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2010 Corrective Measures Implementation (CMI) Annual Report

Southend of the Former General Motors Corporation North American Operations Facility (Otherwise known as Buick City)

Flint, Michigan

April 29, 2011

ARCADIS

2010 CMI Annual Report

Revitalizing Auto Communities
Environmental Response Trust
Buick City Site– Southend
Flint, Michigan

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List of Acronyms, Abbreviations, and Units of Measurement

AOI	Area of Interest
AST	Aboveground Storage Tank
BBL	Blasland, Bouck and Lee
BGS	Below Ground Surface
CLP-type	Contract Laboratory Program - type
CMI	Corrective Measures Implementation
CMP	Corrective Measures Plan
COC	Constituents of Concern
CSX	CSX Corporation
DPT	Direct Push Technology
EC	Electrical Conductivity
FE	Flammability and Explosivity
FSP	Field Sampling Plan
GAI	Groundwater Acute Inhalation
GCC	Groundwater Contact Criteria
GMC	General Motors Corporation
GM LLC	General Motors LLC
GSI	Groundwater/Surface Water Interface
HASP	Health and Safety Plan
HDPE	High Density Polyethylene
HSWA	Hazardous and Solid Waste Amendments
LIF	Laser Induced Fluorescence
LNAPL	Light Non-Aqueous Phase Liquid
MDEQ	Michigan Department of Environmental Quality
MLC	Motors Liquidation Company
mg/kg	Milligrams Per Kilogram
mg/L	Milligrams Per Liter
mS/m	Millisiemens Per Meter
NDC	Non-residential Direct Contact
NDW	Non-residential Drinking Water
NGVIA	Non-residential Groundwater Volatilization to Indoor Air
NPSIC	Non-residential Particulate Soil Inhalation
NSVIA	Non-residential Soil Volatilization to Indoor Air Inhalation
NVSIC	Non-residential Infinite Source Volatile Soil Inhalation
NPDES	National Pollutant Discharge Elimination System
NPMP	NPDES Plus Monitoring Program
NTU	Nephelometric Turbidity Units

PAH	Poly Aromatic Hydrocarbon
PCBs	Polychlorinated Biphenyls
PPM	Parts Per Million
RACER	Revitalizing Auto Communities Environmental Response
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
QAPP	Quality Assurance Project Plan
SDG	Sample Delivery Group
SVOC	Semi-volatile Organic Compound
TCL	Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
UVOST	Ultraviolet Optical Sensing Tool
VOC	Volatile Organic Compound
XRF	X-Ray Florescence
%RE	Percentage of Reference Emitter

1. Overview of Corrective Measures Implemented

This 2010 Corrective Measures Implementation (CMI) Annual Report was prepared by ARCADIS on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust for the southern portion of the former General Motors Corporation (GMC) North American Operations facility (otherwise known as Buick City) (the Site), located in Flint, Michigan. On April 1, 2011 the environmental remediation of the property was transitioned from Motors Liquidation Corporation (MLC) to RACER Trust.

The CMI *Work Plan - Southend of the Former General Motors Corporation North American Operations Facility (Otherwise Known as Buick City)* (CMI Work Plan) was submitted to the United States Environmental Protection Agency (USEPA) on August 13, 2010. The CMI Work Plan was prepared to comply with requirements of the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976 (RCRA) and the Hazardous and Solid Waste Amendments of 1984 (HSWA), 42 U.S.C. § 6901 et seq., and USEPA regulations at 40 C.F.R. Parts 260-271 and Part 124. This annual report was prepared to document and summarize corrective measures completed and implemented during the previous year as well as investigations, testing and other activities completed in support of corrective measures design and implementation. The corrective measures are being implemented in accordance with the *Final Decision and Response to Comments* (Final Decision) for the Southend of the Site issued by the USPEA on May 13, 2010.

1.1 Introduction

The Site is located at 902 East Leith Street in Flint, Michigan, in Genesee County and encompasses approximately 452 acres of land. It is generally bounded to the north by Stewart Avenue and Pierson Road, to the south by Harriet Street, to the east by James P. Cole Boulevard and CSX Railroad, and to the west by Industrial Avenue and North Street. The portion of the Site located north of Leith Street (hereafter referred to as the Northend) was in part occupied by GMC for manufacturing operations until December 6, 2010. The buildings located in the Northend of the Site are either undergoing decommissioning/demolition or are slated for demolition. Building demolition has been completed in the portion of the property located south of Leith Street, which is referred to as the Southend. A Site Location map is included as Figure 1.

1.2 Summary of 2010 Corrective Measures

The following Corrective Measures were implemented in 2010 and are discussed further in their respective sections of the report.

- A Laser Induced Fluorescence (LIF) investigation was performed at the Site from August 2 through August 21, 2010. The purpose of the LIF investigation was to define the vertical and horizontal extent of Light Non Aqueous Phase Liquid (LNAPL) impacts in the Southend of the Site from historic Site operations.

- The annual groundwater monitoring event was conducted from October 10 through October 28, 2010. The purpose of the annual groundwater monitoring event is to monitor groundwater quality and flow patterns, and LNAPL plumes at the Site

- The "NPDES Plus" monitoring program (NPMP) was implemented at the Site to evaluate compliance with Michigan Part 201 GSI criteria for the long-term protection of the Flint River. The NPMP consists of collecting monthly samples from up to 11 Site storm sewers during dry weather flow to assess the impact of groundwater infiltrating into the Site storm sewers.

- The lead soil impact delineation activities were completed from August 16 and August 20, 2010. A sampling program was implemented at Area of Interest (AOI)-09A to delineate areas of elevated lead and benzo(a)pyrene concentrations.

- Quarterly inspections of surface cover in select areas were completed in order to protect future Site users from near surface soils that exceed direct contact criteria. The engineering controls include maintaining the surface cover consistent with existing conditions at five AOIs located in the Southend of the Site.

- Site-wide use restrictions were prepared as part of the overall final corrective action for the Site. RACER Trust intends to establish restrictions in the property deed (restrictive covenant) to limit future use of the Site. Site-wide use restrictions are currently in draft form and pending the review of RACER Trust.

In addition to the above corrective measures this report also includes a brief summary of the following significant activities completed at the Site in 2010:

- The Outfall 003/004 Storm Water Diversion and Treatment System was constructed in order to remove oil from Outfall 003 and 004 storm sewer systems.

- Accumulated sediment was removed from Oil Interceptor #2 to improve its ability to collect oil from along the Outfall 003 storm sewer system.

1.3 Revised Generic Michigan Department of Environmental Quality (MDEQ) Screening Criteria

On December 14, 2010, February 17, 2011 and March 25, 2011 the MDEQ issued revisions to the Part 201 Generic Cleanup Criteria and Part 213 Risk-Based Screening Levels. A brief summary of the revisions are included below:

- Generic groundwater cleanup criteria and screening levels (R 299.5744, Table 1) were revised.
- Generic soil cleanup criteria and screening levels (R 299.5746 and R 299.5748, Tables 2 and 3, respectively) were revised.
- Footnotes for the generic cleanup criteria tables (R 299.5750) were revised.
- Toxicological and chemical-physical properties values (R 299.5752, Table 4) were revised.
- Groundwater Surface Water Interface (GSI) criteria and GSI Protection (GSIP) criteria were revised for soil and their respective footnote (R 299.5750) were revised
- The industrial and commercial land use categories were replaced, in name, by the nonresidential land use category. The criteria that were formerly presented as the industrial criteria are now the nonresidential criteria. This changed the land use designations of the cleanup criteria presented in the groundwater and soil tables to residential and nonresidential and resulted in the elimination of the commercial III and IV subcategories of the soil direct contact criteria.
- Inhalation-based cleanup criteria have been developed for some hazardous substances previously footnoted with an “ID” (i.e., insufficient data). Inhalation-based toxicity endpoints were developed pursuant to Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and the rules promulgated under that part, and, where all necessary chemical-specific data were available, inhalation-based cleanup criteria were developed (R 299.5706a(11)). These criteria are effective March 25, 2011, and replace the “ID” footnote where previously listed in the inhalation-based criteria columns of the tables.

The data presented in this report were compared to the revised MDEQ criteria. The revised MDEQ criteria categories were reviewed in conjunction with Section 4.1 of the *RCRA Facility Investigation (RFI) Phase I Report* (Blasland, Bouck, and Lee [BBL],

2002)(RFI Phase I Report),which specifies the generic MDEQ screening criteria that have been used for comparison during Site RFI activities. The following text summarizes revised criteria category names for the MDEQ criteria applicable for the Site.

On-Site surface and subsurface soil analytical data were compared to the following generic MDEQ criteria:

- Non-residential Direct Contact (NDC);
- Non-residential Soil Volatilization to Indoor Air Inhalation (NSVIA);
- Non-residential Infinite Source Volatile Soil Inhalation (NVSIC); and
- Non-residential Particulate Soil Inhalation (NPSIC).

Groundwater analytical data were compared to the following generic MDEQ criteria:

- Non-residential Drinking Water Criteria (NDW);
- Non-residential Groundwater Volatilization to Indoor Air (NGVIA);
- Groundwater Contact (GCC);
- Groundwater Acute Inhalation (GAI);
- Flammability and Explosivity (FE); and
- GSI criteria – for monitoring wells located within 500 feet of the Flint River.

The NPMP monitoring data collected from the Site storm sewers were compared to GSI criteria.

Off-Site surface and subsurface soil analytical data collected during the lead soil investigation were compared to residential and non-residential generic MDEQ criteria.

2. LNAPL Characterization and Pilot Testing

LNAPL characterization and pilot testing activities were completed at the Southend of the Site consistent with the LIF Work Plan dated July 20, 2010 and the CMI Work Plan, prepared by ARCADIS.

2.1 LIF Investigation

The LIF investigation was completed to further delineate the vertical and lateral extent of the LNAPL areas located in the Southend of the Site. The LNAPL areas included in this investigation are located at AOI 02-B, AOI 09-B, AOI 12-A, -B, and –C, AOI 16-C, and AOI 40-A and –B. As further discussed in Section 2.1.4.1 below, while delineating the extent of LNAPL at AOI 09-B, evidence of LNAPL impacts at AOI 09-A were identified. Although LNAPL remediation at AOI 09-A is not contemplated in the Remediation Cost Estimate (RCE), the extent of on Site LNAPL impact at AOI 09-A was delineated during this investigation.

2.1.1 Summary of Field Activities

ARCADIS and Matrix Environmental, LLC of Osseo, Minnesota (Matrix) conducted the LIF investigation from August 2 through August 21, 2010. The purpose of the LIF investigation was to further define the vertical and horizontal extent of LNAPL impacts at the Southend of the Site from historic Site activities. Matrix provided the LIF equipment and advanced LIF soil probes under the direct supervision of ARCADIS personnel.

A total of 143 LIF borings were advanced at the Southend of the Site to a depth of approximately 26 feet below ground surface (bgs). The LIF borings were completed at five areas in the Southend of the Site known to be impacted by LNAPL, as indicated below.

Area of Interest	AOI 02-B	AOI 09-A and –B	AOI 12-A, -B, and -C	AOI 16-C	AOI 40-A and -B
Number of Borings	22	34	44	18	25

LIF boring locations were concentrated in the areas where LNAPL was previously observed during the RFI activities (based on the presence of LNAPL in monitoring wells) in order to further delineate the extent of LNAPL in the soil. Additional “step out” borings were completed to delineate impacts. Please note that the presence of LNAPL has not been detected in monitoring wells located at AOI 09-A. As discussed above

evidence of LNAPL impacts were identified at AOI 09-A, while conducting LIF investigations at AOI 09-B. Figure 2 presents the locations of the LIF borings.

2.1.2 Description of LIF Technology

LIF investigations are conducted by advancing an ultraviolet optical sensing tool (UVOST®) probe in areas of known or suspected LNAPL impact. The UVOST® probe emits an ultraviolet excitation light and captures returning fluorescence. Polycyclic aromatic hydrocarbon (PAH) compounds, which are a component of common petroleum fuels, readily fluoresce when exposed to ultraviolet light. The magnitude of fluorescence is proportional to the LNAPL saturation within the soil. The fluorescence observed is quantified by comparison to the response of a standard reference solution, known as the reference emitter; the results are expressed as a percentage of reference emitter (%RE) response. Instrument response is expected in areas with no LNAPL impacts due to the fluorescent properties of native soil materials. However, background fluorescence is typically weak as compared to LNAPL fluorescence and does not greatly diminish instrument sensitivity.

The UVOST® probe detects four distinct fluorescent light wavelengths; the relative returns of each wavelength at a given depth are collectively referred to as a waveform. Differences in waveform patterns may indicate differences in the subsurface environment or in LNAPL composition. Waveform changes are indicated by color shifts in the LIF boring log; snapshots of waveforms at selected depths are presented as callouts on each log.

The return (fluorescent) light signal is analyzed in real time by onsite equipment. As the probe is advanced downward, the fluorescence data form a vertical profile of LNAPL impact present at the soil boring location. Results were reviewed after completing each LIF boring and considered when selecting subsequent locations.

An electrical conductivity (EC) point is advanced along with the UVOST® probe at each boring location. EC is the measure of the soils ability to conduct an electrical current measured on the UVOST® probe. Each boring log includes the vertical profile of the EC data recorded in milliseimens per meter (mS/m) in addition to the fluorescence data. The soil type can be determined by the EC data since soil is in the pathway of the electrical current flow. The grain size can thus be determined by comparing the EC log to a soil boring. Conductivity data in the 100s mS/m indicate smaller grain material such as clay, and data in the 10s of mS/m indicate larger grain material such as sand and gravel. The EC data has not been correlated to Site specific soil types, however the data is used to assist in the evaluation of LNAPL distribution.

2.1.3 LIF Investigation Methodology

The following methods/practices were employed during implementation of the investigation event:

- The UVOST® probe was advanced using a track-mounted direct-push rig.
- The first five feet of all borings were advanced using a hand auger or air-knife; therefore, LIF responses from 0 to 5 ft bgs were not included in the analysis.
- Based on a correlation of the observed fluorescence with field data indicative of LNAPL it was determined that LIF readings of less than 5 %RE were attributable to background fluorescence and/or insignificant.
- Boreholes were abandoned with bentonite chips after completion and sealed with cement.

2.1.4 Summary of Results

The LIF logs were analyzed to determine the lateral and vertical extent of LNAPL in the subsurface and LNAPL speciation. Visual observations and interpretations of the 143 LIF logs established a site-specific “background” fluorescence response. If a response was less than 5%RE or the max %RE was at a depth less than 5 feet bgs (the area that was hand cleared in the boring), these responses were considered attributable to “background”. LIF responses greater than this “background” level were considered indicative of LNAPL impact. The table below displays the number of borings performed and the number of borings observed above background. Borings that exhibit LIF responses below background are areas not affected with LNAPL and assist in delineating the horizontal extent of LNAPL.

Refusal was encountered in a number of borings before reaching the target the depth, as shown in the table below. If refusal was encountered and LIF responses greater than background were observed, the boring was included in the analysis on a limited basis. These borings were used as an indicator that the area is affected by LNAPL; however, nothing could be concluded about vertical delineation.

Location	AOI 02-B	AOI 09-A and –B	AOI 12-A, -B, and -C	AOI 16-C	AOI 40-A and -B
Total # of Borings	22	34	44	18	25
# of Borings Above Background	13	21	25	12	16
# of Borings Where Refusal was Encountered	4	2	11	4	7

LIF borings were identified as LIF, followed by the AOI number in which the boring was located, followed by the boring number (the order that the borings were drilled in that AOI) as LIF-XX-YYY. As an example, the 17th LIF boring drilled in AOI 40 would be identified as LIF-40-017.

2.1.4.1 Areal Distribution of Impacts

AOI 09-A and -B

AOI 09-A and -B are located south of Hamilton Ave between Industrial Ave and the decommissioned CSX railroad tracks. The LIF investigation was planned in this area to delineate the extent of the AOI 09-B LNAPL plume. While completing step-out borings for the AOI 09-B delineation, evidence of LNAPL impacts at AOI 09-A were identified. Although LNAPL remediation at AOI 09-A was not contemplated in the RCE, the extent of on Site LNAPL impact at AOI 09-A was delineated during this investigation.

At AOI 09-A, the LIF response was much higher than AOI 09-B, due to a different LNAPL species. The greatest LIF impacts at AOI 09-A were primarily located near the property boundary at AOI-09-017, AOI-09-018, AOI-09-020, and AOI-09-021 (441.52, 230.31, 259.18, 259.26, 565.26 %RE; respectively) (Figure 2). At AOI 09-B, the greatest LIF responses were much lower than the responses at other AOIs in the Southend. This is because the LNAPL speciation (discussed further in Section 2.1.4.3) in the soil is different at AOI 09-B than what was observed throughout the rest of the Site. The highest LIF impact at AOI 09-B, was observed in boring LIF-09-027 (69.84%RE) as shown on Figure 2.

AOI 12-A, -B, and -C

AOI 12-A, -B, and -C are located south of Leith Street, north of Hamilton Avenue, east of Division Street (vacated) and west of Industrial Avenue. The greatest LIF responses were observed between AOI12-B and AOI 12-C near the intersection of Leith Street and Industrial Avenue. In particular, LIF-12-011, LIF-12-016, LIF-12-020, LIF-12-022, and LIF-12-024 were much higher than the majority of the borings, with RE percentages of 511.22, 241.64, 440.39, 336.33, and 513.89; respectively (Figure 2).

AOI 02-B, AOI 40-A and -B, and AOI 16-C

AOI 02-B is located between Division Street (vacated) and the CSX railroad tracks. AOI 40-A and –B are located south of AOI 02-B between Division Street (vacated) and the CSX railroad property and AOI 16-C is southwest of AOI 40-B along Division Avenue (vacated). The extent of contamination at AOI 02-B , AOI 40-A and -B , and AOI 16-C (Figure 2) appear to create one comingled area of impact. This area extends approximately 1400 feet northwest to southeast, from the CSX railroad, west to Division Street (vacated). The greatest LIF impacts were observed along the railroad (LIF-02-006, LIF-02-018, LIF-40-004, and LIF-40-006) and in the center of the impacted area at LIF-40-008, LIF-40-009, and LIF-40-018. In the vicinity of AOI 16-C, borings LIF-16-013 and LIF-16-017 exhibited the greatest LIF responses. These elevated LIF observations were all greater than 200% RE. Elevated impact was also observed at LIF-40-004. This boring is believed to have been advanced into the backfill of a historical tunnel at the Site. It is assumed that the tunnel was filled with a sandy backfill. The higher conductivity of the fill relative to the surrounding soil allowed LNAPL to collect in the pore space.

The maximum fluorescence range observed at each boring location is depicted in Table 1. LIF boring logs that graphically present the output generated by the LIF equipment are included as a Direct Sensing Report by Matrix Environmental in Appendix A. Figure 2 shows the aerial distribution of LIF response as color coded dot based on the LIF response.

2.1.4.2 Vertical Distribution of Impacts

AOI 09-A and -B

The vertical distribution at AOI 09-A and -B is more complex than at other AOIs due to its heterogeneity. The LIF impacted soil is typically in the range between 6 to 14 feet bgs, with a few observations as deep as 24 feet bgs.

AOI 12-A, -B, and -C

The vertical range of LIF impact at AOI 12-A, -B, and -C is typically 6 to 15 feet bgs. There are several instances where the impact extends to depths of 22 to 28 feet bgs.

AOI 02-B

The majority of the LIF borings observed above background at AOI 02-B were from 5 to 12 feet bgs. The vertical distribution of impact was not observed deeper than 12 feet bgs.

AOI 16-C

At AOI 16-C, the typical vertical distribution was 7 to 13 feet bgs, with a few exceptions where the LIF impact was observed down to 23.5 feet. In all borings that reached the target bottom depth (26 feet bgs), the LIF responses returned to background levels.

AOI 40-A and -B

Like the surrounding AOIs, AOI 40-A and -B exhibited a general LIF impact from 5 to 16 feet bgs. At three particular LIF borings, however, LIF responses extend to 30 feet bgs. It is believed the LIF-40-004, LIF-40-003, and LIF-40-014, were advanced through a tunnel that had been backfilled with a sandy soil that acted as a sink for LNAPL.

Visual interpretations of the vertical impacts are presented in cross-sections in Figures 3 through 7.

2.1.4.3 LNAPL Speciation

The LIF waveform signatures observed at the site are consistent with the known LNAPLs at the AOIs. AOI 02-B and AOI12-A, -B and -C have responses consistent with hydraulic oil. LIF responses in AOI 16-C and AOI 40-A and -B are consistent with a fuel oil response. AOI 09-B exhibits responses consistent with weathered gasoline with a smaller area, denoted as AOI-09A, exhibiting responses similar to diesel.

2.1.4.4 Correlation of LIF Data to Monitoring Well Data

Where appropriate, LIF data was compared to fluid-level data in nearby monitoring wells to determine the degree that the LNAPL smear zone observed in the LIF borings correlates to observations of LNAPL accumulation in monitoring wells. The comparison

indicates that LIF responses greater than background have co-located wells with some degree of LNAPL observations; however, LNAPL observations in monitoring wells do not clearly correlate to the degree of impact observed in LIF borings. For example, a four foot thick smear zone of elevated response was observed at boring LIF-02-018 with a maximum fluorescence of 335.48%, and LNAPL has not been observed greater than a trace in neighboring monitoring well RFI-02-012. In contrast, a smear zone approximately 3.5 feet in thickness and a maximum fluorescence of 65.24% was observed in boring LIF-02-014, while LNAPL has historically accumulated in neighboring monitoring well RFI-02-019 to thicknesses of over 3.48 feet. Data from co-located LIF borings and monitoring wells are compared in Table 2. It is important to note that while the LIF technology is effective in delineating the presence of LNAPL in the subsurface, it does not predict the recoverability of the oil.

The comparison of LIF results and monitoring well gauging data demonstrate that:

- LIF borings with elevated responses do show some degree of LNAPL in neighboring monitoring wells.
- The magnitude of LNAPL accumulation in site monitoring wells is not an accurate measure of the degree of LNAPL impact near those wells.
- LIF investigations provide additional delineation of the vertical and horizontal extent of LNAPL in the subsurface.

2.1.5 Conclusions and Future Activities

The LIF investigation event yielded valuable data on the areal and vertical extent of LNAPL impacts. Delineation of LNAPL impacts were complete if the LIF response at a boring are at background levels for areal extent or returns to background levels for vertical extent. Additionally, areal delineation is inferred using multiple lines of evidence including reduction of LIF response intensity and vertical response over distance, and changes in LIF response type. The following conclusions were made based on review and analysis of the investigation and historical site data:

AOI 09-A and -B

- On-Site areal LNAPL delineation is inferred to be complete at AOI 09-A.
- Areal LNAPL delineation at AOI 09-B is inferred based on declining LIF response and changes in response type.

- Vertical LNAPL delineation is complete at AOI 09-A and -B, with the bottom of the LIF impacted zone identified in the boring logs.
- Additional research of potential source areas should be performed to determine possible sources of impacts.
- The magnitude of LNAPL accumulation in site monitoring wells is not an accurate measure of the degree of LNAPL impact near those wells.
- Weathered diesel is thought to be the predominant product type at AOI 09-A.
- Gasoline is thought to be the predominant product type at AOI 09-B.

AOI 02-B and AOI 12-A, -B, and -C

- Areal LNAPL delineation at AOI 02-B along the rail line is not complete.
- Areal LNAPL delineation on Site is not complete along the corner of Leith Street and Industrial Avenue. This portion of the AOI 12-B/12-C LNAPL plume should be further investigated to delineate the LNAPL area.
- Areal LNAPL delineation on Site is inferred at AOI 12-A. Additional investigation is recommended to verify this assumption.
- Vertical LNAPL delineation at each AOI is complete, with the bottom of the LIF impacted zone identified in the boring logs.
- Additional research of potential source areas should be performed to determine possible sources of impacts.
- The magnitude of LNAPL accumulation in site monitoring wells is not an accurate measure of the degree of LNAPL impact near those wells.
- Hydraulic oil is thought to be the predominant product type.

AOI 40-A and -B and AOI 16-C

- Areal LNAPL delineation at each AOI is not complete.

- Vertical LNAPL delineation is complete, with the bottom of the LIF impacted zone identified in the boring logs.

- Additional research of potential source areas should be performed to determine possible sources of impacts.

- The magnitude of LNAPL accumulation in site monitoring wells is not an accurate measure of the degree of LNAPL impact near those wells.

- Fuel oil is thought to be the predominant product type.

Additional assessment is recommended to further understand the LNAPL distribution, potential sources, and associated risks at the Site. Additional investigation may be required to delineate the extent of impact along the CSX railroad property. Determining the extent of horizontal impact will help determine whether off Site migration is occurring.

2.2 AOI 09-B Multi-Phase Extraction Pilot Testing

Multi-phase extraction (MPE) testing was completed at AOI 09-B (former Hamilton avenue tank Farm) in August 2010. The objectives of the field testing activities were to collect the data necessary to facilitate the design of a full scale extraction and treatment system capable of recovering LNAPL from the subsurface and reducing concentrations of contaminants of concern (COCs) in soil and groundwater.

The results of the AOI 09-B MPE pilot testing activities are summarized in the *Multi-Phase Extraction Test Summary and Basis for Full-Scale System Design* report which was submitted to the USEPA on November 19, 2010.

3. Groundwater Monitoring

3.1 Groundwater Level and LNAPL Presence Measurements

As part of the 2010 annual groundwater monitoring event, ARCADIS completed a site-wide round of groundwater level and LNAPL presence and thickness measurements from October 10 to 13, 2010. An attempt was made to collect measurements at each of the 146 locations listed in Table 3 (Northend) and 131 locations listed in Table 4 (Southend). The monitoring well locations for the Northend and Southend are shown on Figures 8 and 9, respectively. Due to the ongoing decommissioning and demolition activities at the Site and limited access, 212 monitoring wells were monitored for groundwater elevation and LNAPL thickness.

Groundwater level measurements were used to generate site-wide groundwater elevation contour maps (Figures 8 and 9) and are summarized in Table 5. The groundwater flow directions are consistent with historical observations. As shown on Figures 8 and 9, groundwater flow is locally influenced by the presence of storm sewers that traverse the Buick City property. This is particularly apparent at the south end of Building 70 (Figure 8), along Leith Street where it passes beneath the railroad tracks (Figures 8 and 9), and at AOI 40-A (Figure 9). Additionally, the Building 40 tunnel (AOI 40-D, Figure 9) appears to distort the groundwater contours, and the basement of Building 20 (Figure 8) appears to create a sump, with local groundwater flow direct into the basement.

The 2010 groundwater level measurements were also compared to historic groundwater level data collected from July 2005 through October 2010. The evaluation did not reveal any obvious trends with the exception of two wells in the Factory 84 area (RFI-84-09S and RFI-84-09D) which showed a decrease in water levels of 5.95 feet and 4.69 feet, respectively.

The LNAPL presence and thickness measurements were compared to historical measurements generated as part of the RFI Phase I Report and RFI Phase II Report (BBL, 2006), the CA 750 groundwater monitoring program, and the *Revised Corrective Measures Proposal (CMP) Addendum No.2 – Northend Corrective Measures and Site-wide Groundwater Monitoring* (ARCADIS, 2010) (CMP Addendum No. 2 - Northend). LNAPL presence and thickness measurements at the Site were consistent with historical data, except as noted below.

North of Leith Street

AOI 03-1 (Figure 8)

During the groundwater monitoring event LNAPL was not detected at monitoring well 03-03R. Historically, LNAPL had been detected at 03-03R from 2004 through 2008 at thicknesses ranging from 0.05 to 2.94 feet. Historically, the AOI 03-1 LNAPL plume has only been detected at 03-03R and the well that it replaced, 03-03. Monitoring well 03-03R will continue to be monitored as part of the annual monitoring events.

AOI 10-1 (Figure 8)

During the groundwater monitoring event LNAPL was not detected at monitoring well 20-168. Historically, LNAPL had been detected at 20-168 from 2003 through 2008 at thicknesses ranging from 0.01 to 2.26 feet. Historically, the AOI 10-1 LNAPL plume has only been detected at monitoring wells 20-167 and 20-168. Monitoring wells 20-167 and 20-168 will be monitored as part of the annual monitoring events.

AOI 86-1 (Figure 8)

During the groundwater monitoring event LNAPL was not detected at monitoring wells RFI-86-02 and RFI-86-03. Historically, LNAPL had been detected at RFI-86-02 and RFI-86-03 from 2004 through 2005. Historic LNAPL thicknesses ranged from 0.01 to 2.39 feet at RFI-86-02 and 0.01 to 0.54 foot at RFI-86-03. Historically, the AOI 86-1 LNAPL plume has only been detected at monitoring wells RFI-86-02 and RFI-86-03. These wells will continue to be monitored as part of the annual monitoring events.

South of Leith Street

AOI 02-B (Figure 9)

During the groundwater monitoring event LNAPL was detected in monitoring wells RFI-02-12, RFI-02-16, RFI-02-17, RFI-02-18 and RFI-02-23 for the first time. The measured thickness of LNAPL at each of these wells was 0.01 foot. These wells were last evaluated for the presence of LNAPL in 2009 (RFI-02-17), 2008 (RFI-02-12), and 2005 (RFI-02-16, RFI-02-18, and RFI-02-23). Historically, LNAPL at the AOI 02-B area was only detected in nearby monitoring wells RFI-

02-14, RFI-02-15 and RFI-02-19. These wells will continue to be monitored as part of the annual monitoring program, along with downgradient wells RFI-02-22, RFI-02-24, RFI-40-13, RFI-40-14R, and RFI-40-15 to evaluate plume stability. The AOI 02-B LNAPL plume will also be addressed as part of LNAPL removal activities planned at the Site.

AOI 12-A (Figure 9)

During the groundwater monitoring event LNAPL was detected in monitoring wells RFI-12-07R2 and RFI-12-27 for the first time. The measured thickness of LNAPL was 0.01 foot at RFI-12-07R2 and 0.02 feet at RFI-12-27. RFI-12-07R2 and RFI-12-27 were last evaluated for the presence of LNAPL in 2008 and 2005, respectively. In addition, LNAPL re-appeared at RFI-12-01R (0.01 foot), RFI-12-15 (0.01 foot) and RFI-12-26 (0.02 foot). LNAPL was previously detected at RFI-12-01R from 2003 through 2005 at thicknesses ranging from 0.01 to 1.72 feet. LNAPL was previously detected at RFI-12-15 once in 2005 at a thickness of 0.01 foot. LNAPL was previously detected at RFI-12-26 from 2003 through 2006 at thicknesses ranging from 0.01 to 0.39 foot.

Additionally, LNAPL was not detected at monitoring wells RFI-12-02R and RFI-12-22R. Historically, LNAPL had been detected at RFI-12-02R from 2003 through 2008 at thicknesses ranging from 0.01 to 4.27 feet. LNAPL had been detected at RFI-12-22R from 2004 through 2005 at thicknesses ranging from 0.01 to 0.16 feet.

These wells will continue to be monitored as part of the annual monitoring events. The AOI 12-A LNAPL plume will also be addressed as part of LNAPL removal activities planned at the Site.

AOI 12-C (Figure 9)

During the groundwater monitoring event LNAPL was detected in monitoring well RFI-12-11S for the first time. The measured thickness of LNAPL was 0.01 foot. RFI-12-11S was last evaluated for the presence of LNAPL in 2008. In addition, LNAPL re-appeared at RFI-12-14R with thicknesses of 0.01 foot. LNAPL was previously detected at RFI-12-14R, once in 2004, at a thickness of 0.01 foot. These wells will continue to be monitored as part of the annual monitoring events. The AOI 12-C LNAPL plume will also be addressed as part of LNAPL removal activities planned at the Site.

AOI 16-C and AOI 40-D (Figure 9)

During the groundwater monitoring event LNAPL was detected in several monitoring wells located at AOI 16-C and AOI 40-D for the first time. AOI 40-D is located downgradient of AOI 16-C and the Building 40 Tunnel. A thickness of 0.01 foot of LNAPL was measured at AOI 16-C monitoring wells RFI-16-01, RFI-16-04R, RFI-16-09, RFI-16-12, RFI-16-20 and RFI-16-24 and AOI 40-D monitoring wells 40-303R, 40-304, and 40-305. These wells were last evaluated for the presence of LNAPL in 2008. The AOI 16-C and AOI 40-D monitoring wells will continue to be monitored as part of the annual monitoring events. Additionally, this area will be further evaluated during the LNAPL investigation and removal activities planned at the Site.

AOI-40-B (Figure 9)

During the groundwater monitoring event LNAPL was detected in monitoring wells RFI-40-03, RFI-40-10R and RFI-40-20 for the first time. The measured thickness of LNAPL at each of these wells was 0.01 foot. RFI-40-03, RFI-40-10R and RFI-40-20 were last evaluated for the presence of LNAPL in 2003, 2008 and 2005, respectively. In addition, LNAPL re-appeared at RFI-40-26 with thicknesses of 0.01 foot. LNAPL was previously detected at RFI-40-26 in 2005 at thicknesses ranging from 0.03 to 0.05 foot. These monitoring wells will continue to be monitored as part of the annual monitoring events. Additionally, this area will be further evaluated during the LNAPL investigation and removal activities planned at the Site.

These monitoring wells will remain in the annual monitoring program and if the LNAPL thickness increases, additional investigation or monitoring will be proposed. Additional wells may be installed for monitoring LNAPL at the existing LNAPL plumes, depending on the results of the LIF investigations (see Section 2) and the subsequent remedial actions taken in those areas. These wells will be installed, as necessary, following EPA approval of the remedial design of each of the LNAPL plumes.

3.2 Monitoring Network Inspection and Maintenance

An inventory was completed in October 2010 of all the monitoring wells at the Site. The inspection included an assessment of the physical condition of the monitoring well protective casing, j-plug and lock, and confirmation of the total depth of the monitoring well (wells included in CMI monitoring program only). Results of the well inventory are provided in Table 6.

The following issues were noted during the inspection:

- 145 monitoring wells missing locks.
- 19 monitoring wells missing covers.
- Three monitoring wells missing J-plugs.
- 17 monitoring well covers missing bolts.
- 11 monitoring wells may need to be redeveloped to remove silt.
- Five monitoring wells were destroyed, including CMI monitoring wells: RFI-10-28, RFI-36-55 and RFI-36-14.
- 20 monitoring well surface completions damaged.

The Site monitoring wells will be evaluated to determine which wells will be needed for future monitoring or which wells should be abandoned. Monitoring wells selected for further monitoring will be repaired as needed. The monitoring well network will also be evaluated to determine if any existing wells are suitable to be substituted in the CMI Groundwater Quality Monitoring Program for RFI-10-28, RFI-36-55, and RFI-36-14. Monitoring wells not selected for further monitoring will be submitted to EPA for review and the wells will be properly abandoned upon receipt of EPA approval.

3.3 Groundwater Quality Monitoring Program

Forty-six monitoring wells were included in the groundwater monitoring program (Table 7) as identified in the CMI Work Plan. Table 7 presents the monitoring locations included in the groundwater quality monitoring program; the specific analyses to be completed at each sampled location; and the rationale for the inclusion of each monitoring well in the sampling program. The monitoring wells included in the sampling program were selected based on analytical data generated as part of the RFI Phase I Report (BBL, 2002), the RFI Phase II Report (BBL, 2006), the CA 750 groundwater monitoring program, and the CMP Addendum No.2 - Northend (ARCADIS, 2010).

The USEPA has provided comments received on the groundwater monitoring plan as presented in the CMP Addendum No.2 – Northend. These comments are currently being evaluated in conjunction with the results of the 2010 Groundwater Monitoring Program and proposed modifications to the monitoring well network will be addressed

in the CMP Addendum No. 2 – Northend, Response to USEPA Comments document, which is currently being prepared and is expected to be submitted to EPA by June 2011.

The following considerations were used to develop this groundwater sampling program:

Samples will be collected near the downgradient edge of areas previously found to be associated with concentrations above the pertinent generic MDEQ PA 451, Part 201 screening criteria. For example, if a plume exhibiting elevated benzene concentrations was identified during a previous sampling event at a series of wells, the well or wells located close to the downgradient extent of the benzene-impacted area will be sampled.

- Samples will be collected along the edge of the site, downgradient of areas previously associated with concentrations above the pertinent generic MDEQ criteria, and at downgradient off Site locations.

- Samples will be collected at locations near the Flint River with historical detections above the GSI criteria.

- Three monitoring wells have been included in the monitoring program to monitor possible discharges to the storm sewers in the Outfall 010 drainage area. Cyanide was detected above GSI criteria in the grab samples collected from Outfall 010 and Outfall 013 in March 2010. Cyanide was not detected above GSI criteria in monitoring wells in the Outfall 013 drainage area; however, it was detected above GSI criteria in the monitoring wells in the Outfall 010 drainage area.

3.3.1 Sample Collection and Laboratory Analysis

Groundwater samples were collected, analyzed and validated using methods and procedures consistent with those employed previously at the site, as described in the Site's Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP) (Appendix C of the RFI Work Plan [BBL, 2001]).

The following monitoring wells were redeveloped prior to collecting groundwater analytical samples because the monitoring wells have not been sampled in the last 5 years: 04-03, 07-01, MW-23, RFI-02-05, RFI-02-22, RFI-36-20, RFI-44-05, RFI-81-08 and RFI-86-01R.

To support the groundwater analyses, one sample delivery group (SDG) was reported by the laboratory at Level 3 and the remainder at Level 2. The data was verified/validated as described in the FSP/QAPP based on the USEPA's (1995) approach for data review on one SDG at a Tier II and the remainder at Tier I.

To maintain consistency with prior sampling efforts, the samples collected for inorganic and PCB analyses were submitted for dissolved and/or total inorganic and dissolved and/or total PCB analyses based on the turbidity of the sample. If the turbidity was less than 10 nephelometric turbidity units (NTUs), the sample was submitted for total inorganic or total PCB analyses only. If sample turbidity was above 10 NTUs, samples were filtered. Both unfiltered and filtered aliquots were submitted for total and dissolved inorganic and PCB analyses, respectively. Monitoring wells were sampled using low-flow purge and sampling methods to reduce turbidity in the samples.

3.3.2 Summary of Field Activities

Of the 46 monitoring wells included in the groundwater monitoring program, eight monitoring wells were not sampled. Five wells had been destroyed or damaged (RFI-02-05, RFI-10-28, RFI-17-02D, RFI-36-55 and RFI-36-14), two wells (RFI-36-56 and MW-26) were dry, and one monitoring well (RFI-36-04) was not accessible. As mentioned in Section 3.3 proposed modifications to the monitoring well network will be addressed in the CMP Addendum No. 2 – Northend, Response to USEPA Comments document. The remaining 38 monitoring wells were sampled from October 13 to 28, 2010. Table 7 summarizes the monitoring wells sampled in October 2010 and the associated laboratory analytical parameters.

The monitoring wells were sampled using low-flow sampling methods in accordance with the FSP (BBL, 2001). The static groundwater level in each well was measured to the nearest 0.01 foot using an oil/water interface probe prior to sampling. Each well was purged until measured field parameters (i.e., temperature, specific electrical conductivity, dissolved oxygen, oxidation/reduction potential, pH and turbidity) stabilized. These field-measured data are summarized in Table 8. Groundwater samples were then collected; submitted to Merit Analytical Laboratories of East Lansing, Michigan, as specified in the FSP (BBL 2001); and analyzed using the procedures specified in the QAPP (BBL 2001).

3.3.3 Summary of Results and Response Plan

The laboratory analytical data for the October 2010 monitoring activities, as well as historical data for these locations, are summarized in Table 9. Figures 10 and 11 present

current and historical data for select parameters at each of the locations sampled during the October 2010 event. Results of the October sampling event are generally consistent with the results of prior monitoring events, except as noted below.

70-165, AOI 81-2 (Figure 10)

During the October 2010 monitoring event, lead was detected at a concentration of 0.38 milligram per liter (mg/L) in the field sample and 0.083 mg/L in the field duplicate sample collected from 70-165. This represents an increase in lead concentration from 2009 (0.049 mg/L). Concentrations in 2009 and 2010 exceeded the MDEQ Part 201 Non-residential Drinking Water Criteria (NDW) of 0.004 mg/L.

In response to the increasing concentrations of lead in 70-165, downgradient CMI monitoring wells RFI-81-50 will be sampled annually for lead. Monitoring well RFI-81-50 was sampled for lead in 2009 as part of the CMI monitoring program and lead was not detected above 0.003 mg/L.

07-01, AOI 7-03 (Figure 10)

Tetrachloroethene was detected at a concentration of 0.028 mg/L in 2010, which is above the MDEQ Part 201 NDW criterion of 0.005 mg/L. Monitoring well 07-01 was only sampled once before for volatile organic carbons (VOCs) in 2001 and tetrachloroethene was not detected above the reporting limit of 0.001 mg/L.

Tetrachloroethene was not detected in 2001; therefore, concentrations of tetrachloroethene in 07-01 will be monitored in 2011 and future recommendations will be included in the 2011 annual monitoring report, if needed. Additionally, tetrachloroethene was not detected in downgradient monitoring point RFI-86-16R.

20-500R, AOI 36-5 (Figure 10)

n-Propylbenzene was detected at a concentration of 0.24 mg/L, which is just above the MDEQ Part 201 NDW criterion of 0.23 mg/L. n-Propylbenzene was not historically included in the analyte list.

n-Propylbenzene was detected at a concentration just above the Part 201 NDW criteria; therefore, no additional monitoring is proposed.

20-FP10R, AOI 10-4 (Figure 10)

Benzene was detected at a concentration of 0.006 mg/L, which is just above the MDEQ Part 201 NDW criterion of 0.005 mg/L. Benzene was detected at a concentration of 0.003 mg/L in 2009.

Benzene will be monitored in monitoring well 20-FP10R in 2011 and, based on the 2011 analytical results, recommendations for additional monitoring will be included in the 2011 annual monitoring report, if needed.

In addition, trichloroethene was detected at a concentration of 0.002 mg/L which is below NDW criteria of 0.005 mg/L. The 2008 and 2009 samples collected from this location had exceeded NDW for trichloroethene.

RFI-36-37, AOI 36-1 (Figure 10)

Benzene was detected at a concentration of 0.048 mg/L, which is above the MDEQ Part 201 NDW criterion of 0.005 mg/L. This represents an increase in benzene concentrations from 2009 (0.015 mg/L).

Downgradient monitoring wells RFI-36-56 was destroyed and will be replaced and sampled in 2011. Based on the analytical results from the replacement downgradient monitoring well, additional recommendations will be included in the 2011 annual report, if needed.

RFI-84-06R, AOI 84-D (Figure 11)

Cyanide was detected at a concentration of 0.008 mg/L in the field sample and 0.086 mg/L in the field duplicate sample collected from RFI-84-06R. The MDEQ GSI criterion is 0.0052 mg/L.

In response to the cyanide detected in RFI-84-06R, downgradient CMI monitoring well RFI-09-48 will be sampled for cyanide in 2011 and additional recommendations will be included in the 2011 annual monitoring report, if needed.

RFI-09-46, AOI 09-B (Figure 11)

Naphthalene was detected at a concentration of 0.016 mg/L, which is above the MDEQ Part 201 GSI criterion of 0.011. Napthalene was not previously analyzed in this well.

Naphthalene was not detected in downgradient monitoring well MW-23 in 2010. No additional sampling is proposed.

3.4 **NPDES Plus Monitoring Program**

The NPDES Plus Monitoring Program (NPMP) was implemented at the Site to ensure compliance with Michigan Part 201 GSI criteria for the long-term protection of the Flint River. The USEPA and MDEQ have agreed to the approach of sampling of the Site storm sewers as a means to address potential GSI impacts. As discussed in further detail below, the NPMP consists of collecting monthly samples from up to 11 Site storm sewers during dry weather flow to evaluate the impact of the groundwater infiltrating into the Site storm sewers.

Storm sewers associated with the following National Pollutant Discharge Elimination System (NPDES) outfalls are included in the NPMP: Outfalls 001, 002, 003, 004, 005, 006, 007, 009, 010, 011, and 013 (see Figure 12). The NPMP primary Monitoring Points (MP) are co-located with the monitoring points which have been identified in the current and previous Site NPDES permits. Please note that Outfalls 008 and 012 are not included in the NPMP. The Outfall 008 storm sewer has been permanently bulkheaded immediately downstream of MP 008. The bulkhead was installed because of a no flow condition due to the collapsed storm sewer line. Outfall 008 no longer receives drainage from the Site; therefore, it is not included in the NPMP. During a previous dry weather sampling activity an attempt was made to collect a sample from MP 012, located on the Outfall 012 storm sewer. However, there was only a small puddle of water in the storm sewer at the time of sampling indicating that significant groundwater infiltration to Outfall 012 is unlikely; therefore, Outfall 012 was not included in the NPMP (ARCADIS, 2010).

3.4.1 Summary of Field Activities

A sampling event was conducted on March 31, 2010, April 1, 2010 and June 10, 2010 for the purpose collecting data for the NPDES permit application for the Site. The samples were collected as grab samples during dry weather flow using a peristaltic pump fitted with tubing. However, the PCB samples were collected using an automated sampler to collect 24-hour composite samples. The samples were collected and analyzed using the procedures described in the Site FSP and QAPP (Appendix C of the RFI Work Plan). The storm sewer samples were submitted for laboratory analysis of Target Compound List (TCL) VOCs, semi-volatile organic compounds (SVOCs), PCBs, cyanide, and/or select metals. The analytical data from this sampling event is included in the NPMP as a baseline.

The NPMP sampling activities were conducted at the Site on a monthly basis beginning in September 2010. The NPMP samples were collected as grab samples during dry weather flow using a peristaltic pump fitted with tubing. However, the PCB samples were collected using an automated sampler to collect 24-hour composite samples as indicated on Table 10. The samples were collected and analyzed using the procedures described in the Site FSP and QAPP (Appendix C of the RFI Work Plan). The storm sewer samples were submitted for laboratory analysis of TCL VOCs, SVOCs, PCBs, cyanide, and/or select metals as summarized in Table 10.

To support the NPMP, sample analyses were reported by the laboratory at Level 2. As discussed in the CMI Work Plan, Level 2 data consists of modified reporting including some supporting documentation, but not full "Contract Laboratory Program"-type (CLP-type). These data were not subjected to verification/validation.

3.4.2 Summary of Results

The results of the reference and NPMP sampling events are summarized below and presented in Table 11. The sample results are compared to the Revised MDEQ GSI criteria.

A review of the NPMP analytical data collected since September 2010 indicates that VOCs and PCBs have not been detected above GSI criteria; however, select metals have been detected at concentrations exceeding GSI criteria at Outfalls 001, 002, 003, 004, 005, 006, 007, 009, 010, and 013. Additional samples were collected during the February 2011 sampling event and submitted for laboratory analysis of dissolved metals and total suspended solids (TSS) in order to evaluate whether the detected metals concentrations where associated with solid phase of the samples. Therefore, this section of the CMI Annual Report presents and interprets data from January and February 2011, in addition to the 2010 data to provide a more accurate evaluation of the data set. The data from seven sampling events (Baseline – March/April 2010 and September 2010 – February 2011) are evaluated below.

3.4.2.1 Outfall 001

Outfall 001 is sampled from MP001, which is located at manhole MH 1-3. Due to the demolition activities occurring at nearby Factory 38, Outfall 001 was not able to be sampled during four sampling events (October 2010 through January 2011). Therefore, samples were collected during three of the seven sampling events with the following samples exceeding the GSI criteria:

- Baseline 2010
  - No exceedances
- September 2010
  - Mercury
- February 2011
  - Total Chromium
  - Dissolved Chromium
  - Total Copper
  - Total Cyanide
  - Total Mercury

TSS was also detected in the February 2011 sampling event at a concentration of 64 mg/L. An evaluation of the February 2011 data indicates that the exceedances of GSI criteria for copper and mercury may be associated with solids in the sample. TSS will be added to the monthly NPMP parameter list and correlation of TSS and metals detections, along with trends of metal concentrations will continue to be evaluated.

3.4.2.2 Outfall 002

Outfall 002 is sampled from MP002, which is located at manhole MH 2-19. Samples were collected at MP002 during all of seven of the sampling events with the following samples exceeding the GSI criteria:

- Baseline 2010
  - Arsenic
  - Silver
- September 2010
  - Mercury
- October 2010
  - Arsenic
  - Mercury
- November 2010
  - Arsenic
  - Total Chromium
  - Copper
  - Lead
  - Mercury
  - Silver
  - Zinc

- December 2010
  - Arsenic
  - Total Chromium
  - Copper
  - Total Cyanide
  - Lead
  - Mercury
  - Vanadium
  - Zinc
- January 2011
  - Arsenic
- February 2011
  - Total Selenium
  - Dissolved Selenium

The February 2011 analytical results also detected TSS at a concentration of 7 mg/L. An evaluation of the NPMP data collected from Outfall 002 show that the concentrations of metals in the samples vary by up to two orders of magnitude with the highest concentrations of metals detected during the November and December 2010 sampling events. TSS will be added to the monthly NPMP parameter list and correlation of TSS and metals detections, along with trends of metal concentrations will continue to be evaluated.

3.4.2.3 Outfall 003

Outfall 003 is sampled from MP003, which is located at manhole MH 3-3. Samples were collected at MP003 during all of seven of the sampling events with the following samples exceeding the GSI criteria:

- Baseline 2010
  - No Exceedances
- September 2010
  - Mercury
- October 2010
  - Mercury
- November 2010
  - Mercury
- December 2010
  - No Exceedances

- January 2011
  - No Exceedances
- February 2011
  - Total Cyanide
  - Total Mercury

As detailed in the Outfall 004 discussion below, the February sample collected from MP003 is from the combined flow of Outfall 003 and 004. The concentrations of metals in the February combined flow sample are similar to previous samples collected from Outfall 003. The February 2011 analytical results detected TSS at a concentration of 15 mg/L. An evaluation of the February 2011 data indicates that the exceedance of GSI criteria for mercury may be associated with solids in the sample. TSS will be added to the monthly NPMP parameter list and correlation of TSS and metals detections, along with trends of metal concentrations will continue to be evaluated.

3.4.2.4 Outfall 004

Outfall 004 is sampled from MP004, which is located at manhole MH 4-5. Due to the installation of the Outfall 003/004 Oil Removal System which began operation on January 12, 2011, sample collection at Outfall 004 was discontinued. The dry-weather flow from Outfall 003 and Outfall 004 are combined and directed through a common oil-water separator and the flow is discharged to manhole MH 3-3 on the Outfall 003 storm sewer. Therefore, there is no longer dry weather flow at manhole MH 4-5. Samples were collected during six of the seven sampling events, with the following samples exceeding the GSI criteria:

- Baseline 2010
  - No Exceedances
- September 2010
  - No Exceedances
- October 2010
  - Mercury
- November 2010
  - Mercury
- December 2010
  - No Exceedances
- January 2011
  - Total Chromium
  - Copper
  - Lead

- Mercury
- Zinc

The Outfall 004 storm sewer flow will continue to be monitored as part of the Outfall 003 sampling.

3.4.2.5 Outfall 005

Outfall 005 is sampled from MP005, which is located at manhole MH 5-6. Samples were collected at MP005 during all of seven of the sampling events with the following samples exceeding the GSI criteria:

- Baseline 2010
  - No Exceedances
- September 2010
  - No Exceedances
- October 2010
  - No Exceedances
- November 2010
  - Arsenic
  - Total Chromium
  - Copper
  - Lead
  - Nickel
  - Zinc
- December 2010
  - Arsenic
  - Lead
- January 2011
  - Arsenic
- February 2011
  - No Exceedances

The February 2011 analytical results also detected TSS at a concentration of 6 mg/L. TSS will be added to the monthly NPMP parameter list and correlation of TSS and metals detections, along with trends of metal concentrations will continue to be evaluated.

3.4.2.6 Outfall 006

Outfall 006 is sampled from MP006, which is located at manhole MH 6-2. Samples were collected at MP006 during all of seven of the sampling events with the following samples exceeding the GSI criteria:

- Baseline 2010
  - Mercury
- September 2010
  - No Exceedances
- October 2010
  - Selenium
- November 2010
  - Mercury
- December 2010
  - No Exceedances
- January 2011
  - No Exceedances
- February 2011
  - Total Mercury

The February 2011 analytical results also detected TSS at a concentration of 1 mg/L. An evaluation of the February 2011 data indicates that the exceedance of GSI criteria for mercury may be associated with solids in the sample. TSS will be added to the monthly NPMP parameter list and correlation of TSS and metals detections, along with trends of metal concentrations will continue to be evaluated.

3.4.2.7 Outfall 007

Due to access issues, the primary sampling location (MH 7-1) was changed after the September 2010 sampling event to where Outfall 007 discharges into the Flint River. However, this secondary location could not be sampled during three sampling events (October 2010, December 2010, and January 2011) due to the river level being up to the outfall discharge point and safety concerns resulting from ice and snow, making an accurate grab sample not possible. Therefore, samples were collected during four of the seven sampling events with the following samples exceeding the GSI criteria:

- Baseline 2010
  - Mercury

- September 2010
  - Mercury
- October 2010
  - No Exceedances
- November 2010
  - Mercury
- December 2010
  - No Exceedances
- January 2011
  - No Exceedances
- February 2011
  - Mercury
  - Dissolved Mercury

The February 2011 sample was non-detect for TSS at a concentration of 1 mg/L. TSS will be added to the monthly NPMP parameter list and correlation of TSS and metals detections, along with trends of metal concentrations will continue to be evaluated.

3.4.2.8 Outfall 009

Outfall 009 is sampled from MP009, which is located at manhole MH 11-7. Samples were collected at MP009 during all of seven of the sampling events with the following samples exceeding the GSI criteria:

- Baseline 2010
  - Mercury
- September 2010
  - Mercury
- October 2010
  - Total Cyanide
  - Mercury
  - Selenium
- November 2010
  - No exceedances
- December 2010
  - Mercury
- January 2011
  - Arsenic
  - Cadmium
  - Total Chromium

  - Copper
  - Lead
  - Mercury
  - Vanadium
  - Zinc
- February 2011
  - No exceedances

TSS was detected in the February 2011 sampling event at a concentration of 23 mg/L. TSS will be added to the monthly NPMP parameter list and correlation of TSS and metals detections, along with trends of metal concentrations will continue to be evaluated.

3.4.2.9 Outfall 010

Outfall 010 is sampled from MP010, which is located at manhole MH 10-5. Samples were collected at MP010 during all of seven of the sampling events with the following samples exceeding the GSI criteria:

- Baseline 2010
  - Total Cyanide
  - Mercury
- September 2010
  - Total Cyanide
- October 2010
  - Total Cyanide
  - Mercury
  - Selenium
- November 2010
  - No Exceedances
- December 2010
  - No Exceedances
- January 2011
  - No Exceedances
- February 2011
  - Total Cyanide

TSS was also detected in the February 2011 sampling event at a concentration of 23 mg/L. TSS will be added to the monthly NPMP parameter list and correlation of TSS

and metals detections, along with trends of metal concentrations will continue to be evaluated.

3.4.2.10 Outfall 011

Due to access issues, the primary sampling location (MP011) was changed to where Outfall 011 discharges into the Flint River. However, this secondary location could not be sampled during two sampling events (October 2010 and December 2010) due to the river level being up to the outfall discharge point and safety concerns resulting from ice and snow, making an accurate grab sample not possible. Therefore, samples were collected during five of the seven sampling events, and no samples exceeded the GSI criteria.

- June 2010
  - No Exceedances
- September 2010
  - No Exceedances
- November 2010
  - No Exceedances
- January 2011
  - No Exceedances
- February 2011
  - No Exceedances

3.4.2.11 Outfall 013

Outfall 013 is sampled from MP013, which is located at manhole MH 13-6. Due to access issues, MP013 could not be sampled during the February 2011 sampling event. Therefore, samples were collected during six of the seven sampling events with the following samples exceeding the GSI criteria:

- March 2010
  - Total Cyanide
  - Mercury
- September 2010
  - Mercury
- October 2010
  - Mercury
  - Selenium
- November 2010
  - Copper
  - Mercury
  - Silver

- December 2010
    - No Exceedances
- January 2011
    - No Exceedances

TSS will be added to the monthly NPMP parameter list and correlation of TSS and metals detections, along with trends of metal concentrations will continue to be evaluated.

3.4.2.12 February 2011 Dissolved Metals Sampling Summary

As discussed in the *NPMP Sampling Notification and Response Plan* letter submitted to the USEPA – Region 5 on March 18, 2011, in response to the GSI exceedances the samples collected during the February 2011 sampling event were submitted for additional analysis of TSS and dissolved metals (including low level mercury) to evaluate if the GSI exceedances are associated with the solid phase of the samples. Please note that Outfall 013 could not be sampled due to access issues during the February 2011 sampling event, but will have the additional analyses completed on the next sampling event completed at Outfall 013.

Based on the review of February 2011 data, the total suspended solids were at or below detection (<1 mg/L) at four sampling locations (Outfall 006, Outfall 007, Outfall 010, and Outfall 011). The remaining sampling location concentrations ranged from 6 mg/L (Outfall 005) to 64 mg/L (Outfall 001). The metal concentrations were all lower in the dissolved samples, suggesting that the metals appear to be associated with the solids portion of the liquid sample. In fact, the total metal concentrations exceeded the GSI at six sampling locations, while the dissolved metal concentrations only exceeded the GSI at three of the sampling locations (Outfall 001, Outfall 002, and Outfall 007).

3.4.3 Response Plan

Ten of the 11 outfalls sampled during the NPMP detected select metals at concentrations exceeding GSI criteria. The following recommendations are made to respond to these metals exceedances.

1) Determine whether any of the metals impacts identified in those outfalls which include off Site drainage areas (Outfall 001, 003, 004, 005, 006, 011, and 013) can be attributed to upgradient sources. ARCADIS is currently evaluating access to determine if samples can be collected from upgradient locations.

2) Review groundwater and surface soil data in the drainage areas for Outfalls 002, 007, 009, and 010 and prepare a plan to move the sampling locations upstream each month to try to determine the source area of the GSI impacts. This activity may also be completed for the remaining outfalls, pending the outcome of the upgradient sampling event discussed in #1.
3) Add TSS to the monthly NPMP parameter list to aid in the correlation of TSS and metals concentrations.

3.4.4 Requested Changes to the Monitoring Plan

Based on the NPMP sampling results to date the following changes to the NPMP monitoring plan are requested.

1) VOCs have not been detected above GSI criteria in any of the NPMP samples collected to date. The detected VOCs are well below criteria and to date the concentrations do not show a significant upward trend. It is requested that VOC analysis be reduced to quarterly sampling.
2) No exceedances of criteria have been detected at Outfall 011. The detected VOCs and metals are well below criteria and to date the concentrations do not show a significant upward trend, with the exception of total chromium. Total chromium was detected in one sample at a concentration of 10 ug/L, the GSI criteria for total chromium is 11 ug/L It is requested that sampling at Outfall 011 be reduced to quarterly, with the exception of total chromium which will continue to be monitored monthly.

If the sampling frequency reductions are granted the analyte trends will continue to be monitored. In the event that two consecutive monitoring events showing an increase in analyte concentrations at a sampling location and the detections are nearing the criteria, then the analyte will be added back into the monthly sampling program for that location.

4. Soil Corrective Measures

4.1 AOI-09A Lead Soil Impact Delineation Activities

The primary objective of the AOI-09A investigation was to delineate the extent of lead and benzo(a)pyrene impacted soils. As presented in the 2008 *RCRA Revised Corrective Measures Plan* (Revised CMP) (ARCADIS BBL, 2008), the constituents of concern (COCs) identified in the AOI-09A impacted area are lead and benzo(a)pyrene in soil. The Revised CMP indicates that the lead impacts were detected in shallow soils at AOI -09A, located east and southeast of the Building 09 footprint as well as on the adjacent CSX property. Lead soil impacts were detected at concentrations up to 120,000 milligrams per kilogram (mg/kg). Additionally, benzo(a)pyrene was detected in an off Site soil boring in shallow soils at a concentration of 56 mg/kg. Figure 13 presents the approximate areas of the soil impacts at AOI -09A.

Per the Final Decision for the Southend of the Site, the selected corrective measure to address off Site soil contamination is to excavate contaminated soil at the CSX railroad property to unrestricted use standards. The selected remedy to address on Site soil contamination is engineering controls and additional institutional controls above the Site-wide institutional controls. As such, the analytical data collected during the AOI 09-A delineation activities were compared to residential (off Site) and non-residential (on Site) generic MDEQ criteria, as discussed in Section 1.3.

4.1.1 Summary of Field Activities

The field sampling program was established to refine the delineation of the impacted areas identified during the RFI investigation. In the area of the benzo(a)pyrene impact borings were completed in select locations to better define the extent of impact. The sampling program in the lead impacted area included establishing a rectangular sample grid system (approximately 20 ft by 20 ft) over the impacted area. In previously identified areas of elevated lead concentration a sub-grid was used to refine the delineations. The approximate boundaries of the grid area were determined by extending the grid to the nearest soil boring location where lead impact was detected below criteria.

Between August 16, and August 20, 2010 a total of 54 boring locations were completed using hand augering to five feet bgs and completed to a depth of 10 feet bgs using direct push technology (DPT) drilling. The boring locations are presented on Figure 14.

Eight delineation soil borings were completed at the benzo(a)pyrene impacted area. Soil samples were collected from 0 to 2 ft bgs and 2 to 4 ft bgs at each boring location. Soil samples from the 0 to 2 foot interval were submitted for laboratory analysis for SVOCs on a 24-hour turn-around time. Samples collected from the 2 to 4 ft interval were placed on hold and analyzed pending 0 to 2 ft interval results. Soil boring logs are included in Appendix B.

Soils collected from the lead impacted soil area were scanned the length of the boring in the field with an x-ray florescence (XRF) device and the field readings were recorded. Soil borings were advanced a minimum of 5 ft bgs or until the XRF readings indicated that lead was not detected.

Based on the XRF soil sample intervals were selected from a range of lead concentrations for laboratory analysis of total lead and/or toxicity characteristic leaching procedure (TCLP) analysis. The XRF measurements and laboratory data were compared to gain an understanding of the correlation between XRF field measurements for lead and the laboratory total lead data. In addition, the TCLP data were compared to the total lead data to establish a correlation between TCLP and total lead concentrations to determine the extent of hazardous soils and to evaluate potential treatment methods during the soil removal phase.

To support the soil analyses the samples were reported by the laboratory at Level 3. The data was verified/validated as described in the FSP/QAPP based on the USEPA's (1995) approach for data review of one SDG at a Tier II and the remainder at Tier I.

Soil boring locations were biased in the field based on field observations. Protocols for the completion of sampling and analysis activities were presented in the FSP/QAPP provided as Appendix C of the RFI Work Plan and in the Health and Safety Plan (HASP) provided as Appendix E of the RFI Work Plan.

4.1.2 Summary of Results – Benzo(a)pyrene Impacts

Eight soil borings were completed at the benzo(a)pyrene impacted area (SB-09-01 through SB-09-04, and SB-09-33 through SB-09-36) to better define the extent of impact. One boring (SB-09-01) was completed on Site, while the remaining seven borings were completed on the adjacent CSX property. The soil boring locations are shown on Figure 14 and the analytical data is presented on Table 12. Laboratory analytical results are included in Appendix C.

Two of the soil borings completed on CSX property (SB-09-02 [0 to 2 ft bgs] and SB-09-36 [1 to 2 ft bgs]) detected multiple SVOCs at concentrations exceeding MDEQ Part 201 Residential and Non-Residential criteria. Concentrations in soil samples collected from SB-09-02 and SB-09-36 from the 2 to 4 ft bgs intervals did not exceed MDEQ Part 201 Residential criteria.

The SVOC impacts are vertically delineated in this area and horizontally delineated to the west, south, and east. The approximate extent of benzo(a)pyrene impacted soil is shown on Figure 14. The estimated volume of benzo(a)pyrene impacted soils is approximately 40 cubic yards.

4.1.3 Summary of Results – Lead Impacts

Forty-six soil borings were completed to refine the delineation of the lead impacted soil area (SB-09-05 through SB-09-32 and SB-09-37 through SB-09-54). Twenty-five soil borings were completed on Site, while the remaining 21 soil borings were completed on the adjacent CSX property. The soil boring locations are presented on Figure 14. The laboratory analytical data and field XRF data are presented on Table 13 and Table 14, respectively. Laboratory analytical results are included in Appendix C.

As discussed in Section 4.1.1 soil borings were scanned with an XRF and based on the readings soil sample intervals were selected from a range of XRF readings (33 parts per million [ppm] to 117,000 ppm) for laboratory analysis of total lead and/or TCLP analysis. In addition, one sample was submitted for analysis of fine and coarse lead fractions.

Evaluation of the XRF and total lead laboratory data showed that in general XRF readings and total lead laboratory concentrations were comparable based on trends. High XRF readings typically showed high laboratory total lead concentrations and low XRF readings showed low laboratory total lead concentrations. However, XRF readings were not comparable to laboratory data on a point by point basis.

The XRF readings and total lead data indicate that the lead impacts are primarily located in the 0 to 3 ft bgs interval. Lead impacts were present at a lesser extent in the 3 to 5 ft bgs interval. Lead impacts were not identified below 5 ft bgs. The approximate extent of lead impacted soil is indicated on Figure 14. The estimated volume of lead impacted soils is approximately 1,000 cubic yards.

The TCLP lead analytical data will be reviewed to determine proper soil disposal options and potential soil stabilization methods prior to disposal.

4.2 Maintenance of Select Surface Covers

This section addresses the engineering controls that will protect future Site users from near surface soils that exceed direct contact criteria. The engineering controls include a chain link fence surrounding the perimeter of the Site (access to the Site controlled by security) and maintaining the surface cover consistent with existing conditions at five AOIs located in the Southend of the Site. In the areas where a concrete slab or asphalt pavement already exists, these areas will be maintained, as necessary, to ensure that the surface cover remains as a barrier for potential direct contact and/or particulate inhalation exposure. In areas where an asphalt or concrete cover does not currently exist; the area will be covered and maintained. ARCADIS is currently evaluating options (soil, stone, concrete, asphalt) to cover these areas as well as cost, maintenance and life of the surface cover.

4.2.1 Summary of Field Activities

The five AOIs discussed below contain six areas where surface cover is inspected and maintained. The locations of these areas are depicted on Figure 15 and include:

- **AOI Group 02-C**: This AOI (one area) is associated with former Building 02, and relates to a former sump in the former Materials Laboratory.

- **AOI Group 12-A**: This AOI (one area) is associated with former Building 12, and relates primarily to several press pits and associated sumps, pits, trenches, and traps.

- **AOI Group 29-A**: This AOI (one area) is associated with the former Building 29, and relates to a pit for a cable-operated elevator and former work pads with oil staining.

- **AOI Group 09-A**: This AOI (one area) is associated with the former Building 9, and relates to a floor trench and underground storage tank (UST) system.

- **AOI Group 09-B:** This AOI includes two separate areas, one of which is associated with the Former Building 31/Hamilton Avenue Tank Farm, and the other is in the general vicinity of this former tank farm.

The above mentioned areas were photographed and visually inspected as a baseline in July 2010 and thereafter inspected and photographed on a quarterly basis. Inspections were performed in July and October 2010. During each inspection the condition of cover was inspected and documented in an inspection log. Documented items include the type of cover (concrete, stone, vegetation, etc.), the condition of concrete or asphalt cover (good, fair, poor), and whether or not conditions of the cover have changed since the last inspection date. Photos of each inspection area are also included with the inspection log.

4.2.2 Summary of Results

Inspections reveal broken concrete and sparsely vegetated spots in several of the AOIs, thus posing a potential risk for direct contact with soils. Consideration of long term solutions for providing adequate cover to the areas is ongoing. Such solutions include the installation of concrete or asphalt, installation of stone cover of a medium grade such as 21AA stone, or installation of clean fill with a vegetative cover. July and October 2010 inspection logs and photographs are located in Appendix D.

4.2.3 Plan Modifications

AOI Group 09-A was not included in the CMI Work Plan. This area was being evaluated for possible excavation; however, it was determined that this area would addressed by deed restriction and maintain a cover. AOI Group 09-A was added to the inspection log for the October 2010 inspection. AOI Group 09-A is currently photographed and inspected with the other areas.

5. Site-Wide Use Restriction Implementation

Corrective measures were designed with the consideration that certain baseline Site-wide use restrictions would be applied as part of the overall final corrective action for the Site.

5.1 Status of Groundwater Use Restriction

A legal survey was completed in August 2010 and the restrictive covenant prohibiting the use of groundwater for any purpose, beyond sampling and other related investigatory testing was prepared. The document is currently under review by RACER Trust and will be filed with the local county register of deeds in accordance with Section 1 of the Recording Requirements Act, 1937 PA 103, as amended (Act 103), MCL 565.201 pending review.

5.2 Status of Site Restrictions

A legal survey was completed in August 2010 and the restrictive covenants for AOIs Group 12-A, Group 02-C, Group 29-A, Group 09-B, Group 09-A and Group 40-D including specific restrictions regarding excavation and/or notification of the presence of hazardous constituents in soil in these areas and limiting future use of the Site to Industrial/Commercial II, III, and IV activities only, in accordance with the Final Decision for the Southend of the Site was prepared. The document is currently under review by RACER Trust and will be filed with the local county register of deeds in accordance with Section 1 of the Recording Requirements Act, 1937 PA 103, as amended (Act 103), MCL 565.201 pending review.

6. Non-CMI Activity Summary

6.1 Outfall 003/004 Diversion and Treatment System

The Outfall 003/004 Storm Water Diversion and Treatment System (System) was installed to minimize the amount of oil in the Outfall 003 and 004 storm sewers from reaching the Flint River. The oil infiltrates the storm sewers, which are located below the groundwater table, in the former manufacturing areas of the Site. The storm sewers are not water tight and as such, allow oil and groundwater to infiltrate. The oil then migrates east from the former manufacturing areas downstream to Outfalls 003 and 004 located at the Flint River. Oil-absorbent booms have historically been employed to prevent oil releases into the river and the oil has subsequently been removed by vacuum extraction behind the booms. Construction of the storm water diversion and treatment system upstream of the river serves as a more practical solution to the ongoing maintenance of control measures at the outfalls.

The general concept of the System was to modify two existing storm water vaults to divert water into a newly constructed treatment system and finally return treated water to the storm sewer network. Major system components include an oil-water separator, BaySeparator™ debris removal system, high density polyethylene (HDPE) conveyance piping, overflow weirs, and above ground structures (bollards, fencing, etc.). Storm water enters the System via a 12-inch and an 8-inch HDPE pipe inlet diverted from two existing storm water vaults (manholes MH 3-6 and 4-6, respectively). Steel overflow weirs were installed in each vault to aid in the diversion process. Sediment, debris, and oils are then captured in the BaySeparator™ consisting of a duel manhole system. Water then travels through an oil-water separator removing floating and emulsified oils. Finally, treated water is returned to the Outfall 003 storm sewer for discharge into the nearby Flint River. As-built-drawings are included in Appendix E.

Installation of the system was performed between October 2010 and January of 2011. The majority of the construction work consisted of general earthwork (excavation and trenching) and mechanical construction including fusion welding, manhole construction, concrete coring, torch cutting, and confined space entry work. Additional professional services rendered included the use of a licensed surveyor to verify the correct placement of System structures and HDPE conveyance piping as well as the use of an air-knifing contractor to locate subsurface utilities.

The System is now operational and is being maintained by an operations and maintenance technician. Water levels and oil levels are actively being monitored in vaults, the BaySeparator™ manholes, and the oil-water separator. Storm water

downstream of the System is also being monitored in manholes as well as the Flint River outfalls to check for accumulating oils. Site restoration including seeding and mulching to restore vegetation is scheduled for completion in spring 2011.

6.2 **Oil Interceptor #2 Sediment Removal**

Oil Interceptor #2 serves as an oil removal system and storm water sedimentation basin within the Outfall 003 storm sewer system in the north end of the Site. The interceptor is located upstream of the Storm Water Diversion and Treatment System described in Section 6.1, and is approximately 90 feet long by 20 feet wide with a depth of approximately 14 feet. Storm water enters the interceptor via a 66-inch storm water sewer and exits the through a 66-inch sewer which ties back into the Outfall 003 storm sewer system. Storm water entering the interceptor experiences an increased hydraulic retention time allowing for oil to be captured from the water surface via a tube skimmer. In addition to oil removal, Interceptor #2 also serves as a settling basin, removing suspended sediment from storm water flow as suspended particles settle out of suspension due to decreased storm water velocity within the Interceptor.

Historically, the interceptor has received minimal operations and maintenance efforts in regards to removing accumulated sediment from the interceptor floor. As a result, approximately 270 cubic yards of sediment had accumulated on the floor thus inhibiting normal operations flow within the interceptor.

On January 28, 2010 and March 3, 2010 PCBs were detected in the weekly sample collected at MP003A, which is located downstream of the interceptor. It was decided that the accumulated sediments would be removed from the interceptor to improve the operation of the interceptor and minimize the potential for detections of PCBs downstream.

Removal of accumulated sediments was performed in the summer of 2010. Approximately 285 tons of sediment was removed from the interceptor via means of hand digging in combination with vacuum extraction using a vacuum truck. Bypass pumping and confined space entry were necessary to complete the sediment removal. Excavated sediment was characterized and sent off site for disposal. A sample was collected from the water removed from the interceptor and submitted for laboratory analysis of metals and PCBs. The analytical data indicated that select metals were detected at concentrations that did not exceed criteria and PCBs were not detected; therefore, the water was returned to interceptor.

As a result of the sediment removal activities normal flow conditions have returned to the interceptor and the presence of PCBs has not been detected in the weekly downstream samples collected since the sediment was removed.

7. References

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ARCADIS

Tables

Table 1. Summary of LIF Investigation Results, 2010 CMI Annual Report
RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID	Maximum Observed Fluorescence	Depth of Observed Maximum	Vertical Range of LIF Response		Refusal Encountered	Final Depth of Boring
			Top	Bottom		
	%RE	ft bgs	ft bgs	ft bgs		ft bgs
LIF-02-001	1.98	2.00	BG	BG	No	26.00
LIF-02-002	13.54	6.47	6.00	7.00	No	26.00
LIF-02-003	1.79	21.41	BG	BG	No	26.00
LIF-02-004	276.75	8.96	6.00	12.00	No	26.02
LIF-02-005	3.66	4.95	BG	BG	No	26.01
LIF-02-006	216.49	8.89	7.50	11.00	No	26.01
LIF-02-007	311.08	8.74	7.50	12.00	No	22.90
LIF-02-008	2.30	23.36	BG	BG	No	23.46
LIF-02-009	136.62	5.76	5.00	7.57	Yes	7.57
LIF-02-010	7.24	5.17	5.00	6.00	No	26.01
LIF-02-011	93.59	10.22	6.00	11.11	Yes	11.11
LIF-02-012	9.08	4.11	BG	BG	Yes	4.64
LIF-02-013	8.98	1.28	BG	BG	No	26.09
LIF-02-014	65.24	6.67	6.50	10.00	No	26.01
LIF-02-015	1.58	15.50	BG	BG	No	26.00
LIF-02-016	6.99	0.56	BG	BG	No	26.00
LIF-02-017	56.53	8.74	5.00	9.39	Yes	9.39
LIF-02-018	335.48	7.26	6.50	10.50	No	26.03
LIF-02-019	258.72	9.52	8.00	11.00	No	26.10
LIF-02-020	22.40	10.01	9.50	11.00	No	26.04
LIF-02-021	86.12	8.09	7.00	9.50	No	15.15
LIF-02-022	4.43	23.44	BG	BG	No	26.00
LIF-09-001	20.13	20.22	20.00	21.00	No	30.03
LIF-09-002	13.05	19.16	19.00	19.50	No	30.00
LIF-09-003	10.78	12.49	12.00	14.50	No	30.00
LIF-09-004	22.76	8.04	8.00	9.00	No	26.02
LIF-09-005	1.68	20.80	BG	BG	No	26.01
LIF-09-006	16.13	11.51	11.00	12.00	No	26.02
LIF-09-007	2.52	15.25	BG	BG	No	26.01
LIF-09-008	41.98	16.04	15.50	16.50	No	26.02
LIF-09-009	6.25	24.54	24.00	24.50	No	30.68
LIF-09-010	9.10	12.27	11.50	14.00	No	26.18
LIF-09-011	4.88	11.38	BG	BG	No	26.01
LIF-09-012	5.45	8.51	8.00	8.50	No	19.95
LIF-09-013	4.10	21.94	BG	BG	No	30.00
LIF-09-014	3.06	21.66	BG	BG	No	30.01
LIF-09-015	10.93	24.42	24.00	24.50	No	30.01
LIF-09-016	1.81	17.36	BG	BG	No	26.00
LIF-09-017	441.52	14.07	5.00	15.00	No	26.02
LIF-09-018	230.31	5.36	5.00	13.00	No	26.00
LIF-09-019	3.33	19.16	BG	BG	No	20.02
LIF-09-020	259.18	10.94	5.00	13.50	No	26.04
LIF-09-021	565.26	12.66	11.50	14.00	No	26.02
LIF-09-022	2.44	13.57	BG	BG	No	26.01
LIF-09-023	2.54	1.86	BG	BG	No	26.00
LIF-09-024	14.77	6.26	6.00	8.50	No	26.06
LIF-09-025	10.48	9.83	9.50	10.50	No	26.00
LIF-09-026	3.73	0.04	BG	BG	No	26.10
LIF-09-027	69.84	12.62	6.00	13.00	No	26.01
LIF-09-028	1.57	2.62	BG	BG	Yes	3.91
LIF-09-029	26.39	12.91	11.00	14.00	No	26.00
LIF-09-030	5.85	9.87	9.50	10.50	No	26.00
LIF-09-031	2.86	17.37	BG	BG	No	29.72
LIF-09-032	13.14	12.63	12.50	12.66	Yes	12.66

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Location ID	Maximum Observed Fluorescence	Depth of Observed Maximum	Vertical Range of LIF Response		Refusal Encountered	Final Depth of Boring
			Top	Bottom		
	%RE	ft bgs	ft bgs	ft bgs		ft bgs
LIF-09-033	10.84	8.72	8.50	9.00	No	26.00
LIF-09-034	2.20	8.22	BG	BG	No	26.00
LIF-12-001	140.68	8.94	7.00	14.00	No	24.68
LIF-12-002	1.17	2.81	BG	BG	Yes	4.03
LIF-12-003	1.22	1.42	BG	BG	Yes	3.88
LIF-12-004	30.63	14.13	8.00	19.00	No	30.00
LIF-12-005	111.26	10.08	8.00	11.00	Yes	14.50
LIF-12-006	0.92	0.09	BG	BG	Yes	10.31
LIF-12-007	25.47	4.34	BG	BG	Yes	6.34
LIF-12-008	1.09	0.05	BG	BG	Yes	2.11
LIF-12-009	2.33	18.22	BG	BG	No	26.02
LIF-12-010	177.29	20.09	18.00	22.00	No	30.02
LIF-12-011	511.22	12.73	5.00	14.50	No	26.03
LIF-12-012	98.18	7.51	6.00	13.00	No	30.00
LIF-12-013	11.09	12.18	11.00	13.00	No	26.03
LIF-12-014	29.67	14.81	14.00	15.00	No	26.00
LIF-12-015	3.05	0.00	BG	BG	No	26.00
LIF-12-016	241.64	14.28	6.00	19.00	No	30.01
LIF-12-017	37.22	14.75	11.00	16.00	No	30.01
LIF-12-018	157.15	8.05	7.00	15.00	No	30.00
LIF-12-019	19.42	1.24	BG	BG	Yes	2.56
LIF-12-020	440.39	12.70	11.00	22.50	No	30.01
LIF-12-021	13.77	4.29	BG	BG	Yes	10.88
LIF-12-022	336.33	10.25	7.50	14.00	No	24.00
LIF-12-023	15.09	7.22	7.00	8.00	No	26.00
LIF-12-023A	64.31	7.99	6.50	14.00	No	26.03
LIF-12-024	513.89	16.56	8.00	28.00	No	34.00
LIF-12-025	24.02	9.28	8.00	10.00	No	26.00
LIF-12-026	165.82	23.05	12.00	24.50	No	30.00
LIF-12-027	70.28	11.05	10.00	11.29	Yes	11.29
LIF-12-028	173.66	14.13	1.00	16.00	No	26.00
LIF-12-029	3.60	19.58	BG	BG	No	26.00
LIF-12-030	0.90	0.75	BG	BG	Yes	3.95
LIF-12-031	0.95	2.66	BG	BG	Yes	4.29
LIF-12-032	52.88	8.04	6.50	12.00	No	26.01
LIF-12-033	1.73	21.25	BG	BG	No	26.01
LIF-12-034	1.79	0.78	BG	BG	Yes	11.97
LIF-12-035	4.36	23.22	BG	BG	No	26.00
LIF-12-036	9.15	16.78	16.50	17.50	No	21.00
LIF-12-037	9.44	6.30	6.00	6.50	No	24.00
LIF-12-038	0.74	0.72	BG	BG	Yes	3.98
LIF-12-039	2.78	1.94	BG	BG	No	3.93
LIF-12-040	5.89	4.62	BG	BG	Yes	13.82
LIF-12-041	127.34	7.02	6.00	7.18	Yes	7.18
LIF-12-042	7.84	5.41	5.00	5.50	No	26.00
LIF-12-043	4.11	21.42	BG	BG	No	26.01
LIF-16-001	43.25	14.28	13.50	16.00	No	26.04
LIF-16-002	69.54	8.45	8.00	11.00	No	26.01
LIF-16-003	98.64	10.03	9.50	11.50	No	26.02
LIF-16-004	3.33	8.17	BG	BG	No	26.01
LIF-16-005	6.88	8.31	8.00	9.00	No	26.00
LIF-16-006	196.33	12.53	9.50	14.50	No	26.00
LIF-16-007	45.21	9.75	8.00	11.00	No	26.01

Table 1. Summary of LIF Investigation Results, 2010 CMI Annual Report
RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID	Maximum Observed Fluorescence	Depth of Observed Maximum	Vertical Range of LIF Response		Refusal Encountered	Final Depth of Boring
			Top	Bottom		
	%RE	ft bgs	ft bgs	ft bgs		ft bgs
LIF-16-008	2.74	3.50	BG	BG	No	26.00
LIF-16-009	31.44	0.38	BG	BG	Yes	9.09
LIF-16-010	18.82	11.63	11.00	11.67	Yes	11.67
LIF-16-011	1.44	0.39	BG	BG	Yes	4.17
LIF-16-012	16.40	17.20	17.00	17.50	No	24.00
LIF-16-013	284.14	21.76	6.00	23.50	No	30.01
LIF-16-014	1.30	2.60	BG	BG	No	2.82
LIF-16-015	15.60	0.00	BG	BG	Yes	9.62
LIF-16-016	10.05	6.97	6.50	7.00	No	26.00
LIF-16-017	219.83	19.54	12.00	23.50	No	30.00
LIF-16-018	23.63	15.78	14.50	16.50	No	26.00
LIF-40-001	7.98	11.07	9.00	13.00	Yes	13.21
LIF-40-002	1.68	1.74	BG	BG	Yes	4.78
LIF-40-003	212.89	27.75	13.00	30.00	No	34.03
LIF-40-004	246.85	30.07	6.00	32.00	No	34.01
LIF-40-005	43.01	7.74	7.00	8.50	Yes	14.32
LIF-40-006	232.95	6.24	5.50	11.00	No	26.00
LIF-40-007	3.44	5.83	BG	BG	Yes	6.14
LIF-40-008	259.90	6.64	5.00	13.50	No	26.00
LIF-40-009	334.30	10.77	5.00	23.00	No	28.00
LIF-40-010	4.25	14.15	BG	BG	No	26.00
LIF-40-011	154.99	15.66	9.00	16.50	No	26.00
LIF-40-012	2.82	26.26	BG	BG	No	27.02
LIF-40-013	73.50	4.82	BG	BG	Yes	5.72
LIF-40-014	73.21	12.98	8.00	30.00	No	37.01
LIF-40-015	138.99	18.76	6.50	19.50	No	26.00
LIF-40-016	59.68	6.59	6.50	6.62	Yes	6.62
LIF-40-017	16.41	17.20	17.00	17.50	No	24.00
LIF-40-018	1.34	2.60	BG	BG	Yes	2.82
LIF-40-019	5.95	0.00	BG	BG	No	26.00
LIF-40-020	1.35	24.37	BG	BG	No	26.00
LIF-40-021	44.15	9.26	6.50	16.00	No	26.00
LIF-40-022	409.46	19.15	19.00	23.00	No	26.00
LIF-40-023	1.72	22.99	BG	BG	No	29.33
LIF-40-024	46.82	6.64	6.00	7.50	No	26.00
LIF-40-025	94.41	16.21	8.50	16.50	No	26.00

Notes:

BG	<5% of orange waveform responses above the top of clay were considered background fluorescence of the native fill materials and not representative of
% RE	Percentage of Reference Emitter Standard
ft bgs	Feet below ground surface
ft	Feet

Table 2. Comparison of Selected LIF Investigation Results and Monitoring Well Gauging Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigar

LIF ID	Maximum Observed Fluorescence	Depth of Maximum Observed	Vertical Range of LIF Response		Corresponding Monitoring Well	Depth to LNAPL	Depth to Water	Maximum Observed LNAPL
			Top	Bottom				
	% RE	ft bgs	ft bgs	ft bgs	ft	ft bgs	ft bgs	ft
LIF-02-004	276.75	8.96	6.0	12.0	RFI-02-019	5.75	9.23	3.48
LIF-02-006	216.49	8.89	7.5	11.0	FRI-02-023	5.28	5.29	0.01
LIF-02-009	136.62	5.76	5.0	7.6	FRI-02-023	5.28	5.29	0.01
LIF-02-014	65.24	6.67	6.5	10.0	RFI-02-019	5.75	9.23	3.48
LIF-02-018	335.48	7.26	6.5	10.5	RFI-02-012	5.72	5.73	0.01
LIF-02-021	86.12	8.09	7.0	9.5	RFI-02-020	ND	3.6	ND
LIF-09-002	13.05	19.16	19.0	19.5	RFI-09-40R	6.8	9.1	2.3
LIF-09-003	10.78	12.49	12.0	14.5	31-8	ND	8.12	ND
LIF-09-004	22.76	8.04	8.0	9.0	RFI-09-12	ND	3.88	ND
LIF-09-006	16.13	11.51	11.0	12.0	RFI-09-52	ND	7.72	ND
LIF-09-010	9.10	12.27	11.5	14.0	RFI-09-11	ND	6.91	ND
LIF-09-012	5.45	8.51	8.0	8.5	RFI-09-47	6.51	8.85	2.34
LIF-09-015	10.93	24.42	24.0	24.5	RFI-09-45R	ND	5.73	ND
LIF-09-018	230.31	5.36	5.0	13.0	RFI-09-36	ND	7.2	ND
LIF-09-020	259.18	10.94	5.0	13.5	RFI-09-36	ND	7.2	ND
LIF-09-027	69.84	12.62	6.0	13.0	RFI-09-12	ND	3.88	ND
LIF-09-029	26.39	12.91	11.0	14.0	RFI-09-06	ND	5	ND
LIF-09-033	10.84	8.72	8.5	9.0	04-3	ND	6.84	ND
LIF-12-001	140.68	8.94	7.0	14.0	RFI-12-12	5.72	5.73	0.01
LIF-12-005	111.26	10.08	8.0	11.0	RFI-12-27	6.05	6.06	0.01
LIF-12-012	98.18	7.51	6.0	13.0	RFI-12-01R	5.25	5.26	0.01
LIF-12-016	241.64	14.28	6.0	19.0	RFI-12-33	ND	4.51	ND
LIF-12-017	37.22	14.75	11.0	16.0	RFI-12-25	ND	4.3	ND
LIF-12-018	157.15	8.05	7.0	15.0	RFI-12-23	7.44	12.92	5.48
LIF-12-020	440.39	12.70	11.0	22.5	RFI-12-09R	4.36	7.64	3.28
LIF-12-026	165.82	23.05	12.0	24.5	RFI-12-07R2	3.99	4	0.01
LIF-16-001	43.25	14.28	13.5	16.0	RFI-16-20	8.01	8.02	0.01
LIF-16-002	69.54	8.45	8.0	11.0	RFI-16-08	4.05	4.6	0.55
LIF-16-003	98.64	10.03	9.5	11.5	RFI-16-24	9.22	9.23	0.01
LIF-16-006	196.33	12.53	9.5	14.5	RFI-16-10	9.17	9.3	0.13
LIF-16-007	45.21	9.75	8.0	11.0	RFI-16-12	8.23	8.24	0.01
LIF-40-003	212.89	27.75	13.0	30.0	RFI-40-25	ND	9.13	ND
LIF-40-006	232.95	6.24	5.5	11.0	RFI-40-20	6.86	6.87	0.01
LIF-40-008	259.90	6.64	5.0	13.5	RFI-40-10R	7.22	7.23	0.01
LIF-40-009	334.30	10.77	5.0	23.0	RFI-40-02R	7.65	11.49	3.84
LIF-40-016	59.68	6.59	6.5	6.6	RFI-40-06R	5.49	5.5	0.01
LIF-40-021	44.15	9.26	6.5	16.0	RFI-40-06R	5.49	5.5	0.01

Notes:

ND	Non-detect for LNAPL
% RE	Percentage of Reference Emitter Standard
ft bgs	Feet below ground surface
ft	Feet

Table 3. Groundwater and LNAPL Elevation Monitoring Locations - Northend
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Area of Interest (AOI)	Location	Comments
03-1	03-03R	LNAPL Monitoring Program Location
03-1	03-105R3	LNAPL Monitoring Program Location
03-1	RFI-03-02	LNAPL Monitoring Program Location
03-1	RFI-03-03	Groundwater Elevation Monitoring Location
03-1	70-109	Groundwater Elevation Monitoring Location
03-1	70-100	Groundwater Elevation Monitoring Location
05-1	43-161	LNAPL Monitoring Program Location
05-1	43-165	LNAPL Monitoring Program Location
05-1	43-166	LNAPL Monitoring Program Location
05-1	43-167	LNAPL Monitoring Program Location
05-1	RFI-05-13	LNAPL Monitoring Program Location
05-1	RFI-05-14	LNAPL Monitoring Program Location
05-4	43-103	Groundwater Elevation Monitoring Location
05-5	RFI-05-06	LNAPL Monitoring Program Location
05-5	RFI-05-08	Groundwater Elevation Monitoring Location
05-5	RW-05 North	LNAPL Monitoring Program Location
05-6	43-140	Groundwater Elevation Monitoring Location
05-6	43-242	Groundwater Elevation Monitoring Location
07-1	RFI-07-03	Groundwater Elevation Monitoring Location
07-1	OW-3D	Groundwater Elevation Monitoring Location
07-1	OW-3S	Groundwater Elevation Monitoring Location
07-1	OW-5	Groundwater Elevation Monitoring Location
07-1	OW-40	Groundwater Elevation Monitoring Location
07-1	GM-2	Groundwater Elevation Monitoring Location
07-1	GM-3	Groundwater Elevation Monitoring Location
07-1	GM-4	Groundwater Elevation Monitoring Location
07-1	GM-5	Groundwater Elevation Monitoring Location
07-1	GM-6	Groundwater Elevation Monitoring Location
07-1	GM-7	Groundwater Elevation Monitoring Location
07-1	GM-8	Groundwater Elevation Monitoring Location
07-1	GM-9	Groundwater Elevation Monitoring Location
07-1	GM-10	Groundwater Elevation Monitoring Location
07-1	GM-11	Groundwater Elevation Monitoring Location
07-1	GM-12	Groundwater Elevation Monitoring Location
07-3	07-01	Groundwater Elevation Monitoring Location
07-3	RFI-07-08	Groundwater Elevation Monitoring Location
07-3	RFI-85-14	Groundwater Elevation Monitoring Location
10-1	20-144	Groundwater Elevation Monitoring Location
10-2	RFI-10-24	Groundwater Elevation Monitoring Location
10-2	RFI-10-26	Groundwater Elevation Monitoring Location
10-2	RFI-10-29	Groundwater Elevation Monitoring Location
10-2	RFI-10-33	Groundwater Elevation Monitoring Location
10-2	RFI-10-35	Groundwater Elevation Monitoring Location
10-2	RFI-10-36	Groundwater Elevation Monitoring Location
10-3	RFI-10-07	Groundwater Elevation Monitoring Location
10-3	RFI-10-28	Groundwater Elevation Monitoring Location
10-4	20-145	Groundwater Elevation Monitoring Location
10-4	20-160	LNAPL Monitoring Program Location
10-4	20-162	LNAPL Monitoring Program Location
10-4	20-163R	LNAPL Monitoring Program Location
10-4	20-168	LNAPL Monitoring Program Location
10-4	20-FP10R	Groundwater Elevation Monitoring Location
10-4	20-FP11R	LNAPL Monitoring Program Location
10-4	20-FP8	LNAPL Monitoring Program Location
10-4	20-FP9R	LNAPL Monitoring Program Location
10-4	RFI-03-04	LNAPL Monitoring Program Location

See Notes on Page 3.

Table 3. Groundwater and LNAPL Elevation Monitoring Locations - Northend
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Area of Interest (AOI)	Location	Comments
36-1	36-FP2	LNAPL Monitoring Program Location
36-1	36-FP3	LNAPL Monitoring Program Location
36-1	36-FP4	LNAPL Monitoring Program Location
36-1	36-FP6	LNAPL Monitoring Program Location
36-1	36-FP7	LNAPL Monitoring Program Location
36-1	36-FP8	LNAPL Monitoring Program Location
36-1	RFI-36-04	LNAPL Monitoring Program Location
36-1	RFI-36-05	LNAPL Monitoring Program Location
36-1	RFI-36-06	LNAPL Monitoring Program Location
36-1	RFI-36-07	LNAPL Monitoring Program Location
36-1	RFI-36-20	Groundwater Elevation Monitoring Location
36-1	RFI-36-25R	Groundwater Elevation Monitoring Location
36-1	RFI-36-29R	LNAPL Monitoring Program Location
36-1	RFI-36-46	Groundwater Elevation Monitoring Location
36-1	RFI-36-47	Groundwater Elevation Monitoring Location
36-1	RFI-36-48	Groundwater Elevation Monitoring Location
36-1	RFI-36-49	LNAPL Monitoring Program Location
36-1	RFI-36-55	Groundwater Elevation Monitoring Location
36-1	RFI-36-56	Groundwater Elevation Monitoring Location
36-1	RW-1	LNAPL Monitoring Program Location
36-1	RW-3	LNAPL Monitoring Program Location
36-2	RFI-36-19	Groundwater Elevation Monitoring Location
36-2	RFI-36-37	Groundwater Elevation Monitoring Location
36-4	RFI-36-12	Groundwater Elevation Monitoring Location
36-5	20-500R	Groundwater Elevation Monitoring Location
36-5	20-502	LNAPL Monitoring Program Location
36-5	20-503	LNAPL Monitoring Program Location
36-5	20-506	LNAPL Monitoring Program Location
36-5	37-RW-NORTH	LNAPL Monitoring Program Location
36-5	37-RW-SOUTH	LNAPL Monitoring Program Location
36-5	RFI-36-13	LNAPL Monitoring Program Location
36-5	RFI-36-14	Groundwater Elevation Monitoring Location
38-1	RFI-38-04	Groundwater Elevation Monitoring Location
38-1	RFI-38-05	Groundwater Elevation Monitoring Location
38-1	36-101	Groundwater Elevation Monitoring Location
38-1	38-120	Groundwater Elevation Monitoring Location
38-1	36-121	Groundwater Elevation Monitoring Location
55-1	55-1	Groundwater Elevation Monitoring Location
55-1	55-2	Groundwater Elevation Monitoring Location
55-1	RFI-55-01	Groundwater Elevation Monitoring Location
55-1	RFI-55-02	Groundwater Elevation Monitoring Location
55-1	RFI-55-12	Groundwater Elevation Monitoring Location
65-1	43-141	Groundwater Elevation Monitoring Location
81-1	RFI-81-02	Groundwater Elevation Monitoring Location
81-1	RFI-81-35	Groundwater Elevation Monitoring Location
81-1	RFI-81-43	LNAPL Monitoring Program Location
81-2	70-101	LNAPL Monitoring Program Location
81-2	70-103	LNAPL Monitoring Program Location
81-2	70-105	LNAPL Monitoring Program Location
81-2	70-107	LNAPL Monitoring Program Location
81-2	70-107R	LNAPL Monitoring Program Location
81-2	70-108R	LNAPL Monitoring Program Location
81-2	70-163	Groundwater Elevation Monitoring Location
81-2	70-164	LNAPL Monitoring Program Location
81-2	70-165	Groundwater Elevation Monitoring Location
81-2	RFI-81-03	Groundwater Elevation Monitoring Location
81-2	RFI-81-21	Groundwater Elevation Monitoring Location
81-2	RFI-81-45	Groundwater Elevation Monitoring Location

See Notes on Page 3.

Table 3. Groundwater and LNAPL Elevation Monitoring Locations - Northend
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Area of Interest (AOI)	Location	Comments
81-2	RFI-81-49	LNAPL Monitoring Program Location
81-2	RFI-81-50	Groundwater Elevation Monitoring Location
81-3	RFI-81-07	Groundwater Elevation Monitoring Location
81-3	RFI-81-08	Groundwater Elevation Monitoring Location
81-3	RFI-81-33	Groundwater Elevation Monitoring Location
81-3	RFI-81-51	Groundwater Elevation Monitoring Location
83/84-1	RFI-83/84-01	Groundwater Elevation Monitoring Location
83/84-1	RFI-83/84-03	LNAPL Monitoring Program Location
83/84-1	RFI-83/84-07	LNAPL Monitoring Program Location
83/84-1	RFI-83/84-29	Groundwater Elevation Monitoring Location
83/84-2	RFI-83/84-04	LNAPL Monitoring Program Location
83/84-2	RFI-83/84-05	LNAPL Monitoring Program Location
83/84-2	RFI-83/84-23	LNAPL Monitoring Program Location
83/84-2	RFI-83/84-28	LNAPL Monitoring Program Location
83/84-2	RFI-83/84-38	LNAPL Monitoring Program Location
83/84-2	RFI-83/84-53	Groundwater Elevation Monitoring Location
83/84-4	RFI-83/84-54	Groundwater Elevation Monitoring Location
83/84-7	88-7	Groundwater Elevation Monitoring Location
83/84-7	RFI-83/84-11	Groundwater Elevation Monitoring Location
85-1	RFI-85-02R	LNAPL Monitoring Program Location
85-1	RFI-85-04R	Groundwater Elevation Monitoring Location
85-1	RFI-85-05	Groundwater Elevation Monitoring Location
86-1	87-FP1	LNAPL Monitoring Program Location
86-1	87-FPD2	Groundwater Elevation Monitoring Location
86-1	87-FPD3	Groundwater Elevation Monitoring Location
86-1	MW-00-FP6	LNAPL Monitoring Program Location
86-1	RFI-86-02	LNAPL Monitoring Program Location
86-1	RFI-86-03	LNAPL Monitoring Program Location
86-1	RFI-86-06D	LNAPL Monitoring Program Location
86-1	RFI-86-06S	LNAPL Monitoring Program Location
86-1	RFI-86-08R	Groundwater Elevation Monitoring Location
86-1	RFI-86-16R	Groundwater Elevation Monitoring Location

Note:
Measurements will be collected on an annual basis.

Table 4. Groundwater and LNAPL Elevation Monitoring Locations - Southend
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Area of Interest (AOI)	Location	Comments
02-B	RFI-02-12	Groundwater Elevation Monitoring Location
02-B	RFI-02-14	LNAPL Monitoring Program Location
02-B	RFI-02-15	LNAPL Monitoring Program Location
02-B	RFI-02-16	LNAPL Monitoring Program Location
02-B	RFI-02-17	LNAPL Monitoring Program Location
02-B	RFI-02-18	LNAPL Monitoring Program Location
02-B	RFI-02-19	LNAPL Monitoring Program Location
02-B	RFI-02-23	LNAPL Monitoring Program Location
02-B	RFI-02-24	Groundwater Elevation Monitoring Location
02-E	RFI-02-05	Groundwater Elevation Monitoring Location
02-F	RFI-02-07	Groundwater Elevation Monitoring Location
02-F	RFI-02-13	Groundwater Elevation Monitoring Location
02-F	RFI-86-01R	Groundwater Elevation Monitoring Location
04-D	04-1	Groundwater Elevation Monitoring Location
04-D	04-3	Groundwater Elevation Monitoring Location
04-D	04-4	Groundwater Elevation Monitoring Location
09-A	MW-16	Groundwater Elevation Monitoring Location
09-A	MW-17	Groundwater Elevation Monitoring Location
09-A	MW-18	Groundwater Elevation Monitoring Location
09-A	MW-19	Groundwater Elevation Monitoring Location
09-A	MW-25	Groundwater Elevation Monitoring Location
09-A	RFI-09-04R	Groundwater Elevation Monitoring Location
09-A	RFI-09-49R	Groundwater Elevation Monitoring Location
09-A	RFI-09-53	Groundwater Elevation Monitoring Location
09-A	RFI-09-56	Groundwater Elevation Monitoring Location
09-A	RFI-09-57	Groundwater Elevation Monitoring Location
09-A	RFI-09-58	Groundwater Elevation Monitoring Location
09-A	MW-26	Groundwater Elevation Monitoring Location
09-B	11-6-2	Groundwater Elevation Monitoring Location
09-B	31-1	Groundwater Elevation Monitoring Location
09-B	31-3	Groundwater Elevation Monitoring Location
09-B	31-4D	Groundwater Elevation Monitoring Location
09-B	31-4S	Groundwater Elevation Monitoring Location
09-B	31-5	Groundwater Elevation Monitoring Location
09-B	31-8	LNAPL Monitoring Program Location
09-B	MW-23	Groundwater Elevation Monitoring Location
09-B	RFI-09-14	Groundwater Elevation Monitoring Location
09-B	RFI-09-40R	LNAPL Monitoring Program Location
09-B	RFI-09-44	LNAPL Monitoring Program Location
09-B	RFI-09-45R	LNAPL Monitoring Program Location
09-B	RFI-09-46	Groundwater Elevation Monitoring Location
09-B	RFI-09-48	Groundwater Elevation Monitoring Location
09-B	RFI-09-52	LNAPL Monitoring Program Location
12-A	RFI-12-01R	LNAPL Monitoring Program Location
12-A	RFI-12-02/02R	LNAPL Monitoring Program Location
12-A	RFI-12-07R2	LNAPL Monitoring Program Location
12-A	RFI-12-08R	LNAPL Monitoring Program Location

See Notes on Page 3.

Table 4. Groundwater and LNAPL Elevation Monitoring Locations - Southend
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Area of Interest (AOI)	Location	Comments
12-A	RFI-12-09R	LNAPL Monitoring Program Location
12-A	RFI-12-15	LNAPL Monitoring Program Location
12-A	RFI-12-21	Groundwater Elevation Monitoring Location
12-A	RFI-12-22R	LNAPL Monitoring Program Location
12-A	RFI-12-24	Groundwater Elevation Monitoring Location
12-A	RFI-12-25	Groundwater Elevation Monitoring Location
12-A	RFI-12-26	LNAPL Monitoring Program Location
12-A	RFI-12-27	LNAPL Monitoring Program Location
12-C	RFI-12-11D	LNAPL Monitoring Program Location
12-C	RFI-12-11S	LNAPL Monitoring Program Location
12-C	RFI-12-14R	LNAPL Monitoring Program Location
12-C	RFI-12-23	LNAPL Monitoring Program Location
12-C	RFI-12-33	Groundwater Elevation Monitoring Location
12-C	RFI-12-34	Groundwater Elevation Monitoring Location
12-C	RFI-12-35	Groundwater Elevation Monitoring Location
12-C	RFI-12-36	Groundwater Elevation Monitoring Location
12-C	RFI-12-38	LNAPL Monitoring Program Location
12-C	RFI-12-40	LNAPL Monitoring Program Location
12-C	RFI-12-41	LNAPL Monitoring Program Location
16-A	RFI-16-01	Groundwater Elevation Monitoring Location
16-C	40-302	LNAPL Monitoring Program Location
16-C	RFI-16-04R	LNAPL Monitoring Program Location
16-C	RFI-16-07	LNAPL Monitoring Program Location
16-C	RFI-16-08	LNAPL Monitoring Program Location
16-C	RFI-16-09	LNAPL Monitoring Program Location
16-C	RFI-16-10	LNAPL Monitoring Program Location
16-C	RFI-16-12	Groundwater Elevation Monitoring Location
16-C	RFI-16-20	LNAPL Monitoring Program Location
16-C	RFI-16-24	Groundwater Elevation Monitoring Location
17-A	RFI-17-02	Groundwater Elevation Monitoring Location
23-A	RFI-23-02R	Groundwater Elevation Monitoring Location
44-A	RFI-44-05	Groundwater Elevation Monitoring Location
40-A	40-3	Groundwater Elevation Monitoring Location
40-A	40-6R	Groundwater Elevation Monitoring Location
40-A	RFI-40-01R2	Groundwater Elevation Monitoring Location
40-A	RFI-40-07	Groundwater Elevation Monitoring Location
40-A	RFI-40-09	Groundwater Elevation Monitoring Location
40-A	RFI-40-15	Groundwater Elevation Monitoring Location
40-B	40-07R2	LNAPL Monitoring Program Location
40-B	RFI-40-02R	LNAPL Monitoring Program Location
40-B	RFI-40-10R	LNAPL Monitoring Program Location
40-B	RFI-40-12R	LNAPL Monitoring Program Location
40-B	RFI-40-13	Groundwater Elevation Monitoring Location
40-B	RFI-40-14R	LNAPL Monitoring Program Location
40-B	RFI-40-20	LNAPL Monitoring Program Location
40-B	RFI-40-25	LNAPL Monitoring Program Location
40-B	RFI-40-26	LNAPL Monitoring Program Location
40-C	RFI-40-03	Groundwater Elevation Monitoring Location
40-D	40-303R	Groundwater Elevation Monitoring Location
40-D	40-304	Groundwater Elevation Monitoring Location

Notes on Page 3.

Table 4. Groundwater and LNAPL Elevation Monitoring Locations - Southend
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Area of Interest (AOI)	Location	Comments
40-D	40-305	Groundwater Elevation Monitoring Location
40-D	RFI-40-04	Groundwater Elevation Monitoring Location
44-A	04-120	Groundwater Elevation Monitoring Location
44-A	04-140	Groundwater Elevation Monitoring Location
44-A	04-160	Groundwater Elevation Monitoring Location
84-A	RFI-84-06R	Groundwater Elevation Monitoring Location
84-A	MW-23	Groundwater Elevation Monitoring Location
84-D	84-6R2D	Groundwater Elevation Monitoring Location
84-D	84-7D	Groundwater Elevation Monitoring Location
84-D	RFI-17-02D	Groundwater Elevation Monitoring Location
84-D	RFI-84-03S	Groundwater Elevation Monitoring Location
84-D	RFI-84-04D	Groundwater Elevation Monitoring Location
84-D	RFI-84-04I	Groundwater Elevation Monitoring Location
84-D	RFI-84-05	Groundwater Elevation Monitoring Location
84-D	RFI-84-06RD	Groundwater Elevation Monitoring Location
84-D	RFI-84-07S	Groundwater Elevation Monitoring Location
84-D	RFI-84-09D	Groundwater Elevation Monitoring Location
84-D	RFI-84-09S	Groundwater Elevation Monitoring Location
84-D	RFI-84-11S	Groundwater Elevation Monitoring Location
84-D	RFI-84-12	Groundwater Elevation Monitoring Location
84-D	RFI-84-8S	Groundwater Elevation Monitoring Location
84-D	RFI-40-11	Groundwater Elevation Monitoring Location
86-1	RFI-02-08R	Groundwater Elevation Monitoring Location
94-B	RFI-94-08	Groundwater Elevation Monitoring Location
94-B	RFI-94-11	Groundwater Elevation Monitoring Location
94-B	94-100	Groundwater Elevation Monitoring Location
94-D	RFI-02-22	Groundwater Elevation Monitoring Location
94-D	RFI-94-05	Groundwater Elevation Monitoring Location
BD01	BD01-01	Groundwater Elevation Monitoring Location
BD01	BD01-02R	Groundwater Elevation Monitoring Location
BD01	BD01-03	Groundwater Elevation Monitoring Location
BD01	BD01-04	Groundwater Elevation Monitoring Location
Harriet Street	ACSP-B2AR	Groundwater Elevation Monitoring Location

Note:
Measurements will be collected on an annual basis.

Table 5. **October 2010 Groundwater Elevation Data**
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Well ID	Reference Point Elevation (feet)	LNAPL Density (extrapolated or measured)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet above means sea level (ft amsl)	Groundwater Elevation Corrected for LNAPL (ft amsl)
October 10 - 13, 2010							
11-6-2		--	not located				
04-1	731.03	--	--	--	4.04	726.99	--
04-3	NA	--	--	--	7.15	--	--
04-4	NA	--	--	--	6.85	--	--
07-01	NA	--	--	--	15.40	--	--
03-105R3	747.76	--	--	--	9.60	738.16	--
03-3R	746.47	0.90	--	--	10.65	735.82	--
04-120	750.52	--	not located				
04-140	751.06	--	not located				
04-160	729.13	--	--	--	12.66	716.47	--
20-144	749.90	--	--	--	7.85	742.05	--
20-145	749.34	--	--	--	8.82	740.52	--
20-160	752.81	0.99	--	--	11.75	741.06	--
20-162	753.48	0.99	not located				
20-163R	750.58	0.99	9.10	3.70	12.80	737.78	741.44
20-168	753.44	0.99	--	--	12.95	740.49	--
20-500R	750.77	--	--	--	8.90	741.87	--
20-502	751.29	0.99	9.40	3.15	12.55	738.74	741.86
20-503	751.54	0.99	10.72	0.48	11.20	740.34	740.82
20-506	751.35	--	--	--	10.00	741.35	--
20-FP-10R	NA	--	--	--	6.98	--	
20-FP-11R	744.09	--	destroyed				
20-FP-8	748.73	0.99	8.32	1.90	10.22	738.51	740.39
20-FP-9R	749.21	--	--	--	8.80	740.41	--
31-1	735.19	--	--	--	8.20	726.99	--
31-3	734.44	--	--	--	7.45	726.99	--
31-4D	733.87	0.75	5.98	0.02	6.00	727.87	727.89
31-4S	733.90	--	--	--	6.15	727.75	--
31-5	736.12	--	--	--	10.15	725.97	--
31-7	729.75	0.75	7.35	0.65	8.00	721.75	722.24
31-8	730.26	--	--	--	9.32	720.94	--
36 FP2	750.30	0.90	12.24	1.56	13.80	736.50	737.90
36 FP3	749.41	0.90	not located				
36 FP4	753.70	0.90	not located				
36 FP6	749.51	0.90	8.65	5.75	14.40	735.11	740.29
36 FP7	750.02	0.90	11.65	3.45	15.10	734.92	738.03
36 FP8	748.83	--	not located				
36-101	750.11	--	--	--	13.58	736.53	--
36-121	753.79	--	not located				
37-RW-NORTH	NA	0.90	10.30	0.10	10.40	--	--
37-RW-SOUTH	NA	--	--	--	10.80	--	--
38-120	754.47	--	--	--	12.54	741.93	--
40-07R2	735.37	0.92	11.70	3.10	14.80	720.57	723.42
40-3	737.01	0.92	--	--	13.21	723.80	--
40-302	732.96	--	not located				
40-303R	730.41	0.92	12.12	0.01	12.13	718.28	718.29
40-304	731.11	0.92	3.02	0.01	3.03	728.08	728.09
40-305	731.24	0.92	4.61	0.01	4.62	726.62	726.63
40-4	736.47	--	--	--	11.66	724.81	--
40-6R	735.00	--	--	--	5.18	729.82	--
43-103	752.10	--	--	--	8.86	743.24	--
43-140	750.14	--	--	--	9.90	740.24	--
43-141	752.78	--	could not access				
43-161	750.19	0.92	not located				
43-165	749.41	0.92	6.75	1.55	8.30	741.11	742.54
43-166	747.97	--	--	--	6.82	741.15	--
43-167	748.43	--	--	--	7.45	740.98	--
43-242	753.64	--	could not access				
55-1	753.43	--	--	--	11.45	741.98	--

Table 5. **October 2010 Groundwater Elevation Data**
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October 10 - 13, 2010							
55-2	753.06	--	--	--	10.70	742.36	--
70-100	742.36	--	--	--	6.15	736.21	--
70-101	742.68	0.91	4.70	1.10	5.80	736.88	737.88
70-103	743.78	0.91	not located				
70-105	743.58	--	--	--	6.20	737.38	--
70-107	742.58	--	--	--	7.30	735.28	--
70-107R	742.80	0.91	5.9	2.40	8.30	734.50	736.68
70-108R	743.64	--	--	--	5.25	738.39	--
70-109	741.60	--	--	--	3.85	737.75	--
70-163	742.59	--	--	--	5.25	737.34	--
70-164	742.37	--	not located				
70-165	741.26	--	--	--	5.20	736.06	--
84-6R2-D	726.80	--	--	--	5.12	721.68	--
84-7-D	727.42	--	--	--	7.40	720.02	--
87-FP1	715.79	--	--	--	1.40	714.39	--
87-FPD2	742.05	--	--	--	27.75	714.30	--
87-FPD3	742.05	--	--	--	24.60	717.45	--
88-7	742.20	--	--	--	5.60	736.60	--
94-100	720.36	--	not located				
ACSP-B2AR	738.66	--	could not access				
BD01-01	744.29	--	could not access				
BD-01-02R	736.67	--	not located				
BD-01-03	733.49	--	not located				
BD01-04	736.33	--	--	--	15.98	720.35	--
GM-10	725.79	--	--	--	13.60	712.19	--
GM-11	726.29	--	destroyed				
GM-12	738.62	--	--	--	22.79	715.83	--
GM-2	725.40	--	not located				
GM-3	725.54	--	--	--	13.70	711.84	--
GM-4	738.12	--	--	--	25.20	712.92	--
GM-5	737.05	--	--	--	24.20	712.85	--
GM-6	734.96	--	--	--	22.25	712.71	--
GM-7	739.81	--	--	--	26.35	713.46	--
GM-8	738.71	--	--	--	22.95	715.76	--
GM-9	724.39	--	--	--	12.20	712.19	--
MW-00-FP6	740.73	--	--	--	16.60	724.13	--
MW-16	713.53	--	--	--	4.00	709.53	--
MW-17	714.54	--	--	--	5.00	709.54	--
MW-18	714.33	--	--	--	4.85	709.48	--
MW-19	712.00	--	--	--	3.20	708.80	--
MW-23	719.89	--	--	--	6.85	713.04	--
MW-25	722.38	--	--	--	8.85	713.53	--
MW-26	722.18	--	--	--	6.10	716.08	--
OW-3D	736.78	--	not located				
OW-3S	738.34	--	--	--	13.29	725.05	--
OW-40	NA	--	not located				
OW-5	725.32	--	--	--	12.13	713.19	--
RFI-02-05	738.88	--	dry				
RFI-02-07	735.06	--	not located				
RFI-02-08R	736.07	--	--	--	2.97	733.10	--
RFI-02-12	738.51	0.95	5.72	0.01	5.73	732.78	732.79
RFI-02-13	731.00	--	could not access				
RFI-02-14	738.73	0.95	5.95	7.37	13.32	725.41	732.41
RFI-02-15	738.74	0.95	5.29	5.06	10.35	728.39	733.20
RFI-02-16	738.66	0.95	5.09	0.01	5.10	733.56	733.57
RFI-02-17	738.67	0.95	5.51	0.01	5.52	733.15	733.16
RFI-02-18	738.69	0.95	5.33	0.01	5.34	733.35	733.36
RFI-02-19	738.54	0.95	5.75	3.48	9.23	729.31	732.62
RFI-02-22	729.77	0.95	--	--	1.95	727.82	--

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October 10 - 13, 2010							
RFI-02-23	738.57	0.95	5.28	0.01	5.29	733.28	733.29
RFI-02-24	729.88	--	not located				
RFI-03-02	742.35	--	--	--	6.90	735.45	--
RFI-03-03	742.01	--	--	--	2.85	739.16	--
RFI-03-04	746.67	--	--	--	6.40	740.27	--
RFI-05-06	752.13	--	--	--	11.45	740.68	--
RFI-05-08R	755.78	--	--	--	13.24	742.54	--
RFI-05-13	754.16	0.92	12.55	3.85	16.40	737.76	741.30
RFI-05-14	754.12	0.92	12.75	2.05	14.80	739.32	741.21
RFI-07-03	726.74	--	could not access				
RFI-07-08	728.12	--	--	--	12.50	715.62	--
RFI-09-04R	725.95	--	--	--	15.25	710.70	--
RFI-09-14	724.44	--	--	--	6.44	718.00	--
RFI-09-40R	729.76	0.75	7.55	1.25	8.80	720.96	721.90
RFI-09-44	728.22	--	--	--	5.70	722.52	--
RFI-09-45R	729.76	--	--	--	6.40	723.36	--
RFI-09-46	723.07	--	--	--	9.22	713.85	--
RFI-09-47	730.02	--	--	--	7.42	722.60	--
RFI-09-48	719.69	--	--	--	12.17	707.52	--
RFI-09-49R	726.43	--	--	--	15.10	711.33	--
RFI-09-52	730.21	--	--	--	8.30	721.91	--
RFI-09-53	725.48	--	--	--	11.15	714.33	--
RFI-09-56	726.93	--	--	--	5.65	721.28	--
RFI-09-57	724.90	--	--	--	6.40	718.50	--
RFI-09-58	723.38	--	--	--	5.52	717.86	--
RFI-10-07	751.33	--	--	--	9.85	741.48	--
RFI-10-24	751.53	--	--	--	11.85	739.68	--
RFI-10-26	749.32	--	--	--	8.68	740.64	--
RFI-10-28	752.58	--	could not access				
RFI-10-29	752.40	--	--	--	14.10	738.30	--
RFI-10-33	755.30	--	--	--	14.05	741.25	--
RFI-10-35	755.69	--	--	--	16.10	739.59	--
RFI-10-36	752.82	--	--	--	13.80	739.02	--
RFI-12-01R	741.98	0.93	5.25	0.01	5.26	736.72	736.73
RFI-12-02	742.41	0.93	3.96	8.45	12.41	730.00	737.86
RFI-12-02R	742.10	0.93	--	--	3.96	738.14	--
RFI-12-07R2	741.95	0.93	3.99	0.01	4.00	737.95	737.96
RFI-12-08R	742.08	0.93	11.55	1.16	12.71	729.37	730.45
RFI-12-09R	741.97	0.93	4.36	8.32	12.68	729.29	737.03
RFI-12-11D	742.09	0.93	7.63	8.38	16.01	726.08	733.87
RFI-12-11S	742.17	0.93	4.55	0.01	4.56	737.61	737.62
RFI-12-14R	742.20	0.93	5.78	0.01	5.79	736.41	736.42
RFI-12-15	742.13	0.93	5.08	0.01	5.09	737.04	737.05
RFI-12-21	741.50	--	not located				
RFI-12-22R	742.07	0.93	--	--	4.27	737.80	--
RFI-12-23	742.21	0.93	7.44	5.48	12.92	729.29	734.39
RFI-12-24	742.12	--	--	--	3.91	738.21	--
RFI-12-25	741.85	--	--	--	4.30	737.55	--
RFI-12-26	742.04	0.93	4.65	0.02	4.67	737.37	737.39
RFI-12-27	737.91	0.93	6.05	0.01	6.06	731.85	731.86
RFI-12-33	743.66	--		--	4.51	739.15	--
RFI-12-34	744.02	--	--	--	5.89	738.13	--
RFI-12-35	743.83	0.93	4.66	2.53	7.19	736.64	738.99
RFI-12-36	734.89	--	not located				
RFI-12-38	742.39	0.93	not located				
RFI-12-40	741.47	--	not located				
RFI-12-41	741.56	--	--	--	3.90	737.66	--
RFI-16-01	736.10	0.86	7.96	0.01	7.97	728.13	728.14
RFI-16-04R	732.12	0.86	7.85	0.01	7.86	724.26	724.27

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October 10 - 13, 2010							
RFI-16-07	733.26	--	not located				
RFI-16-08	733.24	0.86	4.05	0.55	4.60	728.64	729.11
RFI-16-09	733.39	0.86	6.52	0.01	6.53	726.86	726.87
RFI-16-10	736.09	0.86	9.17	0.13	9.30	726.79	726.90
RFI-16-12	735.58	0.86	8.23	0.01	8.24	727.34	727.35
RFI-16-20	NA	0.86	8.01	0.01	8.02	--	
RFI-16-24	736.39	0.86	9.22	0.01	9.23	727.16	727.17
RFI-17-02	720.27	--	--	--	5.20	715.07	--
RFI-17-02D	720.36	--	--	--	4.70	715.66	--
RFI-23-02R	740.08	--	--	--	3.96	736.12	--
RFI-36-04	756.14	0.83	could not access				
RFI-36-05	755.07	0.83	could not access				
RFI-36-06	755.29	0.83	could not access				
RFI-36-07	753.99	0.83	could not access				
RFI-36-12	753.52	0.83	could not access				
RFI-36-13	751.81	--	--	--	10.15	741.66	--
RFI-36-14	750.00	--	not located				
RFI-36-19	753.31	--	--	--	15.55	737.76	--
RFI-36-20	757.01	--	--	--	18.95	738.06	--
RFI-36-25R	754.67	--	could not access				
RFI-36-29R	753.72	0.83	could not access				
RFI-36-37	757.15	--	--	--	19.24	737.91	--
RFI-36-46	750.13	--	--	--	12.80	737.33	--
RFI-36-47	749.26	--	not located				
RFI-36-48	757.71	--	--	--	21.50	736.21	--
RFI-36-49	755.94	--	not located				
RFI-36-55	750.49	--	destroyed				
RFI-36-56	749.97	--	--	--	Dry	--	--
RFI-38-04	751.58	--	not located				
RFI-38-05	750.79	--	not located				
RFI-40-01R2	734.05	--	not located				
RFI-40-02R	735.34	0.92	7.65	3.84	11.49	723.85	727.38
RFI-40-03	735.33	0.92	8.18	0.01	8.19	727.14	727.15
RFI-40-04	728.15	--	--	--	10.60	717.55	--
RFI-40-07	729.35	0.92	--	--	2.40	726.95	--
RFI-40-07R2	NA	--	11.69	3.11	14.80	--	--
RFI-40-09	731.85	--	--	--	9.20	722.65	--
RFI-40-10R	735.17	0.92	7.22	0.01	7.23	727.94	727.95
RFI-40-11	731.22	--	--	--	3.62	727.60	--
RFI-40-12R	743.12	0.92	not located				
RFI-40-13	731.92	--	--	--	8.57	723.35	--
RFI-40-14R	NA	--	--	--	14.08	--	--
RFI-40-15	732.18	--	not located				
RFI-40-20	738.47	0.92	6.86	0.01	6.87	731.60	731.61
RFI-40-25	NA	--	not located				
RFI-40-26	738.37	0.92	9.47	0.01	9.48	728.89	728.90
RFI-44-05	731.97	--	--	--	8.01	723.96	--
RFI-55-01	751.85	--	--	--	8.60	743.25	--
RFI-55-02	752.88	--	--	--	10.26	742.62	--
RFI-55-12	752.26	--	not located				
RFI-81-02	745.92	--	--	--	15.20	730.72	--
RFI-81-03	745.70	--	--	--	14.80	730.90	--
RFI-81-07	NA	--	not located				
RFI-81-08	741.43	--	--	--	8.75	732.68	--
RFI-81-21	753.80	--	not located				
RFI-81-33	736.94	--	--	--	5.70	731.24	--
RFI-81-35	743.23	--	--	--	13.95	729.28	--
RFI-81-43	743.76	--	--	--	7.40	736.36	--
RFI-81-45	742.87	--	--	--	6.55	736.32	--

Table 5. October 2010 Groundwater Elevation Data
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Well ID	Reference Point Elevation (feet)	LNAPL Density (extrapolated or measured)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet above means sea level (ft amsl)	Groundwater Elevation Corrected for LNAPL (ft amsl)
October 10 - 13, 2010							
RFI-81-49	742.71	--	--	--	11.30	731.41	--
RFI-81-50	740.60	--	--	--	4.95	735.65	--
RFI-81-51	742.35	--	--	--	13.00	729.35	--
RFI-83/84-01	741.34	--	--	--	3.72	737.62	--
RFI-83/83-03	NA	--	could not access				
RFI-83/84-04	745.51	--	could not access				
RFI-83/84-05	745.93	--	could not access				
RFI-83/84-07	746.56	--	could not access				
RFI-83/84-11	741.61	--	--	--	6.80	734.81	--
RFI-83/84-23	745.93	--	could not access				
RFI-83/83-28	NA	--	could not access				
RFI-83/84-29	742.76	--	--	--	13.20	729.56	--
RFI-83/83-38	NA	--	could not access				
RFI-83/84-53	745.63	--	could not access				
RFI-83/84-54	746.41	--	could not access				
RFI-84-03S	727.23	--	--	--	9.60	717.63	--
RFI-84-04D	727.08	--	--	--	9.40	717.68	--
RFI-84-04I	727.23	--	--	--	9.55	717.68	--
RFI-84-05	726.63	--	--	--	6.25	720.38	--
RFI-84-06R	720.12	--	--	--	5.00	715.12	--
RFI-84-06RD	720.18	--	--	--	7.32	712.86	--
RFI-84-07	727.12	--	--	--	7.90	719.22	--
RFI-84-08	727.22	--	--	--	9.80	717.42	--
RFI-84-09D	719.27	--	--	--	10.10	709.17	--
RFI-84-09S	719.43	--	--	--	10.30	709.13	--
RFI-84-11S	721.97	--	--	--	4.05	717.92	--
RFI-84-12	NA	--	--	--	8.70	--	--
RFI-85-02R	742.91	0.86	not located				
RFI-85-04R	745.95	--	--	--	18.62	727.33	--
RFI-85-05	745.95	--	--	--	20.95	725.00	--
RFI-85-14	NA	--	not located				
RFI-86-01R	735.51	--	not located				
RFI-86-02	735.65	0.87	--	--	8.00	727.65	--
RFI-86-03	736.62	0.87	--	--	7.30	729.32	--
RFI-86-06D	737.21	--	--	--	22.40	714.81	--
RFI-86-06S	737.32	--	--	--	11.95	725.37	--
RFI-86-08R	743.25	--	could not access				
RFI-86-14	NA	--	--	--	16.01	--	--
RFI-86-16R	731.76	--	--	--	16.40	715.36	--
RFI-94-05	727.48	--	--	--	2.95	724.53	--
RFI-94-08	727.44	--	--	--	14.23	713.21	--
RFI-94-11	719.54	--	--	--	8.23	711.31	--
RW-05 North	NA	--	12.95	1.70	14.65	--	--
RW-1	749.92	0.92	12.30	0.15	12.45	737.47	737.61
RW-3	749.46	--	--	--	11.60	737.86	--

Notes:
Groundwater elevation relative to the National Geodetic Vertical Datum (NGVD) of 1929.
NA = Not available.
-- = Not applicable.

Table 6. Monitoring Well Inventory
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Monitoring Well ID Number	Depth to LNAPL (feet)	Depth to Water (feet)	Depth to Bottom (feet)	Condition of Protective Casing	Lock Present?	J- Plug Condition	Riser Condition	Comments	Repairs or Actions Needed to Maintain or Restore Monitoring Well
04-1	NP	4.04	7.12	Good	No	Good	Good	Well silted in 6.6 ft	Re-develop well; replace lock
04-2				Good	Yes	Good	Good		
04-3				Good	Yes	Good	Good		
04-4				Good	Yes	Good	Good		
04-5				Good	Yes	Good	Good		
07-01	NP	15.40	17.45	Good	Yes	Good	Good		
07-02								Could not locate	
11-6								Could not locate	
03-01R								Could not locate	
03-03R	NP	10.65	13.20	Good	No	Good	Good	Well silted in 1.35 ft	Re-develop well; replace lock
03-101R				Good	Yes	Good	Good	Missing bolts	Replace bolts
03-105R3	NP	9.60	12.52	NA	NA	NA	NA		
03-110R				Good	Yes	Good	Good		
03-114R				Good	Yes	Good	Good		
04-120								Could not locate	
04-140								Could not locate	
04-160	NP	12.66	21.09	Good	No	Good	Good		Replace lock
11-140								Could not locate	
20-100				Poor	Yes	Good	Good	No well cover	Replace well cover
20-101				Poor	Yes	Good	Good	No well cover and missing bolts	Replace well cover
20-101R				Good	Yes	Good	Good		
20-101RD				Good	Yes	Good	Good		
20-102				Good	Yes	Good	Good		
20-103N				Good	Yes	Good	Good		
20-103S				Good	Yes	Good	Good		
20-105R				Good	Yes	Good	Good	Missing bolts	Replace bolts
20-107								Could not locate	
20-120				Poor	Yes	Good	Good	Missing well cover and bolts	Replace well cover
20-121				Good	Yes	Good	Good		
20-122				Good	Yes	Good	Good		
20-140								Could not locate	
20-141				Good	Yes	Good	Good		
20-142				Poor	Yes	Good	Good	No well cover	Replace well cover
20-143				Good	Yes	Good	Good		
20-144	NP	7.85	12.35	Poor	No	Poor	Good	No well cover	Replace well cover, j-plug and lock
20-145	NP	8.82	12.95	Good	No	Okay	Good		Replace lock
20-146									
20-160	NP	11.75	14.90	Good	No	Okay	Good		Replace lock
20-162								Could not locate	
20-163R	9.10	12.80	17.46	Poor	No	Good	Good	Needs new surface completion	Replace surface completion and lock
20-164				Good	Yes	Good	Good		
20-165				Good	Yes	Good	Good	Missing bolts	Replace bolts
20-167								Could not locate	
20-168	NP	12.95	17.52	No lid	Yes	Good	Good		
20-169				Good	Yes	Good	Good		
20-170				Good	Yes	Good	Good		
20-171								Could not locate	
20-500				Good	Yes	Good	Good		
20-500R	NP	8.90	13.80	Good	No	Good	Good		Replace lock
20-501				Good	Yes	Good	Good		
20-502	9.40	12.55	13.77	Good	No	Good	Good		Replace lock
20-503	10.72	11.20	15.10	Good	No	Good	Good		Replace lock
20-506	NP	10.00	14.60	Poor	No	Good	Good	No well cover	Replace well cover and lock
20-606								Could not locate	
20-702								Could not locate	
20-FP10R	NP	6.98	13.95	Poor	Yes	Good	Poor		Replace surface completion
20-FP11R				Poor	No	Good	Good	Destroyed	Replace surface completion and lock
20-FP12				Good	Yes	Good	Good	Missing 1 bolt	
20-FP2				Good	Yes	Good	Good	Missing bolts	Replace bolts
20-FP4R				Good	Yes	Good	Good		
20-FP5				Poor	Yes	Good	Good	Missing well cover and bolts	Replace well cover
20-FP6				Good	Yes	Good	Good		
20-FP6R				Good	Yes	Good	Good		
20-FP7				Good	Yes	Good	Good	Missing bolts	Replace bolts
20-FP8	8.32	10.22	13.05	Poor	No	Good	Good	No well cover	Replace well cover and lock
20-FP9	NP	8.80	14.75	Good	No	Good	Good		Replace lock
30-100				Good	Yes	Good	Good		
30-120				Poor	Yes	Good	Good	No well cover and missing bolts	Replace well cover
30-121								Could not locate	
30-140				Good	Yes	Good	Good		
31-1	NP	8.20	20.20	Good	No	Good	Good		Replace lock
31-2								Could not locate	
31-3	NP	7.45	17.75	Good	No	Good	Good		Replace lock
31-4D	5.98	6.00	15.70	Good	No	Good	Good		Replace lock
31-4S	NP	6.15	11.75	Good	No	Good	Good		Replace lock
31-5	NP	10.15	13.70	Poor	No	Good	Good		Replace lock
31-6				Good	Yes	Good	Good		

Table 6. Monitoring Well Inventory
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Monitoring Well ID Number	Depth to LNAPL (feet)	Depth to Water (feet)	Depth to Bottom (feet)	Condition of Protective Casing	Lock Present?	J- Plug Condition	Riser Condition	Comments	Repairs or Actions Needed to Maintain or Restore Monitoring Well
31-7	7.35	8.00	15.65	Good	No	Good	Good		Replace lock
31-8	NP	9.32	14.65	Good	No	Good	Good		Replace lock
36-100				Good	Yes	Good	Good		
36-101	NP	13.58	17.55	Poor	No	Good	Good		Replace lock
36-120									
36-121									
36-160									
36-161								Covered with metal	
36-FP1				Poor	Yes	Good	Good	No well cover and bolts	Replace well cover
36-FP2	12.24	13.80	17.68	Good	Yes	Good	Good		
36-FP3								Under scrap pile	
36-FP4								Inside building 36	
36-FP5								Inside building 36	
36-FP6	8.65	14.40	14.40	Good	Yes	Good	Good		
36-FP7	11.65	15.10	NA	NA	NA	NA	NA		
36-FP8									
37-01				Good	Yes	Good	Good		
37-RW-NORTH	10.30	10.40	17.20	NA	NA	NA	Good		
37-RW-SOUTH	NP	10.80	14.00	NA	NA	NA	Good		
38-120	NP	12.54	17.60	Poor	No	Good	Good		Replace lock
40-07R2	11.70	14.80	22.66	Good	Yes	Good	Good		
40-1R									
40-2	6.1	6.11	9.59	Good	No	Good	Good		Replace lock
40-3	NP	13.21	20.75	Good	Yes	Good	Good		
40-301								Not located	
40-302								Buried under debris	
40-303R	12.12	12.13	32.64	Good	Yes	Good	Good		
40-304	3.02	3.03	8.40	Poor	No	Good	Good		Replace lock
40-305	4.61	4.62	9.92	No lid	No	Good	Good		Replace lock
40-4	NP	11.66	14.70	Poor	No	Good	Good	Missing bolts	Replace surface completion and lock
40-4R				Good	Yes	Good	Good	Missing 1 bolt	
40-5				Good	Yes	Good	Good		
40-6R	NP	5.18	9.53	Good	No	Good	Good		Replace lock
43-100								Not located	
43-101R				Good	Yes	Good	Good		
43-102				Good	Yes	Good	Good		
43-102E				Good	Yes	Good	Good		
43-103	NP	8.86	13.65	Poor	No	Good	Good		Replace lock
43-140	NP	9.90	14.70	Good	No	Good	Poor		Replace lock
43-141								Could not locate	
43-160				Good	Yes	Good	Good		
43-161								Could not locate	
43-162				Good	Yes	Good	Good		
43-163				Good	Yes	Good	Good		
43-164				Good	Yes	Good	Good		
43-165	6.75	8.30	15.60	Good	No	Good	Good		Replace lock
43-166	NP	6.82	14.70	Poor	No	Good	Good	No well cover	Replace well cover and lock
43-167	NP	7.45	14.85	Poor	No	Good	Good		Replace lock
43-168				Good	Yes	Good	Good		
43-169				Good	Yes	Good	Good		
43-220				Good	Yes	Good	Good		
43-242								Could not open - epoxy over well	
55-1	NP	11.45	15.85	Poor	No	Good	Good		Replace lock
55-2	NP	10.70	15.75	Good	No	Good	Good		Replace lock
55-3				Good	Yes	Good	Good	Missing bolts	Replace bolts
55-4				Good	Yes	Good	Good	Missing bolts	Replace bolts
55-5				Good	Yes	Good	Good		
70-100	NP	6.15	25.30	Good	No	Good	Good		Replace lock
70-101	4.70	5.80	11.80	Poor	No	Good	Good		Replace lock
70-102R				Good	Yes	Good	Good		
70-103								Could not locate	
70-104				Good	Yes	Good	Good	Marked on lid as 105 in field	Re-label monitoring well
70-105	NP	6.20	10.80	Good	No	Good	Good		Replace lock
70-106				Good	Yes	Good	Good		
70-107	NP	7.30	20.20	Good	No	Good	Good		Replace lock
70-107R	5.90	8.30	12.65	Good	No	Good	Good	Missing bolts	Replace lock
70-108				Good	Yes	Good	Good		
70-108R	NP	5.25	15.70	Good	No	Good	Good		Replace lock
70-109	NP	3.85	10.80	Good	No	Good	Good		Replace lock
70-163	NP	5.25	5.25	Good	No	Good	Good	Needs new pad	Replace surface completion and lock
70-164								Could not locate	
70-165	NP	5.20	9.90	Good	Yes	Good	Good		
84-6R2								Could not locate	
84-6R2D	NP	5.12	34.62	Good	No	Good	Good		Replace lock
84-7								Could not locate	
84-7D	NP	7.40	33.55	Good	No	Good	Good		Replace lock
86-1				Good	Yes	Good	Good		

Table 6. Monitoring Well Inventory
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Monitoring Well ID Number	Depth to LNAPL (feet)	Depth to Water (feet)	Depth to Bottom (feet)	Condition of Protective Casing	Lock Present?	J- Plug Condition	Riser Condition	Comments	Repairs or Actions Needed to Maintain or Restore Monitoring Well
86-100				Good	Yes	Good	Good	Missing bolts, grass coming from one side	
86-14								Could not locate	
86-2				Good	Yes	Good	Good	No bolts	Replace bolts
86-3				Good	Yes	Good	Good		
87-FP1	NP	1.40	6.20	Poor	No	Good	Good		Replace lock
87-FP2								Could not locate	
87-FP3								Could not locate	
87-FP4								Well has been filled	Decommission monitoring well
87-FP5				Good	Yes	Good	Good		
87-FPD2	NP	27.75	34.15	Good	Yes	Good	Good	Well silted in 5.02 feet	Re-develop well
87-FPD3	NP	24.60	45.95	Good	Yes	Good	Good		
87-RDP2		27.75	34.14						
88-4				Poor				Locked but filled in	Re-develop well
88-5				Good	Yes	Good	Good		
88-6				Good	Yes	Good	Good		
88-7	NP	5.60	14.75	Poor	No	Good	Good	Missing 1 bolt	Replace surface completion and lock
88-8				Good	Yes	Good	Good		
88-9				Good	Yes	Good	Good		
94-100								Could not locate	
ACSP-B2AR								No access	
BD01-01								No access	
BD01-02R								No access	
BD01-03								No access	
BD01-04	NP	15.98	20.70	Good	No	Good	Good		Replace lock
GM-1								Could not locate	
GM-10	NP	13.60	43.70	Fair	No	Good	Good		Replace lock
GM-11								Destroyed	
GM-12	NP	22.79	37.35	Fair	No	Good	Good		Replace lock
GM-2								Could not locate	
GM-3	NP	13.70	40.35	Fair	No	Okay	Good		Replace lock
GM-3D								Destroyed	
GM-3S		13.29	19.25						
GM-4	NP	25.20	80.70	Fair	No	Good	Good		Replace lock
GM-5	NP	24.20	60.60	Fair	No	Good	Good		Replace lock
GM-6	NP	22.25	65.00	Fair	No	Okay	Good		Replace lock
GM-7	NP	26.35	60.70	Fair	No	Okay	Good		Replace lock
GM-8	NP	22.95	44.00	Fair	No	Okay	Good		Replace lock
GM-9	NP	12.20	27.30	Fair	No	Good	Good		Replace lock
MW-00-FP6	NP	16.60	18.00	Good	No	Good	Good		Replace lock
MW-00-FP7								Could not locate	
MW-00-FP8								Could not locate	
MW-16		4.00	57.00						
MW-17		5.00	52.60						
MW-18		4.85	56.20						
MW-19		3.20	60.40						
MW-23		6.85	9.25		Yes				
MW-25		8.85	9.50						
MW-26		6.10	7.25						
OW-3D								Destroyed	
OW-3S	NP	13.29	15.25	Good	Yes	Good	Good		
OW-40								Could not open	
OW-5	NP	12.13	27.25	Good	Yes	Good	Good		
RFI-02-05				Good	No	Good	Good	Roots in well, unable to gauge.	Removed roots from well
RFI-02-07								Could not locate	
RFI-02-08R	NP	7.74	13.58	Good	No	Good	Good		Replace lock
RFI-02-12	5.72	5.73	13.81	Good	No	Good	Good	Missing 1 bolt	Replace lock
RFI-02-13								No access	
RFI-02-14	5.95	13.32	17.70	Good	No	Good	Good		Replace lock
RFI-02-15	5.29	10.35	17.72	Good	No	Good	Good		Replace lock
RFI-02-16	5.09	5.10	17.85	Good	No	Good	Good		Replace lock
RFI-02-17	5.51	5.51	17.98	Good	No	Good	Good		Replace lock
RFI-02-18	5.33	5.34	13.28	Good	No	Good	Good	No lock, Missing bolts.	Replace well cover and lock
RFI-02-19	5.75	9.23	17.15	Good	No	Good	Good		Replace lock
RFI-02-20				Good	Yes	Good	Good		
RFI-02-21				Good	Yes	Good	Good		
RFI-02-22	NP	1.95	15.12	Good	Yes	Good	Good		
RFI-02-23	5.28	5.29	14.94	Good	No	Good	Good		Replace lock
RFI-03-02	NP	6.90	14.40	Good	No	Good	Good		Replace lock
RFI-03-03	NP	2.85	11.90	Good	No	Good	Good		Replace lock
RFI-03-04	NP	6.40	14.00	Good	No	Good	Good		Replace lock
RFI-03-15R				Good	Yes	Good	Good	Missing 1 bolt	
RFI-05-01				Good	Yes	Good	Good	No bolts	Replace bolts
RFI-05-02				Good	Yes	Good	Good		
RFI-05-03								Under roll off box	
RFI-05-04								Could not locate	
RFI-05-05				Good	Yes	Good	Good		
RFI-05-05R		13.24	27.15						
RFI-05-06	NP	11.45	19.10	Good	No	Good	Good		Replace lock

Table 6. Monitoring Well Inventory
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Monitoring Well ID Number	Depth to LNAPL (feet)	Depth to Water (feet)	Depth to Bottom (feet)	Condition of Protective Casing	Lock Present?	J- Plug Condition	Riser Condition	Comments	Repairs or Actions Needed to Maintain or Restore Monitoring Well
RFI-05-07								Potentially under equipment	
RFI-05-08	NP	DRY	13.70	Good	No	Good	Good		Replace lock
RFI-05-08R				Good	Yes	Good	Good		
RFI-05-09				Good	Yes	Good	Good		
RFI-05-10				Good	Yes	Good	Good		
RFI-05-11				Good	Yes	Good	Good		
RFI-05-12								Potentially under equipment	
RFI-05-13	12.55	16.40	16.35	Good	Yes	Good	Good		
RFI-05-14	12.52	12.75	14.80	Good	Yes	Good	Good	Well silted in 1.6 feet	Re-develop well
RFI-05-19DR				Good	Yes	Good	Good		
RFI-05-19S				ok	No	No J-Plug		Filled in with dirt and grass	Decommission monitoring well
RFI-05-20				Good	Yes	Good	Good		
RFI-05-21								Located abandoned concrete pad from well	
RFI-05-21R				Good	Yes	Good	Good		
RFI-05-30				Good	Yes	Good	Good	Missing 1 bolt	
RFI-07-01R									
RFI-07-01R2									
RFI-07-03								In construction area	
RFI-07-08	NP	12.50	19.82	Good	No	Good	Good		Replace lock
RFI-09-011D									
RFI-09-01R				Good	Yes	Good	Good		
RFI-09-04				Good	Yes	Good	Good		
RFI-09-04R	NP	15.25	18.80	Good	No	Good	Good		Replace lock
RFI-09-06				Good	Yes	Good	Good		
RFI-09-07								Could not locate	
RFI-09-08				Good	Yes	Good	Good		
RFI-09-08D				Good	Yes	Good	Good		
RFI-09-09				Good	Yes	Good	Good		
RFI-09-09D				Poor	Yes	Good	Good	No well cover	Replace well cover
RFI-09-10				Poor	Yes	Good	Good	No well cover	Replace well cover
RFI-09-11				Poor	Yes	Good	Good	No well cover but locked	Replace well cover
RFI-09-12				Good	Yes	Good	Good		
RFI-09-14		6.44	15.90						
RFI-09-36R				Good	Yes	Good	Good		
RFI-09-40R	6.80	15.25	18.80	Good	No	Good	Good		Replace lock
RFI-09-44	NP	5.70	14.70	Good	No	Good	Good		Replace lock
RFI-09-45								Abandoned	
RFI-09-45R	NP	6.40	13.60	Good	No	Good	Good		Replace lock
RFI-09-46	NP	9.13	14.68	Good	No	Good	Good		Replace lock
RFI-09-47	6.51	7.42	16.20	Good	No	Good	Good		Replace lock
RFI-09-48	NP	12.10	17.55	Good	No	Good	Good		Replace lock
RFI-09-49				Good	Yes	Good	Good		
RFI-09-49R	NP	15.10	19.80	Good	No	Good	Good		Replace lock
RFI-09-52	NP	8.30	14.70	Good	No	Good	Good		Replace lock
RFI-09-53	NP	11.15	15.80	Good	No	Good	Good		Replace lock
RFI-09-54D								Could not locate	
RFI-09-54S								Could not locate	
RFI-09-55D								Could not locate	
RFI-09-55S								Could not locate	
RFI-09-56	NP	5.65	10.40	Good	No	Good	Good		Replace lock
RFI-09-57	NP	6.40	12.80	Good	No	Good	Good		Replace lock
RFI-09-58		5.52	15.65		Yes				
RFI-10-01									
RFI-10-02				Good	Yes	Good	Good		
RFI-10-03				Good	Yes	Good	Good		
RFI-10-07	NP	9.85	16.70	Good	No	Good	Good		Replace lock
RFI-10-08				Good	Yes	Good	Good		
RFI-10-11								Under debris	
RFI-10-12				Good	Yes	Good	Good	Missing 2 bolts	
RFI-10-24	NP	11.85	18.45		Yes				
RFI-10-26	NP	8.68	14.75	Good	No	Good	Good		Replace lock
RFI-10-28								Could not locate	
RFI-10-29		14.10	20.80		No				Replace lock
RFI-10-33		14.05	20.10		No				Replace lock
RFI-10-35		16.10	20.10		No				Replace lock
RFI-10-36		13.80	16.10		No				Replace lock
RFI-12-01	5.25	5.26	14.59	Good	Yes	Good	Good		
RFI-12-01R				Good	Yes	Good	Good		
RFI-12-02/02R	3.96	12.41	19.20	Good	Yes	Good	Good		
RFI-12-07R				Good	Yes	Good	Good	Missing 3 bolts	Replace bolts
RFI-12-07R2	3.99	4.00	12.74	Good	No	Good	Good	Missing 3 bolts.	Replace lock and bolts
RFI-12-08R	11.55	12.71	19.13	Good	No	Good	Good	Casing full of slimy mud.	Redevelop monitoring well
RFI-12-09				Good	Yes	Good	Good		
RFI-12-09R	4.36	7.64	12.68	Good	No	Good	Good		Replace lock
RFI-12-11D	7.63	16.01	24.99	Good	No	Good	Good	Missing all 3 bolts, water in casing.	Replace bolts and lock
RFI-12-11S	4.55	4.56	14.56	Poor	No	Good	Good	Missing 2 bolts, water in casing.	Replace surface completion and lock

Table 6. Monitoring Well Inventory
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Monitoring Well ID Number	Depth to LNAPL (feet)	Depth to Water (feet)	Depth to Bottom (feet)	Condition of Protective Casing	Lock Present?	J- Plug Condition	Riser Condition	Comments	Repairs or Actions Needed to Maintain or Restore Monitoring Well
RFI-12-14				Good	Yes	Good	Good		
RFI-12-14R	5.78	5.79	12.82	Good	No	Good	Good		Replace lock
RFI-12-15	5.08	5.09	17.72	Poor	No	Good	Good	Missing 3 bolts.	Replace surface completion and lock
RFI-12-21								Could not locate	
RFI-12-22				Good	Yes	Good	Good		
RFI-12-22R	NP	4.27	12.62	Good	No	Good	Good		Replace lock
RFI-12-23	7.44	12.92	17.90	Poor	No	Good	Good	Missing one bolt.	Replace surface completion and lock
RFI-12-24	NP	3.91	15.20	Good	No	Good	Good		Replace lock
RFI-12-25	NP	4.30	16.51	Good	No	Good	Good		Replace lock
RFI-12-26	4.65	4.67	19.20	Good	No	Good	Good		Replace lock
RFI-12-27	6.05	6.06	13.53	Broken lid	No	Good	Good	Water and mud in protective casing	Replace surface completion and lock, re-develop monitoring well
RFI-12-28				Good	Yes	Good	Good		
RFI-12-32								Could not locate	
RFI-12-33	NP	4.51	13.79	Good	No	Good	Good		Replace lock
RFI-12-34	NP	5.89	15.73	Good	No	Good	Good		Replace lock
RFI-12-35	4.66	7.19	14.81	Good	No	Good	Good		Replace lock
RFI-12-36								Could not locate	
RFI-12-38				Good	Yes	Good	Good		
RFI-12-40				Good	Yes	Good	Good		
RFI-12-41	NP	3.90	11.82	Poor	No	Good	Good	Missing bolts	Replace surface completion and lock
RFI-16-01	7.96	7.97	13.74	Poor	Yes	Good	Good	Water in protective casing.	Replace surface completion
RFI-16-04								Abandoned	
RFI-16-04R	7.85	7.86	16.02	Good	Yes	Good	Good		
RFI-16-07								Could not locate	
RFI-16-08	4.05	4.60	10.29	Good	Yes	Good	Good	Monitoring well has silted in 1.9 feet	Redevelop monitoring well
RFI-16-09	6.52	6.53	9.08	Good	Yes	Good	Good		
RFI-16-10	9.17	9.30	12.67	Poor	No	Good	Good	No well cover.	Replace surface completion and lock
RFI-16-11				Good	Yes	Good	Good		
RFI-16-12	8.23	8.24	14.52	Good	Yes	Good	Good		
RFI-16-12R								Abandoned	
RFI-16-20	8.01	8.02	10.82	Poor	No	Good	Good	Missing bolts.	Replace surface completion and lock
RFI-16-24	9.22	9.23	15.69	Good	Yes	Good	Good		
RFI-16-25				Good	Yes	Good	Good	Missing 1 bolt	
RFI-17-02	NP	5.20	13.65	Poor	No	Good	Good		Replace surface completion and lock
RFI-17-02D	NP	4.70	25.10		No			Surface completion destroyed	Replace surface completion, j-plug, and re-develop well
RFI-21-04								Not located	
RFI-23-01R				Good	Yes	Good	Good		
RFI-23-02R	NP	3.96	13.88	Good	Yes	Good	Good		
RFI-30-13		8.57	18.63						
RFI-36-01								Inside demolition area	
RFI-36-02								Inside demolition area	
RFI-36-04								Inside demolition area	
RFI-36-05								Inside demolition area	
RFI-36-06								Inside demolition area	
RFI-36-07								Inside demolition area	
RFI-36-08				Good	Yes	Good	Good	Painted bright orange	
RFI-36-09				Good	Yes	Good	Good	Painted bright orange	
RFI-36-10				Good	Yes	Good	Good	Painted bright orange	
RFI-36-11								Inside demolition area	
RFI-36-12								Inside demolition area	
RFI-36-13	NP	10.15	17.15	Good	No	Good	Good	Missing 1 bolt	Replace lock
RFI-36-14								Inside demolition area	
RFI-36-15								Inside demolition area	
RFI-36-16								Inside demolition area	
RFI-36-19		15.55	21.45		Yes				
RFI-36-20		18.95	24.95		Yes				
RFI-36-21								Inside demolition area	
RFI-36-22								Inside demolition area	
RFI-36-23								Inside demolition area	
RFI-36-24								Inside demolition area	
RFI-36-25R								Inside demolition area	
RFI-36-27								Inside demolition area	
RFI-36-29								Inside demolition area	
RFI-36-29R								Inside demolition area	
RFI-36-32								Inside demolition area	
RFI-36-35				Good	Yes	Good	Good		
RFI-36-37		19.24	26.95		Yes				
RFI-36-43								Inside demolition area	
RFI-36-46	NP	12.80	19.20	Good	No	Good	Good		Replace lock
RFI-36-48		21.50	29.55		Yes				
RFI-36-49								Inside demolition area	
RFI-36-55								Destroyed	
RFI-36-56		DRY	12.80						
RFI-38-04								Inside demolition area	
RFI-38-05								Inside demolition area	

Table 6. Monitoring Well Inventory
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Monitoring Well ID Number	Depth to LNAPL (feet)	Depth to Water (feet)	Depth to Bottom (feet)	Condition of Protective Casing	Lock Present?	J- Plug Condition	Riser Condition	Comments	Repairs or Actions Needed to Maintain or Restore Monitoring Well
RFI-38-06				Good	Yes	Good	Good	Pushed up a little from construction activities	
RFI-40-01R2								Could not locate	
RFI-40-02R	7.65	11.49	15.55	Good	Yes	Good	Good	Missing one bolt	
RFI-40-03	8.18	8.19	15.76	Good	Yes	Good	Good	Missing one bolt.	
RFI-40-03R								Could not locate	
RFI-40-04	NP	10.60	31.60	Good	No	Good	Good		Replace lock
RFI-40-06R	5.49	5.50	9.53	Good	Yes	Good	Good		
RFI-40-07	NP	2.40	18.70	Good	No	Good	Good		Replace lock
RFI-40-07R	11.70	14.80	22.66						
RFI-40-07R2	11.69	14.80	22.65	Good	Yes	Good	Good		
RFI-40-09	NP	9.20	18.70	Good	No	Good	Good		Replace lock
RFI-40-10								Could not locate	
RFI-40-10R	7.22	7.23	14.95	Good	Yes	Good	Good		
RFI-40-11		3.62	11.90						
RFI-40-12								Could not locate	
RFI-40-12R								Could not locate	
RFI-40-13	NP	8.57	18.63	Good	Yes	Good	Good		
RFI-40-14R	NP	14.08	22.72	Good	Yes	Good	Good		
RFI-40-15				Good	Yes	Good	Good		
RFI-40-20	6.86	6.87	12.92	Good	No	Good	Good		Replace lock
RFI-40-25								Could not locate	
RFI-40-26	9.47	9.48	16.82	Good	No	Good	Good		Replace lock
RFI-40-27				Good	Yes	Good	Good		
RFI-44-04								Under debris	
RFI-44-05	NP	8.01	17.94	Good	Yes	Good	Good		
RFI-44-06								Could not locate	
RFI-44-06R								Could not locate	
RFI-55-01	NP	8.60	19.60	Good	No	Good	Good		Replace lock
RFI-55-02	NP	10.26	19.70	Good	No	Good	Good		Replace lock
RFI-55-09				Good	Yes	Good	Good	Missing 1 bolt	
RFI-55-10				Good	Yes	Good	Good		
RFI-55-12								Could not locate	
RFI-65-01				Good	Yes	Good	Good		
RFI-81-02	NP	15.20	20.65	Poor	No	Good	Good		Replace lock
RFI-81-03	NP	14.80	18.60	Good	No	Good	Good		Replace lock
RFI-81-04				Poor	Yes	Good	Good	No well cover and missing bolts	Replace well cover
RFI-81-08	NP	8.75	17.30	Poor	Yes	Good	Good		Replace surface completion
RFI-81-09				Good	Yes	Good	Good		
RFI-81-11				Good	Yes	Good	Good		
RFI-81-12R								Could not locate	
RFI-81-13				Good	Yes	Good	Good		
RFI-81-21								No access	
RFI-81-22				Good	Yes	Good	Good		
RFI-81-33								Could not locate	
RFI-81-35	NP	5.70	13.70	Good	No	Good	Good		Replace lock
RFI-81-39R	NP	13.96	19.45	Good	No	Good	Good		Replace lock
RFI-81-43	NP	7.40	12.25	Good	No	Good	Good		Replace lock
RFI-81-45	NP	6.55	12.50	Good	No	Good	Good		Replace lock
RFI-81-47				Good	Yes	Good	Good		
RFI-81-49	NP	11.30	12.85	Good	No	Good	Good		Replace lock
RFI-81-50	NP	4.95	12.90	Good	Yes	Good	Good		
RFI-81-51	NP	13.00	19.70	Good	No	Good	Good		Replace lock
RFI-83/84-01	NP	3.72	11.75	Good	No	Good	Good		Replace lock
RFI-83/84-02				Good	Yes	Good	Good		
RFI-83/84-11	NP	6.80	14.95	Good	No	Good	Good	Missing bolts	Replace bolts and lock
RFI-83/84-29	NP	13.20	16.70	Good	No	Good	Good		Replace lock
RFI-83/84-54								Could not locate	
RFI-84-03D				Good	Yes	Good	Good		
RFI-84-03I				Good	Yes	Good	Good		
RFI-84-03S	NP	9.60	21.25	Good	No	Good	Good		Replace lock
RFI-84-04D	NP	9.40	47.25	Good	No	Good	Good	Monitoring well has silted in 0.90 feet	Re-develop monitoring well
RFI-84-04I	NP	7.55	33.70	Good	No	Good	Good		Replace lock
RFI-84-05	NP	6.25	17.80	Good	No	Good	Good		Replace lock
RFI-84-06R	NP	5.90	12.20	Good	Yes	Good	Good		
RFI-84-06RD	NP	7.32	21.53	Good	Yes	Good	Good		
RFI-84-07D								Could not locate	
RFI-84-07S	NP	7.90	21.75	Good	No	Good	Good	Bolts missing from flush-mount protective casing lid.	Replace lock and bolts
RFI-84-09D	NP	10.10	29.05	Poor	Yes	Good	Good		Replace surface completion
RFI-84-09S	NP	10.30	14.50	Good	Yes	Good	Good		
RFI-84-10D				Good	Yes	Good	Good		
RFI-84-10S				Good	Yes	Good	Good		
RFI-84-11S	NP	4.05	12.65	Poor	Yes	Good	Good	Concrete pad missing.	Replace surface competition
RFI-84-12		8.70	18.80		Yes				
RFI-84-8D				Good	Yes	Good	Good		
RFI-84-8S	NP	9.80	20.00	Good	No	Good	Good		Replace lock

Table 6. Monitoring Well Inventory
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Monitoring Well ID Number	Depth to LNAPL (feet)	Depth to Water (feet)	Depth to Bottom (feet)	Condition of Protective Casing	Lock Present?	J- Plug Condition	Riser Condition	Comments	Repairs or Actions Needed to Maintain or Restore Monitoring Well
RFI-85-02/02R								Could not locate	
RFI-85-03				Good	Yes	Good	Good		
RFI-85-04R	NP	18.62	26.15	Good	No	Good	Good		Replace lock
RFI-85-05	NP	20.95	23.80	Good	No	Good	Good		Replace lock
RFI-85-07				Poor	Yes	Good	Good	Missing bolts, crushed pad	Replace surface completion
RFI-86-01								Could not locate	
RFI-86-01D				Good	Yes	Good	Good		
RFI-86-01R				Good	Yes	Good	Good		
RFI-86-02		8.00	16.70	Good	No	Good	Good		Replace lock
RFI-86-03		7.30	14.90						
RFI-86-04								Could not locate	
RFI-86-05				Good	Yes	Good	Good		
RFI-86-06D	NP	22.40	24.10	Good	No	Good	Good		Replace lock
RFI-86-06S	NP	11.95	14.10	Good	Yes	Good	Good		
RFI-86-08R								Could not locate	
RFI-86-14	NP	16.01	16.79	Good	No	Good	Good		Replace lock
RFI-86-15				Good	Yes	Good	Good		
RFI-86-16				Good	Yes	Good	Good	Missing bolts	Replace bolts
RFI-86-16R	NP	16.40	20.20	Good	Yes	Good	Good		
RFI-94-02R				Good	Yes	Good	Good		
RFI-94-05								Could not locate	
RFI-94-07				Good	Yes	Good	Good		
RFI-94-08	NP	14.23	24.50	Good	No	Good	Good		Replace lock
RFI-94-11		8.23	11.15	Poor	Yes			No well cover	Replace well cover
RFI-SS-01								Could not locate	
RFI-SS-02								Could not locate	
RFI-SS-03								Could not locate	
RFI-SS-04				Good	Yes	Good	Good		
RFI-SS-05				Poor	Yes	Good	Good	No well cover	Replace well cover
RFI-SS-06				Good	Yes	Good	Good		
RFI-SS-07				Good	Yes	Good	Good		
RFI-SS-08				Good	Yes	Good	Good	Missing 3 bolts	Replace bolts
RFI-SS-09				Good	Yes	Good	Good		
RRI-02-08	NP	2.97	13.59	Good	No	Good	Good		Replace lock
RW-05-EAST				Good	Yes	Good	Good		
RW-05-NORTH				Good	Yes	Good	Good		
RW-05-SOUTH				Good	Yes	Good	Good		
RW-1	12.30	12.45	22.28	Good	No	N/A	Good	Bolts missing from flush-mount protective casing lid.	Replace lock and bolts
RW-1-P1				Good	Yes	Good	Good		
RW-1-P2				Good	Yes	Good	Good		
RW-2				Good	Yes	Good	Good		
RW-3	NP	11.60	21.00	Good	No	N/A	Good		Replace lock
RW-3A-P1				Poor	Yes	Good	Good	No well cover	Replace well cover
RW-3A-P2				Good	Yes	Good	Good		
RW-4								Could not locate	
RW-5								Could not locate	
RW-6								No access	
RW-6-P1								No access	
RW-7								Could not locate	
RW-7-P1				Good	Yes	Good	Good		

Table 7. Groundwater Quality Monitoring Locations
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Area of Interest (AOI)	Sampling Location	Groundwater Analytical Parameters	Sampling Rationale
North of Leith Street			
7-03	07-01	VOCs	Sentinel location downgradient of LNAPL plume.
10-2	RFI-10-24	VOCs	Off-site; sentinel location at downgradient edge of VOC impacted area
10-2	RFI-10-29	VOCs	Off-site; sentinel location at downgradient edge of VOC impacted area
10-2	RFI-10-33	VOCs	Off-site; sentinel location at downgradient edge of VOC impacted area
10-2	RFI-10-35	VOCs	Off-site; sentinel location at downgradient edge of VOC impacted area
10-2	RFI-10-36	VOCs	Off-site; sentinel location at downgradient edge of VOC impacted area
10-3	20-500R	VOCs	Sentinel location at downgradient edge of VOC impacted area
10-3	RFI-10-28	VOCs	Off-site; sentinel location at downgradient edge of VOC impacted area
10-4	20-FP10R	VOCs	Sentinel location at downgradient edge of VOC impacted area
10-4	RFI-10-26	VOCs	Sentinel location at downgradient edge of VOC impacted area
36-1	RFI-36-04	VOCs	Monitoring VOCs downgradient of LNAPL plume.
36-1	RFI-36-19	VOCs	Off-site; sentinel location at downgradient edge of VOC impacted area
36-1	RFI-36-37	VOCs	Off-site; sentinel location at downgradient edge of VOC impacted area
36-1	RFI-36-47	VOCs	Off-site; sentinel location at downgradient edge of VOC impacted area
36-1	RFI-36-48	VOCs	Off-site; sentinel location at downgradient edge of VOC impacted area
36-1	RFI-36-55	VOCs	Off-site; sentinel location at downgradient edge of VOC impacted area
36-1	RFI-36-56	VOCs	Off-site; sentinel location at downgradient edge of VOC impacted area
36-1	RFI-36-20	VOCs	Sentinel location at downgradient edge of VOC impacted area
36-5	RFI-36-14	VOCs	Sentinel location downgradient of LNAPL plume.
81-2	70-165	VOCs and lead	Sentinel location downgradient of LNAPL plume and historical lead exceedance.
81-2	RFI-81-50	VOCs	Sentinel location downgradient of LNAPL plume.
81-3	RFI-81-08	VOCs	Sentinel location at downgradient edge of VOC plume
86-1	RFI-86-16R	VOCs	Off-site; sentinel location at downgradient edge of VOC impacted area
86-1	RFI-86-01R	VOCs, lead, and manganese	Sentinel location at downgradient edge of VOC and inorganic impacted area
South of Leith Street			
02-E	RFI-02-05	VOCs	Sentinel location at downgradient edge of VOC impacted area
04-D	04-4	Cyanide	Sentinel location upgradient of storm sewer
04-D	04-3	Cyanide	Sentinel location upgradient of storm sewer
09-A	RFI-09-04R	VOCs	Monitoring TCE to confirm stable concentrations.
09-A	RFI-09-53	VOCs	Monitoring to confirm stable concentrations of VOCs.
09-A	MW-26	VOCs	Off-site; sentinel location to confirm VOC plume has not migrated
09-B	RFI-09-14	VOCs	Off-site; sentinel location at downgradient edge of VOC impacted area
09-B	RFI-09-48	VOCs	Sentinel location at downgradient edge of VOC impacted area.
09-B	RFI-09-46	VOCs	Monitoring benzene concentrations to confirm stable concentrations
17-A	RFI-17-02	VOCs and selenium	Sentinel location at downgradient edge of VOC impacted area and GSI monitoring point
40-D	40-304	VOCs and PCBs	Sentinel location downgradient of building 40 Tunnel (PCBs required by 9/13/2005 EPA letter)
44-A	RFI-44-05	Cyanide	Sentinel location upgradient of storm sewer
84-A	MW-23	VOCs	Off-site; downgradient of VOC impacted area
84-D	RFI-17-02D	VOCs and selenium	Monitoring vinyl chloride to confirm stable concentrations and GSI monitoring point
84-D	RFI-84-06R	VOCs, cyanide, selenium, and silver	Sentinel location at downgradient edge of VOC impacted area and GSI monitoring point
84-D	RFI-84-06RD	VOCs	Sentinel location at downgradient edge of VOC impacted area
84-D	RFI-84-09D	VOCs	Sentinel location at downgradient edge of VOC impacted area
84-D	RFI-84-09S	VOCs	Sentinel location at downgradient edge of VOC impacted area
84-D	RFI-84-11S	VOCs	Sentinel location at downgradient edge of VOC impacted area
84-D	RFI-84-12	VOCs and selenium	Sentinel location at downgradient edge of VOC impacted area and GSI monitoring point
94-B	RFI-94-11	VOCs	Off-site; sentinel location at downgradient edge of VOC impacted area
94-D	RFI-02-22	VOCs	Sentinel locations, downgradient of LNAPL plumes

Note:

VOCs = Volatile Organic Compounds.

LNAPL = light non-aqueous phase liquid.

Table 8. Annual Groundwater Sampling Event Field Parameter Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Well ID	Date Sampled	Temperature (ºC)	pH (SU)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTUs)	Oxidation Reduction Potential (mV)
RFI-09-14	10/13/2010	16.06	7.12	0.801	0.21	7.50	50.8
RFI-09-46	10/13/2010	15.19	7.05	2.679	0.49	2.42	-170.9
20-500R	10/14/2010	19.51	6.65	1.053	0.59	3.29	-70.4
20-FD10R	10/14/2010	18.07	7.11	5.283	0.64	4.08	-98.9
MW-23	10/14/2010	16.02	6.62	1.118	2.70	4.62	-121.4
RFI-10-24	10/14/2010	14.52	7.08	1.170	0.44	0.98	149
RFI-10-26	10/14/2010	16.46	7.70	2.359	3.30	2.53	-140.0
RFI-10-29	10/14/2010	15.04	7.28	0.825	0.39	4.04	-130.5
RFI-10-33	10/14/2010	15.42	7.76	0.490	3.09	1.37	93.0
RFI-10-35	10/14/2010	12.77	7.06	0.889	1.22	3.14	138.0
RFI-10-36	10/14/2010	11.69	7.03	0.740	0.47	0.96	-136.0
RFI-36-20	10/14/2010	14.94	7.72	0.980	4.73	4.02	-131.9
07-01	10/15/2010	15.52	7.59	0.91	1.38	40.8	19
RFI-02-22	10/15/2010	17.01	8.65	3.393	0.07	4.18	-285.1
RFI-36-19	10/15/2010	14.52	6.81	0.815	3.52	1.22	76.2
RFI-36-37	10/15/2010	13.74	7.03	2.064	1.14	0.72	-13.7
RFI-36-47	10/15/2010	11.59	7.62	2.158	1.38	2.84	-180.7
RFI-36-48	10/15/2010	10.97	6.81	1.048	2.44	0.50	-27.1
RFI-84-11S	10/15/2010	15.96	7.26	1.119	0.10	2.63	120.0
RFI-84-12	10/15/2010	13.33	7.39	1.042	0.26	3.35	-155.1
40-304	10/18/2010	16.11	7.44	0.401	1.34	2.57	-77.8
70-165	10/18/2010	15.33	6.97	0.915	0.30	3.08	-91.5
RFI-09-04R	10/18/2010	14.96	8.41	1.550	1.48	0.70	-146.8
RFI-09-48	10/18/2010	14.62	7.95	2.895	0.19	2.21	-181.3
RFI-09-53	10/18/2010	15.13	6.80	0.918	1.06	2.18	56.2
RFI-81-08	10/18/2010	16.24	7.19	4.09	0.09	24.8	-114
RFI-81-50	10/18/2010	14.93	7.00	0.809	0.19	3.72	12
RFI-86-16R	10/18/2010	15.80	7.06	0.498	0.28	12.1	-75.6
RFI-94-11	10/18/2010	18.31	6.71	8.412	0.51	2.74	-32.3
RFI-17-02D	10/19/2010	18.28	6.79	0.506	0.36	3.87	77.8
RFI-84-06R	10/19/2010	16.40	8.32	1.309	0.69	3.18	-12.3
RFI-84-06RD	10/19/2010	16.16	7.26	4.397	1.08	3.21	46.4
RFI-84-09D	10/19/2010	16.04	7.36	1.640	0.10	0.57	-110
RFI-84-09S	10/19/2010	15.36	7.06	1.650	0.26	281	-156.0
04-3	10/26/2010	17.73	6.94	0.506	0.40	4.46	-94.1
RFI-44-05	10/26/2010	17.02	7.06	1.001	1.49	2.01	80.2
RFI-86-01R	10/27/2010	11.11	6.70	0.680	2.85	3.61	83.2
04-4	10/28/2010	17.90	6.85	0.536	2.59	1.21	87.1

Notes:
ºC = Celsius.
mg/L = milligrams per liter.
mV = millivolts.
NTUs = Nephelometric Turbidity Units.
SU = Standard Units.
mS/cm = milliSiemens per centimeter.
NS = not sampled.

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	04-3 09/17/01	04-3 10/26/10	04-4 09/17/01	04-4 03/27/03	04-4 10/28/10	07-01 09/20/01	07-01 10/15/10	20-500R 11/02/06	20-500R 10/26/07	20-500R 09/15/08	20-500R 09/23/09	20-500R 10/14/10	20-FP10R 10/26/07	20-FP10R 09/15/08	20-FP10R 09/23/09	20-FP10R 10/14/10	40-304 09/14/01	40-304 12/17/02	40-304 03/21/03
VOC																												
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	0.0050 U	NA	NA	NA	0.0010 U	NA	NA	NA
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	0.0010 U	NA	0.0010 U	NA	NA	0.00096 J	0.0040	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	0.0010 U	NA	0.0010 U	NA	NA	0.0039	0.0060	0.0050 U	0.0010 U	0.0010 U	0.00020 J	0.0050 U	0.0010 U	0.0010 U	0.00050 J	0.0020	0.0014	0.0011	0.0010 U
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	0.030 U	NA	NA	NA	0.0050 U	NA	NA	NA
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	0.0050 U	NA	NA	NA	0.0010 U	NA	NA	NA
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	0.0050 U	NA	NA	NA	0.0010 U	NA	NA	NA
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	0.0050 U	NA	0.0050 U	NA	NA	0.0050 U	0.0050 U	0.010 U	0.0020 U	0.0020 U	0.0020 U	0.030 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	0.0050 U	NA	NA	NA	0.0010 U	NA	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0050 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.030 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 UJ	0.0010 U
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	0.0050 U	NA	NA	NA	0.0010 U	NA	NA	NA
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.00030 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	0.025 U	NA	0.025 U	NA	NA	0.025 U	0.030 U	0.10 UJ	0.020 U	0.020 U	0.020 U	0.10 U	0.020 U	0.020 U	0.020 U	0.030 U	0.0020 J	0.0046 J	0.025 U
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	0.050 U	NA	0.050 U	NA	NA	0.050 U	0.050 U	0.30 UJ	0.050 U	0.050 UJ	0.050 U	0.30 U	0.050 U	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	0.030 U	NA	NA	NA	0.0050 U	NA	NA	NA
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	0.015	NA	NA	NA	0.0010 U	NA	NA	NA
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	0.050 U	NA	0.050 U	NA	NA	0.050 U	0.050 U	0.050 U	0.010 U	0.010 U	0.010 U	0.30 U	0.010 U	0.010 U	0.010 U	0.050 U	0.050 U	0.050 U	0.050 U
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	0.025 U	NA	0.025 U	NA	NA	0.025 U	0.050 U	0.10 UJ	0.020 U	0.020 U	0.020 U	0.30 U	0.020 U	0.020 U	0.0020 J	0.050 U	0.025 U	0.025 U	0.025 U
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	NA	NA	NA	NA	NA	NA	0.0020 U	NA	NA	NA	NA	0.010 U	NA	NA	NA	0.0020 U	NA	NA	NA
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.025 (NDW,RDW)	0.065 (NDW,RDW)	0.00040 J	0.00060 J	0.0050 U	0.00020 J	0.0010 U	0.0030	0.0060 (NDW,RDW)	0.0010 U	0.0010 U	0.0010 U
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	0.0050 U	NA	NA	NA	0.0010 U	NA	NA	NA
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	0.0010 U	NA	0.0010 U	NA	NA	0.0010 UJ	0.0050 U	0.010 U	0.0020 U	0.0020 U	0.0020 U	0.030 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0010 U	0.0010 U	0.0010 UJ
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	0.0050 U	NA	0.0050 U	NA	NA	0.0050 U	0.0050 U	0.030 U	0.0050 U	0.0050 U	0.0050 U	0.030 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 UJ
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	0.0050 U	NA	NA	NA	0.0010 U	NA	NA	NA
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0050 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.030 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0050 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.030 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 UJ
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0070	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0020	0.0020	0.0030	0.0030	0.012	0.0049	0.0083
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 UJ	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0050 U	NA	0.0050 U	NA	NA	0.0050 U	NA	0.0050 U	0.0080 U	0.0010 UJ	0.0010 U	NA	0.00040 J	0.0010 UJ	0.0010 U	NA	0.0050 U	0.0050 U	0.0050 U
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	0.030 U	NA	NA	NA	0.0050 U	NA	NA	NA
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0050 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.030 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 UJ	0.0010 U
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	0.030 U	NA	NA	NA	0.0050 U	NA	NA	NA
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0050 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.030 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	NA	NA	NA	NA	NA	NA	0.010 U	NA	NA	NA	NA	0.050 U	NA	NA	NA	0.010 U	NA	NA	NA
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.43	0.13	0.0040	0.0010 U	0.012	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	0.030 U	NA	NA	NA	0.0050 U	NA	NA	NA
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	0.0050 U	NA	NA	NA	0.0010 U	NA	NA	NA
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	0.0050 U	NA	0.0050 U	NA	NA	0.0050 U	0.0050 U	0.33	0.25	0.0080	0.0060	0.080	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0020 U	NA	0.0020 U	NA	NA	0.0020 U	0.0020 U	0.074	0.014	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0050 U	NA	0.0050 U	NA	NA	0.0050 U	NA	0.050 U	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U	NA	0.0050 U	0.0050 U	0.0050 UJ
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	NA	0.010 J	0.020 J	0.0050 J	0.00070 J	NA	0.020 U	0.020 U	0.00020 J	NA	0.0010 U	0.0010 U	0.0010 U
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	0.0050 U	NA	0.0050 U	NA	NA	0.0050 U	0.0050 U	0.030 U	0.0050 U	0.0050 U	0.0050 U	0.030 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	0.0050 U	NA	0.0050 U	NA	NA	0.0050 U	0.0050 U	0.030 U	0.0050 U	0.0050 U	0.0050 U	0.030 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	0.030 U	NA	NA	NA	0.0050 U	NA	NA	NA
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	0.0090	NA	NA	NA	0.0010 U	NA	NA	NA
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	0.24 (NDW,RDW)	NA	NA	NA	0.0010 U	NA	NA	NA
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0040 J	0.00080 J	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	0.0050 U	NA	NA	NA	0.0010 U	NA	NA	NA
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.028 (NDW,RDW)	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	NA	NA	NA	NA	NA	NA	0.090 U	NA	NA	NA	NA	0.50 U	NA	NA	NA	0.090 U	NA	NA	NA
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.00090 J	0.0010 U	0.0010 U	0.00010 J	0.0050 U	0.0010 U	0.0010 U	0.00020 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	0.0050 U	NA	NA	NA	0.0010 U	NA	NA	NA
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0030	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0020	0.0070 (NDW,RDW)	0.0080 (NDW,RDW)	0.0020	0.0010 U	0.0010 U	0.0010 U
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	NA	0.20 U	0.030 U	0.030 U	0.030 U	NA	0.030 U	0.030 U	0.030 U	NA	0.0010 U	0.0010 U	0.0010 U
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	0.0010 U	NA	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.00060 J	0.0020	0.0020	0.0049 (NDW,RDW)	0.0053 (NDW,RDW)	0.0017
Xylenes (total)	mg/L	70	190(S)	190(S)	0.041	10 (E)	190(S)	10 (E)	190(S)	0.0020 U	NA	0.0020 U	NA	NA	0.0020 U	NA	0.078 J	0.015 J	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	NA	0.0020 U	0.0020 U	0.0020 U
PCB																												
Total PCBs	mg/L	ID	ID	0.0033(AA)	0.0002(M	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	0.00012 U	NA	0.00011 U	0.00011 U	NA	0.00010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00015	NA	NA
PCB-Dissolved																												
Total PCBs (Dissolved)	mg/L	ID	ID	0.0033(AA)	0.0002(M)	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	0.00011 U	NA	0.00010 U	NA	NA	0.00011 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00028 U	NA	NA
Inorganic																												
Cyanide (total)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	0.0050 U	0.0050 U	0.0050 U	NA	0.0050 U	0.0020 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	mg/L	ID	ID	9,100	4.767(G,X)	0.05(E)	NLV	0.05(E)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic-Dissolved																												
Cyanide (dissolved)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	0.0050 U	NA	0.0050 U	NA	NA	0.0021 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0040 J	NA	NA
Lead (Dissolved)	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	0.00040 U	NA	0.00040 U	NA	NA	0.00040 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00040 U	NA	NA
Selenium (Dissolved)	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	0.0014 U	NA	0.0028	NA	NA	0.0014 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0014 U	NA	NA
Silver (Dissolved)	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	0.00040 U	NA	0.00040 U	NA	NA	0.00041 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00040 U	NA	NA
Thallium (Dissolved)	mg/L	ID	ID	13	0.0037(X)	0.002(A)	NLV	0.002(A)	NLV	0.00020 U	NA	0.00020 U	NA	NA	0.00020 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00020 U	NA	NA

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	40-304 10/06/04	40-304 10/31/07	40-304 09/11/08	40-304 10/18/10	70-165 09/26/01	70-165 06/22/02	70-165 03/28/03	70-165 10/07/04	70-165 10/29/07	70-165 09/16/08	70-165 09/24/09
VOC																				
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	0.0010 J	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	0.0020 U	NA	NA	0.0050 U	0.0050 U	NA	NA	0.0020 U	NA	NA	0.0020 U
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	NA	0.0050 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.00010 J
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	0.030 U	NA	NA	0.030 U	0.025 U	NA	NA	0.030 U	NA	NA	0.020 U
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	0.050 UJ	NA	NA	0.050 U	0.050 U	NA	NA	0.050 U	NA	NA	0.050 U
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	0.0010 U	NA	NA	0.050 U	0.050 U	NA	NA	0.0010 U	NA	NA	0.010 U
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	0.0070 J	NA	NA	0.050 U	0.025 U	NA	NA	0.030 U	NA	NA	0.0020 J
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	NA	NA	NA	0.0020 U	NA	NA	NA	NA	NA	NA	NA
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	0.00030 J	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	0.0010 UJ	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 UJ	NA	NA	0.0010 U
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	0.0020 UJ	NA	NA	0.0050 U	0.0010 UJ	NA	NA	0.0020 UJ	NA	NA	0.0020 U
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	0.0050 U	NA	NA	0.0050 U	0.0050 U	NA	NA	0.0050 UJ	NA	NA	0.0050 U
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	0.0010 UJ	NA	NA	0.0050 U	0.0010 U	NA	NA	0.0010 UJ	NA	NA	0.0010 U
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	0.0010 U	NA	NA	0.0050 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	0.0070	NA	NA	0.0070	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	NA	NA	0.0050 U	NA	NA	0.0010 U	NA	NA	0.0010 U
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	0.0010 U	NA	NA	0.0050 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	0.0010 U	NA	NA	0.0050 U	0.0010 U	NA	NA	0.0010 UJ	NA	NA	0.0010 U
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	NA	NA	NA	0.010 U	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	0.0010 U	NA	NA	0.0050 U	0.0050 U	NA	NA	0.0010 U	NA	NA	0.0010 U
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	NA	0.0020 U	0.0020 U	NA	NA	0.0010 U	NA	NA	0.0010 U
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.010 U	NA	NA	NA	0.0050 U	NA	NA	0.010 U	NA	NA	0.010 U
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.020 U	NA	NA	NA	0.0010 U	NA	NA	0.020 U	NA	NA	0.020 U
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	0.0050 U	NA	NA	0.0050 U	0.0050 U	NA	NA	0.0050 U	NA	NA	0.0050 U
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	0.0050 U	NA	NA	0.0050 U	0.0050 U	NA	NA	0.0050 U	NA	NA	0.0050 U
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	NA	NA	NA	0.090 U	NA	NA	NA	NA	NA	NA	NA
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.00010 J
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	0.00020 J	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	0.0010 U	NA	NA	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	0.030 U	NA	NA	NA	0.0010 UJ	NA	NA	0.030 U	NA	NA	0.030 U
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	0.0050 (NDW,RDW)	NA	NA	0.0040 (NDW,RDW)	0.0010 U	NA	NA	0.0010 U	NA	NA	0.0010 U
Xylenes (total)	mg/L	70	190(S)	190(S)	0.041	10 (E)	190(S)	10 (E)	190(S)	0.0010 U	NA	NA	NA	0.0020 U	NA	NA	0.0010 U	NA	NA	0.0010 U
PCB																				
Total PCBs	mg/L	ID	ID	0.0033(AA)	0.0002(M	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	0.00010 U	0.00010 U [0.00010 UJ	0.00010 U [0.00010 UJ	0.00010 U	NA	NA	NA	NA	NA	NA
PCB-Dissolved																				
Total PCBs (Dissolved)	mg/L	ID	ID	0.0033(AA)	0.0002(M)	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	0.00012 U	NA	NA	NA	NA	NA	NA
Inorganic																				
Cyanide (total)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	0.0050 U	0.0050 U	0.0050 UJ	NA	NA	NA	NA
Lead	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	0.0030 U	NA	NA	NA	NA	0.00023 J	0.027 (NDW,RDW)	0.055 (NDW,RDW)	0.054 (NDW,RDW)	0.090 (NDW,RDW)	0.092 (NDW,RDW)	0.049 (NDW,RDW)	0.049 (NDW,RDW)
Manganese	mg/L	ID	ID	9,100	4.767(G,X)	0.05(E)	NLV	0.05(E)	NLV	NA	NA	NA	NA	NA	1.2 J (NDW,RDW)	0.46 (NDW,RDW)	NA	NA	NA	NA	NA
Selenium	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	0.0031	0.0053	NA	NA	NA	NA	NA
Silver	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	0.00040 UJ	0.00040 U	NA	NA	NA	NA	NA
Inorganic-Dissolved																				
Cyanide (dissolved)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	0.0050 U	0.0050 U	NA	NA	NA	NA	NA	NA
Lead (Dissolved)	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	0.019 (NDW,RDW)	0.00040 U	NA	NA	NA	NA	NA	NA
Selenium (Dissolved)	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	0.0042 J	0.0027	NA	NA	NA	NA	NA	NA
Silver (Dissolved)	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	0.00040 UJ	0.00040 UJ	NA	NA	NA	NA	NA	NA
Thallium (Dissolved)	mg/L	ID	ID	13	0.0037(X)	0.002(A)	NLV	0.002(A)	NLV	NA	NA	NA	NA	0.00020 U	0.00020 U	NA	NA	NA	NA	NA	NA

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	70-165 10/18/10	MW-23 02/27/02	MW-23 06/25/02	MW-23 03/20/03	MW-23 10/04/04	MW-23 10/14/10	MW-26 06/26/02	MW-26 03/24/03	MW-26 10/05/04	MW-26 02/28/05	RFI-02-05 09/18/01	RFI-02-05 12/16/02	RFI-02-22 04/05/05	RFI-02-22 10/15/10	RFI-09-04R 06/24/02	RFI-09-04R 03/24/03	RFI-09-04R 10/05/04
VOC																										
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	0.0010 U	0.0010 UJ	NA	0.0010 U	0.0010 U	0.0010 U	0.0031	0.0018	0.0030	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00030 J
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0045	0.0017	0.0060 J	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0050 U	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	0.0050 U	0.0050 U	NA	0.0050 U	0.0020 U	0.0050 U	0.0050 U	0.0050 U	0.0020 U	NA	0.0050 U [0.0050 U]	NA	0.0020 U	0.0050 U	0.0050 U	0.0050 U	0.0020 U
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0050 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 UJ	0.0050 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	0.030 UJ	0.025 U	NA	0.025 U	0.030 U	0.030 U	0.025 U	0.025 U	0.030 U	NA	0.025 U [0.025 U]	NA	0.030 U	0.030 U	0.025 UJ	0.025 U	0.030 U
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	0.050 UJ	0.050 U	NA	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	NA	0.050 U [0.050 U]	NA	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	0.0050 U	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	0.050 U	0.050 U	NA	0.050 U	0.0010 U	0.050 U	0.050 U	0.050 U	0.0010 U	NA	0.050 U [0.050 U]	NA	0.0010 U	0.050 U	0.050 U	0.050 U	0.0010 U
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	0.050 UJ	0.025 U	NA	0.025 U	0.030 U	0.050 U	0.0035 J	0.025 U	0.030 U	NA	0.025 U [0.025 U]	NA	0.010 J	0.050 U	0.025 U	0.025 U	0.030 U
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	0.0020 U	NA	NA	NA	NA	0.0020 U	NA	NA	NA	NA	NA	NA	NA	0.0020 U	NA	NA	NA
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.00020 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	NA	0.0010 U [0.0010 U]	NA	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	0.0050 U	0.0010 UJ	NA	0.0010 U	0.0020 UJ	0.0050 U	0.0010 U	0.0010 U	0.0010 UJ	NA	0.0010 U [0.0010 U]	NA	R	0.0050 U	0.0010 U	0.0010 UJ	0.0020 UJ
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	0.0050 U	0.0050 U	NA	0.0050 UJ	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 UJ	NA	0.0050 U [0.0050 U]	NA	0.0050 UJ	0.0050 U	0.0050 U	0.0050 UJ	0.0050 U
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00030 J
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	0.0050 U	0.0010 U	NA	0.0010 U	0.0010 UJ	0.0050 U	0.0021	0.0010 U	0.0020 J	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 UJ
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	0.0050 U	0.0010 U	NA	0.0010 UJ	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0050 U	0.0010 U	0.0010 UJ	0.0010 U
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.00030 J	0.0010 U	0.00098 J	0.0010 U	0.0020
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.0050 UJ	NA	0.0050 U	0.0010 U	NA	0.034	0.0053	0.0020 J	NA	0.0050 U [0.0050 U]	NA	0.0010 UJ	NA	0.0050 U	0.0050 U	0.0010 U
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0050 U	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	0.0050 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	0.0050 U	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	0.0050 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 UJ	0.0050 U	0.0010 U	0.0010 U	0.0010 U
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	0.010 U	NA	NA	NA	NA	0.010 U	NA	NA	NA	NA	NA	NA	NA	0.010 U	NA	NA	NA
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.00057 J	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	0.0050 U	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	0.0050 U	0.0050 U	NA	0.0050 U	0.0010 U	0.0050 U	0.0036 J	0.0050 U	0.0010 U	NA	0.0050 U [0.0050 U]	NA	0.0010 U	0.0050 U	0.0050 U	0.0050 U	0.0010 U
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0020 U	0.0020 U	NA	0.0020 U	0.0010 U	0.0020 U	0.0020 U	0.0020 U	0.0010 U	NA	0.0020 U [0.0020 U]	NA	0.0010 U	0.0020 U	0.0020 U	0.0020 U	0.0010 U
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.0050 U	NA	0.0050 U	0.010 U	NA	0.0050 U	0.0050 U	0.0060 J	NA	0.0050 U [0.0050 U]	NA	0.010 U	NA	0.0050 U	0.0050 U	0.010 UJ
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.0010 U	NA	0.0010 U	0.020 U	NA	0.12 EJ	0.010	0.020 U	NA	0.0010 U [0.0010 U]	NA	0.020 UJ	NA	0.0010 U	0.0010 U	0.020 U
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	0.0050 U	0.0050 UJ	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA	0.0050 U [0.0050 U]	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA	0.0050 U [0.0050 U]	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	0.0050 U	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	0.090 U	NA	NA	NA	NA	0.090 U	NA	NA	NA	NA	NA	NA	NA	0.090 U	NA	NA	NA
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.00020 J	0.0010 U	0.0067 (NDW,RDW)	0.0055 (NDW,RDW)	0.011 (NDW,RDW)
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0040	0.0096	0.0050
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	NA	0.0010 U	NA	0.0010 U	0.030 U	NA	0.0010 UJ	0.0010 U	0.030 U	NA	0.0010 U [0.0010 U]	NA	0.030 U	NA	0.0010 U	0.0010 U	0.030 U
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U [0.0010 U]	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Xylenes (total)	mg/L	70	190(S)	190(S)	0.041	10 (E)	190(S)	10 (E)	190(S)	NA	0.0020 U	NA	0.0020 U	0.0010 U	NA	0.0020 U	0.0020 U	0.0010 U	NA	0.0020 U [0.0020 U]	NA	0.0010 U	NA	0.0020 U	0.0020 U	0.0010 U
PCB																										
Total PCBs	mg/L	ID	ID	0.0033(AA)	0.0002(M	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.000041 J [0.00015]	NA	NA	NA	NA	NA	NA
PCB-Dissolved																										
Total PCBs (Dissolved)	mg/L	ID	ID	0.0033(AA)	0.0002(M)	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00018 [0.000071 J]	NA	NA	NA	NA	NA	NA
Inorganic																										
Cyanide (total)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0017 J [0.0016 J]	NA	NA	NA	NA	NA	NA
Lead	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	.38 J (NDW,RDW) [0.083 J (NDW,RDW)	NA	NA	NA	NA	NA	NA	NA	NA	0.0040	0.00065 J [0.00034 J]	0.0021 J	NA	NA	NA	NA	0.0030 U
Manganese	mg/L	ID	ID	9,100	4.767(G,X)	0.05(E)	NLV	0.05(E)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.4 J (NDW,RDW) [1.5 (NDW,RDW)	2.0 (NDW,RDW)	NA	NA	NA	NA	NA
Selenium	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	0.00070 J	NA	0.0050 U	NA	NA	NA	NA	NA	0.0014 U [0.00084 J]	0.0022 J	NA	NA	NA	NA	NA
Silver	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00040 U [0.00040 U]	0.00040 UJ	NA	NA	NA	NA	NA
Inorganic-Dissolved																										
Cyanide (dissolved)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00098 J [0.0019 J]	NA	NA	NA	NA	NA	NA
Lead (Dissolved)	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0020	0.00040 U [0.00040 U]	NA	NA	NA	NA	NA	NA
Selenium (Dissolved)	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0014 U [0.0014 U]	NA	NA	NA	NA	NA	NA
Silver (Dissolved)	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00040 UJ [0.00040 UJ]	NA	NA	NA	NA	NA	NA
Thallium (Dissolved)	mg/L	ID	ID	13	0.0037(X)	0.002(A)	NLV	0.002(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00020 U [0.00020 U]	NA	NA	NA	NA	NA	NA

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	RFI-09-04R 06/08/05	RFI-09-04R 11/01/06	RFI-09-04R 11/14/07	RFI-09-04R 09/12/08	RFI-09-04R 10/18/10	RFI-09-14 10/03/01	RFI-09-14 06/26/02	RFI-09-14 03/31/03	RFI-09-14 10/04/04	RFI-09-14 12/08/05	RFI-09-14 06/27/07	RFI-09-14 11/01/07	RFI-09-14 03/18/08	RFI-09-14 06/18/08	RFI-09-14 09/10/08	RFI-09-14 12/02/08	RFI-09-14 10/13/10
VOC																										
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	0.00030 J	0.00060 J	0.00060 J	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0050 U	NA	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 UJ	0.0020 U	0.0020 U	0.0020 U [0.0020 U]	0.0050 U
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	NA	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0050 U
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	0.030 U	0.020 U	0.020 U	0.020 U	0.030 U	0.025 U	NA	0.025 U	0.030 U	0.030 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ [0.020 UJ]	0.030 U
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 U	0.050 U	NA	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 UJ [0.050 UJ]	0.050 U
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	0.0010 U	0.010 U	0.010 U	0.010 U	0.050 U	0.050 U	NA	0.050 U	0.0010 U	0.0010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U [0.010 U]	0.050 U
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	0.030 U	0.020 U	0.020 U	0.020 U	0.050 U	0.025 U	NA	0.047	0.030 U	0.030 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 J	0.020 U	0.020 UJ [0.020 UJ]	0.050 U
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	NA	NA	NA	NA	0.0020 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0020 U
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0010 U	NA	0.0010 U	0.0020 UJ	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 UJ	0.0020 U [0.0020 U]	0.0050 U
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 UJ	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	NA	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U [0.0010 U]	0.0050 U
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0050 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0050 U
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	0.0010	0.0020	0.0010	0.0010	0.0010	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 UJ	0.0010 U	0.0010 UJ	NA	0.0050 U	NA	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U [0.0010 U]	NA
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0050 U
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	0.0010 U	0.0010 UJ	0.0010 UJ	0.0010 U	0.0050 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U [0.0010 U]	0.0050 U
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	NA	NA	NA	NA	0.010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.010 U
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0050 U	NA	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0050 U
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 U	0.0020 U	NA	0.0020 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0020 U
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.010 U	0.010 U	0.010 U	0.010 U	NA	0.0050 U	NA	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U [0.010 U]	NA
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.020 U	0.020 U	0.020 U	0.020 U	NA	0.0010 U	NA	0.0010 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.020 U	0.020 U	0.020 U [0.020 U]	NA
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	0.0010 U	0.0010 U	0.00010 J	0.0010 U	0.0010 U	0.0010 UJ	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	NA	NA	NA	NA	0.090 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.090 U
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00010 J	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	0.0090 (NDW,RDW)	0.012 (NDW,RDW)	0.010 (NDW,RDW)	0.0090 (NDW,RDW)	0.0080 (NDW,RDW)	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	0.0050 J	0.0040	0.0030	0.0030	0.0060	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	0.030 U	0.030 U	0.030 U	0.030 U	NA	0.0010 U	NA	0.0010 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U [0.030 U]	NA
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Xylenes (total)	mg/L	70	190(S)	190(S)	0.041	10 (E)	190(S)	10 (E)	190(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0020 U	NA	0.0020 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	NA
PCB																										
Total PCBs	mg/L	ID	ID	0.0033(AA)	0.0002(M	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-Dissolved																										
Total PCBs (Dissolved)	mg/L	ID	ID	0.0033(AA)	0.0002(M)	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic																										
Cyanide (total)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	mg/L	ID	ID	9,100	4.767(G,X)	0.05(E)	NLV	0.05(E)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	0.0025 U	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA
Silver	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic-Dissolved																										
Cyanide (dissolved)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead (Dissolved)	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	0.00040 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium (Dissolved)	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver (Dissolved)	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium (Dissolved)	mg/L	ID	ID	13	0.0037(X)	0.002(A)	NLV	0.002(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	RFI-09-46 12/19/02	RFI-09-46 04/01/03	RFI-09-46 10/05/04	RFI-09-46 06/27/07	RFI-09-46 10/26/07	RFI-09-46 03/18/08	RFI-09-46 06/17/08	RFI-09-46 09/12/08	RFI-09-46 12/02/08	RFI-09-46 10/13/10	RFI-09-48 04/24/03	RFI-09-48 10/06/04	RFI-09-48 02/24/05
VOC																						
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.00010 J	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0030	NA	NA	NA
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	0.0050 U [0.0050 U]	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U [0.0020 U]	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0050 U	0.0020 U	NA
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 UJ [0.0010 UJ]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	NA
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0020 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	0.025 U [0.025 U]	0.025 U	0.030 U	0.020 U	0.020 U	0.0020 J [0.020 U]	0.020 U	0.020 U	0.020 UJ	0.13 U	0.025 U	0.030 U	NA
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	0.050 U [0.050 U]	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U [0.050 U]	0.050 U	0.050 UJ	0.050 UJ	0.050 U	0.050 U	0.050 U	NA
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	0.050 U [0.050 U]	0.050 U	0.0010 U	0.010 U	0.010 U	0.010 U [0.010 U]	0.010 U	0.010 U	0.010 U	0.050 U	0.050 U	0.0010 U	NA
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	0.0061 J [0.0052 J]	0.025 U	0.060 J	0.040 U	0.020 U	0.020 U [0.020 U]	0.030 U	0.050 U	0.020 UJ	0.050 U	0.0019 J	0.030 U	NA
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0020 U	NA	NA	NA
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	0.70 D(GSI,NDW,RDW) [0.68 D(GSI,NDW,RDW)]	0.50 D(GSI,NDW,RDW)	0.049 (NDW,RDW)	0.034 (NDW,RDW)	0.17 (NDW,RDW)	0.026 (NDW,RDW) [0.025 (NDW,RDW)]	0.026 (NDW,RDW)	0.076 (NDW,RDW)	0.022 (NDW,RDW)	0.068 (NDW,RDW)	0.0010 U	0.0010 U	NA
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	0.0010 UJ [0.0010 UJ]	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	NA
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	0.0010 U [0.0010 U]	0.0010 U	0.0020 UJ	0.0020 U	0.0020 U	0.0020 UJ [0.0020 UJ]	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0010 U	0.0020 UJ	NA
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	0.00057 J [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 UJ	NA
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	0.0010 UJ [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	0.0010 U [0.0010 U]	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 UJ [0.0010 UJ]	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 UJ	NA
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	0.0010 U [0.0010 U]	0.0010 U	0.0030 U	0.0040 U	0.013 U	0.0040 U [0.0050 U]	0.0060 UJ	0.0040 UJ	0.0090 U	0.0050 U	0.0010 U	0.0010 U	NA
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.17 D [0.16 D]	0.16 D	0.12 J	0.098	0.14	0.085 [0.085]	0.10	0.058 J	0.13	NA	0.0050 U	0.0010 U	NA
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	0.0010 UJ [0.0010 UJ]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	NA
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 UJ	0.0010 U	0.0050 U	0.0010 U	0.0010 U	NA
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.010 U	NA	NA	NA
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	0.0019 [0.0018]	0.0016	0.00040 J	0.00030 J	0.00060 J	0.00040 J [0.00040 J]	0.00040 J	0.00050 J	0.00050 J	0.0010 U	0.0010 U	0.0010 U	NA
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	0.017 [0.016]	0.015	0.0090	0.0070	0.011	0.0070 [0.0070]	0.0080	0.010	0.012 J	0.011	0.0050 U	0.0010 U	NA
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.045 [0.043]	0.038	0.016 J	0.0080	0.012	0.0070 [0.0070]	0.0080	0.010	0.012	0.013	0.0020 U	0.0010 U	NA
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0050 U [0.0050 U]	0.0050 U	0.010 UJ	0.010 U	0.010 U	0.010 U [0.010 U]	0.010 U	0.010 U	0.010 U	NA	0.0050 U	0.010 U	NA
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.049 [0.045]	0.048	0.040	0.030	0.040	0.030 [0.030]	0.040	0.040	0.040	NA	0.0010 U	0.020 U	NA
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	0.00061 J [0.00059 J]	0.0050 U	0.0050 U	0.0050 U	0.00090 J	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.016(GSI)	NA	NA	NA
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0080	NA	NA	NA
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0082 [0.0078]	0.0067	0.0030	0.0020	0.0040	0.0020 [0.0020]	0.0020	0.0030	0.0040	0.0040	0.0010 U	0.0010 U	NA
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.090 U	NA	NA	NA
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	0.019 [0.018]	0.016	0.0060	0.0040	0.0070	0.0040 [0.0040]	0.0040	0.0050	0.0050	0.0060	0.0010 U	0.0010 U	NA
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	0.0010 U [0.0010 U]	0.0010 U	0.030 U	0.030 U	0.030 U	0.030 U [0.030 U]	0.030 U	0.030 U	0.030 U	NA	0.0010 U	0.030 U	NA
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
Xylenes (total)	mg/L	70	190(S)	190(S)	0.041	10 (E)	190(S)	10 (E)	190(S)	0.053(GSI) [0.051(GSI)]	0.045(GSI)	0.019 J	0.010	0.016	0.0090 [0.0090]	0.010	0.013	0.016	NA	0.0020 U	0.0010 U	NA
PCB																						
Total PCBs	mg/L	ID	ID	0.0033(AA)	0.0002(M	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-Dissolved																						
Total PCBs (Dissolved)	mg/L	ID	ID	0.0033(AA)	0.0002(M)	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic																						
Cyanide (total)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	0.0050 U [0.0033 J]	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0026 J	NA	0.0050 U
Lead	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	0.00048 J [0.00040 U]	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00021 J	NA	NA
Manganese	mg/L	ID	ID	9,100	4.767(G,X)	0.05(E)	NLV	0.05(E)	NLV	0.065 J (NDW,RDW) [0.059 J (NDW,RDW)]	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.090 (NDW,RDW)	NA	NA
Selenium	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	0.0016 U [0.0016 U]	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	0.0016 U	0.0050 U	NA
Silver	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	0.00040 UJ [0.00040 UJ]	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00040 UJ	NA	NA
Inorganic-Dissolved																						
Cyanide (dissolved)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U
Lead (Dissolved)	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium (Dissolved)	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver (Dissolved)	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium (Dissolved)	mg/L	ID	ID	13	0.0037(X)	0.002(A)	NLV	0.002(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	RFI-09-48 12/08/05	RFI-09-48 11/01/06	RFI-09-48 04/23/07	RFI-09-48 06/27/07	RFI-09-48 11/01/07	RFI-09-48 03/18/08	RFI-09-48 06/17/08	RFI-09-48 09/12/08	RFI-09-48 12/02/08	RFI-09-48 10/18/10	RFI-09-53 04/07/05	RFI-09-53 06/08/05	RFI-09-53 11/01/06	RFI-09-53 11/14/07	RFI-09-53 09/12/08	RFI-09-53 09/24/09	RFI-09-53 10/18/10
VOC																										
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.050	0.26 (NDW,RDW)	0.15 [0.13]	0.13	0.14	0.0010 U	0.039
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.015	0.035	0.028 [0.026]	0.028	0.062	0.0010 U	0.049
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00060 J	0.0040 J	0.0020 [0.0020]	0.0020	0.0020	0.0010 U	0.0010 U
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	0.0050 U
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	0.0020 U	0.0020 U	0.0020 U	0.0020 U [0.0020 U]	0.0020 U	0.0020 UJ	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.010 U	0.0020 U [0.0020 U]	0.0020 U	0.0020 U	0.0020 U	0.0050 U
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 UJ	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0050 U
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.00030 J	0.0010 U
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	0.030 U	0.020 U	0.020 U	0.020 U [0.020 U]	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.030 U	0.030 U	0.10 U	0.020 U [0.020 U]	0.020 U	0.020 U	0.020 U	0.030 U
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	0.050 U	0.050 U	0.050 U	0.050 U [0.050 U]	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 UJ	0.050 U	0.050 U	0.30 U	0.050 U [0.050 U]	0.050 U	0.050 UJ	0.050 U	0.050 U
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	0.0050 U
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	0.0010 U	0.010 U	0.010 U	0.010 U [0.010 U]	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.050 U	0.0010 U	0.0050 U	0.010 U [0.010 U]	0.010 U	0.010 U	0.010 U	0.050 U
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	0.030 U	0.020 U	0.020 UJ	0.020 U [0.020 U]	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.050 U	0.030 UJ	0.10 U	0.020 U [0.020 U]	0.020 U	0.020 U	0.020 U	0.050 U
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0020 U	NA	NA	NA	NA	NA	NA	0.0020 U
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00030 J	0.0050 U	0.0010 U [0.0010 U]	0.00020 J	0.00040 J	0.00010 J	0.0010 U
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	0.0020 U	0.0020 U	0.0020 U	0.0020 U [0.0020 U]	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	R	0.010 U	0.0020 U [0.0020 U]	0.0020 U	0.0020 U	0.0020 U	0.0050 U
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.030 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00030 J	0.0050 U	0.0020 [0.0010]	0.00070 J	0.0010 U	0.0010 U	0.0010 U
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0020	0.0010 U	0.0050 U
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020	0.0030 J	0.0050 [0.0040]	0.0030	0.0020	0.0010 U	0.0020
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0050 U
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.012	0.011	0.024 [0.021]	0.028	0.068	0.0020	0.025
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 UJ	0.0010 UJ	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	NA	0.0010 UJ	0.0050 U	0.0010 UJ [0.0010 UJ]	0.0010 U	0.0010 UJ	0.0010 U	NA
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	0.0050 U
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0050 U
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	0.0050 U
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ [0.0010 UJ]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 UJ	0.0010 U	0.0010 U	0.0050 U
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.010 U	NA	NA	NA	NA	NA	NA	0.010 U
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	0.0050 U
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0050 U
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0020 U
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.010 U	0.010 U	0.010 U	0.010 U [0.010 U]	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.050 U	0.010 U [0.010 U]	0.010 U	0.010 U	0.010 U	NA
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.020 U	0.020 U	0.020 U	0.020 U [0.020 U]	0.020 U	0.020 UJ	0.020 U	0.020 U	0.020 U	NA	0.00020 J	0.10 U	0.020 U [0.020 U]	0.020 U	0.020 U	0.020 U	NA
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 UJ	0.030 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.030 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	0.0050 U
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.090 U	NA	NA	NA	NA	NA	NA	0.090 U
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	0.0010 U	0.0010 U	0.00020 J	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00030 J	0.0050 U	0.0010 U [0.0010 U]	0.00020 J	0.00040 J	0.00020 J	0.0010 U
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.035 (NDW,RDW)	0.18 (NDW,RDW)	0.11 (NDW,RDW) [0.11 (NDW,RDW)]	0.12 (NDW,RDW)	0.10 (NDW,RDW)	0.0010	0.045 (NDW,RDW)
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	0.030 U	0.030 U	0.030 U	0.030 U [0.030 U]	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	NA	0.00050 J	0.20 U	0.030 U [0.030 U]	0.030 U	0.00030 J	0.030 U	NA
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.00030 J	0.00066 J	0.00090 J	0.0010 U	0.0010 J	0.0050 U	0.0040 (NDW,RDW) [0.0040 (NDW,RDW)]	0.0050 (NDW,RDW)	0.023 (NDW,RDW)	0.0030 (NDW,RDW)	0.0080 (NDW,RDW)
Xylenes (total)	mg/L	70	190(S)	190(S)	0.041	10 (E)	190(S)	10 (E)	190(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	NA
PCB																										
Total PCBs	mg/L	ID	ID	0.0033(AA)	0.0002(M	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-Dissolved																										
Total PCBs (Dissolved)	mg/L	ID	ID	0.0033(AA)	0.0002(M)	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic																										
Cyanide (total)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	mg/L	ID	ID	9,100	4.767(G,X)	0.05(E)	NLV	0.05(E)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic-Dissolved																										
Cyanide (dissolved)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead (Dissolved)	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium (Dissolved)	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver (Dissolved)	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium (Dissolved)	mg/L	ID	ID	13	0.0037(X)	0.002(A)	NLV	0.002(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	RFI-10-24 02/20/02	RFI-10-24 06/25/02	RFI-10-24 03/26/03	RFI-10-24 10/06/04	RFI-10-24 12/08/05	RFI-10-24 06/28/07	RFI-10-24 10/25/07	RFI-10-24 03/20/08	RFI-10-24 06/17/08	RFI-10-24 09/15/08	RFI-10-24 12/03/08	RFI-10-24 10/14/10	RFI-10-26 02/21/02	RFI-10-26 06/20/02	RFI-10-26 03/27/03	RFI-10-26 11/02/06	RFI-10-26 10/26/07	RFI-10-26 09/15/08	RFI-10-26 10/14/10	RFI-10-28 12/12/02	RFI-10-28 10/06/04	RFI-10-28 12/08/05	RFI-10-28 10/25/07	RFI-10-28 03/27/08
VOC																																	
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0020	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0040	0.041	0.0042	0.0010 U	NA	0.0010 U	0.00020 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0030	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	0.0050 U	0.0050 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0050 U	0.0050 U	NA	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0050 U	0.0020 U [0.0020 U]	0.0020 U	0.0020 U	0.0020 U
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	0.025 U	0.025 U	0.025 U	0.030 U	0.030 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.030 U	0.025 U	0.025 U	NA	0.020 U	0.020 U	0.020 U	0.030 U	0.011 J	0.030 U [0.030 U]	0.030 U	0.020 U	0.020 U
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 UJ	0.050 U	0.050 U	NA	0.050 U	0.050 U	0.050 UJ	0.050 U	0.050 U	0.050 UJ [0.050 UJ]	0.050 U	0.050 U	0.050 U
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	0.050 U	0.050 U	0.050 U	0.0010 U	0.0010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.050 U	0.050 U	0.050 U	NA	0.010 U	0.010 U	0.010 U	0.050 U	0.050 U	0.0010 U [0.0010 U]	0.0010 U	0.010 U	0.010 U
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	0.025 U	0.025 U	0.025 U	0.030 U	0.030 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.050 U	0.025 U	0.025 U	NA	0.020 U	0.020 U	0.020 U	0.050 U	0.21 JD	0.030 U [0.030 U]	0.030 U	0.020 U	0.020 U
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0020 U	NA	NA	NA	NA	NA	NA	0.0020 U	NA	NA	NA	NA	NA
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ [0.0010 UJ]	0.0010 U	0.0010 U	0.0010 U
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	0.0010 U	0.0010 U	0.0010 U	0.0020 UJ	0.0020 U	0.0020 U	0.0020 U	0.0020 UJ	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0010 U	0.0010 U	NA	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0010 UJ	0.0020 UJ [0.0020 UJ]	0.0020 U	0.0020 U	0.0020 UJ
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.018	0.016	0.0080	0.021	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 UJ [0.0010 UJ]	0.0010 U	0.0010 U	0.0010 UJ
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0056	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0050 U	0.0050 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	NA	0.0050 U	0.0050 U	NA	0.0030 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.010 U	NA	NA	NA	NA	NA	NA	0.010 U	NA	NA	NA	NA	NA
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	0.0050 U	0.0050 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0050 U	0.0050 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0020 U	0.0020 U	0.0020 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 U	0.0020 U	0.0020 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0020 U	0.0020 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0050 U	0.0050 U	0.0050 U	0.010 UJ	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	0.0050 U	0.0050 U	NA	0.010 U	0.010 U	0.010 U	NA	0.0030 U	0.010 U [0.010 U]	0.010 U	0.010 U	0.010 U
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	NA	0.0010 U	0.0010 U	NA	0.020 U	0.020 U	0.020 U	NA	0.0030 U	0.020 U [0.020 U]	0.020 U	0.020 U	0.020 U
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.00030 J	0.0050 U	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.090 U	NA	NA	NA	NA	NA	NA	0.090 U	NA	NA	NA	NA	NA
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	0.0010 U	0.0010 U	0.0010 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	NA	0.0010 U	0.0010 U	NA	0.030 U	0.030 U	0.030 U	NA	0.0030 U	0.030 U [0.030 U]	0.030 U	0.030 U	0.030 U
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	RFI-10-28 06/18/08	RFI-10-28 09/17/08	RFI-10-28 12/03/08	RFI-10-29 12/12/02	RFI-10-29 06/30/05	RFI-10-29 12/08/05	RFI-10-29 06/28/07	RFI-10-29 10/25/07	RFI-10-29 03/20/08	RFI-10-29 06/17/08	RFI-10-29 09/17/08	RFI-10-29 12/03/08	RFI-10-29 10/14/10	RFI-10-33 06/29/05	RFI-10-33 12/08/05	RFI-10-33 10/25/07	RFI-10-33 03/20/08	RFI-10-33 06/18/08	RFI-10-33 09/17/08	RFI-10-33 12/03/08	RFI-10-33 10/14/10
VOC																														
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.019	0.063	0.076 [0.076]	0.0090	0.018	0.025	0.096	0.045
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.021	0.060	0.068 [0.073]	0.0050	0.012	0.021	0.067	0.029
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0040	0.010 (NDW,RDW)	0.011 (NDW,RDW) [0.012 (NDW,RDW)]	0.0010	0.0030	0.0040	0.015 (NDW,RDW)	0.0060
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	0.0050 U
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U [0.0020 U]	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	0.020 U	0.020 U	0.020 UJ	0.025 U	0.030 U	0.030 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.030 U	0.030 U	0.030 U	0.020 U [0.020 U]	0.020 U	0.020 U	0.020 U	0.020 UJ	0.030 U
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	0.050 U	0.050 UJ	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 UJ	0.050 U	0.050 U	0.050 U [0.050 U]	0.050 U	0.050 U	0.050 UJ	0.050 UJ	0.050 U
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	0.0050 U
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	0.010 U	0.010 U	0.010 U	0.050 U	0.0010 U	0.0010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.050 U	0.0010 U	0.0010 U	0.010 U [0.010 U]	0.010 U	0.010 U	0.010 U	0.010 U	0.050 U
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	0.020 U	0.020 U	0.020 UJ	0.0019 J	0.030 U	0.030 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.050 U	0.030 U	0.030 U	0.020 U [0.020 U]	0.020 U	0.020 U	0.020 U	0.020 UJ	0.050 U
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0020 U	NA	NA	NA	NA	NA	NA	NA	0.0020 U
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	0.0020 UJ	0.0020 UJ	0.0020 UJ	0.0020 U	0.0010 UJ	0.0020 U	0.0020 U	0.0020 U	0.0020 UJ	0.0020 U	0.0020 UJ	0.0020 UJ	0.0050 U	0.0020 U	0.0020 U	0.0020 U [0.0020 U]	0.0020 UJ	0.0020 UJ	0.0020 UJ	0.0020 UJ	0.0050 U
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	0.0010 UJ	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 UJ	0.0010 U	0.0050 U	0.0040	0.0050	0.0030 [0.0040]	0.0010 UJ	0.0010 UJ	0.0010 J	0.0030	0.0050 U
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00040 J [0.00040 J]	0.0010 U	0.0010 U	0.0010 U	0.00060 J	0.0010 U
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0030 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	0.0050 U
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	0.0050 U
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 UJ	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.010 U	NA	NA	NA	NA	NA	NA	NA	0.010 U
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	0.0050 U
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0020 U	0.0010 U	0.0010 U	0.0010 U	0.00010 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 U
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.010 U	0.010 U	0.010 U	0.0030 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U [0.010 U]	0.010 U	0.010 U	0.010 U	0.010 U	NA
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.020 U	0.020 U	0.020 U	0.0030 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	NA	0.020 U	0.020 U	0.020 U [0.020 U]	0.020 U	0.020 U	0.020 U	0.020 U	NA
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	0.0050 U
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.090 U	NA	NA	NA	NA	NA	NA	NA	0.090 U
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	0.00010 J	0.0010 U	0.0010 U	0.00051 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00010 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	0.0010 U
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	0.030 U	0.030 U	0.030 U	0.0030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	NA	0.030 U	0.030 U	0.030 U [0.030 U]	0.030 U	0.030 U	0.030 U	0.030 U	NA
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Xylenes (total)	mg/L	70	190(S)	190(S)	0.041	10 (E)	190(S)	10 (E)	190(S)	0.0010 U	0.0010 U	0.0010 U	0.0020 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00010 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA
PCB																														
Total PCBs	mg/L	ID	ID	0.0033(AA)	0.0002(M	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-Dissolved																														
Total PCBs (Dissolved)	mg/L	ID	ID	0.0033(AA)	0.0002(M)	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic																														
Cyanide (total)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	mg/L	ID	ID	9,100	4.767(G,X)	0.05(E)	NLV	0.05(E)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	N

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	RFI-10-35 06/29/05	RFI-10-35 12/08/05	RFI-10-35 06/28/07	RFI-10-35 10/25/07	RFI-10-35 03/27/08	RFI-10-35 06/17/08	RFI-10-35 09/17/08	RFI-10-35 12/03/08	RFI-10-35 10/14/10	RFI-10-36 06/29/05	RFI-10-36 12/08/05	RFI-10-36 06/28/07	RFI-10-36 10/25/07	RFI-10-36 03/20/08	RFI-10-36 06/17/08	RFI-10-36 09/15/08	RFI-10-36 12/03/08	RFI-10-36 10/14/10	RFI-17-02 10/03/01	RFI-17-02 06/25/02	RFI-17-02 04/02/03	RFI-17-02 10/05/04	RFI-17-02 06/09/05
VOC																																
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U [0.0010 U]	NA	NA	NA	NA
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	0.0030	0.0010	0.00020 J	0.00060 J	0.00090 J [0.00070 J]	0.0020	0.0060	0.013	0.012	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	0.015	0.031	0.029	0.038	0.036 [0.035]	0.029	0.045	0.048	0.021	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.017 [0.016]	0.0010 U	NA	NA	NA	0.0020
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	0.0010	0.0020	0.0020	0.0040	0.0030 [0.0030]	0.0030	0.0040	0.0050	0.0030	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U [0.0050 U]	NA	NA	NA	NA
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U [0.0010 U]	NA	NA	NA	NA
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U [0.0010 U]	NA	NA	NA	NA
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U [0.0020 U]	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U [0.0050 U]	0.0050 U	NA	NA	NA	0.0020 U
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U [0.0010 U]	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U [0.0050 U]	0.0010 U	NA	NA	NA	0.0010 U
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U [0.0010 U]	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	0.030 U	0.030 U	0.020 U	0.020 U	0.020 U [0.020 U]	0.020 U	0.020 U	0.020 UJ	0.030 U	0.030 U	0.030 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.030 U [0.030 U]	0.025 U	NA	NA	NA	0.030 U
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U [0.050 U]	0.050 U	0.050 UJ	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 U [0.050 U]	0.050 U	NA	NA	NA	0.050 U
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U [0.0050 U]	NA	NA	NA	NA	NA
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U [0.0010 U]	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	0.0010 U	0.0010 U	0.010 U	0.010 U	0.010 U [0.010 U]	0.010 U	0.010 U	0.010 U	0.050 U	0.0010 U	0.0010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.050 U [0.050 U]	0.050 U	NA	NA	NA	0.0010 U
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	0.030 U	0.030 U	0.020 U	0.020 U	0.020 U [0.020 U]	0.020 U	0.020 U	0.020 UJ	0.050 U	0.030 U	0.030 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.050 U [0.050 U]	0.025 U	NA	NA	NA	0.030 U
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	NA	NA	NA	NA	NA	NA	NA	NA	0.0020 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0020 U [0.0020 U]	NA	NA	NA	NA	NA
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U [0.0010 U]	NA	NA	NA	NA	NA
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 UJ [0.0020 UJ]	0.0020 U	0.0020 UJ	0.0020 UJ	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 UJ	0.0020 UJ	0.0020 U	0.0020 U	0.0050 U [0.0050 U]	0.0010 U	NA	NA	NA	0.0020 U
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	NA	NA	NA	0.0050 U
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U [0.0010 U]	NA	NA	NA	NA	NA
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ [0.0010 UJ]	0.0010 U	0.0010 UJ	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0090	0.0010 UJ	0.0010 U	0.0040	0.0010 U	0.023 [0.015]	0.0010 U	NA	NA	NA	0.0010 U
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 UJ	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0050 U [0.0050 U]	0.0010 U	NA	NA	NA	0.0010 U
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00020 J [0.00020 J]	0.0010 U	0.00020 J	0.00050 J	0.0010	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	NA	0.0050 U	NA	NA	NA	NA	0.0010 U
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U [0.0050 U]	NA	NA	NA	NA	NA
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U [0.0050 U]	0.0010 U	NA	NA	NA	0.0010 U
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U [0.0050 U]	NA	NA	NA	NA	NA
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U [0.0050 U]	0.0010 U	NA	NA	NA	0.0010 U
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	NA	NA	NA	NA	NA	NA	NA	NA	0.010 U	NA	NA	NA	NA	NA	NA	NA	NA	0.010 U [0.010 U]	NA	NA	NA	NA	NA
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	0.0010 U	0.0010 U	0.00010 J	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U [0.0050 U]	NA	NA	NA	NA	NA
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U [0.0010 U]	NA	NA	NA	NA	NA
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U [0.0050 U]	0.0050 U	NA	NA	NA	0.0010 U
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.00010 J	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0020 U	0.0010 U	0.0010 U	0.00010 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 U [0.0020 U]	0.0020 U	NA	NA	NA	0.0010 U
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U [0.010 U]	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	0.0050 U	NA	NA	NA	0.010 U
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U [0.020 U]	0.020 U	0.020 U	0.020 U	NA	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	NA	0.0010 U	NA	NA	NA	0.020 U
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	NA	NA	NA	0.0030 J
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	NA	NA	NA	0.0050 U
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U [0.0050 U]	NA	NA	NA	NA	NA
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U [0.0010 U]	NA	NA	NA	NA	NA
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U [0.0010 U]	NA	NA	NA	NA	NA
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U [0.0010 U]	NA	NA	NA	NA	NA
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 UJ	NA	NA	NA	0.0010 U
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	NA	NA	NA	NA	NA	NA	NA	NA	0.090 U	NA	NA	NA	NA	NA	NA	NA	NA	0.090 U [0.090 U]	NA	NA	NA	NA	NA
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U [0.0010 U]	NA	NA	NA	NA	NA
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U [0.030 U]	0.030 U	0.030 U	0.030 U	NA	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	NA	0.0010 U	NA	NA	NA	0.030 U
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	NA	0.0010 U
Xylenes (total)	mg/L	70	190(S)	190(S)	0.041	10 (E)	190(S)	10 (E)	190(S)	0.0010 U	0.0010 U	0.00010 J	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.00010 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0020 U	NA	NA	NA	0.0010 U
PCB																																
Total PCBs	mg/L	ID	ID	0.0033(AA)	0.0002(M	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	RFI-17-02 12/08/05	RFI-17-02 11/01/06	RFI-17-02 04/24/07	RFI-17-02 06/26/07	RFI-17-02 10/26/07	RFI-17-02 03/18/08	RFI-17-02 06/17/08	RFI-17-02 09/10/08	RFI-17-02 12/04/08	RFI-17-02 10/19/10	RFI-17-02D 07/29/05	RFI-17-02D 12/08/05	RFI-17-02D 11/01/06	RFI-17-02D 04/24/07	RFI-17-02D 06/27/07	RFI-17-02D 10/26/07	RFI-17-02D 03/18/08	RFI-17-02D 06/17/08
VOC																											
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	0.0020	0.0020	0.0010	0.0010 J	0.00080 J	0.00070 J	0.00080 J [0.00080 J]	0.00080 J	0.00070 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00020 J	0.00030 J	0.00050 J	0.00080 J
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 UJ	0.0020 U [0.0020 U]	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 UJ	0.0020 U
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	0.030 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U [0.020 U]	0.020 U	0.020 U	0.030 U	0.030 U	0.030 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U [0.050 U]	0.050 UJ	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	0.0010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U [0.010 U]	0.010 U	0.010 U	0.050 U	0.0010 U	0.0010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	0.030 U	0.020 U	0.020 UJ	R	0.020 U	0.020 U	0.020 U [0.020 U]	0.020 U	0.020 UJ	0.050 U	0.030 U	0.030 U	0.020 U	0.0060 J	0.020 U	0.020 U	0.020 U	0.020 U
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0020 U	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010	0.031 (NDW,RDW)
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U [0.0020 U]	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 UJ [0.0010 UJ]	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00010 J	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0030	0.0030	0.0040	0.0010	0.0020	0.0040	0.0030	0.0040
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 UJ	0.0010 UJ	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 UJ	0.0010 U	NA	0.0010 UJ	0.0010 U	0.0010 UJ	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	0.0010 U	0.0010 U	0.0010 U	R	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 UJ	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.010 U	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.00010 J	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0020 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U [0.010 U]	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.020 U [0.020 U]	0.020 U	0.020 U	NA	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.020 U
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	0.0040 J	0.0030 J	0.0020 J	0.0020 J	0.0010 J	0.0010 J	0.00040 J [0.00040 J]	0.00030 J	0.00030 J	0.0050 U	0.0030 J	0.0030 J	0.0020 J	0.00090 J	0.0010 J	0.00070 J	0.00070 J	0.00050 J
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.090 U	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 U	0.030 U [0.030 U]	0.030 U	0.030 U	NA	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	0.0010 U	0.00090 J	0.0010 U	0.0010 UJ	0.0010 U	0.00060 J	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0030 (NDW,RDW)	0.0030 (NDW,RDW)	0.0020	0.0010 U	0.0020	0.0030 (NDW,RDW)	0.0010	0.0020
Xylenes (total)	mg/L	70	190(S)	190(S)	0.041	10 (E)	190(S)	10 (E)	190(S)	0.0010 U	0.0010 U	0.0010 U	0.00010 J	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
PCB																											
Total PCBs	mg/L	ID	ID	0.0033(AA)	0.0002(M	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-Dissolved																											
Total PCBs (Dissolved)	mg/L	ID	ID	0.0033(AA)	0.0002(M)	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic																											
Cyanide (total)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	mg/L	ID	ID	9,100	4.767(G,X)	0.05(E)	NLV	0.05(E)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA
Silver	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic-Dissolved																											
Cyanide (dissolved)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead (Dissolved)	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium (Dissolved)	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver (Dissolved)	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium (Dissolved)	mg/L	ID	ID	13	0.0037(X)	0.002(A)	NLV	0.002(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	RFI-17-02D 09/10/08	RFI-17-02D 12/04/08	RFI-17-02D 09/22/09	RFI-36-04 09/28/01	RFI-36-04 06/18/02	RFI-36-04 04/02/03	RFI-36-04 09/18/08	RFI-36-14 10/02/01	RFI-36-14 02/20/02	RFI-36-14 06/17/02
VOC																			
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 UJ	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 UJ [0.0010 UJ]	NA	0.0010 U
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	0.00090 J [0.0010 J]	0.00090 J	0.0010 J [0.0010]	0.00082 J	NA	NA	0.0020	0.0010 U [0.0010 U]	NA	0.0010 U
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	0.0020 U [0.0020 U]	0.0020 U	0.0020 U [0.0020 U]	0.0050 U	NA	NA	0.0020 U	0.0050 U [0.0050 U]	NA	0.0050 U
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	0.0010 U [0.0010 U]	0.0010 U	0.00030 J [0.00030 J]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	0.020 U [0.020 U]	0.020 U	0.020 U [0.020 U]	0.025 U	NA	NA	0.020 U	0.025 U [0.025 U]	NA	0.025 U
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	0.050 UJ [0.050 UJ]	0.050 UJ	0.050 U [0.050 U]	0.050 U	NA	NA	0.050 UJ	0.050 U [0.050 U]	NA	0.050 U
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	0.010 U [0.010 U]	0.010 U	0.010 U [0.010 U]	0.050 U	NA	NA	0.010 U	0.050 U [0.050 U]	NA	0.050 U
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	0.020 U [0.020 U]	0.020 UJ	0.0030 J [0.0040 J]	0.025 U	NA	NA	0.020 U	0.025 U [0.025 U]	NA	0.025 U
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	0.072 (NDW,RDW) [0.071 (NDW,RDW)]	0.13 (NDW,RDW)	0.080 (NDW,RDW) [0.078 (NDW,RDW)]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	0.0020 U [0.0020 U]	0.0020 U	0.0020 U [0.0020 U]	0.0010 U	NA	NA	0.0020 UJ	0.0010 U [0.0010 U]	NA	0.0010 U
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	0.0050 U [0.0050 U]	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	NA	NA	0.0050 U	0.0050 U [0.0050 U]	NA	0.0050 U
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 UJ	0.0010 U [0.0010 U]	NA	0.0010 U
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	0.0010 UJ [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	0.0040 [0.0040]	0.0040	0.0030 [0.0030]	0.0010 U	NA	NA	0.0010	0.0010 U [0.0010 U]	NA	0.0010 U
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 UJ [0.0010 UJ]	0.0010 U	0.0010 U [0.0010 U]	0.0050 U	NA	NA	0.0010 U	0.0050 U [0.0050 U]	NA	0.0050 U
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	0.0010 UJ [0.0010 UJ]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0050 U	NA	NA	0.0010 U	0.0050 U [0.0050 U]	NA	0.0050 U
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.00030 J]	0.0020 U	NA	NA	0.0010 U	0.0020 U [0.0020 U]	NA	0.0020 U
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.010 U [0.010 U]	0.010 U	0.010 U [0.010 U]	0.0050 U	NA	NA	0.010 U	0.0050 U [0.0050 U]	NA	0.0050 U
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.020 U [0.020 U]	0.020 U	0.020 U [0.020 U]	0.0010 U	NA	NA	0.020 U	0.0010 U [0.0010 U]	NA	0.0010 U
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	0.00050 J [0.00060 J]	0.00050 J	0.00050 J [0.00050 J]	0.0050 U	NA	NA	0.0050 U	0.0050 U [0.0050 U]	NA	0.0050 U
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	0.0050 U [0.0050 U]	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	NA	NA	0.0050 U	0.0050 U [0.0050 U]	NA	0.0050 UJ
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 UJ
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	0.0010 U [0.0010 U]	0.0010 U	0.00030 J [0.00030 J]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	0.0010 U [0.0010 U]	0.00020 J	0.0010 U [0.00030 J]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 UJ	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	NA	NA	0.0010 U	0.0010 U [0.0010 U]	NA	0.0010 U
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	0.030 U [0.030 U]	0.030 U	0.030 U [0.030 U]	0.0010 U	NA	NA	0.030 U	0.0010 U [0.0010 U]	NA	0.0010 U
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	0.0010 [0.0020]	0.0020 J	0.0010 [0.0010]	0.0010 U	NA	NA	0.0030 (NDW,RDW)	0.0010 U [0.0010 U]	NA	0.0010 U
Xylenes (total)	mg/L	70	190(S)	190(S)	0.041	10 (E)	190(S)	10 (E)	190(S)	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.00030 J]	0.0020 U	NA	NA	0.0010 U	0.0020 U [0.0020 U]	NA	0.0020 U
PCB																			
Total PCBs	mg/L	ID	ID	0.0033(AA)	0.0002(M	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	0.00010 U	NA	NA	NA	0.00010 U [0.00010 U]	NA	NA
PCB-Dissolved																			
Total PCBs (Dissolved)	mg/L	ID	ID	0.0033(AA)	0.0002(M)	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	0.00010 U	NA	NA	NA	0.00010 U	NA	NA
Inorganic																			
Cyanide (total)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	NA	0.0015 J [0.0050 U]	NA	0.029
Lead	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	0.0010 [0.00091]	0.0018	NA	0.00038 J [0.00017 J]	NA	0.00025 J
Manganese	mg/L	ID	ID	9,100	4.767(G,X)	0.05(E)	NLV	0.05(E)	NLV	NA	NA	NA	NA	4.44 (NDW,RDW) [0.56 J (NDW,RDW)]	0.60 J (NDW,RDW)	NA	1.5 J (NDW,RDW) [2.5 (NDW,RDW)]	0.62 (NDW,RDW)	0.28 J (NDW,RDW)
Selenium	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	0.0014 U [0.0013 J]	0.0016 U	NA	0.00049 J [0.0048 J]	NA	0.0032
Silver	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	0.00040 U [0.00054]	0.00040 U	NA	0.00040 U [0.00040 U]	NA	0.00040 U
Inorganic-Dissolved																			
Cyanide (dissolved)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	0.0050 U	NA	NA	NA	0.0013 J [0.0015 J]	NA	NA
Lead (Dissolved)	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	0.00040 U	NA	NA	NA	0.00040 U [0.00040 U]	NA	NA
Selenium (Dissolved)	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	0.0029	NA	NA	NA	0.035 [0.032]	NA	NA
Silver (Dissolved)	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	0.00040 U	NA	NA	NA	0.00040 U [0.00040 U]	NA	NA
Thallium (Dissolved)	mg/L	ID	ID	13	0.0037(X)	0.002(A)	NLV	0.002(A)	NLV	NA	NA	NA	0.00020 U	NA	NA	NA	0.00020 U [0.00020 U]	NA	NA

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	RFI-36-14 03/25/03	RFI-36-14 10/11/04	RFI-36-14 11/02/06	RFI-36-14 10/26/07	RFI-36-14 09/15/08	RFI-36-14 09/23/09	RFI-36-19 09/28/01	RFI-36-19 10/06/04	RFI-36-19 12/08/05	RFI-36-19 06/26/07	RFI-36-19 10/30/07	RFI-36-19 03/20/08	RFI-36-19 06/18/08	RFI-36-19 09/17/08	RFI-36-19 12/04/08	RFI-36-19 09/25/09	RFI-36-19 10/15/10	RFI-36-20 09/28/01	RFI-36-20 06/22/02	RFI-36-20 10/06/04	RFI-36-20 10/14/10	RFI-36-37 09/28/01
VOC																															
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.22 D
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0057
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	0.0050 U	NA
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	NA	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0050 U	NA	0.0020 U	0.0050 U	0.0050 U
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	NA	0.0010 U	0.0050 U	0.0010 U
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0040
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00020 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	NA	0.030 U	0.020 U	0.020 U	0.020 U	0.020 U	0.025 U	0.030 U	0.030 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.020 U	0.030 U	0.025 U	NA	0.030 U	0.030 U	0.025 U
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	NA	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 UJ	0.050 U	0.050 U	NA	0.050 UJ	0.050 U	0.050 U
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	0.0050 U	NA
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	NA	0.0010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.050 U	0.0010 U	0.0010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.050 U	0.050 U	NA	0.0010 U	0.050 U	0.050 U
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	NA	0.030 U	0.020 U	0.020 U	0.020 U	0.020 U	0.025 U	0.030 U	0.030 U	R	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.020 U	0.050 U	0.025 U	NA	0.030 U	0.050 U	0.025 U
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0020 U	NA	NA	NA	0.0020 U	NA
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0032
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	NA	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 UJ	0.0010 U	0.0010 U
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	NA	0.0020 UJ	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0010 U	0.0020 UJ	0.0020 U	0.0020 U	0.0020 U	0.0020 UJ	0.0020 UJ	0.0020 UJ	0.0020 UJ	0.0020 U	0.0050 U	0.0010 U	NA	0.0020 UJ	0.0050 U	0.0010 U
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	NA	0.0050 UJ	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 U	0.0050 U
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	NA	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 UJ	0.0010 U	0.0010 UJ	0.0010 UJ	0.0010 UJ	0.0010 U	0.0010 U	0.0050 U	0.0010 U	NA	0.0010 UJ	0.0050 U	0.18 D
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	NA	0.0010 U	0.0050 U	0.0010 U
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0028
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0050 U	NA	0.0010 U	NA	0.0050 U
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	0.0050 U	NA
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	NA	0.0010 U	0.0050 U	0.0010 U
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	0.0050 U	NA
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	R	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	NA	0.0010 U	0.0050 U	0.0010 U
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.010 U	NA	NA	NA	0.010 U	NA
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	0.0050 U	NA
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0050 U	NA	0.0010 U	0.0050 U	0.0050 U
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 U	0.0020 U	NA	0.0010 U	0.0020 U	0.0020 U
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0050 U	0.010 UJ	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	0.0050 U	NA	0.010 U	NA	0.0050 U
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.0010 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	NA	0.0010 U	NA	0.020 U	NA	0.0010 U
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 U	0.0050 U
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 U	0.0050 U
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	0.0050 U	NA
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.090 U	NA	NA	NA	0.090 U	NA
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00020 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00010 J	0.0010 U	0.0010 U	0.0010 U	0.00010 J	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0032	0.00080 J	0.0010 U	0.0010 UJ	0.0030 J	0.0020	0.0020	0.0020	0.0020	0.0010	0.0010 U	0.0026	NA	0.0020	0.0010 U	0.0010 U
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	NA	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.0010 U	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	NA	0.0010 U	NA	0.030 U	NA	0.0010 U
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0027 (NDW,RDW)
Xylenes (total)	mg/L	70	190(S)	190(S)	0.041	10 (E)	190(S)	10 (E)	190(S)	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 U	NA	0.0010 U	NA	0.0020 U
PCB																															
Total PCBs	mg/L	ID	ID	0.0033(AA)	0.0002(M	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00011 U
PCB-Dissolved																															
Total PCBs (Dissolved)	mg/L	ID	ID	0.0033(AA)	0.0002(M)	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00011 U
Inorganic																															
Cyanide (total)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	0.0030 J [0.0033 J]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	0.0014 J
Lead	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	0.00040 U [0.00034 J]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.000089 J	NA	NA	NA
Manganese	mg/L	ID	ID	9,100	4.767(G,X)	0.05(E)	NLV	0.05(E)	NLV	0.72 (NDW,RDW)	0.72 (NDW,RDW)	0.68 (NDW,RDW)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00054 J	NA	NA	NA
Selenium	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	0.0016 U [0.0016 U]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0014 U	NA	NA	NA
Silver	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	0.00037 J [0.00012 J]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00040 UJ	NA	NA	NA
Inorganic-Dissolved																															
Cyanide (dissolved)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	N

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	RFI-36-37 06/22/02	RFI-36-37 06/10/05	RFI-36-37 06/26/07	RFI-36-37 10/30/07	RFI-36-37 09/18/08	RFI-36-37 09/25/09	RFI-36-37 10/15/10	RFI-36-47 12/13/02	RFI-36-47 03/25/03	RFI-36-47 06/10/05	RFI-36-47 12/09/05	RFI-36-47 04/23/07	RFI-36-47 06/26/07	RFI-36-47 10/30/07	RFI-36-47 03/20/08	RFI-36-47 06/19/08	RFI-36-47 09/18/08	RFI-36-47 12/04/08
VOC																											
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	0.0010 U	0.00060 J	0.00010 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.19	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.12	0.0010 U
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.00030 J	0.0010 U
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	0.053	0.0010	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0085	0.0040	0.0060	0.56	0.0030	0.014	0.019 [0.017]	0.010	0.012 [0.011]	0.11	0.012
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	0.0015	0.0020	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.070 (NDW,RDW)	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.031 (NDW,RDW)	0.0010 U
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0050 U	0.0050 U	0.0020 U	0.020 U	0.0020 U	0.0020 U	0.0020 U [0.0020 U]	0.0020 U	0.0020 U [0.0020 U]	0.0020 U	0.0020 U
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 UJ	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	0.0017	0.0010 U	0.0010 U	0.0010	0.0010	0.0010 U	0.0030 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00020 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	0.0026 J	0.030 U	0.020 U	0.020 U	0.020 U	0.020 U	0.030 U	0.025 U	0.025 U	0.030 U	0.30 U	0.020 U	0.020 U	0.020 U [0.020 U]	0.020 U	0.020 U [0.020 U]	0.020 U	0.020 UJ
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	0.050 U	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.50 U	0.050 U	0.050 U	0.050 U [0.050 U]	0.050 U	0.050 U [0.050 U]	0.050 UJ	0.050 UJ
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	0.050 U	0.0010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.050 U	0.050 U	0.050 U	0.0010 U	0.010 UJ	0.010 U	0.010 U	0.010 U [0.010 U]	0.010 U	0.010 U [0.010 U]	0.010 U	0.010 U
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	0.025 U	0.030 U	R	0.020 U	0.020 U	0.020 U	0.050 U	0.0013 J	0.025 U	0.030 U	0.30 U	0.020 UJ	R	0.020 U [0.020 U]	0.020 U	0.020 U [0.020 U]	0.020 U	0.020 UJ
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	NA	NA	NA	NA	NA	NA	0.0020 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	0.0010 U	0.0090 (NDW,RDW)	0.0090 (NDW,RDW)	0.013 (NDW,RDW)	0.015 (NDW,RDW)	0.015 (NDW,RDW)	0.048 (NDW,RDW)	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.00030 J	0.0010 U
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	0.0010 U	0.0020 U	0.0020 U	0.0020 U	0.0020 UJ	0.0020 U	0.0050 U	0.0010 UJ	0.0010 U	0.0020 U	0.020 U	0.0020 U	0.0020 U	0.0020 U [0.0020 U]	0.0020 UJ	0.0020 UJ [0.0020 UJ]	0.0020 UJ	0.0020 U
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	0.10	0.0050 J	0.0010 UJ	0.0010 U	0.0010 UJ	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.12	0.0010 U	0.0010 UJ	0.0010 U [0.0010 U]	0.0010 UJ	0.0010 UJ [0.0010 UJ]	0.026 J	0.0010 U
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 UJ	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 UJ	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	0.0010	0.00040 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0050	0.0010 U
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0050 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	NA	0.0030 U	0.0050 U	0.0010 U	0.010 U	0.0010 UJ	0.0010 UJ	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	0.0010 U	0.0010 U	R	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	R	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	NA	NA	NA	NA	NA	NA	0.010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0050 U	0.0050 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0020 U	0.0010 U	0.00030 J	0.0010 U	0.0010 U	0.0010 U	0.0020 U	0.0020 U	0.0020 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0050 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	0.0030 U	0.0050 U	0.010 U	0.10 U	0.010 U	0.010 U	0.010 U [0.010 U]	0.010 U	0.010 U [0.010 U]	0.010 U	0.010 U
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	NA	0.0030 U	0.0010 UJ	0.020 U	0.20 U	0.020 U	0.020 U	0.020 U [0.020 U]	0.020 U	0.020 U [0.020 U]	0.020 U	0.020 U
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.050 U	0.0050 U	0.00020 J	0.0050 U [0.0050 U]	0.0050 U	0.0050 U [0.0050 U]	0.00040 J	0.0050 U
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	NA	NA	NA	NA	NA	NA	0.090 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	0.0010 U	0.0010 U	0.0010 U	0.00020 J	0.0010 U	0.00020 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.00020 J	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.00010 J [0.0010 U]	0.0010 U	0.0010 U
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.00040 J	0.0010 U
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.010 U	0.0010 U	0.0010 UJ	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	0.0010 U	0.030 U	0.030 UJ	0.030 U	0.030 U	0.030 U	NA	0.0030 U	0.0010 U	0.030 U	0.30 U	0.030 U	0.030 UJ	0.030 U [0.030 UJ]	0.030 U	0.030 U [0.030 UJ]	0.030 U	0.030 U
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	0.00056 J	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.020 (NDW,RDW)	0.0010 U	0.0010 UJ	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0030 (NDW,RDW)	0.0010 U
Xylenes (total)	mg/L	70	190(S)	190(S)	0.041	10 (E)	190(S)	10 (E)	190(S)	0.0020 U	0.0010 U	0.00030 J	0.0010 U	0.0010 U	0.0010 U	NA	0.0020 U	0.0020 U	0.0010 U	0.010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U
PCB																											
Total PCBs	mg/L	ID	ID	0.0033(AA)	0.0002(M	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-Dissolved																											
Total PCBs (Dissolved)	mg/L	ID	ID	0.0033(AA)	0.0002(M)	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic																											
Cyanide (total)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	mg/L	ID	ID	9,100	4.767(G,X)	0.05(E)	NLV	0.05(E)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic-Dissolved																											
Cyanide (dissolved)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead (Dissolved)	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium (Dissolved)	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver (Dissolved)	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium (Dissolved)	mg/L	ID	ID	13	0.0037(X)	0.002(A)	NLV	0.002(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	RFI-36-47 10/15/10	RFI-36-48 12/13/02	RFI-36-48 02/28/05	RFI-36-48 06/10/05	RFI-36-48 12/09/05	RFI-36-48 09/30/07	RFI-36-48 03/20/08	RFI-36-48 06/19/08	RFI-36-48 09/17/08	RFI-36-48 12/04/08	RFI-36-48 10/15/10	RFI-36-55 07/06/05	RFI-36-55 12/09/05	RFI-36-55 06/26/07
VOC																							
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	0.12	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.00020 J	0.00060 J	0.00090 J	0.0030	0.0070	0.0010 U	0.0010 U	0.0010 U
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	0.087	0.0010 U	0.0030 [0.0020]	0.0020	0.17 [0.18]	0.025 [0.024]	0.017	0.027	0.027	0.016	0.049	0.0010 U	0.0010 U	0.0020
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	0.026 (NDW,RDW)	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0050 [0.0050]	0.00060 J [0.00060 J]	0.00090 J	0.0020	0.0020	0.0040	0.0060	0.0010 U	0.0010 U	0.0010 U
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	0.0050 U	0.0050 U	0.0020 U [0.0020 U]	0.0020 U	0.0020 U [0.0020 U]	0.0020 U [0.0020 U]	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0050 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 UJ
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	0.0010 U	0.00077 J	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	0.030 U	0.025 U	0.030 U [0.030 U]	0.030 U	0.030 U [0.030 U]	0.020 UJ [0.020 UJ]	0.020 U	0.020 U	0.020 U	0.020 UJ	0.030 U	0.030 U	0.030 U	0.020 U
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	0.050 U	0.050 U	0.050 UJ [0.050 UJ]	0.050 U	0.050 U [0.050 U]	0.050 U [0.050 U]	0.050 U	0.050 U	0.050 UJ	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 U
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	0.050 U	0.050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.010 UJ [0.010 UJ]	0.010 U	0.010 U	0.010 U	0.010 U	0.050 U	0.0010 U	0.0010 U	0.010 U
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	0.050 U	0.0017 J	0.030 U [0.030 U]	0.030 U	0.030 U [0.030 U]	0.020 UJ [0.020 UJ]	0.020 U	0.020 U	0.020 U	0.020 UJ	0.050 U	0.030 U	0.030 U	0.0070 J
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	0.0020 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0020 U	NA	NA	NA
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	0.0050 U	0.0010 UJ	R [R]	0.0020 U	0.0020 U [0.0020 U]	0.0020 U [0.0020 U]	0.0020 UJ	0.0020 UJ	0.0020 UJ	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U [0.0050 U]	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	0.010	0.0010 U	0.0020 [0.0010]	0.0010 U	0.0050 [0.0060]	0.0010 U [0.0010 U]	0.0010 UJ	0.0010 UJ	0.0010 UJ	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 UJ
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	0.0010 U	0.0010 U	0.0010 UJ [0.0010 UJ]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	0.0050 U	0.0010 UJ	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 UJ [0.0010 UJ]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 UJ
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	0.0040	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.00020 J	0.00020 J	0.00040 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.0030 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 UJ
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	0.0050 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	0.0050 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	R
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	0.010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.010 U	NA	NA	NA
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00010 J
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	0.0050 U	0.0050 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.00020 J	0.0010 U	0.0010
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0020 U	0.0020 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 U	0.0010 U	0.0010 U	0.00010 J
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.0030 U	0.010 U [0.010 U]	0.010 U	0.010 U [0.010 U]	0.010 UJ [0.010 UJ]	0.010 U	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.0030 U	0.020 U [0.020 U]	0.020 U	0.020 U [0.020 U]	0.020 UJ [0.020 UJ]	0.020 U	0.020 U	0.020 U	0.020 U	NA	0.020 U	0.020 U	0.020 U
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	0.0050 U	0.0050 U	0.00020 J [0.00030 J]	0.0050 U	0.0040 J [0.0040 J]	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0010 J	0.00020 J
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U	0.0050 U [0.0050 U]	0.0050 UJ [0.0050 UJ]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 J	0.0010 U	0.0010 U
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	0.090 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.090 U	NA	NA	NA
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	0.0010 U	0.00086 J	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	NA	0.0030 U	0.030 U [0.030 U]	0.030 U	0.030 U [0.030 U]	0.030 U [0.030 U]	0.030 U	0.030 U	0.030 U	0.030 U	NA	0.030 U	0.030 U	0.030 UJ
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	0.0020	0.0010 U	0.0050 (NDW,RDW)	0.0060 (NDW,RDW)	0.0040 (NDW,RDW)	0.064 (NDW,RDW)	0.064 (NDW,RDW)	0.0030 (NDW,RDW)	0.0030 (NDW,RDW)	0.0030 (NDW,RDW)	0.0020	0.0030 (NDW,RDW)	0.0010 U	0.0030 (NDW,RDW)	0.0010 U	0.0010 UJ
Xylenes (total)	mg/L	70	190(S)	190(S)	0.041	10 (E)	190(S)	10 (E)	190(S)	NA	0.0020 U	0.0010 U [0.0010 U]	0.0010 U	0.0010 U [0.0010 U]	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.00010 J
PCB																							
Total PCBs	mg/L	ID	ID	0.0033(AA)	0.0002(M	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-Dissolved																							
Total PCBs (Dissolved)	mg/L	ID	ID	0.0033(AA)	0.0002(M)	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic																							
Cyanide (total)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	mg/L	ID	ID	9,100	4.767(G,X)	0.05(E)	NLV	0.05(E)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic-Dissolved																							
Cyanide (dissolved)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead (Dissolved)	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium (Dissolved)	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver (Dissolved)	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium (Dissolved)	mg/L	ID	ID	13	0.0037(X)	0.002(A)	NLV	0.002(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	RFI-36-55 10/30/07	RFI-36-55 03/20/08	RFI-36-55 06/18/08	RFI-36-55 09/17/08	RFI-36-55 12/04/08	RFI-36-56 07/21/05	RFI-36-56 12/09/05	RFI-36-56 06/26/07	RFI-36-56 10/30/07	RFI-36-56 03/20/08	RFI-36-56 06/18/08	RFI-36-56 09/17/08	RFI-36-56 12/04/08	RFI-44-05 09/14/01	RFI-44-05 12/20/02	RFI-44-05 03/24/03	RFI-44-05 10/05/04	RFI-44-05 10/26/10	RFI-81-08 09/24/01	RFI-81-08 06/17/02
VOC																													
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00020 J	0.00040 J	0.0010 U	NA	NA	0.0010 U	NA	0.0012	0.0011
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 UJ	0.0010 U
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	0.0020	0.013	0.033	0.045	0.061	0.0040	0.0050	0.0040	0.0040	0.00030 J	0.0030	0.0080	0.0070	0.0010 U	NA	NA	0.0010 U	NA	0.0031	0.0011
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	NA	NA	0.0020 U	NA	0.0050 U	0.0050 U
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.030 U	0.030 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.025 U	NA	NA	0.030 U	NA	0.025 U	0.025 U
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 UJ	0.050 U	NA	NA	0.050 UJ	NA	0.050 U	0.050 U
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0010 U	0.0010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.050 U	NA	NA	0.0010 U	NA	0.050 U	0.050 U
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	0.0050 J	0.020 U	0.0030 J	0.020 U	0.020 UJ	0.030 U	0.030 U	R	0.020 U	0.020 U	0.020 U	0.020 UJ	0.020 UJ	0.025 U	NA	NA	0.0060 J	NA	0.025 U	0.025 U
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 UJ	NA	0.0010 U	0.0010 U
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	0.0020 U	0.0020 UJ	0.0020 UJ	0.0020 UJ	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 UJ	0.0020 UJ	0.0020 UJ	0.0020 UJ	0.0010 U	NA	NA	0.0020 UJ	NA	0.0010 U	0.0010 U
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA	NA	0.0050 U	NA	0.0050 U	0.0050 U
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	0.0010 U	0.0010 UJ	0.0010 UJ	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 UJ	0.0010 UJ	0.0010 UJ	0.0010 U	0.0010 U	NA	NA	0.0010 UJ	NA	0.0010 UJ	0.0010 U
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 UJ	0.0010 U
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0036	0.0014
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	NA	NA	0.0010 U	NA	0.0050 U	0.0050 U
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	R	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	0.00090 J	0.00030 J	0.00030 J	0.00060 J	0.00070 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	NA	NA	0.0010 U	NA	0.0050 U	0.0050 U
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 U	NA	NA	0.0010 U	NA	0.0020 U	0.0020 U
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.0050 U	NA	NA	0.010 U	NA	0.0050 U	0.0050 U
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.0010 U	NA	NA	0.020 U	NA	0.0010 U	0.0010 U
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	0.00040 J	0.00030 J	0.0050 U	0.00030 J	0.00040 J	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA	NA	0.0050 U	NA	0.0050 U	0.0050 U
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA	NA	0.0050 U	NA	0.0050 U	0.0050 UJ
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	0.00020 J	0.0050	0.0060 (NDW,RDW)	0.0050	0.00050 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 UJ	0.0010 UJ
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00010 J	0.00010 J	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00030 J	0.00080 J	0.00050 J	0.00050 J	0.0010 U	0.00020 J	0.00070 J	0.00040 J	0.0010 U	NA	NA	0.0010 U	NA	0.011 (NDW,RDW)	0.0077 (NDW,RDW)
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0010 U	0.0010 U
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.0010 U	NA	NA	0.030 U	NA	0.0010 U	0.0010 U
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	0.00090 J	0.00060 J	0.0010 U	0.00020 J	0.0010 J	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	NA	0.0067 (NDW,RDW)	0.00060 J
Xylenes (total)	mg/L	70	190(S)	190(S)	0.041	10 (E)	190(S)	10 (E)	190(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 U	NA	NA	0.0010 U	NA	0.0020 U	0.0020 U
PCB																													
Total PCBs	mg/L	ID	ID	0.0033(AA)	0.0002(M	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00010 U	0.00012 U	0.00010 U	[0.00010 UJ]	NA	NA	0.00011 U	NA
PCB-Dissolved																													
Total PCBs (Dissolved)	mg/L	ID	ID	0.0033(AA)	0.0002(M)	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0011 (NDW,RDW)	0.00011 U	NA	NA	NA	NA	0.00011 U	NA
Inorganic																													
Cyanide (total)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0067 JDM	0.019	NA	0.0050 U	0.0019 J	0.0050 U
Lead	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.075 J (NDW,RDW)	0.0016	0.0030 U	NA	NA	0.00067
Manganese	mg/L	ID	ID	9,100	4.767(G,X)	0.05(E)	NLV	0.05(E)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.41 (NDW,RDW)	0.14 (NDW,RDW)	NA	NA	NA	1.4 J (NDW,RDW)
Selenium	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.034	0.0096	0.0050 U	NA	NA	0.0014 U
Silver	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.000085 J	0.00040 U	NA	NA	NA	0.00040 U
Inorganic-Dissolved																													
Cyanide (dissolved)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	0.0054 J	NA	NA	NA	0.0027 J	0.0050 U
Lead (Dissolved)	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00040 U	0.018 J (NDW,RDW)	NA	NA	NA	0.00040 U	0.00040 U
Selenium (Dissolved)	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.052 (NDW,RDW)	0.051 J (NDW,RDW)	NA	NA	NA	0.0023 U	0.0014 U
Silver (Dissolved)	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00040 U	R	NA	NA	NA	0.00040 UJ	0.00040 U
Thallium (Dissolved)	mg/L	ID	ID	13	0.0037(X)	0.002(A)	NLV	0.002(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00020 U	R	NA	NA	NA	0.00020 U	0.00020 U

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	RFI-81-08 04/01/03	RFI-81-08 10/07/04	RFI-81-08 02/24/05	RFI-81-08 10/18/10	RFI-81-50 04/04/05	RFI-81-50 11/02/06	RFI-81-50 10/31/07	RFI-81-50 09/16/08	RFI-81-50 09/24/09	RFI-81-50 10/18/10	RFI-84-06R 04/02/03	RFI-84-06R 04/03/03	RFI-84-06R 02/25/05	RFI-84-06R 07/22/05	RFI-84-06R 12/08/05	RFI-84-06R 11/01/06	RFI-84-06R 04/24/07	RFI-84-06R 06/26/07	RFI-84-06R 10/26/07
VOC																												
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	0.0010 U	0.00040 J	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	0.0047	0.0020	0.0020	0.0020	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00040 J	0.00080 J	0.00070 J
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	0.0050 U	0.0020 U	0.0020 U	0.0050 U	NA	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0050 U	NA	NA	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 UJ	0.0010 U	0.0010 U	0.0050 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00010 J	0.0010 U
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	0.025 U	0.030 U	0.030 U	0.030 UJ	NA	0.020 UJ	0.020 U	0.020 U	0.020 U	0.030 UJ	0.025 U	NA	NA	0.030 U	0.030 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	0.050 U	0.050 U	0.050 U	0.050 U	NA	0.050 UJ	0.050 U	0.050 UJ	0.050 U	0.050 UJ	0.050 U	NA	NA	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	0.050 U	0.0010 U	0.0010 U	0.050 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.050 U	0.050 U	NA	NA	0.0010 U	0.0010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	0.025 U	0.030 U	0.0080 J	0.050 UJ	NA	0.020 UJ	0.020 U	0.020 U	0.020 U	0.050 UJ	0.025 U	NA	NA	0.030 U	0.030 U	0.020 U	0.010 J	0.0040 J	0.020 U
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	NA	NA	NA	0.0020 U	NA	NA	NA	NA	NA	0.0020 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0030	0.0050	0.0070 (NDW,RDW)	0.0010
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	0.0010 U	0.0020 UJ	R	0.0050 U	NA	0.0020 U	0.0020 U	0.0020 UJ	0.0020 U	0.0050 U	0.0010 U	NA	NA	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	0.0050 U	0.0050 UJ	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	0.0010 U	0.0010 UJ	0.0010 U	0.0050 U	NA	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0050 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	0.0010 U	0.0010 U	0.0010 UJ	0.0050 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	0.050	0.025	0.024	0.0080	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0050 U	0.0010 UJ	0.0010 UJ	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0050 U	NA	NA	0.0010 UJ	0.0010 U	0.0010 UJ	0.0010 UJ	0.0020 J	0.0010 U
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	0.0010 U	0.0010 U	0.0010 U	0.0050 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	0.0010 U	0.0010 UJ	0.0010 U	0.0050 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	R	0.0010 U
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	NA	NA	NA	0.010 U	NA	NA	NA	NA	NA	0.010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00020 J	0.0010 U
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	0.0050 U	0.0010 U	0.0010 U	0.0050 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0050 U	NA	NA	0.0010 U	0.0010 U	0.00030 J	0.00040 J	0.00080 J	0.00020 J
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0020 U	0.0010 U	0.0010 U	0.0020 U	NA	0.00010 J	0.0010 U	0.0010 U	0.00030 J	0.0020 U	0.0020 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0050 U	0.010 U	0.010 U	NA	NA	0.010 U	0.010 U	0.010 U	0.010 U	NA	0.0050 U	NA	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.020 U	0.020 U	NA	NA	0.020 U	0.020 U	0.020 U	0.020 U	NA	0.0010 U	NA	NA	0.020 U	0.020 U	0.020 U	0.00030 J	0.00070 J	0.020 U
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA	NA	0.00030 J	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA	NA	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	NA	NA	NA	0.090 U	NA	NA	NA	NA	NA	0.090 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.00020 J	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	0.0047	0.0030 J	0.0020	0.0020	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	0.0026	0.0020	0.0020	0.0050	NA	0.00040 J	0.00020 J	0.0010 U	0.00080 J	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	0.0010 U	0.030 U	0.030 U	NA	NA	0.030 U	0.030 U	0.030 U	0.030 U	NA	0.0010 U	NA	NA	0.030 U	0.030 U	0.030 U	0.030 U	0.030 UJ	0.030 U
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	0.029 (NDW,RDW)	0.0080 (NDW,RDW)	0.012 J (NDW,RDW)	0.0010	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Xylenes (total)	mg/L	70	190(S)	190(S)	0.041	10 (E)	190(S)	10 (E)	190(S)	0.0020 U	0.0010 U	0.0010 U	NA	NA	0.00010 J	0.0010 U	0.0010 U	0.00030 J	NA	0.0020 U	NA	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
PCB																												
Total PCBs	mg/L	ID	ID	0.0033(AA)	0.0002(M	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00011 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-Dissolved																												
Total PCBs (Dissolved)	mg/L	ID	ID	0.0033(AA)	0.0002(M)	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00011 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic																												
Cyanide (total)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	0.0028 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.061(GSI)	0.062(GSI)	NA	NA	NA	NA	NA	NA	NA
Lead	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	0.00039 J	0.0030 U	NA	NA	0.0030 U [0.0030 U]	NA	0.0030 U	NA	0.0030 U	NA	NA	0.00094	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	mg/L	ID	ID	9,100	4.767(G,X)	0.05(E)	NLV	0.05(E)	NLV	3.3 J (NDW,RDW)	1.4 (NDW,RDW)	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.051 J (NDW,RDW)	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	0.0019 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0029 J	NA	NA	NA	NA	NA	NA	NA	NA
Silver	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	0.00040 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00040 U	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic-Dissolved																												
Cyanide (dissolved)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.071(GSI)	NA	0.058(GSI)	NA	NA	NA	NA	NA	NA	NA
Lead (Dissolved)	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00017 J	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium (Dissolved)	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0040	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver (Dissolved)	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00024 J(GSI)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium (Dissolved)	mg/L	ID	ID	13	0.0037(X)	0.002(A)	NLV	0.002(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00017 J	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	RFI-84-06R 03/17/08	RFI-84-06R 06/17/08	RFI-84-06R 09/10/08	RFI-84-06R 12/03/08	RFI-84-06R 10/19/10	RFI-84-06RD 07/21/05	RFI-84-06RD 12/08/05	RFI-84-06RD 11/02/06	RFI-84-06RD 04/24/07	RFI-84-06RD 06/27/07	RFI-84-06RD 10/26/07	RFI-84-06RD 03/17/08	RFI-84-06RD 06/17/08	RFI-84-06RD 09/10/08	RFI-84-06RD 12/03/08	RFI-84-06RD 10/19/10	RFI-84-09D 07/22/05	RFI-84-09D 12/08/05	RFI-84-09D 11/01/06
VOC																												
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	0.00050 J	0.00070 J	0.00080 J	0.00070 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	0.0020 UJ	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 UJ	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	0.020 U	0.020 U	0.020 U	0.020 UJ	0.030 U	0.030 U	0.030 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.030 U	0.030 U	0.030 U	0.020 U
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	0.050 U	0.050 U	0.050 UJ	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 UJ	0.050 U	0.050 U	0.050 U
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	0.010 U	0.010 U	0.010 U	0.010 U	0.050 U	0.0010 U	0.0010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.050 U	0.0010 U	0.0010 U	0.010 U
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	0.0040 J	0.020 U	0.020 U	0.020 UJ	0.050 U	0.030 U	0.030 U	0.020 U	0.020 UJ	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.050 U	0.030 U	0.030 U	0.020 U
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	NA	NA	NA	NA	0.0020 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0020 U	NA	NA	NA
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	0.0060 (NDW,RDW)	0.0040	0.0020	0.0020	0.0020	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0040	0.0040	0.0040
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	NA	0.0010 UJ	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	NA	0.0010 UJ	0.0010 U	0.0010 UJ
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	0.0010 U	0.0010 UJ	0.0010 UJ	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	NA	NA	NA	NA	0.010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.010 U	NA	NA	NA
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	0.00030 J	0.00040 J	0.00030 J	0.00030 J	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00010 J	0.00010 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 U	0.0010 U	0.0010 U	0.0010 U
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.010 U	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.020 UJ	0.00030 J	0.00020 J	0.00030 J	NA	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.020 U	0.020 U	0.020 U	NA	0.020 U	0.020 U	0.020 U
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0020 J	0.0030 J	0.0030 J
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	NA	NA	NA	NA	0.090 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.090 U	NA	NA	NA
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	0.030 U	0.030 U	0.030 U	0.030 U	NA	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	NA	0.030 U	0.030 U	0.030 U
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0030 (NDW,RDW)	0.0030 (NDW,RDW)
Xylenes (total)	mg/L	70	190(S)	190(S)	0.041	10 (E)	190(S)	10 (E)	190(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00010 J	0.00010 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U
PCB																												
Total PCBs	mg/L	ID	ID	0.0033(AA)	0.0002(M	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-Dissolved																												
Total PCBs (Dissolved)	mg/L	ID	ID	0.0033(AA)	0.0002(M)	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic																												
Cyanide (total)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	0.088(GSI) [0.086(GSI)]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	mg/L	ID	ID	9,100	4.767(G,X)	0.05(E)	NLV	0.05(E)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	0.0050 U [0.0050 U]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	0.00050 U [0.00050 U]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic-Dissolved																												
Cyanide (dissolved)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead (Dissolved)	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium (Dissolved)	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver (Dissolved)	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium (Dissolved)	mg/L	ID	ID	13	0.0037(X)	0.002(A)	NLV	0.002(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	RFI-84-09D 04/24/07	RFI-84-09D 06/28/07	RFI-84-09D 10/26/07	RFI-84-09D 03/18/08	RFI-84-09D 06/17/08	RFI-84-09D 09/11/08	RFI-84-09D 12/03/08	RFI-84-09D 10/19/10	RFI-84-09S 07/22/05	RFI-84-09S 12/08/05	RFI-84-09S 11/01/06	RFI-84-09S 04/24/07	RFI-84-09S 06/28/07	RFI-84-09S 10/26/07	RFI-84-09S 03/17/08	RFI-84-09S 06/17/08	RFI-84-09S 09/11/08
VOC																										
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020	0.0010	0.00050 J	0.00010 J	0.0010 U	0.0010 U	0.0010 U
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00050 J	0.00040 J	0.00040 J	0.0010 U	0.0010 U	0.00030 J
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	0.0020 U [0.0020 U]	0.0020 U	0.0020 U	0.0020 UJ	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 UJ	0.0020 U	0.0020 U
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	0.020 U [0.020 U]	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.030 U	0.030 U	0.030 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	0.050 U [0.050 U]	0.050 U	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 UJ
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	0.010 U [0.010 U]	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.050 U	0.0010 U	0.0010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	0.0090 J [0.010 J]	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.050 U	0.030 U	0.030 U	0.020 U	0.020 UJ	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	NA	NA	NA	NA	NA	NA	NA	0.0020 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00080 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	0.0020 U [0.0020 U]	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00030 J	0.0010 UJ	0.0010 U
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	0.0030 [0.0030]	0.0040	0.0030	0.0030	0.0030	0.0030	0.0040	0.0030	0.0010 U	0.0010 U	0.00030 J	0.00030 J	0.00050 J	0.00080 J	0.00040 J	0.00040 J	0.00060 J
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 UJ [0.0010 UJ]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	NA	0.0010 UJ	0.0010 U	0.0010 UJ	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	0.0010 U [0.0010 U]	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	NA	NA	NA	NA	NA	NA	NA	0.010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00020 J	0.0010 U	0.0010 U	0.0010 U
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U [0.0010 U]	0.0010 U	0.00010 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.010 U [0.010 U]	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.020 U [0.020 U]	0.020 U	0.020 U	0.020 UJ	0.020 U	0.020 U	0.020 U	NA	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ	0.020 U	0.020 U
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	0.0020 J [0.0020 J]	0.0020 J	0.0010 J	0.0010 J	0.0010 J	0.0010 J	0.0010 J	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.00050 J	0.00040 J	0.00030 J	0.00020 J	0.00050 J
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	0.0050 U [0.0050 U]	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	NA	NA	NA	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	0.0010 U [0.0010 U]	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	NA	NA	NA	NA	NA	NA	NA	0.090 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	0.0010 U [0.0010 U]	0.00020 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	0.00020 J [0.00020 J]	0.00020 J	0.00010 J	0.00010 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00080 J	0.00050 J	0.00040 J	0.00020 J	0.0010 U	0.00010 J	0.00020 J
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	0.0010 U [0.0010 U]	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	0.030 U [0.030 U]	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	NA	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	0.0030 (NDW,RDW) [0.0030 (NDW,RDW)]	0.0030 (NDW,RDW)	0.0030 (NDW,RDW)	0.0030 (NDW,RDW)	0.0030 (NDW,RDW)	0.0030 (NDW,RDW)	0.0020	0.0030 J (NDW,RDW)	0.0020	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Xylenes (total)	mg/L	70	190(S)	190(S)	0.041	10 (E)	190(S)	10 (E)	190(S)	0.0010 U [0.0010 U]	0.0010 U	0.00010 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
PCB																										
Total PCBs	mg/L	ID	ID	0.0033(AA)	0.0002(M	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-Dissolved																										
Total PCBs (Dissolved)	mg/L	ID	ID	0.0033(AA)	0.0002(M)	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic																										
Cyanide (total)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	mg/L	ID	ID	9,100	4.767(G,X)	0.05(E)	NLV	0.05(E)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic-Dissolved																										
Cyanide (dissolved)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead (Dissolved)	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium (Dissolved)	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver (Dissolved)	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium (Dissolved)	mg/L	ID	ID	13	0.0037(X)	0.002(A)	NLV	0.002(A)	NLV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	RFI-84-09S 12/03/08	RFI-84-09S 10/19/10	RFI-84-11S 07/28/05	RFI-84-11S 11/01/06	RFI-84-11S 03/17/08	RFI-84-11S 09/11/08	RFI-84-11S 10/19/10	RFI-84-12 12/03/08	RFI-84-12 09/23/09	RFI-84-12 10/19/10	RFI-86-01R 06/25/02	RFI-86-01R 04/02/03	RFI-86-01R 10/07/04	RFI-86-01R 10/28/10	RFI-86-16R 09/16/03	RFI-86-16R 10/06/04	RFI-86-16R 06/27/07	RFI-86-16R 10/29/07	RFI-86-16R 09/15/08	RFI-86-16R 10/18/10	RFI-94-11 04/07/05	RFI-94-11 12/08/05
VOC																															
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	NA	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00010 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00030 J	0.00030 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.0050 U	NA	NA	NA	NA	0.0050 U	NA	NA	0.0050 U	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	0.0050 U	NA	NA
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	NA	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 UJ	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0050 U	0.0050 U	0.0050 U	0.0020 U	0.0050 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	NA	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 UJ	0.0010 U
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	0.0010	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	NA	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00020 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	0.020 UJ	0.030 U	0.030 U	0.020 U	0.020 U	0.020 U	0.030 U	0.020 UJ	0.020 U	0.030 U	0.025 UJ	0.025 U	0.030 U	0.030 U	0.025 U	0.030 U	0.020 U	0.020 U	0.020 U	0.030 UJ	0.030 U	0.030 U
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 U	0.050 UJ	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 UJ	0.050 U	0.050 U
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	NA	0.0050 U	NA	NA	NA	NA	0.0050 U	NA	NA	0.0050 U	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	0.0050 U	NA	NA
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	NA	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	0.010 U	0.050 U	0.0010 U	0.010 U	0.010 U	0.010 U	0.050 U	0.010 U	0.010 U	0.050 U	0.050 U	0.050 U	0.0010 U	0.050 U	0.050 U	0.0010 U	0.010 U	0.010 U	0.010 U	0.050 U	0.0010 U	0.0010 U
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	0.020 UJ	0.050 U	0.030 UJ	0.020 U	0.020 U	0.020 U	0.050 U	0.020 UJ	0.020 U	0.050 U	0.025 U	0.025 U	0.030 UJ	0.050 U	0.025 U	0.030 U	0.020 U	0.020 U	0.020 U	0.050 UJ	0.030 UJ	0.030 U
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	NA	0.0020 U	NA	NA	NA	NA	0.0020 U	NA	NA	0.0020 U	NA	NA	NA	0.0020 U	NA	NA	NA	NA	NA	0.0020 U	NA	NA
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	NA	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0050 U	0.0020 U	0.0020 U	0.0050 U	0.0010 U	0.0010 U	0.0020 UJ	0.0050 U	0.0010 U	0.0020 UJ	0.0020 U	0.0020 U	0.0020 U	0.0050 U	R	0.0020 U
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 UJ	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 UJ	0.0050 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00020 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	0.00080 J	0.0010 U	0.0010 U	0.00090 J	0.00070 J	0.00080 J	0.0030	0.00030 J	0.0020	0.0020	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	NA	0.0010 UJ	0.0010 UJ	0.0010 U	0.0010 U	0.0010 UJ	NA	0.0010 U	0.0010 U	NA	0.0050 U	0.0050 U	0.0010 U	NA	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 UJ	0.0010 U
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.0050 U	NA	NA	NA	NA	0.0050 U	NA	NA	0.0050 U	NA	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	0.0050 U	NA	NA
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	NA	0.0050 U	NA	NA	NA	NA	0.0050 U	NA	NA	0.0050 U	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	0.0050 U	NA	NA
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0050 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	NA	0.010 U	NA	NA	NA	NA	0.010 U	NA	NA	0.010 U	NA	NA	NA	0.010 U	NA	NA	NA	NA	NA	0.010 U	NA	NA
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	NA	0.0050 U	NA	NA	NA	NA	0.0050 U	NA	NA	0.0050 U	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	0.0050 U	NA	NA
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U	0.0050 U	0.0050 U	0.0050 U	0.0010 U	0.0050 U	0.0050 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0050 U	0.0010 U	0.0010 U
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0020 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 U	0.0010 U	0.0010 U	0.0020 U	0.0020 U	0.0020 U	0.0010 U	0.0020 U	0.0020 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 U	0.0010 U	0.0010 U
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.010 U	NA	0.010 UJ	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U	NA	0.0050 U	0.0050 U	0.010 U	NA	0.0050 U	0.010 UJ	0.010 U	0.010 U	0.010 U	NA	0.010 U	0.010 U
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.020 U	NA	0.020 U	0.020 U	0.020 UJ	0.020 U	NA	0.020 U	0.020 U	NA	0.0010 U	0.0010 U	0.020 U	NA	0.0010 U	0.020 U	0.020 U	0.020 U	0.020 U	NA	0.020 U	0.020 U
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	0.00060 J	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0010 J	0.00090 J	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 UJ	0.0050 U
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.00030 J	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	NA	0.0050 U	NA	NA	NA	NA	0.0050 U	NA	NA	0.0050 U	NA	NA	NA	0.0050 U	NA	NA	NA	NA	NA	0.0050 U	NA	NA
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	NA	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	NA	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	NA	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	0.0010 U	0.0010 U	0.00050 J	0.0010 U	0.00060 J	0.00040 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	NA	0.090 U	NA	NA	NA	NA	0.090 U	NA	NA	0.090 U	NA	NA	NA	0.090 U	NA	NA	NA	NA	NA	0.090 U	NA	NA
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010	0.00020 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00010 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	0.0010 U	NA	NA	NA	NA	0.0010 U	NA	NA	0.0010 U	NA	NA	NA	0.0010 U	NA	NA	NA	NA	NA	0.0010 U	NA	NA
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	0.0010 U	0.0010 U	0.00080 J	0.0020	0.0010	0.0020	0.0020	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	0.030 U	NA	0.030 U	0.030 U	0.030 U	0.030 U	NA	0.030 U	0.030 U	NA	0.0010 U	0.0010 U	0.030 U	NA	0.0010 U	0.030 U	0.030 U	0.030 U	0.030 U	NA	0.030 U	0.030 U
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	0.00040 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0020 J	0.0020	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
Xylenes (total)	mg/L	70	190(S)	190(S)	0.041	10 (E)	190(S)	10 (E)	190(S)	0.0010 U	NA	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U	NA	0.0020 U	0.0020 U	0.0010 U	NA	0.0020 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	NA	0.0010 U	0.0010 U
PCB																															
Total PCBs	mg/L	ID	ID	0.0033(AA)	0.0002(M	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-Dissolved																															
Total PCBs (Dissolved)	mg/L	ID	ID	0.0033(A

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Date Collected:	Units	FE	GAI	GCC	GSI	NDW	NGVIA	RDW	RGVIA	RFI-94-11 06/28/07	RFI-94-11 11/02/07	RFI-94-11 03/27/08	RFI-94-11 06/19/08	RFI-94-11 09/12/08	RFI-94-11 12/05/08	RFI-94-11 10/18/10
VOC																
1,1,1,2-Tetrachloroethane	mg/L	ID	ID	30	ID	0.32	96	0.077	15	NA	NA	NA	NA	NA	NA	0.0010 U
1,1,1-Trichloroethane	mg/L	ID	1,300(S)	1,300(S)	0.089	0.2(A)	1,300(S)	0.2(A)	660	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,1,2,2-Tetrachloroethane	mg/L	ID	ID	4.7	0.078(X)	0.035	77	0.0085	12	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,1,2-Trichloroethane	mg/L	NA	ID	21	0.33(X)	0.005(A)	110	0.005(A)	17	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,1-Dichloroethane	mg/L	380	ID	2,400	0.74	2.5	2,300	0.88	1,000	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,1-Dichloroethene	mg/L	97	140	11	0.13	0.007(A)	1.3	0.007(A)	0.2	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,2,3-Trichlorobenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	0.0050 U
1,2,3-Trichloropropane	mg/L	NA	ID	84	NA	0.12	18	0.042	8.3	NA	NA	NA	NA	NA	NA	0.0010 U
1,2,3-Trimethylbenzene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	0.0010 U
1,2,4-Trichlorobenzene	mg/L	NA	300(S)	19	0.099(X)	0.07(A)	300(S)	0.07(A)	300(S)	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U [0.0020 U]	0.0050 U
1,2,4-Trimethylbenzene	mg/L	56(S)	ID	56(S)	0.017	2.9 (E)	56(S)	1.0 (E)	56(S)	NA	NA	NA	NA	NA	NA	0.0010 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0050 U
1,2-Dibromoethane (Ethylene Dibromide)	mg/L	ID	ID	0.025	0.0057(X)	0.00005(A)	15	0.00005(A)	2.4	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,2-Dichlorobenzene	mg/L	NA	160(S)	160(S)	0.013	0.6(A)	160(S)	0.6(A)	160(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,2-Dichloroethane	mg/L	2,500	ID	19	0.36(X)	0.005(A)	59	0.005(A)	9.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,2-Dichloropropane	mg/L	550	2,800(S)	16	0.23(X)	0.005(A)	36	0.005(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,3,5-Trimethylbenzene	mg/L	ID	ID	61(S)	0.045	2.9 (E)	61(S)	1.0 (E)	61(S)	NA	NA	NA	NA	NA	NA	0.0010 U
1,3-Dichlorobenzene	mg/L	ID	ID	2	0.028	0.019	41	0.0066	18	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
1,4-Dichlorobenzene	mg/L	NA	ID	6.4	0.017	0.075(A)	74(S)	0.075(A)	16	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
2-Butanone (Methyl Ethyl Ketone)	mg/L	ID	2.40E+05(S)	2.40E+05(S)	2.2	38	2.40E+05(S)	13	2.40E+05(S)	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U [0.020 U]	0.030 U
2-Hexanone	mg/L	NA	ID	5,200	ID	2.9	8,700	1	4,200	0.050 U	0.050 U	0.050 U	0.050 U	0.050 UJ	0.050 UJ [0.050 UJ]	0.050 U
2-Methylnaphthalene	mg/L	ID	ID	25(S)	0.019	0.75	25(S)	0.26	25(S)	NA	NA	NA	NA	NA	NA	0.0050 U
2-Phenylbutane (sec-Butylbenzene)	mg/L	ID	ID	4.4	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	0.0010 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	mg/L	ID	20,000(S)	13,000	ID	5.2	20,000(S)	1.8	20,000(S)	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U [0.010 U]	0.050 U
Acetone	mg/L	15,000	1.00E+06(D)	31,000	1.7	2.1	1.00E+06(D,S)	0.73	1.00E+06(D,S)	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 UJ [0.020 UJ]	0.050 U
Acrylonitrile	mg/L	6,400	ID	14	0.002(M)	0.011	190	0.0026	34	NA	NA	NA	NA	NA	NA	0.0020 U
Benzene	mg/L	68	67	11	0.2(X)	0.005(A)	35	0.005(A)	5.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Bromobenzene	mg/L	ID	ID	12	NA	0.05	390	0.018	180	NA	NA	NA	NA	NA	NA	0.0010 U
Bromodichloromethane	mg/L	ID	ID	14	ID	0.08(A,W)	37	0.08(A,W)	4.8	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Bromoform	mg/L	ID	ID	140	ID	0.08(A,W)	3,100(S)	0.08(A,W)	470	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Bromomethane (Methyl Bromide)	mg/L	ID	ID	70	0.035	0.029	9	0.01	4	0.0020 U	0.0020 U	0.0020 UJ	0.0020 UJ	0.0020 U	0.0020 U [0.0020 U]	0.0050 U
Carbon disulfide	mg/L	13	ID	1,200(S)	ID	2.3	550	0.8	250	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U
Carbon tetrachloride	mg/L	ID	96	4.6	0.045(X)	0.005(A)	2.4	0.005(A)	0.37	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Chlorobenzene	mg/L	160	ID	86	0.025	0.1(A)	470(S)	0.1(A)	210	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Chlorobromomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	0.0010 U
Chloroethane	mg/L	110	ID	440	1.1(X)	1.7	5,700(S)	0.43	5,700(S)	0.0010 U	0.0010 U	0.0010 UJ	0.0010 UJ	0.0010 U	0.0010 U [0.0010 U]	0.0050 U
Chloroform (Trichloromethane)	mg/L	ID	ID	150	0.35	0.08(A,W)	180	0.08(A,W)	28	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Chloromethane (Methyl Chloride)	mg/L	36	210	490	ID	1.1	45	0.26	8.6	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0050 U
cis-1,2-Dichloroethene	mg/L	530	ID	200	0.62	0.07(A)	210	0.07(A)	93	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
cis-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ	0.0010 U [0.0010 U]	NA
Cymene (p-Isopropyltoluene)	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	0.0050 U
Dibromochloromethane	mg/L	ID	ID	18	ID	0.08(A,W)	110	0.08(A,W)	14	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0050 U
Dibromomethane	mg/L	ID	ID	530	NA	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	0.0050 U
Dichlorodifluoromethane (CFC-12)	mg/L	ID	ID	300(S)	ID	4.8	300(S)	1.7	220	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0050 U
Diethyl ether	mg/L	650	61,000(S)	35,000	ID	10 (E)	61,000(S)	3.7 (E)	61,000(S)	NA	NA	NA	NA	NA	NA	0.010 U
Ethylbenzene	mg/L	43	170(S)	170(S)	0.018	0.700(E)	170(S)	0.700(E)	110	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Hexachloroethane	mg/L	ID	ID	1.9	0.0067(X)	0.021	50(S)	0.0073	27	NA	NA	NA	NA	NA	NA	0.0050 U
Iodomethane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	0.0010 U
Isopropylbenzene	mg/L	29	ID	56(S)	0.028	2.3	56(S)	0.8	56(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0050 U
m&p-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.00020 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0020 U
Methyl acetate	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U	0.010 U [0.010 U]	NA
Methyl cyclohexane	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U [0.020 U]	NA
Methyl Tert Butyl Ether	mg/L	ID	ID	610	7.1(X)	0.690 (E)	47,000(S)	0.240(E)	47,000(S)	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U
Methylene chloride	mg/L	ID	ID	220	1.5(X)	0.005(A)	1,400	0.005(A)	220	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U [0.0050 U]	0.0050 U
Naphthalene	mg/L	NA	31(S)	31(S)	0.011	1.5	31(S)	0.52	31(S)	NA	NA	NA	NA	NA	NA	0.0050 U
n-Butylbenzene	mg/L	ID	ID	5.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	0.0010 U
n-Propylbenzene	mg/L	ID	ID	15	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	0.0010 U
o-Xylene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Styrene	mg/L	140	310(S)	9.7	0.08(X)	0.1(A)	310(S)	0.1(A)	170	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 UJ [0.0010 U]	0.0010 U
tert-Butylbenzene	mg/L	ID	ID	8.9	ID	0.23	ID	0.08	ID	NA	NA	NA	NA	NA	NA	0.0010 U
Tetrachloroethene	mg/L	ID	200(S)	12	0.06(X)	0.005(A)	170	0.005(A)	25	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Tetrahydrofuran	mg/L	60	3,600	1,600	11(X)	0.27	16,000	0.095	6,900	NA	NA	NA	NA	NA	NA	0.090 U
Toluene	mg/L	61	ID	530(S)	0.27	1.0 (E)	530(S)	1.0 (E)	530(S)	0.00020 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
trans-1,2-Dichloroethene	mg/L	230	ID	220	1.5(X)	0.1(A)	200	0.1(A)	85	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
trans-1,3-Dichloropropene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
trans-1,4-Dichloro-2-butene	mg/L	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	0.0010 U
Trichloroethene	mg/L	ID	1,100(S)	22	0.2(X)	0.005(A)	97	0.005(A)	15	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Trichlorofluoromethane (CFC-11)	mg/L	ID	1,100(S)	1,100(S)	NA	7.3	1,100(S)	2.6	1,100(S)	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Trifluorotrichloroethane (Freon 113)	mg/L	ID	170(S)	170(S)	0.032	170(S)	170(S)	170(S)	170(S)	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U	0.030 U [0.030 U]	NA
Vinyl chloride	mg/L	33	ID	1	0.013(X)	0.002(A)	13	0.002(A)	1.1	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	0.0010 U
Xylenes (total)	mg/L	70	190(S)	190(S)	0.041	10 (E)	190(S)	10 (E)	190(S)	0.00020 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U [0.0010 U]	NA
PCB																
Total PCBs	mg/L	ID	ID	0.0033(AA)	0.0002(M	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA
PCB-Dissolved																
Total PCBs (Dissolved)	mg/L	ID	ID	0.0033(AA)	0.0002(M)	0.0005(A)	0.045(S)	0.0005(A)	0.045(S)	NA	NA	NA	NA	NA	NA	NA
Inorganic																
Cyanide (total)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA
Lead	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA
Manganese	mg/L	ID	ID	9,100	4.767(G,X)	0.05(E)	NLV	0.05(E)	NLV	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA
Silver	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA
Inorganic-Dissolved																
Cyanide (dissolved)	mg/L	ID	ID	57	0.0052	0.2(A)	NLV	0.2(A)	NLV	NA	NA	NA	NA	NA	NA	NA
Lead (Dissolved)	mg/L	ID	ID	ID	0.0309(G,X)	0.004(L)	NLV	0.004(L)	NLV	NA	NA	NA	NA	NA	NA	NA
Selenium (Dissolved)	mg/L	ID	ID	970	0.005	0.05(A)	NLV	0.05(A)	NLV	NA	NA	NA	NA	NA	NA	NA
Silver (Dissolved)	mg/L	ID	ID	1,500	0.0002(M)	0.098	NLV	0.034	NLV	NA	NA	NA	NA	NA	NA	NA
Thallium (Dissolved)	mg/L	ID	ID	13	0.0037(X)	0.002(A)	NLV	0.002(A)	NLV	NA	NA	NA	NA	NA	NA	NA

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
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General Notes:

Samples were collected by ARCADIS., and submitted Merit Laboratories, for analysis of MDEQ List volatile organic compounds, select inorganics and PCBs
Duplicate results are presented in brackets.
Groundwater concentrations are presented in milligrams per liter (mg/L)
Total Xylenes reported as the sum of m&p-Xylene and o-Xylene
Highlighted cells represent constituent concentrations that exceed at least one of the listed Michigan Part 201 Criteria

RDW = Residential Drinking Water criteria, updated March 2011.
NDW = Non-Residential Drinking Water criteria, updated March 2011
GSI = Groundwater/Surface Water Interaction criteria, updated December 2010
GCC = Groundwater Contact criteria, updated March 2011.
GAI = Groundwater Acute Inhalation Screening Level, updated March 2011
RGVIA = Residential Groundwater Volatilization to Indoor Air Inhalation criteria, updated March 2011.
NGVIA = Non-Residential Groundwater Volatilization to Indoor Air Inhalation criteria, updated March 2011.
FE = Flammability and Explosivity Screening Level, updated March 2011

Data Qualifiers:

U = Not detected. The value represents the associated detection limit
NS = Not analyzed for this constituent.
D = Concentration is based on a diluted sample analysis
J = The compound/constituent was positively identified; however, the associated numerical value is an estimated concentration only
E = Measured concentration exceeded the linear range of the instrument. A diluted sample analysis was run; however, the undiluted result was chosen as representative of the sample concentratior
R = Indicates that the previously reported detection limit or sample result has been rejected due to a major deficiency in the data generation procedure. The data shall not be used for any qualitative or quantitative purpose
Y = Elevated reporting limit due to high target concentration

MDEQ Criteria Qualifiers:

ID = *Inadequate data* to develop criterion.
NA = Criterion or value is *not available* or, as is the case for Csat, *not applicable*.
{A} = Criterion is the State of Michigan Drinking Water Standard established pursuant to Section 5 of the Safe Drinking Water Act, Act No. 399 of the Public Acts of 1976
{D} = Calculated criterion exceeds 100%, hence it is reduced to 100% (i.e., 1.0E+9 ppb). Evaluation of free phase contaminant, environmental impacts, adverse aesthetics and acute or local toxicity is required.
{E} = Criterion is the aesthetic drinking water value, as required by Sec. 20120(1)(5). A Notice of Aesthetic Impact may be employed as an institutional control mechanism where groundwater concentrations exceed the aesthetic DWC but do not exceed the applicable health-based DWC. Health-based DWC are provided in the table below

Hazardous Substance	CAS #	Residential Health-Based DWC	Non-Residential Health-Based DWC
Aluminum	7429905	300	4,100
Copper	7440508	1,400	4,000
Diethyl ether	60297	3,700	10,000
Ethylbenzene	100414	700	700
Iron	7439896	2,000	5,600
Manganese	7439965	860	2,500
Methyl-tert-butyl ether (MTBE)	1634044	240	690
Toluene	108883	1,000	1,000
1,2,4-Trimethylbenzene	95636	1,000	2,900
1,3,5-Trimethylbenzene	108678	1,000	2,900
Xylenes	1330207	10,000	10,000

{G} = GSI criterion is pH or water hardness dependent. The Final Chronic Value (FCV) for the protection of aquatic life must be calculated based on the pH or hardness of the receiving surface water. Where water hardness exceeds 400 mg CaCO3/L, use 400 mg CaCO3/L for the FCV calculation. The FCV formula provides values in units of ug/L (ppb). The generic GSI criterion is the lesser of the calculated FCV, the wildlife value (WV), and the surface water human non-drinking water value (HNDV). The soil GSI protection criteria for these hazardous substances are the greater of the 20 X GSI and the GSI soil-water partition values using the GSI criteria developed with the procedur described in this footnote.

Hazardous Substance	FCV Formula (ug/L)	FCV Conversion Factor (CF)	WV (ug/L)	HNDV (ug/L)
Barium[x]	EXP(1.0629*(LnH)+1.1869)	NA	NA	1.6E+5
Beryllium	EXP(2.5279*(LnH)-10.7689)	NA	NA	1,200
Cadmium[x]	(EXP(0.7852*(LnH)-2.715))*CF	1.101672-((LnH)*0.04184)	NA	130
Chromium (III)[x]	(EXP(0.819*(LnH)+0.6848))*CF	0.86	NA	9,400
Copper	(EXP(0.8545*(LnH)-1.702))*CF	0.96	NA	64,000
Lead[x]	(EXP(1.273*(LnH)-3.296))*CF	1.46203-((LnH)*0.14571)	NA	190
Manganese	EXP(0.8784*(LnH)+2.226)	NA	NA	59,000
Nickel	(EXP(0.846*(LnH)+0.0584))*CF	0.997	NA	2.1E+5
Pentachlorophenol[x]	EXP(1.005*(pH)-5.134)	NA	NA	2.8
Zinc	(EXP(0.8473*(LnH)+0.884))*CF	0.986	NA	22,000

Where,

EXP(x) = The base of the natural logarithm raised to power x (e^x).
LnH = The natural logarithm of water hardness in mg $CaCO_3$/L.
SS = Total suspended solids in mg/L.
* = The multiplication symbol.
[x] = The GSI criterion developed here may not be protective for surface water that is used as a drinking water source. Refer to footnote {X} for further guidance.

Table 9. 2010 Annual Groundwater Sampling Event and Historical Groundwater Analytical Data
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MDEQ Criteria Qualifiers (Cont'd.):

A spreadsheet that may be used to calculate GSI and GSI PC for {G} footnoted hazardous substances is available at http://www.deq.state.mi.us/erd.

{I} = Hazardous substance may exhibit the characteristic of ignitability as defined in 40 CFR 261.21
{J} = Hazardous substance may be present in several isomer forms. Isomer-specific concentrations must be added together for comparison to criteria
{M} = Calculated criterion is below the analytical Target Detection Limit (TDL), therefore, the criterion defaults to the TDL
{R} = Hazardous substance may exhibit the characteristic of reactivity as defined in 40 CFR 261.23
{S} = Criterion defaults to the chemical-specific water solubility limit
{W} = Concentrations of trihalomethanes in groundwater must be added together to determine compliance with the State of Michigan Drinking Water Standard of 100 ug/L. Concentrations of trihalomethanes in soil must be added together to determin compliance with the DWPC of 2,000 ug/kg.
{X} = The GSI criterion shown is not protective for surface water that is used as a drinking water source. For groundwater discharges to the Great Lakes and their connecting waters or discharges in close proximity to water supply intake(s) in inlan surface waters, the generic GSI criterion is the Surface Water Human Drinking Water Value (HDV) listed in the table below except for those HDV indicated with an asterisk. For HDV with an asterisk, the generic GSI criterion is the lesser of th HDV, the WV and the calculated FCV (see formulas in footnote {G}). Soil protection criteria based on the HDV are listed below except for those values with an asterisk. Soil GSI protection criteria for compounds with an asterisk are the greater o the 20 X GSI and GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote

Hazardous Substance	Chemical Abstract Service Number	Surface Water Human Drinking Water Values (HDV) (ug/L)	Soil GSI Protection Criteria for HDV (ug/Kg)
Acrylonitrile	107131	2.0 (M); 0.87	100 (M); 17
Alachlor	15972608	3.5	91
Antimony	7440360	2	1,400
Arsenic	7440382	50	23,000
Atrazine	1912249	4.3	86
Barium	7440393	1,900*	*
Benzene	71432	12	240
bis(2-Chloroethyl)ether	111444	1 (M); 0.79	100 (M); 20
Bromate	15541454	10 (M); 0.5	200 (M); 10
Butyl benzyl phthalate	85687	6.9	13,000
Cadmium	7440439	2.5*	*
Carbon tetrachloride	56235	5.6	110
Chloride	16887006	50,000	1,000,000
Chloroform	67663	77	1,500
Chromium (III)	16065831	120*	*
Cyanazine	21725462	2 (M); 0.93	200 (M); 40
3,3'-Dichlorobenzidine	91941	0.3 (M); 0.14	2,000 (M); 7.7
1,2-Dichloroethane	107062	6	120
1,1-Dichloroethylene	75354	24	480
1,2-Dichloropropane	78875	9.1	180
N,N-Dimethylacetamide	127195	700	14,000
1,4-Dioxane	123911	34	680
Ethylene dibromide	106934	0.05 (M); 0.006	20 (M); 1.0
Ethylene glycol	107211	56,000	1,100,000
Heptachlor	76448	0.01 (M); 0.0017	NLL
beta-Hexachlorocyclohexane	319857	0.024	20 (M)
Hexachloroethane	67721	5.3	310
Isophorone	78591	310	6,200
Isopropyl alcohol	67630	28,000	560,000
Lead	7439921	14*	*
Manganese	7439965	3600	72,000
Methyl-tert-butyl ether (MTBE)	1634044	100	2,000
Methylene chloride	75092	47	940
Mirex	2385855	0.02 (M); 1.6E-5	NLL
Molybdenum	7439987	120	2,400
Nitrobenzene	98953	4.7	330 (M); 94
Pentachlorophenol	87865	1.8*	*
1,2,4,5-Tetrachlorobenzene	95943	2.8	3,300
1,1,1,2-Tetrachloroethane	630206	19	380
1,1,2,2-Tetrachloroethane	79345	3.2	64
Tetrachloroethylene	127184	11	220
Tetrahydrofuran	109999	350	7,000
Thallium	7440280	2.0 (M); 1.2	2,300
1,1,2-Trichloroethane	79005	12	240
Trichloroethylene	79016	29	580

Table 10. NPMP Monitoring Points and Rationale
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Outfall	Monitoring Point	Frequency	Sample Type	Analytes	Sampling Rationale
001	MP001	Monthly	Dry weather - Grab	VOCs (MDNRE List) Metals [1] Cyanide	Select VOCs and metals were detected in the sample collected from Outfall 001 in support of the 2010 NPDES Permit (permit); therefore, the NPMP samples collected from Outfall 001will be analyzed for VOCs (MDNRE list) and metals [1]. Cyanide was not detected in the sample collected from Outfall 001 in support of the permit; however, cyanide was detected above criteria in groundwater samples collected from the Outfall 001 drainage area; therefore, the NPMP samples collected from Outfall 001 will be analyzed for cyanide in order to monitor the storm sewers for possible infiltration of cyanide impacted groundwater. Oil and grease was not detected in the sample collected from Outfall 001 in support of the permit and there is not a GSI criteria for this analyte; therefore, oil and grease will not be analyzed for in the NPMP.
		Yearly [2]	Dry weather - Grab	SVOCs (MDNRE List)	SVOCs were not detected in the sample collected from Outfall 001 in support of the permit and therefore were not included in the NPMP monthly sampling. However, SVOCs were detected above criteria in groundwater samples collected from the Outfall 001 drainage area; therefore, a yearly sample will be collected from Outfall 001 and analyzed for SVOCs (MDNRE List) in order to monitor the storm sewers for possible infiltration of SVOC impacted groundwater.
002	MP002	Monthly	Dry weather - Grab	VOCs (MDNRE List) Metals [1] Cyanide	Select VOCs and metals were detected in the sample collected from Outfall 002 in support of the permit; therefore, the NPMP samples collected from Outfall 002 will be analyzed for VOCs (MDNRE list) and metals [1]. Cyanide was not detected in the sample collected from Outfall 002 in support of the permit; however, cyanide was detected above criteria in groundwater samples collected from the Outfall 002 drainage area; therefore, the NPMP samples collected from Outfall 002 will be analyzed for cyanide in order to monitor the storm sewers for possible infiltration of cyanide impacted groundwater. Oil and grease was not detected in the sample collected from Outfall 002 in support of the permit and there is not a GSI criteria for this analyte; therefore, oil and grease will not be analyzed for in the NPMP.
		Yearly [2]	Dry weather - Grab	SVOCs (MDNRE List)	SVOCs were not detected in the sample collected from Outfall 002 in support of the permit and therefore were not included in the NPMP monthly sampling. However, SVOCs were detected above criteria in groundwater samples collected from the Outfall 002 drainage area; therefore, a yearly sample will be collected from Outfall 002 and analyzed for SVOCs (MDNRE List) in order to monitor the storm sewers for possible infiltration of SVOC impacted groundwater.
003	MP003	Monthly	Dry weather - Grab	VOCs (MDNRE List) Metals [1] Cyanide	Select metals were detected in the sample collected from Outfall 003 in support of the permit; therefore, the NPMP samples collected from Outfall 003 will be analyzed for metals [1]. VOCs and cyanide were not detected in the sample from Outfall 003 in support of the permit; however, VOCs and cyanide were detected above criteria in groundwater samples collected from the Outfall 003 drainage area; therefore, the NPMP samples collected from Outfall 003 will be analyzed for VOCs and cyanide in order to monitor the storm sewers for possible infiltration of impacted groundwater. Oil and grease was not detected in the sample collected from Outfall 001 in support of the permit and there is not a GSI criteria for this analyte; therefore, oil and grease will not be analyzed for in the NPMP.
		Monthly	Dry weather - 24-hr Composite	PCBs	PCBs were not detected in the sample collected from Outfall 003 in support of the permit. However due to the presence of PCB-containing LNAPL in the Outfall 003 drainage area and the presence of oil in the storm sewer, the NPMP samples collected from Outfall 003 will be analyzed for PCBs.
		Yearly [2]	Dry weather - Grab	SVOCs (MDNRE List)	SVOCs were not detected in the sample collected from Outfall 003 in support of the permit and therefore were not included in the NPMP monthly sampling. However, SVOCs were detected above criteria in groundwater samples collected from the Outfall 003 drainage area; therefore, a yearly sample will be collected from Outfall 003 and analyzed for SVOCs(MDNRE List) in order to monitor the storm sewers for possible infiltration of SVOC impacted groundwater.
004	MP004[3]	Monthly	Dry weather - Grab	VOCs (MDNRE List) Metals [1] Cyanide	Select VOCs and metals were detected in the sample collected from Outfall 004 in support of the permit; therefore, the NPMP samples collected from Outfall 004 will be analyzed for VOCs (MDNRE list) and metals [1]. Cyanide was not detected in the sample collected from Outfall 004 in support of the permit; however, cyanide was detected above criteria in groundwater samples collected from the Outfall 004 drainage area; therefore, the NPMP samples collected from Outfall 004 will be analyzed for cyanide in order to monitor the storm sewers for possible infiltration of cyanide impacted groundwater. Oil and grease was not detected in the sample collected from Outfall 004 in support of the permit and there is not a GSI criteria for this analyte; therefore, oil and grease will not be analyzed for in the NPMP.
		Monthly	Dry weather - 24-hr Composite	PCBs	PCBs were not detected in the sample collected from Outfall 004 in support of the permit. However due to the presence of PCB-containing LNAPL in the Outfall 004 drainage area and the presence of oil in the storm sewer, the NPMP samples collected from Outfall 004 will be analyzed for PCBs.
		Yearly [2]	Dry weather - Grab	SVOCs (MDNRE List)	SVOCs were not detected in the sample collected from Outfall 004 in support of the permit and therefore were not included in the NPMP monthly sampling. However, SVOCs were detected above criteria in groundwater samples collected from the Outfall 004 drainage area; therefore, a yearly sample will be collected from Outfall 004 and analyzed for SVOCs (MDNRE List) in order to monitor the storm sewers for possible infiltration of SVOC impacted groundwater.

Table 10. NPMP Monitoring Points and Rationale
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Outfall	Monitoring Point	Frequency	Sample Type	Analytes	Sampling Rationale
005	MP005	Monthly	Dry weather - Grab	Metals [1] Cyanide	Select metals were detected in the sample collected from Outfall 005 in support of the permit; therefore, the NPMP samples collected from Outfall 005 will be analyzed for metals [1]. Cyanide was not detected in the sample collected from Outfall 005 in support of the permit; however, cyanide was detected above criteria in groundwater samples collected from the Outfall 005 drainage area; therefore, the NPMP samples collected from Outfall 005 will be analyzed for cyanide in order to monitor the storm sewers for possible infiltration of cyanide impacted groundwater. Oil and grease was not detected in the sample collected from Outfall 005 in support of the permit and there is not a GSI criteria for this analyte; therefore, oil and grease will not be analyzed for in the NPMP.
		Monthly	Dry weather - 24-hr Composite	PCBs	PCBs were not detected in the sample collected from Outfall 005 in support of the permit. However due to the presence of PCB-containing LNAPL in the Outfall 005 drainage area and the presence of oil in the storm sewer, the NPMP samples collected from Outfall 005 will be analyzed for PCBs.
		Yearly [2]	Dry weather - Grab	SVOCs (MDNRE List)	SVOCs were not detected in the sample collected from Outfall 005 in support of the permit and therefore were not included in the NPMP monthly sampling. However, SVOCs were detected above criteria in groundwater samples collected from the Outfall 005 drainage area; therefore, a yearly sample will be collected from Outfall 005 and analyzed for SVOCs (MDNRE List) in order to monitor the storm sewers for possible infiltration of SVOC impacted groundwater.
006	MP006	Monthly	Dry weather - Grab	VOCs (MDNRE List) Metals [1] Cyanide	Select metals were detected in the sample collected from Outfall 006 in support of the permit; therefore, the NPMP samples collected from Outfall 006 will be analyzed for metals [1]. VOCs and cyanide were not detected in the sample from Outfall 006 in support of the permit; however, VOCs and cyanide were detected above criteria in groundwater samples collected from the Outfall 006 drainage area; therefore, the NPMP samples collected from Outfall 006 will be analyzed for VOCs and cyanide in order to monitor the storm sewers for possible infiltration of impacted groundwater.
007	MP007	Monthly	Dry weather - Grab	VOCs (MDNRE List) Metals [1] Cyanide	Select VOCs and metals were detected in the sample collected from Outfall 007 in support of the permit; therefore, the NPMP samples collected from Outfall 007 will be analyzed for VOCs (MDNRE list) and metals [1]. Cyanide was not detected in the sample collected from Outfall 007 in support of the permit; however, cyanide was detected above criteria in groundwater samples collected from the Outfall 007 drainage area; therefore, the NPMP samples collected from Outfall 007 will be analyzed for cyanide in order to monitor the storm sewers for possible infiltration of cyanide impacted groundwater.
		Yearly [2]	Dry weather - Grab	SVOCs (MDNRE List)	SVOCs were not detected in the sample collected from Outfall 007 in support of the permit and therefore were not included in the NPMP monthly sampling. However, SVOCs were detected above criteria in groundwater samples collected from the Outfall 007 drainage area; therefore, a yearly sample will be collected from Outfall 007 and analyzed for SVOCs (MDNRE List) in order to monitor the storm sewers for possible infiltration of SVOC impacted groundwater.
009	MP009	Monthly	Dry weather - Grab	VOCs (MDNRE List) Metals [1] Cyanide	Select VOCs and metals were detected in the sample collected from Outfall 009 in support of the permit; therefore, the NPMP samples collected from Outfall 009 will be analyzed for VOCs (MDNRE list) and metals [1]. Cyanide was not detected in the sample collected from Outfall 009 in support of the permit; however, cyanide was detected above criteria in groundwater samples collected from the Outfall 009 drainage area; therefore, the NPMP samples collected from Outfall 009 will be analyzed for cyanide in order to monitor the storm sewers for possible infiltration of cyanide impacted groundwater. Oil and grease was not detected in the sample collected from Outfall 009 in support of the permit and there is not a GSI criteria for this analyte; therefore, oil and grease will not be analyzed for in the NPMP.
		Yearly [2]	Dry weather - Grab	SVOCs (MDNRE List)	SVOCs were not detected in the sample collected from Outfall 009 in support of the permit and therefore were not included in the NPMP monthly sampling. However, SVOCs were detected above criteria in groundwater samples collected from the Outfall 009 drainage area; therefore, a yearly sample will be collected from Outfall 009 and analyzed for SVOCs (MDNRE List) in order to monitor the storm sewers for possible infiltration of SVOC impacted groundwater.
010	MP010	Monthly	Dry weather - Grab	VOCs (MDNRE List) Metals [1] Cyanide	Select VOCs, metals and cyanide were detected in the sample collected from Outfall 010 in support of the permit; therefore, the NPMP samples collected from Outfall 010 will be analyzed for VOCs (MDNRE list) and metals[1]. Oil and grease was not detected in the sample collected from Outfall 010 in support of the permit and there is not a GSI criteria for this analyte; therefore, oil and grease will not be analyzed for in the NPMP.
		Yearly [2]	Dry weather - Grab	SVOCs (MDNRE List)	SVOCs were not detected in the sample collected from Outfall 010 in support of the permit and therefore were not included in the NPMP monthly sampling. However, SVOCs were detected above criteria in groundwater samples collected from the Outfall 010 drainage area; therefore, a yearly sample will be collected from Outfall 010 and analyzed for SVOCs (MDNRE List) in order to monitor the storm sewers for possible infiltration of SVOC impacted groundwater.
011	DP011	Monthly	Dry weather - Grab	VOCs (MDNRE List) Metals [1] Cyanide	Select VOCs, metals and cyanide were detected in the sample collected from Outfall 011 in support of the permit; therefore, the NPMP samples collected from Outfall 011 will be analyzed for VOCs (MDNRE list) and metals[1]. Oil and grease was not detected in the sample collected from Outfall 011 in support of the permit and there is not a GSI criteria for this analyte; therefore, oil and grease will not be analyzed for in the NPMP.
		Yearly [2]	Dry weather - Grab	SVOCs (MDNRE List)	SVOCs were not detected in the sample collected from Outfall 011 in support of the permit and therefore were not included in the NPMP monthly sampling. However, SVOCs were detected above criteria in groundwater samples collected from the Outfall 011 drainage area; therefore, a yearly sample will be collected from Outfall 011 and analyzed for SVOCs (MDNRE List) in order to monitor the storm sewers for possible infiltration of SVOC impacted groundwater.
013	MP013	Monthly	Dry weather - Grab	Metals [1] Cyanide	Select metals and cyanide were detected in the sample collected from Outfall 013 in support of the permit; therefore, the NPMP samples collected from Outfall 013 will be analyzed for metals [1] and cyanide.

1. Metals analysis to include - Ag, As, Ba, Be, Cd, Cr (total), Co, Cu, Hg, Mn, Ni, Pb, Sb, Se,T, V, and Zn

2. SVOCs will be collected on a yearly basis for the first three years of the NPMP.

3. Following the installation of the oil-water separator and debris removal system in the Outfall 003 and 004 storm sewers, the dry-weather flow from these sewers will be combined into the Outfall 003 storm sewer; thereafter there will be no dry-weather flow in the Outfall 004 storm sewer.

Table 11. NPMP Sampling Analytical Results
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Outfall: / Location ID: / Date Collected:	Groundwater Surface Water Interface Criteria	Units	001 MH 1-3 04/01/10	001 MH 1-3 09/20/10	001 MH 1-3 02/24/11	002 MH 2-19 04/01/10	002 MH 2-19 09/20/10	002 MH 2-19 10/27/10	002 MH 2-19 11/22/10	002 MH 2-19 12/20/10	002 MH 2-19 01/26/11	002 MH 2-19 02/24/11	003 MH 3-3 03/31/10	003 MH 3-3 09/20/10	003 MH 3-3 09/27/10	003 MH 3-3 10/27/10	003 MH 3-3 10/28/10	003 MH 3-3 11/20/10	003 MH 3-3 11/22/10	003 MH 3-3 12/20/10	003 MH 3-3 12/21/10	003 MH 3-3 01/26/11	003 MH 3-3 01/26/11	003 MH 3-3 02/24/11	003 MH 3-3 02/25/11	004 MH 4-5 03/31/10
VOC																										
1,1,1,2-Tetrachloroethane	ID	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
1,1,1-Trichloroethane	89	ug/L	<1.0	<1.0	<1.0	13	10 [10]	12	5.0	11	11	9.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
1,1,2,2-Tetrachloroethane	78(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
1,1,2-Trichloroethane	330(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
1,1-Dichloroethane	740	ug/L	<1.0	<1.0	<1.0	23	19 [19]	14	4.0	21	25	17	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
1,1-Dichloroethene	130	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
1,2,3-Trichlorobenzene	- -	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
1,2,3-Trichloropropane	NA	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
1,2,3-Trimethylbenzene	- -	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
1,2,4-Trichlorobenzene	99(X)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
1,2,4-Trimethylbenzene	17	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
1,2-Dibromo-3-chloropropane (DBCP)	- -	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
1,2-Dibromoethane (Ethylene Dibromide)	5.7(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
1,2-Dichlorobenzene	13	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
1,2-Dichloroethane	360(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
1,2-Dichloropropane	230(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
1,3,5-Trimethylbenzene	45	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
1,3-Dichlorobenzene	28	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
1,4-Dichlorobenzene	17	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
2-Butanone (Methyl Ethyl Ketone)	2,200	ug/L	<30	<30	<25	<30	<30 [<30]	<30	<30	<30	<30	<25	<30	<30	NA	<30	NA	NA	<30	<30	NA	<30	NA	<25	NA	<30
2-Hexanone	ID	ug/L	<50	<50	<50	<50	<50 [<50]	<50	<50	<50	<50	<50	<50	<50	NA	<50	NA	NA	<50	<50	NA	<50	NA	<50	NA	<50
2-Methylnaphthalene	19	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
2-Phenylbutane (sec-Butylbenzene)	ID	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ID	ug/L	<50	<50	<50	<50	<50 [<50]	<50	<50	<50	<50	<50	<50	<50	NA	<50	NA	NA	<50	<50	NA	<50	NA	<50	NA	<50
Acetone	1,700	ug/L	<50	<50	<50	<50	<50 [<50]	<50	<50	<50	<50	<50	<50	<50	NA	<50	NA	NA	<50	<50	NA	<50	NA	<50	NA	<50
Acrylonitrile	2(M)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0 [<2.0]	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NA	<2.0	NA	NA	<2.0	<2.0	NA	<2.0	NA	<2.0	NA	<2.0
Benzene	200(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
Bromobenzene	NA	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
Bromodichloromethane	ID	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
Bromoform	ID	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
Bromomethane (Methyl Bromide)	35	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
Carbon disulfide	ID	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
Carbon tetrachloride	45(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
Chlorobenzene	25	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
Chlorobromomethane	- -	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
Chloroethane	1,100(X)	ug/L	<5.0	<5.0	<5.0	23	16 [15]	9.0	<5.0	20	17	19	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
Chloroform (Trichloromethane)	350	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
Chloromethane (Methyl Chloride)	ID	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
cis-1,2-Dichloroethene	620	ug/L	1.0	<1.0	<1.0	9.0	10 [10]	5.0	2.0	11	12	9.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	2.0
cis-1,3-Dichloropropene	- -	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
Cymene (p-Isopropyltoluene)	- -	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
Dibromochloromethane	ID	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
Dibromomethane	NA	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
Dichlorodifluoromethane (CFC-12)	ID	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
Diethyl ether	ID	ug/L	<10	<10	<10	<10	<10 [<10]	<10	<10	<10	<10	<10	<10	<10	NA	<10	NA	NA	<10	<10	NA	<10	NA	<10	NA	<10
Ethylbenzene	18	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
Hexachloroethane	6.7(X)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
Iodomethane	- -	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
Isopropylbenzene	28	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
m&p-Xylene	- -	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0 [<2.0]	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NA	<2.0	NA	NA	<2.0	<2.0	NA	<2.0	NA	<2.0	NA	<2.0
Methyl Tert Butyl Ether	7,100(X)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
Methylene chloride	1,500(X)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
Naphthalene	11	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
n-Butylbenzene	ID	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
n-Propylbenzene	ID	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
o-Xylene	- -	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
Styrene	80(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
tert-Butylbenzene	ID	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
Tetrachloroethene	60(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
Tetrahydrofuran	11,000(X)	ug/L	<90	<90	<90	<90	<90 [<90]	<90	<90	<90	<90	<90	<90	<90	NA	<90	NA	NA	<90	<90	NA	<90	NA	<90	NA	<90
Toluene	270	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
trans-1,2-Dichloroethene	1,500(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
trans-1,3-Dichloropropene	- -	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
trans-1,4-Dichloro-2-butene	- -	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
Trichloroethene	200(X)	ug/L	<1.0	<1.0	<1.0	2.0	2.0 [2.0]	1.0	<1.0	2.0	3.0	3.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	1.0
Trichlorofluoromethane (CFC-11)	NA	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
Vinyl chloride	13(X)	ug/L	<1.0	<1.0	<1.0	2.0	2.0 [2.0]	1.0	<1.0	2.0	1.0	2.0	<1.0	<1.0	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0

Table 11. NPMP Sampling Analytical Results
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Outfall: / Location ID: / Date Collected:	Groundwater Surface Water Interface Criteria	Units	001 MH 1-3 04/01/10	001 MH 1-3 09/20/10	001 MH 1-3 02/24/11	002 MH 2-19 04/01/10	002 MH 2-19 09/20/10	002 MH 2-19 10/27/10	002 MH 2-19 11/22/10	002 MH 2-19 12/20/10	002 MH 2-19 01/26/11	002 MH 2-19 02/24/11	003 MH 3-3 03/31/10	003 MH 3-3 09/20/10	003 MH 3-3 09/27/10	003 MH 3-3 10/27/10	003 MH 3-3 10/28/10	003 MH 3-3 11/20/10	003 MH 3-3 11/22/10	003 MH 3-3 12/20/10	003 MH 3-3 12/21/10	003 MH 3-3 01/26/11	003 MH 3-3 01/26/11	003 MH 3-3 02/24/11	003 MH 3-3 02/25/11	004 MH 4-5 03/31/10
SVOC																										
1,2,4-Trichlorobenzene	99(X)	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
1,2-Dichlorobenzene	13	ug/L	<1.0	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0
1,2-Diphenylhydrazine	- -	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
1,3-Dichlorobenzene	28	ug/L	<1.0	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0
1,4-Dichlorobenzene	17	ug/L	<1.0	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	- -	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
2,4,5-Trichlorophenol	NA	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
2,4,6-Trichlorophenol	5	ug/L	<4.0	NA	NA	<4.0	NA	NA	NA	NA	NA	NA	<4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<4.0
2,4-Dichlorophenol	11	ug/L	<10	NA	NA	<10	NA	NA	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10
2,4-Dimethylphenol	380	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
2,4-Dinitrophenol	- -	ug/L	<30	NA	NA	<30	NA	NA	NA	NA	NA	NA	<30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<30
2,4-Dinitrotoluene	NA	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
2,6-Dinitrotoluene	- -	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
2-Chloronaphthalene	NA	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
2-Chlorophenol	18	ug/L	<10	NA	NA	<10	NA	NA	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10
2-Methylnaphthalene	19	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
2-Methylphenol	- -	ug/L	<10	NA	NA	<10	NA	NA	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10
2-Nitroaniline	- -	ug/L	<30	NA	NA	<30	NA	NA	NA	NA	NA	NA	<30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<30
2-Nitrophenol	ID	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
3&4-Methylphenol	- -	ug/L	<20	NA	NA	<20	NA	NA	NA	NA	NA	NA	<20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<20
3,3'-Dichlorobenzidine	0.3(M)	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
3-Nitroaniline	- -	ug/L	<30	NA	NA	<30	NA	NA	NA	NA	NA	NA	<30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<30
4,6-Dinitro-2-methylphenol	- -	ug/L	<20	NA	NA	<20	NA	NA	NA	NA	NA	NA	<20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<20
4-Bromophenyl phenyl ether	- -	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
4-Chloro-3-methylphenol	7.4	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
4-Chloroaniline	- -	ug/L	<10	NA	NA	<10	NA	NA	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10
4-Chlorophenyl phenyl ether	- -	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
4-Nitroaniline	- -	ug/L	<30	NA	NA	<30	NA	NA	NA	NA	NA	NA	<30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<30
4-Nitrophenol	- -	ug/L	<30	NA	NA	<30	NA	NA	NA	NA	NA	NA	<30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<30
Acenaphthene	38	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
Acenaphthylene	ID	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
Anthracene	ID	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
Benzo(a)anthracene	ID	ug/L	<1.0	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0
Benzo(a)pyrene	ID	ug/L	<1.0	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0
Benzo(b)fluoranthene	ID	ug/L	<1.0	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0
Benzo(g,h,i)perylene	ID	ug/L	<1.0	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0
Benzo(k)fluoranthene	NA	ug/L	<1.0	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0
bis(2-Chloroethoxy)methane	- -	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
bis(2-Chloroethyl)ether	1(M)	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
bis(2-Ethylhexyl)phthalate	25	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
Butyl benzylphthalate	67(X)	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
Chrysene	ID	ug/L	<1.0	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0
Dibenz(a,h)anthracene	ID	ug/L	<2.0	NA	NA	<2.0	NA	NA	NA	NA	NA	NA	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0
Dibenzofuran	4	ug/L	<4.0	NA	NA	<4.0	NA	NA	NA	NA	NA	NA	<4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<4.0
Diethyl phthalate	110	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
Dimethyl phthalate	NA	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
Di-n-butylphthalate	9.7	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
Di-n-octyl phthalate	ID	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
Fluoranthene	1.6	ug/L	<1.0	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0
Fluorene	12	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
Hexachlorobenzene	0.2(M)	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
Hexachlorobutadiene	0.053	ug/L	<10	NA	NA	<10	NA	NA	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10
Hexachlorocyclopentadiene	ID	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
Hexachloroethane	6.7(X)	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
Indeno(1,2,3-cd)pyrene	ID	ug/L	<2.0	NA	NA	<2.0	NA	NA	NA	NA	NA	NA	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0
Isophorone	1,300(X)	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
Naphthalene	11	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
Nitrobenzene	180(X)	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
N-Nitrosodi-n-propylamine	NA	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
N-Nitrosodiphenylamine	NA	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
Pentachlorophenol	2.8(G,X)	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
Phenanthrene	2(M)	ug/L	<2.0	NA	NA	<2.0	NA	NA	NA	NA	NA	NA	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0
Phenol	450	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
Pyrene	ID	ug/L	<5.0	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0

Table 11. NPMP Sampling Analytical Results
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Outfall: / Location ID: / Date Collected:	Groundwater Surface Water Interface Criteria	Units	001 MH 1-3 04/01/10	001 MH 1-3 09/20/10	001 MH 1-3 02/24/11	002 MH 2-19 04/01/10	002 MH 2-19 09/20/10	002 MH 2-19 10/27/10	002 MH 2-19 11/22/10	002 MH 2-19 12/20/10	002 MH 2-19 01/26/11	002 MH 2-19 02/24/11	003 MH 3-3 03/31/10	003 MH 3-3 09/20/10	003 MH 3-3 09/27/10	003 MH 3-3 10/27/10	003 MH 3-3 10/28/10	003 MH 3-3 11/20/10	003 MH 3-3 11/22/10	003 MH 3-3 12/20/10	003 MH 3-3 12/21/10	003 MH 3-3 01/26/11	003 MH 3-3 01/26/11	003 MH 3-3 02/24/11	003 MH 3-3 02/25/11	004 MH 4-5 03/31/10
PCB																										
Aroclor-1016 (PCB-1016)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.10	NA	<0.10	NA	<0.10	<0.10	NA	NA	<0.10	NA	<0.10	NA	<0.10	<0.10
Aroclor-1221 (PCB-1221)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.10	NA	<0.10	NA	<0.10	<0.10	NA	NA	<0.10	NA	<0.10	NA	<0.10	<0.10
Aroclor-1232 (PCB-1232)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.10	NA	<0.10	NA	<0.10	<0.10	NA	NA	<0.10	NA	<0.10	NA	<0.10	<0.10
Aroclor-1242 (PCB-1242)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.10	NA	<0.10	NA	<0.10	<0.10	NA	NA	<0.10	NA	<0.10	NA	<0.10	<0.10
Aroclor-1248 (PCB-1248)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.10	NA	<0.10	NA	<0.10	<0.10	NA	NA	<0.10	NA	<0.10	NA	<0.10	<0.10
Aroclor-1254 (PCB-1254)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.10	NA	<0.10	NA	<0.10	<0.10	NA	NA	<0.10	NA	<0.10	NA	<0.10	<0.10
Aroclor-1260 (PCB-1260)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.10	NA	<0.10	NA	<0.10	<0.10	NA	NA	<0.10	NA	<0.10	NA	<0.10	<0.10
Total PCBs	0.2(M)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.10	NA	<0.10	NA	<0.10	<0.10	NA	NA	<0.10	NA	<0.10	NA	<0.10	<0.10
Inorganic																										
Antimony	130(X)	ug/L	1.0	1.0	<5.0	6.0	<1.0 [<1.0]	<5.0	<5.0	<5.0	<5.0	<5.0	3.0	<1.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	2.0
Arsenic	10	ug/L	<1.0	5.0	<2.0	**11**	10 [9.0]	**18**	**47**	**220**	**19**	10	2.0	<2.0	NA	3.0	NA	NA	4.0	3.0	NA	3.0	NA	<2.0	NA	1.0
Barium	1,308(G)	ug/L	96	23	130	520	450 [440]	650	310	1,100	530	450	120	67	NA	71	NA	NA	170	160	NA	160	NA	60	NA	96
Beryllium	32.3(G)	ug/L	<1.0	<0.80	<1.0	<1.0	<0.80 [<0.80]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.80	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
Cadmium	4.8(G,X)	ug/L	<0.20	<0.50	2.0	<0.20	<0.50 [<0.50]	0.50	0.80	1.5	0.80	1.8	<0.20	<0.50	NA	<0.50	NA	NA	<0.50	<0.50	NA	<0.50	NA	<0.50	NA	<0.20
Chromium Total	11	ug/L	<5.0	<5.0	**45**	<5.0	<5.0 [<5.0]	<5.0	**18**	**27**	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	7.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
Cobalt	100	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	8.0	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
Copper	21.6(G)	ug/L	3.0	6.0	**31**	<1.0	<1.0 [<1.0]	14	**69**	**160**	10	<4.0	2.0	2.0	NA	<4.0	NA	NA	4.0	<4.0	NA	<4.0	NA	7.0	NA	2.0
Cyanide (total)	5.2	ug/L	<5.0	<5.0	**12**	<5.0	<5.0 [<5.0]	<5.0	<5.0	**11**	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	**10**	NA	<5.0
Iron	NA	ug/L	140	NA	NA	4900	NA	NA	NA	NA	NA	NA	810	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	340
Lead	30.9(G,X)	ug/L	<1.0	<1.0	27	<1.0	<1.0 [<1.0]	4.0	**53**	**130**	12	8.0	<1.0	<1.0	NA	4.0	NA	NA	<3.0	7.0	NA	<3.0	NA	17	NA	<1.0
Manganese	4,767(G,X)	ug/L	<5.0	5.0	95	890	550 [550]	900	1,400	3,500	950	690	230	61	NA	73	NA	NA	210	210	NA	250	NA	88	NA	120
Mercury	1.3	ng/L	1.1	**2.4**	**13**	<0.50	**1.2 [1.5]**	**2.3**	**9.8**	**57**	0.81	0.52	<0.50	**1.4**	NA	**5.8**	NA	NA	**3.2**	0.66	NA	0.92	NA	**3.6**	NA	0.76
Nickel	124.3(G)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	5.0	15	13	<5.0	<5.0	<5.0	<5.0	NA	<5.0	NA	NA	9.0	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
Selenium	5	ug/L	<1.0	<5.0	<5.0	1.0	<5.0 [<5.0]	5.0	<5.0	<5.0	<5.0	**7.0**	<1.0	<5.0	NA	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	NA	2.0
Silver	0.2(M)	ug/L	<0.50	<0.50	<0.50	**1.4**	<0.50 [<0.50]	<0.50	**0.60**	<0.50	<0.50	<0.50	<0.50	<0.50	NA	<0.50	NA	NA	<0.50	<0.50	NA	<0.50	NA	<0.50	NA	<0.50
Thallium	3.7(X)	ug/L	<1.0	<0.40	<1.0	<1.0	<0.40 [<0.40]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.40	NA	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	NA	<1.0
Vanadium	12	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0 [<4.0]	<4.0	12	**13**	<4.0	<4.0	<4.0	<4.0	NA	<4.0	NA	NA	7.0	<4.0	NA	<4.0	NA	<4.0	NA	<4.0
Zinc	282.7(G)	ug/L	12	48	240	8.0	13 [13]	68	**340**	**1,300**	35	<5.0	9.0	8.0	NA	27	NA	NA	30	15	NA	29	NA	50	NA	11
Inorganic-Dissolved																										
Antimony (Dissolved)	130(X)	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA
Arsenic (Dissolved)	10	ug/L	NA	NA	<2.0	NA	NA	NA	NA	NA	NA	6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	NA
Barium (Dissolved)	1,308(G)	ug/L	NA	NA	91	NA	NA	NA	NA	NA	NA	430	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	50	NA	NA
Beryllium (Dissolved)	32.3(G)	ug/L	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA	NA
Cadmium (Dissolved)	4.8(G,X)	ug/L	NA	NA	2.0	NA	NA	NA	NA	NA	NA	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.50	NA	NA
Chromium Total (Dissolved)	11	ug/L	NA	NA	**37**	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA
Cobalt (Dissolved)	100	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA
Copper (Dissolved)	21.6(G)	ug/L	NA	NA	9.0	NA	NA	NA	NA	NA	NA	<4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<4.0	NA	NA
Lead (Dissolved)	30.9(G,X)	ug/L	NA	NA	5.0	NA	NA	NA	NA	NA	NA	6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13	NA	NA
Manganese (Dissolved)	4,767(G,X)	ug/L	NA	NA	41	NA	NA	NA	NA	NA	NA	680	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	73	NA	NA
Mercury (Dissolved)	1.3	ng/L	NA	NA	1.2	NA	NA	NA	NA	NA	NA	<0.51	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.91	NA	NA
Nickel (Dissolved)	124.3(G)	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA
Selenium (Dissolved)	5	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	**6.0**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA
Silver (Dissolved)	0.2(M)	ug/L	NA	NA	<0.50	NA	NA	NA	NA	NA	NA	<0.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.50	NA	NA
Thallium (Dissolved)	3.7(X)	ug/L	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA	NA
Vanadium (Dissolved)	12	ug/L	NA	NA	<4.0	NA	NA	NA	NA	NA	NA	<4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<4.0	NA	NA
Zinc (Dissolved)	282.7(G)	ug/L	NA	NA	46	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	25	NA	NA
Miscellaneous																										
Oil and Grease	- -	ug/L	<1,000	NA	NA	<1,000	NA	NA	NA	NA	NA	NA	<1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1,000
Total Suspended Solids (TSS)	- -	ug/L	NA	NA	64,000	NA	NA	NA	NA	NA	NA	7,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	15,000	NA	NA

Notes:
Bolded and highlighted detections exceed criteria.
NA - Not Analyzed
ug/L - micrograms per liter

Table 11. NPMP Sampling Analytical Results
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Outfall: / Location ID: / Date Collected:	Groundwater Surface Water Interface Criteria	Units	004 MH 4-5 09/20/10	004 MH 4-5 09/29/10	004 MH 4-5 10/27/10	004 MH 4-5 10/29/10	004 MH 4-5 11/21/10	004 MH 4-5 11/22/10	004 MH 4-5 12/10/10	004 MH 4-5 12/20/10	004 MH 4-5 01/26/11	004 MH 4-5 01/28/11	005 MH 5-6 03/31/10	005 MH 5-6 09/20/10	005 MH 5-6 10/01/10	005 MH 5-6 10/27/10	005 MH 5-6 11/01/10	005 MH 5-6 11/22/10
VOC																		
1,1,1,2-Tetrachloroethane	ID	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	89	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	78(X)	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	330(X)	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	740	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	130	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	- -	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	NA	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trimethylbenzene	- -	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	99(X)	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	17	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	- -	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane (Ethylene Dibromide)	5.7(X)	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	13	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	360(X)	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	230(X)	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	45	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	28	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	17	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
2-Butanone (Methyl Ethyl Ketone)	2,200	ug/L	<30	NA	<30	NA	NA	<30	NA	<30 [<30]	<30	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	ID	ug/L	<50	NA	<50	NA	NA	<50	NA	<50 [<50]	<50	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	19	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	NA	NA	NA	NA	NA	NA
2-Phenylbutane (sec-Butylbenzene)	ID	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ID	ug/L	<50	NA	<50	NA	NA	<50	NA	<50 [<50]	<50	NA	NA	NA	NA	NA	NA	NA
Acetone	1,700	ug/L	<50	NA	<50	NA	NA	<50	NA	<50 [<50]	<50	NA	NA	NA	NA	NA	NA	NA
Acrylonitrile	2(M)	ug/L	<2.0	NA	<2.0	NA	NA	<2.0	NA	<2.0 [<2.0]	<2.0	NA	NA	NA	NA	NA	NA	NA
Benzene	200(X)	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
Bromobenzene	NA	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	ID	ug/L	<1.0	NA	<1.0	NA	NA	1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
Bromoform	ID	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
Bromomethane (Methyl Bromide)	35	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	ID	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	NA	NA	NA	NA	NA	NA
Carbon tetrachloride	45(X)	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	25	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
Chlorobromomethane	- -	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
Chloroethane	1,100(X)	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	NA	NA	NA	NA	NA	NA
Chloroform (Trichloromethane)	350	ug/L	<1.0	NA	<1.0	NA	NA	2.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
Chloromethane (Methyl Chloride)	ID	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	620	ug/L	2.0	NA	3.0	NA	NA	<1.0	NA	3.0 [3.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	- -	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
Cymene (p-Isopropyltoluene)	- -	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	ID	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	NA	NA	NA	NA	NA	NA
Dibromomethane	NA	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane (CFC-12)	ID	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	NA	NA	NA	NA	NA	NA
Diethyl ether	ID	ug/L	<10	NA	<10	NA	NA	<10	NA	<10 [<10]	<10	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	18	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	6.7(X)	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	NA	NA	NA	NA	NA	NA
Iodomethane	- -	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	28	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	NA	NA	NA	NA	NA	NA
m&p-Xylene	- -	ug/L	<2.0	NA	<2.0	NA	NA	<2.0	NA	<2.0 [<2.0]	<2.0	NA	NA	NA	NA	NA	NA	NA
Methyl Tert Butyl Ether	7,100(X)	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	NA	NA	NA	NA	NA	NA
Methylene chloride	1,500(X)	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	NA	NA	NA	NA	NA	NA
Naphthalene	11	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	ID	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	ID	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
o-Xylene	- -	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
Styrene	80(X)	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	ID	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	60(X)	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
Tetrahydrofuran	11,000(X)	ug/L	<90	NA	<90	NA	NA	<90	NA	<90 [<90]	<90	NA	NA	NA	NA	NA	NA	NA
Toluene	270	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
trans-1,2-Dichloroethene	1,500(X)	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	- -	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
trans-1,4-Dichloro-2-butene	- -	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	200(X)	ug/L	4.0	NA	6.0	NA	NA	1.0	NA	4.0 [4.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane (CFC-11)	NA	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	13(X)	ug/L	<1.0	NA	<1.0	NA	NA	<1.0	NA	1.0 [1.0]	<1.0	NA	NA	NA	NA	NA	NA	NA

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Outfall: / Location ID: / Date Collected:	Groundwater Surface Water Interface Criteria	Units	004 MH 4-5 09/20/10	004 MH 4-5 09/29/10	004 MH 4-5 10/27/10	004 MH 4-5 10/29/10	004 MH 4-5 11/21/10	004 MH 4-5 11/22/10	004 MH 4-5 12/10/10	004 MH 4-5 12/20/10	004 MH 4-5 01/26/11	004 MH 4-5 01/28/11	005 MH 5-6 03/31/10	005 MH 5-6 09/20/10	005 MH 5-6 10/01/10	005 MH 5-6 10/27/10	005 MH 5-6 11/01/10	005 MH 5-6 11/22/10
SVOC																		
1,2,4-Trichlorobenzene	99(X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	13	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0 S	NA	NA	NA	NA	NA
1,2-Diphenylhydrazine	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	28	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0 S	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	17	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0 S	NA	NA	NA	NA	NA
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<4.0 S	NA	NA	NA	NA	NA
2,4-Dichlorophenol	11	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10 S	NA	NA	NA	NA	NA
2,4-Dimethylphenol	380	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
2,4-Dinitrophenol	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<30 S	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
2-Chlorophenol	18	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10 S	NA	NA	NA	NA	NA
2-Methylnaphthalene	19	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
2-Methylphenol	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10 S	NA	NA	NA	NA	NA
2-Nitroaniline	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<30 S	NA	NA	NA	NA	NA
2-Nitrophenol	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
3&4-Methylphenol	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<20 S	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	0.3(M)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
3-Nitroaniline	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<30 S	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<20 S	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	7.4	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
4-Chloroaniline	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10 S	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
4-Nitroaniline	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<30 S	NA	NA	NA	NA	NA
4-Nitrophenol	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<30 S	NA	NA	NA	NA	NA
Acenaphthene	38	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
Acenaphthylene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
Anthracene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
Benzo(a)anthracene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0 S	NA	NA	NA	NA	NA
Benzo(a)pyrene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0 S	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0 S	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0 S	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NA	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0 S	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	1(M)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	25	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
Butyl benzylphthalate	67(X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
Chrysene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0 S	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0 S	NA	NA	NA	NA	NA
Dibenzofuran	4	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<4.0 S	NA	NA	NA	NA	NA
Diethyl phthalate	110	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
Dimethyl phthalate	NA	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
Di-n-butylphthalate	9.7	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
Di-n-octyl phthalate	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
Fluoranthene	1.6	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0 S	NA	NA	NA	NA	NA
Fluorene	12	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
Hexachlorobenzene	0.2(M)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
Hexachlorobutadiene	0.053	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10 S	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
Hexachloroethane	6.7(X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0 S	NA	NA	NA	NA	NA
Isophorone	1,300(X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
Naphthalene	11	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
Nitrobenzene	180(X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NA	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
Pentachlorophenol	2.8(G,X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
Phenanthrene	2(M)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0 S	NA	NA	NA	NA	NA
Phenol	450	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA
Pyrene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0 S	NA	NA	NA	NA	NA

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Outfall: / Location ID: / Date Collected:	Groundwater Surface Water Interface Criteria	Units	004 MH 4-5 09/20/10	004 MH 4-5 09/29/10	004 MH 4-5 10/27/10	004 MH 4-5 10/29/10	004 MH 4-5 11/21/10	004 MH 4-5 11/22/10	004 MH 4-5 12/10/10	004 MH 4-5 12/20/10	004 MH 4-5 01/26/11	004 MH 4-5 01/28/11	005 MH 5-6 03/31/10	005 MH 5-6 09/20/10	005 MH 5-6 10/01/10	005 MH 5-6 10/27/10	005 MH 5-6 11/01/10	005 MH 5-6 11/22/10
PCB																		
Aroclor-1016 (PCB-1016)	- -	ug/L	NA	<0.10	NA	<0.10	<0.10	NA	<0.10	NA	NA	<0.10	<0.10	NA	<0.10	NA	<0.10	NA
Aroclor-1221 (PCB-1221)	- -	ug/L	NA	<0.10	NA	<0.10	<0.10	NA	<0.10	NA	NA	<0.10	<0.10	NA	<0.10	NA	<0.10	NA
Aroclor-1232 (PCB-1232)	- -	ug/L	NA	<0.10	NA	<0.10	<0.10	NA	<0.10	NA	NA	<0.10	<0.10	NA	<0.10	NA	<0.10	NA
Aroclor-1242 (PCB-1242)	- -	ug/L	NA	<0.10	NA	<0.10	<0.10	NA	<0.10	NA	NA	<0.10	<0.10	NA	<0.10	NA	<0.10	NA
Aroclor-1248 (PCB-1248)	- -	ug/L	NA	<0.10	NA	<0.10	<0.10	NA	<0.10	NA	NA	<0.10	<0.10	NA	<0.10	NA	<0.10	NA
Aroclor-1254 (PCB-1254)	- -	ug/L	NA	<0.10	NA	<0.10	<0.10	NA	<0.10	NA	NA	<0.10	<0.10	NA	<0.10	NA	<0.10	NA
Aroclor-1260 (PCB-1260)	- -	ug/L	NA	<0.10	NA	<0.10	<0.10	NA	<0.10	NA	NA	<0.10	<0.10	NA	<0.10	NA	<0.10	NA
Total PCBs	0.2(M)	ug/L	NA	<0.10	NA	<0.10	<0.10	NA	<0.10	NA	NA	<0.10	<0.10	NA	<0.10	NA	<0.10	NA
Inorganic																		
Antimony	130(X)	ug/L	<1.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	1.0	<1.0	NA	<5.0	NA	<5.0
Arsenic	10	ug/L	<2.0	NA	2.0	NA	NA	<2.0	NA	<2.0 [<2.0]	5.0	NA	6.0	7.0	NA	5.0	NA	**24**
Barium	1,308(G)	ug/L	84	NA	69	NA	NA	52	NA	100 [98]	140	NA	110	95	NA	94	NA	280
Beryllium	32.3(G)	ug/L	<0.80	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	<1.0	<0.80	NA	<1.0	NA	<1.0
Cadmium	4.8(G,X)	ug/L	<0.50	NA	<0.50	NA	NA	<0.50	NA	<0.50 [<0.50]	1.6	NA	<0.20	<0.50	NA	<0.50	NA	1.5
Chromium Total	11	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	**18**	NA	<5.0	<5.0	NA	<5.0	NA	**21**
Cobalt	100	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0
Copper	21.6(G)	ug/L	2.0	NA	<4.0	NA	NA	4.0	NA	<4.0 [<4.0]	**45**	NA	<1.0	<1.0	NA	<4.0	NA	**37**
Cyanide (total)	5.2	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0
Iron	NA	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1500	NA	NA	NA	NA	NA
Lead	30.9(G,X)	ug/L	<1.0	NA	<3.0	NA	NA	<3.0	NA	9.0 [<3.0]	**110**	NA	<1.0	<1.0	NA	<3.0	NA	**130**
Manganese	4,767(G,X)	ug/L	27	NA	33	NA	NA	93	NA	54 [52]	1,100	NA	170	130	NA	130	NA	2,600
Mercury	1.3	ng/L	0.95	NA	**3.0**	NA	NA	**4.2**	NA	<0.51 [<0.51]	**92**	NA	<0.50	0.53	NA	0.86	NA	1.3
Nickel	124.3(G)	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	11	NA	<5.0	<5.0	NA	<5.0	NA	**250**
Selenium	5	ug/L	<5.0	NA	<5.0	NA	NA	<5.0	NA	<5.0 [<5.0]	<5.0	NA	<1.0	<5.0	NA	<5.0	NA	<5.0
Silver	0.2(M)	ug/L	<0.50	NA	<0.50	NA	NA	<0.50	NA	<0.50 [<0.50]	<0.50	NA	<0.50	<0.50	NA	<0.50	NA	<0.50
Thallium	3.7(X)	ug/L	<0.40	NA	<1.0	NA	NA	<1.0	NA	<1.0 [<1.0]	<1.0	NA	<1.0	<0.40	NA	<1.0	NA	<1.0
Vanadium	12	ug/L	<4.0	NA	<4.0	NA	NA	<4.0	NA	<4.0 [<4.0]	10	NA	<4.0	<4.0	NA	<4.0	NA	6.0
Zinc	282.7(G)	ug/L	12	NA	22	NA	NA	33	NA	7.0 [10]	**490**	NA	8.0	7.0	NA	15	NA	**820**
Inorganic-Dissolved																		
Antimony (Dissolved)	130(X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic (Dissolved)	10	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium (Dissolved)	1,308(G)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium (Dissolved)	32.3(G)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium (Dissolved)	4.8(G,X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium Total (Dissolved)	11	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt (Dissolved)	100	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper (Dissolved)	21.6(G)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead (Dissolved)	30.9(G,X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese (Dissolved)	4,767(G,X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury (Dissolved)	1.3	ng/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel (Dissolved)	124.3(G)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium (Dissolved)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver (Dissolved)	0.2(M)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium (Dissolved)	3.7(X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium (Dissolved)	12	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc (Dissolved)	282.7(G)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous																		
Oil and Grease	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1,000	NA	NA	NA	NA	NA
Total Suspended Solids (TSS)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Bolded and highlighted detections exceed criteria.
NA - Not Analyzed
ug/L - micrograms per liter

Table 11. NPMP Sampling Analytical Results
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Outfall: / Location ID: / Date Collected:	Groundwater Surface Water Interface Criteria	Units	005 MH 5-6 11/24/10	005 MH 5-6 12/14/10	005 MH 5-6 12/20/10	005 MH 5-6 01/26/11	005 MH 5-6 01/27/11	005 MH 5-6 02/24/11	005 MH 5-6 02/26/11	006 MH 6-2 03/31/10	006 MH 6-2 09/21/10	006 MH 6-2 10/27/10	006 MH 6-2 11/22/10	006 MH 6-2 12/20/10	006 MH 6-2 01/26/11	006 MH 6-2 02/24/11	007 MH 7-1 03/31/10	007 MH 7-1 09/21/10
VOC																		
1,1,1,2-Tetrachloroethane	ID	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,1,1-Trichloroethane	89	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,1,2,2-Tetrachloroethane	78(X)	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,1,2-Trichloroethane	330(X)	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,1-Dichloroethane	740	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	<1.0 [<1.0]
1,1-Dichloroethene	130	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,2,3-Trichlorobenzene	- -	ug/L	NA	NA	NA	[<5.0]	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
1,2,3-Trichloropropane	NA	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,2,3-Trimethylbenzene	- -	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,2,4-Trichlorobenzene	99(X)	ug/L	NA	NA	NA	[<5.0]	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
1,2,4-Trimethylbenzene	17	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,2-Dibromo-3-chloropropane (DBCP)	- -	ug/L	NA	NA	NA	[<5.0]	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
1,2-Dibromoethane (Ethylene Dibromide)	5.7(X)	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,2-Dichlorobenzene	13	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,2-Dichloroethane	360(X)	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,2-Dichloropropane	230(X)	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,3,5-Trimethylbenzene	45	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,3-Dichlorobenzene	28	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,4-Dichlorobenzene	17	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
2-Butanone (Methyl Ethyl Ketone)	2,200	ug/L	NA	NA	NA	[<30]	NA	NA	NA	<30	<30	<30	<30	<30	<30	<30	<25	<30 [<30]
2-Hexanone	ID	ug/L	NA	NA	NA	[<50]	NA	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50 [<50]
2-Methylnaphthalene	19	ug/L	NA	NA	NA	[<5.0]	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
2-Phenylbutane (sec-Butylbenzene)	ID	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ID	ug/L	NA	NA	NA	[<50]	NA	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50 [<50]
Acetone	1,700	ug/L	NA	NA	NA	[<50]	NA	NA	NA	<50	<50	<50	<50	<50	<50	<50	<50	<50 [<50]
Acrylonitrile	2(M)	ug/L	NA	NA	NA	[<2.0]	NA	NA	NA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0 [<2.0]
Benzene	200(X)	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
Bromobenzene	NA	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
Bromodichloromethane	ID	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
Bromoform	ID	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
Bromomethane (Methyl Bromide)	35	ug/L	NA	NA	NA	[<5.0]	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
Carbon disulfide	ID	ug/L	NA	NA	NA	[<5.0]	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
Carbon tetrachloride	45(X)	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
Chlorobenzene	25	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
Chlorobromomethane	- -	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
Chloroethane	1,100(X)	ug/L	NA	NA	NA	[<5.0]	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
Chloroform (Trichloromethane)	350	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
Chloromethane (Methyl Chloride)	ID	ug/L	NA	NA	NA	[<5.0]	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
cis-1,2-Dichloroethene	620	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	<1.0 [<1.0]
cis-1,3-Dichloropropene	- -	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
Cymene (p-Isopropyltoluene)	- -	ug/L	NA	NA	NA	[<5.0]	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
Dibromochloromethane	ID	ug/L	NA	NA	NA	[<5.0]	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
Dibromomethane	NA	ug/L	NA	NA	NA	[<5.0]	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
Dichlorodifluoromethane (CFC-12)	ID	ug/L	NA	NA	NA	[<5.0]	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
Diethyl ether	ID	ug/L	NA	NA	NA	[<10]	NA	NA	NA	<10	<10	<10	<10	<10	<10	<10	<10	<10 [<10]
Ethylbenzene	18	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
Hexachloroethane	6.7(X)	ug/L	NA	NA	NA	[<5.0]	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
Iodomethane	- -	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
Isopropylbenzene	28	ug/L	NA	NA	NA	[<5.0]	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
m&p-Xylene	- -	ug/L	NA	NA	NA	[<2.0]	NA	NA	NA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0 [<2.0]
Methyl Tert Butyl Ether	7,100(X)	ug/L	NA	NA	NA	[<5.0]	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
Methylene chloride	1,500(X)	ug/L	NA	NA	NA	[<5.0]	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
Naphthalene	11	ug/L	NA	NA	NA	[<5.0]	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
n-Butylbenzene	ID	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
n-Propylbenzene	ID	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
o-Xylene	- -	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
Styrene	80(X)	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
tert-Butylbenzene	ID	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
Tetrachloroethene	60(X)	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
Tetrahydrofuran	11,000(X)	ug/L	NA	NA	NA	[<90]	NA	NA	NA	<90	<90	<90	<90	<90	<90	<90	<90	<90 [<90]
Toluene	270	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
trans-1,2-Dichloroethene	1,500(X)	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
trans-1,3-Dichloropropene	- -	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
trans-1,4-Dichloro-2-butene	- -	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
Trichloroethene	200(X)	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
Trichlorofluoromethane (CFC-11)	NA	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]
Vinyl chloride	13(X)	ug/L	NA	NA	NA	[<1.0]	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]

Table 11. NPMP Sampling Analytical Results
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Outfall: / Location ID: / Date Collected:	Groundwater Surface Water Interface Criteria	Units	005 MH 5-6 11/24/10	005 MH 5-6 12/14/10	005 MH 5-6 12/20/10	005 MH 5-6 01/26/11	005 MH 5-6 01/27/11	005 MH 5-6 02/24/11	005 MH 5-6 02/26/11	006 MH 6-2 03/31/10	006 MH 6-2 09/21/10	006 MH 6-2 10/27/10	006 MH 6-2 11/22/10	006 MH 6-2 12/20/10	006 MH 6-2 01/26/11	006 MH 6-2 02/24/11	007 MH 7-1 03/31/10	007 MH 7-1 09/21/10
SVOC																		
1,2,4-Trichlorobenzene	99(X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
1,2-Dichlorobenzene	13	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA
1,2-Diphenylhydrazine	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
1,3-Dichlorobenzene	28	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA
1,4-Dichlorobenzene	17	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
2,4,5-Trichlorophenol	NA	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
2,4,6-Trichlorophenol	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<4.0	NA
2,4-Dichlorophenol	11	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
2,4-Dimethylphenol	380	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
2,4-Dinitrophenol	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<30	NA
2,4-Dinitrotoluene	NA	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
2,6-Dinitrotoluene	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
2-Chloronaphthalene	NA	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
2-Chlorophenol	18	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
2-Methylnaphthalene	19	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
2-Methylphenol	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
2-Nitroaniline	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<30	NA
2-Nitrophenol	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
3&4-Methylphenol	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<20	NA
3,3'-Dichlorobenzidine	0.3(M)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
3-Nitroaniline	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<30	NA
4,6-Dinitro-2-methylphenol	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<20	NA
4-Bromophenyl phenyl ether	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
4-Chloro-3-methylphenol	7.4	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
4-Chloroaniline	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
4-Chlorophenyl phenyl ether	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
4-Nitroaniline	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<30	NA
4-Nitrophenol	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<30	NA
Acenaphthene	38	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
Acenaphthylene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
Anthracene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
Benzo(a)anthracene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA
Benzo(a)pyrene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA
Benzo(b)fluoranthene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA
Benzo(g,h,i)perylene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA
Benzo(k)fluoranthene	NA	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA
bis(2-Chloroethoxy)methane	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
bis(2-Chloroethyl)ether	1(M)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
bis(2-Ethylhexyl)phthalate	25	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
Butyl benzylphthalate	67(X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
Chrysene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA
Dibenz(a,h)anthracene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA
Dibenzofuran	4	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<4.0	NA
Diethyl phthalate	110	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
Dimethyl phthalate	NA	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
Di-n-butylphthalate	9.7	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
Di-n-octyl phthalate	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
Fluoranthene	1.6	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	NA
Fluorene	12	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
Hexachlorobenzene	0.2(M)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
Hexachlorobutadiene	0.053	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10	NA
Hexachlorocyclopentadiene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
Hexachloroethane	6.7(X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
Indeno(1,2,3-cd)pyrene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA
Isophorone	1,300(X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
Naphthalene	11	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
Nitrobenzene	180(X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
N-Nitrosodi-n-propylamine	NA	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
N-Nitrosodiphenylamine	NA	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
Pentachlorophenol	2.8(G,X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
Phenanthrene	2(M)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	NA
Phenol	450	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA
Pyrene	ID	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	NA

Table 11. NPMP Sampling Analytical Results
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Outfall: / Location ID: / Date Collected:	Groundwater Surface Water Interface Criteria	Units	005 MH 5-6 11/24/10	005 MH 5-6 12/14/10	005 MH 5-6 12/20/10	005 MH 5-6 01/26/11	005 MH 5-6 01/27/11	005 MH 5-6 02/24/11	005 MH 5-6 02/26/11	006 MH 6-2 03/31/10	006 MH 6-2 09/21/10	006 MH 6-2 10/27/10	006 MH 6-2 11/22/10	006 MH 6-2 12/20/10	006 MH 6-2 01/26/11	006 MH 6-2 02/24/11	007 MH 7-1 03/31/10	007 MH 7-1 09/21/10
PCB																		
Aroclor-1016 (PCB-1016)	- -	ug/L	<0.10	<0.10	NA	NA	<0.10	NA	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221 (PCB-1221)	- -	ug/L	<0.10	<0.10	NA	NA	<0.10	NA	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232 (PCB-1232)	- -	ug/L	<0.10	<0.10	NA	NA	<0.10	NA	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242 (PCB-1242)	- -	ug/L	<0.10	<0.10	NA	NA	<0.10	NA	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248 (PCB-1248)	- -	ug/L	<0.10	<0.10	NA	NA	<0.10	NA	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254 (PCB-1254)	- -	ug/L	<0.10	<0.10	NA	NA	<0.10	NA	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260 (PCB-1260)	- -	ug/L	<0.10	<0.10	NA	NA	<0.10	NA	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.2(M)	ug/L	<0.10	<0.10	NA	NA	<0.10	NA	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic																		
Antimony	130(X)	ug/L	NA	NA	<5.0	<5.0 [<5.0]	NA	<5.0	NA	1.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	2.0	2.0 [2.0]
Arsenic	10	ug/L	NA	NA	**54**	**19 [120]**	NA	8.0	NA	2.0	3.0	2.0	2.0	<2.0	<2.0	<2.0	1.0	<2.0 [<2.0]
Barium	1,308(G)	ug/L	NA	NA	170	120 [270]	NA	92	NA	85	89	80	95	83	74	68	57	70 [69]
Beryllium	32.3(G)	ug/L	NA	NA	<1.0	<1.0 [<1.0]	NA	<1.0	NA	<1.0	<0.80	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.80 [<0.80]
Cadmium	4.8(G,X)	ug/L	NA	NA	0.50	<0.50 [0.60]	NA	<0.50	NA	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.20	<0.50 [<0.50]
Chromium Total	11	ug/L	NA	NA	<5.0	<5.0 [<5.0]	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
Cobalt	100	ug/L	NA	NA	<5.0	<5.0 [<5.0]	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
Copper	21.6(G)	ug/L	NA	NA	7.0	<4.0 [7.0]	NA	<4.0	NA	1.0	1.0	<4.0	<4.0	<4.0	<4.0	<4.0	3.0	2.0 [2.0]
Cyanide (total)	5.2	ug/L	NA	NA	<5.0	<5.0 [<5.0]	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
Iron	NA	ug/L	NA	NA	NA	NA	NA	NA	NA	630	NA	NA	NA	NA	NA	NA	280	NA
Lead	30.9(G,X)	ug/L	NA	NA	**34**	<3.0 [7.0]	NA	11	NA	<1.0	<1.0	<3.0	<3.0	<3.0	<3.0	<3.0	3.0	<1.0 [<1.0]
Manganese	4,767(G,X)	ug/L	NA	NA	780	230 [740]	NA	170	NA	210	170	170	810	360	250	370	11	6.0 [5.0]
Mercury	1.3	ng/L	NA	NA	0.56	0.52 [<0.51]	NA	0.76	NA	**3.5**	1.1	1.2	**6.0**	0.77	0.61	**1.7**	**21**	**2.0 [1.7]**
Nickel	124.3(G)	ug/L	NA	NA	<5.0	<5.0 [<5.0]	NA	<5.0	NA	<5.0	<5.0	<5.0	6.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]
Selenium	5	ug/L	NA	NA	<5.0	<5.0 [<5.0]	NA	<5.0	NA	<1.0	<5.0	**10**	<5.0	<5.0	<5.0	<5.0	1.0	<5.0 [<5.0]
Silver	0.2(M)	ug/L	NA	NA	<0.50	<0.50 [<0.50]	NA	<0.50	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50 [<0.50]
Thallium	3.7(X)	ug/L	NA	NA	<1.0	<1.0 [<1.0]	NA	<1.0	NA	<1.0	<0.40	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.40 [<0.40]
Vanadium	12	ug/L	NA	NA	<4.0	<4.0 [<4.0]	NA	<4.0	NA	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0 [<4.0]
Zinc	282.7(G)	ug/L	NA	NA	170	23 [200]	NA	<5.0	NA	<5.0	<5.0	<5.0	16	6.0	<5.0	<5.0	20	<5.0 [<5.0]
Inorganic-Dissolved																		
Antimony (Dissolved)	130(X)	ug/L	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA
Arsenic (Dissolved)	10	ug/L	NA	NA	NA	NA	NA	5.0	NA	NA	NA	NA	NA	NA	NA	<2.0	NA	NA
Barium (Dissolved)	1,308(G)	ug/L	NA	NA	NA	NA	NA	88	NA	NA	NA	NA	NA	NA	NA	65	NA	NA
Beryllium (Dissolved)	32.3(G)	ug/L	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	<1.0	NA	NA
Cadmium (Dissolved)	4.8(G,X)	ug/L	NA	NA	NA	NA	NA	<0.50	NA	NA	NA	NA	NA	NA	NA	<0.50	NA	NA
Chromium Total (Dissolved)	11	ug/L	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA
Cobalt (Dissolved)	100	ug/L	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA
Copper (Dissolved)	21.6(G)	ug/L	NA	NA	NA	NA	NA	<4.0	NA	NA	NA	NA	NA	NA	NA	<4.0	NA	NA
Lead (Dissolved)	30.9(G,X)	ug/L	NA	NA	NA	NA	NA	10	NA	NA	NA	NA	NA	NA	NA	<3.0	NA	NA
Manganese (Dissolved)	4,767(G,X)	ug/L	NA	NA	NA	NA	NA	160	NA	NA	NA	NA	NA	NA	NA	260	NA	NA
Mercury (Dissolved)	1.3	ng/L	NA	NA	NA	NA	NA	<0.51	NA	NA	NA	NA	NA	NA	NA	0.60	NA	NA
Nickel (Dissolved)	124.3(G)	ug/L	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA
Selenium (Dissolved)	5	ug/L	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA
Silver (Dissolved)	0.2(M)	ug/L	NA	NA	NA	NA	NA	<0.50	NA	NA	NA	NA	NA	NA	NA	<0.50	NA	NA
Thallium (Dissolved)	3.7(X)	ug/L	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	<1.0	NA	NA
Vanadium (Dissolved)	12	ug/L	NA	NA	NA	NA	NA	<4.0	NA	NA	NA	NA	NA	NA	NA	<4.0	NA	NA
Zinc (Dissolved)	282.7(G)	ug/L	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	<5.0	NA	NA
Miscellaneous																		
Oil and Grease	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Suspended Solids (TSS)	- -	ug/L	NA	NA	NA	NA	NA	6,000	NA	NA	NA	NA	NA	NA	NA	1,000	NA	NA

Notes:
Bolded and highlighted detections exceed criteria.
NA - Not Analyzed
ug/L - micrograms per liter

Table 11. NPMP Sampling Analytical Results
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Outfall: Location ID: Date Collected:	Groundwater Surface Water Interface Criteria	Units Units	007 Outfall 007 11/22/10	007 Outfall 007 02/24/11	009 MH 11-7 04/01/10	009 MH 11-7 09/20/10	009 MH 11-7 10/27/10	009 MH 11-7 11/22/10	009 MH 11-7 12/20/10	009 MH 11-7 01/26/11	009 MH 11-7 02/24/11	010 MH 10-5 03/31/10	010 MH 10-5 09/21/10	010 MH 10-5 10/27/10	010 MH 10-5 11/22/10	010 MH 10-5 12/20/10	010 MH 10-5 01/26/11	010 MH 10-5 02/24/11
VOC																		
1,1,1,2-Tetrachloroethane	ID	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,1,1-Trichloroethane	89	ug/L	2.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,1,2,2-Tetrachloroethane	78(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,1,2-Trichloroethane	330(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,1-Dichloroethane	740	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,1-Dichloroethene	130	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,2,3-Trichlorobenzene	- -	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
1,2,3-Trichloropropane	NA	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,2,3-Trimethylbenzene	- -	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,2,4-Trichlorobenzene	99(X)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
1,2,4-Trimethylbenzene	17	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,2-Dibromo-3-chloropropane (DBCP)	- -	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
1,2-Dibromoethane (Ethylene Dibromide)	5.7(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,2-Dichlorobenzene	13	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,2-Dichloroethane	360(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,2-Dichloropropane	230(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,3,5-Trimethylbenzene	45	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,3-Dichlorobenzene	28	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
1,4-Dichlorobenzene	17	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
2-Butanone (Methyl Ethyl Ketone)	2,200	ug/L	<30	<25	<30	<30	<30	<30 [<30]	<30	<30	<25	<30	<30	<30 [<30]	<30	<30	<30	<25 [<25]
2-Hexanone	ID	ug/L	<50	<50	<50	<50	<50	<50 [<50]	<50	<50	<50	<50	<50	<50 [<50]	<50	<50	<50	<50 [<50]
2-Methylnaphthalene	19	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
2-Phenylbutane (sec-Butylbenzene)	ID	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ID	ug/L	<50	<50	<50	<50	<50	<50 [<50]	<50	<50	<50	<50	<50	<50 [<50]	<50	<50	<50	<50 [<50]
Acetone	1,700	ug/L	<50	<50	<50	<50	<50	<50 [<50]	<50	<50	<50	<50	<50	<50 [<50]	<50	<50	<50	<50 [<50]
Acrylonitrile	2(M)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0 [<2.0]	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0 [<2.0]	<2.0	<2.0	<2.0	<2.0 [<2.0]
Benzene	200(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
Bromobenzene	NA	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
Bromodichloromethane	ID	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
Bromoform	ID	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
Bromomethane (Methyl Bromide)	35	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
Carbon disulfide	ID	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
Carbon tetrachloride	45(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
Chlorobenzene	25	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
Chlorobromomethane	- -	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
Chloroethane	1,100(X)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
Chloroform (Trichloromethane)	350	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
Chloromethane (Methyl Chloride)	ID	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
cis-1,2-Dichloroethene	620	ug/L	2.0	<1.0	24	7.0	8.0	9.0 [9.0]	13	16	12	1.0	2.0	2.0 [2.0]	1.0	<1.0	<1.0	1.0 [1.0]
cis-1,3-Dichloropropene	- -	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
Cymene (p-Isopropyltoluene)	- -	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
Dibromochloromethane	ID	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
Dibromomethane	NA	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
Dichlorodifluoromethane (CFC-12)	ID	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
Diethyl ether	ID	ug/L	<10	<10	<10	<10	<10	<10 [<10]	<10	<10	<10	<10	<10	<10 [<10]	<10	<10	<10	<10 [<10]
Ethylbenzene	18	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
Hexachloroethane	6.7(X)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
Iodomethane	- -	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
Isopropylbenzene	28	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
m&p-Xylene	- -	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0 [<2.0]	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0 [<2.0]	<2.0	<2.0	<2.0	<2.0 [<2.0]
Methyl Tert Butyl Ether	7,100(X)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
Methylene chloride	1,500(X)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
Naphthalene	11	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
n-Butylbenzene	ID	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
n-Propylbenzene	ID	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
o-Xylene	- -	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
Styrene	80(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
tert-Butylbenzene	ID	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
Tetrachloroethene	60(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
Tetrahydrofuran	11,000(X)	ug/L	<90	<90	<90	<90	<90	<90 [<90]	<90	<90	<90	<90	<90	<90 [<90]	<90	<90	<90	<90 [<90]
Toluene	270	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
trans-1,2-Dichloroethene	1,500(X)	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
trans-1,3-Dichloropropene	- -	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
trans-1,4-Dichloro-2-butene	- -	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
Trichloroethene	200(X)	ug/L	7.0	7.0	10	3.0	5.0	3.0 [3.0]	5.0	7.0	6.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
Trichlorofluoromethane (CFC-11)	NA	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
Vinyl chloride	13(X)	ug/L	<1.0	<1.0	3.0	<1.0	<1.0	<1.0 [<1.0]	1.0	<1.0	1.0	<1.0	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]

Table 11. NPMP Sampling Analytical Results
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Outfall: / Location ID: / Date Collected:	Groundwater Surface Water Interface Criteria	Units	007 Outfall 007 11/22/10	007 Outfall 007 02/24/11	009 MH 11-7 04/01/10	009 MH 11-7 09/20/10	009 MH 11-7 10/27/10	009 MH 11-7 11/22/10	009 MH 11-7 12/20/10	009 MH 11-7 01/26/11	009 MH 11-7 02/24/11	010 MH 10-5 03/31/10	010 MH 10-5 09/21/10	010 MH 10-5 10/27/10	010 MH 10-5 11/22/10	010 MH 10-5 12/20/10	010 MH 10-5 01/26/11	010 MH 10-5 02/24/11
SVOC																		
1,2,4-Trichlorobenzene	99(X)	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	13	ug/L	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA
1,2-Diphenylhydrazine	- -	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	28	ug/L	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	17	ug/L	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	- -	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	5	ug/L	NA	NA	<4.0	NA	NA	NA	NA	NA	NA	<4.0	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	11	ug/L	NA	NA	<10	NA	NA	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	380	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	- -	ug/L	NA	NA	<30	NA	NA	NA	NA	NA	NA	<30	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	- -	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
2-Chlorophenol	18	ug/L	NA	NA	<10	NA	NA	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	19	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
2-Methylphenol	- -	ug/L	NA	NA	<10	NA	NA	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA
2-Nitroaniline	- -	ug/L	NA	NA	<30	NA	NA	NA	NA	NA	NA	<30	NA	NA	NA	NA	NA	NA
2-Nitrophenol	ID	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
3&4-Methylphenol	- -	ug/L	NA	NA	<20	NA	NA	NA	NA	NA	NA	<20	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	0.3(M)	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
3-Nitroaniline	- -	ug/L	NA	NA	<30	NA	NA	NA	NA	NA	NA	<30	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	- -	ug/L	NA	NA	<20	NA	NA	NA	NA	NA	NA	<20	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	- -	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	7.4	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
4-Chloroaniline	- -	ug/L	NA	NA	<10	NA	NA	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	- -	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
4-Nitroaniline	- -	ug/L	NA	NA	<30	NA	NA	NA	NA	NA	NA	<30	NA	NA	NA	NA	NA	NA
4-Nitrophenol	- -	ug/L	NA	NA	<30	NA	NA	NA	NA	NA	NA	<30	NA	NA	NA	NA	NA	NA
Acenaphthene	38	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
Acenaphthylene	ID	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
Anthracene	ID	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	ID	ug/L	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	ID	ug/L	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	ID	ug/L	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	ID	ug/L	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NA	ug/L	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	- -	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	1(M)	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	25	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
Butyl benzylphthalate	67(X)	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
Chrysene	ID	ug/L	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	ID	ug/L	NA	NA	<2.0	NA	NA	NA	NA	NA	NA	<2.0	NA	NA	NA	NA	NA	NA
Dibenzofuran	4	ug/L	NA	NA	<4.0	NA	NA	NA	NA	NA	NA	<4.0	NA	NA	NA	NA	NA	NA
Diethyl phthalate	110	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NA	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
Di-n-butylphthalate	9.7	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	ID	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
Fluoranthene	1.6	ug/L	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA
Fluorene	12	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.2(M)	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	0.053	ug/L	NA	NA	<10	NA	NA	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	ID	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
Hexachloroethane	6.7(X)	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	ID	ug/L	NA	NA	<2.0	NA	NA	NA	NA	NA	NA	<2.0	NA	NA	NA	NA	NA	NA
Isophorone	1,300(X)	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
Naphthalene	11	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
Nitrobenzene	180(X)	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NA	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
Pentachlorophenol	2.8(G,X)	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
Phenanthrene	2(M)	ug/L	NA	NA	<2.0	NA	NA	NA	NA	NA	NA	<2.0	NA	NA	NA	NA	NA	NA
Phenol	450	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA
Pyrene	ID	ug/L	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA

Table 11. NPMP Sampling Analytical Results
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Outfall: Location ID: Date Collected:	Groundwater Surface Water Interface Criteria	Units Units	007 Outfall 007 11/22/10	007 Outfall 007 02/24/11	009 MH 11-7 04/01/10	009 MH 11-7 09/20/10	009 MH 11-7 10/27/10	009 MH 11-7 11/22/10	009 MH 11-7 12/20/10	009 MH 11-7 01/26/11	009 MH 11-7 02/24/11	010 MH 10-5 03/31/10	010 MH 10-5 09/21/10	010 MH 10-5 10/27/10	010 MH 10-5 11/22/10	010 MH 10-5 12/20/10	010 MH 10-5 01/26/11	010 MH 10-5 02/24/11
PCB																		
Aroclor-1016 (PCB-1016)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221 (PCB-1221)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232 (PCB-1232)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242 (PCB-1242)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248 (PCB-1248)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254 (PCB-1254)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260 (PCB-1260)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.2(M)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic																		
Antimony	130(X)	ug/L	<5.0	<5.0	1.0	<1.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	1.0	<1.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
Arsenic	10	ug/L	<2.0	<2.0	1.0	<2.0	<2.0	<2.0 [<2.0]	<2.0	**19**	3.0	2.0	<2.0	2.0 [<2.0]	3.0	<2.0	2.0	<2.0 [<2.0]
Barium	1,308(G)	ug/L	65	58	120	220	110	250 [210]	220	700	210	96	110	100 [110]	110	110	100	100 [100]
Beryllium	32.3(G)	ug/L	<1.0	<1.0	<1.0	<0.80	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<0.80	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
Cadmium	4.8(G,X)	ug/L	<0.50	<0.50	<0.20	<0.50	<0.50	<0.50 [<0.50]	<0.50	**8.1**	<0.50	<0.20	<0.50	<0.50 [<0.50]	<0.50	<0.50	<0.50	<0.50 [<0.50]
Chromium Total	11	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	**50**	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
Cobalt	100	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	8.0	<5.0	<5.0	<5.0	<5.0 [<5.0]	<5.0	<5.0	<5.0	<5.0 [<5.0]
Copper	21.6(G)	ug/L	<4.0	<4.0	1.0	2.0	<4.0	<4.0 [<4.0]	<4.0	**62**	<4.0	5.0	2.0	<4.0 [<4.0]	<4.0	<4.0	<4.0	<4.0 [<4.0]
Cyanide (total)	5.2	ug/L	<5.0	<5.0	<5.0	<5.0	**10**	<5.0 [<5.0]	<5.0	<5.0	<5.0	**9.0**	**10**	**8.0 [<5.0]**	<5.0	<5.0	<5.0	**10 [8.0]**
Iron	NA	ug/L	NA	NA	500	NA	NA	NA	NA	NA	NA	700	NA	NA	NA	NA	NA	NA
Lead	30.9(G,X)	ug/L	<3.0	<3.0	<1.0	<1.0	<3.0	<3.0 [<3.0]	17	**270**	<3.0	2.0	<1.0	<3.0 [<3.0]	<3.0	3.0	<3.0	<3.0 [<3.0]
Manganese	4,767(G,X)	ug/L	9.0	13	190	210	90	560 [410]	420	2,100	760	61	33	48 [46]	39	70	57	54 [53]
Mercury	1.3	ng/L	**1.9**	**3.1**	**13**	**2.2**	**1.7**	1.3 [1.2]	**6.5**	**2.9**	1.3	**3.5**	1.0	**1.7 [1.5]**	0.99	0.95	0.73	0.90 [0.99]
Nickel	124.3(G)	ug/L	6.0	<5.0	<5.0	<5.0	<5.0	8.0 [9.0]	<5.0	23	<5.0	<5.0	<5.0	<5.0 [<5.0]	7.0	<5.0	<5.0	<5.0 [<5.0]
Selenium	5	ug/L	<5.0	<5.0	1.0	<5.0	**9.0**	<5.0 [<5.0]	<5.0	<5.0	<5.0	<1.0	<5.0	**6.0 [<5.0]**	<5.0	<5.0	<5.0	<5.0 [<5.0]
Silver	0.2(M)	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50 [<0.50]	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50 [<0.50]	<0.50	<0.50	<0.50	<0.50 [<0.50]
Thallium	3.7(X)	ug/L	<1.0	<1.0	<1.0	<0.40	<1.0	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0	<0.40	<1.0 [<1.0]	<1.0	<1.0	<1.0	<1.0 [<1.0]
Vanadium	12	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0 [<4.0]	<4.0	**19**	<4.0	<4.0	<4.0	<4.0 [<4.0]	<4.0	<4.0	<4.0	<4.0 [<4.0]
Zinc	282.7(G)	ug/L	<5.0	<5.0	<5.0	13	14	<5.0 [<5.0]	77	**1,100**	<5.0	43	6.0	9.0 [8.0]	7.0	8.0	<5.0	<5.0 [<5.0]
Inorganic-Dissolved																		
Antimony (Dissolved)	130(X)	ug/L	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0 [<5.0]
Arsenic (Dissolved)	10	ug/L	NA	<2.0	NA	NA	NA	NA	NA	NA	3.0	NA	NA	NA	NA	NA	NA	<2.0 [<2.0]
Barium (Dissolved)	1,308(G)	ug/L	NA	55	NA	NA	NA	NA	NA	NA	220	NA	NA	NA	NA	NA	NA	100 [100]
Beryllium (Dissolved)	32.3(G)	ug/L	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0 [<1.0]
Cadmium (Dissolved)	4.8(G,X)	ug/L	NA	<0.50	NA	NA	NA	NA	NA	NA	<0.50	NA	NA	NA	NA	NA	NA	<0.50 [<0.50]
Chromium Total (Dissolved)	11	ug/L	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0 [<5.0]
Cobalt (Dissolved)	100	ug/L	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0 [<5.0]
Copper (Dissolved)	21.6(G)	ug/L	NA	<4.0	NA	NA	NA	NA	NA	NA	<4.0	NA	NA	NA	NA	NA	NA	<4.0 [<4.0]
Lead (Dissolved)	30.9(G,X)	ug/L	NA	<3.0	NA	NA	NA	NA	NA	NA	<3.0	NA	NA	NA	NA	NA	NA	<3.0 [<3.0]
Manganese (Dissolved)	4,767(G,X)	ug/L	NA	6.0	NA	NA	NA	NA	NA	NA	820	NA	NA	NA	NA	NA	NA	53 [54]
Mercury (Dissolved)	1.3	ng/L	NA	**1.4**	NA	NA	NA	NA	NA	NA	<0.51	NA	NA	NA	NA	NA	NA	0.71 [<0.51]
Nickel (Dissolved)	124.3(G)	ug/L	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0 [<5.0]
Selenium (Dissolved)	5	ug/L	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	NA	<5.0 [<5.0]
Silver (Dissolved)	0.2(M)	ug/L	NA	<0.50	NA	NA	NA	NA	NA	NA	<0.50	NA	NA	NA	NA	NA	NA	<0.50 [<0.50]
Thallium (Dissolved)	3.7(X)	ug/L	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	<1.0 [<1.0]
Vanadium (Dissolved)	12	ug/L	NA	<4.0	NA	NA	NA	NA	NA	NA	<4.0	NA	NA	NA	NA	NA	NA	<4.0 [<4.0]
Zinc (Dissolved)	282.7(G)	ug/L	NA	<5.0	NA	NA	NA	NA	NA	NA	29	NA	NA	NA	NA	NA	NA	<5.0 [<5.0]
Miscellaneous																		
Oil and Grease	- -	ug/L	NA	NA	<1,000	NA	NA	NA	NA	NA	NA	<1,000	NA	NA	NA	NA	NA	NA
Total Suspended Solids (TSS)	- -	ug/L	NA	<1,000	NA	NA	NA	NA	NA	NA	23,000	NA	NA	NA	NA	NA	NA	1,000 [<1,000]

Notes:
Bolded and highlighted detections exceed criteria.
NA - Not Analyzed
ug/L - micrograms per liter

Table 11. NPMP Sampling Analytical Results
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Outfall: / Location ID: / Date Collected:	Groundwater Surface Water Interface Criteria	Units	011 Outfall 011 06/10/10	011 MP011 09/21/10	011 Outfall 011 11/22/10	011 OUTFALL 011 01/26/11	011 OUTFALL 011 02/24/11	013 MH 13-6 03/31/10	013 MH 13-6 09/21/10	013 MH 13-6 10/27/10	013 MH 13-6 11/22/10	013 MH 13-6 12/20/10	013 MH 13-6 01/26/11
VOC													
1,1,1,2-Tetrachloroethane	ID	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	89	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	78(X)	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	330(X)	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	740	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	130	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	- -	ug/L	<5.0	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	NA	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
1,2,3-Trimethylbenzene	- -	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	99(X)	ug/L	<5.0	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	17	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane (DBCP)	- -	ug/L	<5.0	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane (Ethylene Dibromide)	5.7(X)	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	13	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	360(X)	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	230(X)	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	45	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	28	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	17	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
2-Butanone (Methyl Ethyl Ketone)	2,200	ug/L	<30	NA	<30	<30	<25	NA	NA	NA	NA	NA	NA
2-Hexanone	ID	ug/L	<50	NA	<50	<50	<50	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	19	ug/L	<5.0	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
2-Phenylbutane (sec-Butylbenzene)	ID	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ID	ug/L	<50	NA	<50	<50	<50	NA	NA	NA	NA	NA	NA
Acetone	1,700	ug/L	<50	NA	<50	<50	<50	NA	NA	NA	NA	NA	NA
Acrylonitrile	2(M)	ug/L	<2.0	NA	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA
Benzene	200(X)	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Bromobenzene	NA	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Bromodichloromethane	ID	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Bromoform	ID	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Bromomethane (Methyl Bromide)	35	ug/L	<5.0	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
Carbon disulfide	ID	ug/L	<5.0	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
Carbon tetrachloride	45(X)	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Chlorobenzene	25	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Chlorobromomethane	- -	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Chloroethane	1,100(X)	ug/L	<5.0	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
Chloroform (Trichloromethane)	350	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Chloromethane (Methyl Chloride)	ID	ug/L	<5.0	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	620	ug/L	5.0	NA	4.0	3.0	3.0	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	- -	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Cymene (p-Isopropyltoluene)	- -	ug/L	<5.0	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
Dibromochloromethane	ID	ug/L	<5.0	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
Dibromomethane	NA	ug/L	<5.0	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane (CFC-12)	ID	ug/L	<5.0	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
Diethyl ether	ID	ug/L	<10	NA	<10	<10	<10	NA	NA	NA	NA	NA	NA
Ethylbenzene	18	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Hexachloroethane	6.7(X)	ug/L	<5.0	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
Iodomethane	- -	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Isopropylbenzene	28	ug/L	<5.0	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
m&p-Xylene	- -	ug/L	<2.0	NA	<2.0	<2.0	3.0	NA	NA	NA	NA	NA	NA
Methyl Tert Butyl Ether	7,100(X)	ug/L	<5.0	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
Methylene chloride	1,500(X)	ug/L	<5.0	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
Naphthalene	11	ug/L	<5.0	NA	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
n-Butylbenzene	ID	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
n-Propylbenzene	ID	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
o-Xylene	- -	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Styrene	80(X)	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	ID	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Tetrachloroethene	60(X)	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Tetrahydrofuran	11,000(X)	ug/L	<90	NA	<90	<90	<90	NA	NA	NA	NA	NA	NA
Toluene	270	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
trans-1,2-Dichloroethene	1,500(X)	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	- -	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
trans-1,4-Dichloro-2-butene	- -	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Trichloroethene	200(X)	ug/L	2.0	NA	2.0	2.0	1.0	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane (CFC-11)	NA	ug/L	7.0	NA	6.0	6.0	5.0	NA	NA	NA	NA	NA	NA
Vinyl chloride	13(X)	ug/L	<1.0	NA	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA

Table 11. NPMP Sampling Analytical Results
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Outfall: / Location ID: / Date Collected:	Groundwater Surface Water Interface Criteria	Units	011 Outfall 011 06/10/10	011 MP011 09/21/10	011 Outfall 011 11/22/10	011 OUTFALL 011 01/26/11	011 OUTFALL 011 02/24/11	013 MH 13-6 03/31/10	013 MH 13-6 09/21/10	013 MH 13-6 10/27/10	013 MH 13-6 11/22/10	013 MH 13-6 12/20/10	013 MH 13-6 01/26/11
SVOC													
1,2,4-Trichlorobenzene	99(X)	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	13	ug/L	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Diphenylhydrazine	- -	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	28	ug/L	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	17	ug/L	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	- -	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	5	ug/L	<4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	11	ug/L	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	380	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	- -	ug/L	<30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	- -	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	18	ug/L	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	19	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	- -	ug/L	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	- -	ug/L	<30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	ID	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol	- -	ug/L	<20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	0.3(M)	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	- -	ug/L	<30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	- -	ug/L	<20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	- -	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	7.4	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	- -	ug/L	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	- -	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	- -	ug/L	<30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	- -	ug/L	<30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	38	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	ID	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	ID	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	ID	ug/L	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	ID	ug/L	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	ID	ug/L	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	ID	ug/L	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NA	ug/L	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	- -	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	1(M)	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	25	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzylphthalate	67(X)	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	ID	ug/L	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	ID	ug/L	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	4	ug/L	<4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	110	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NA	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butylphthalate	9.7	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	ID	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	1.6	ug/L	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	12	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.2(M)	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	0.053	ug/L	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	ID	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	6.7(X)	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	ID	ug/L	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	1,300(X)	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	11	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	180(X)	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	NA	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	2.8(G,X)	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	2(M)	ug/L	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	450	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	ID	ug/L	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 11. NPMP Sampling Analytical Results
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Outfall: / Location ID: / Date Collected:	Groundwater Surface Water Interface Criteria	Units	011 Outfall 011 06/10/10	011 MP011 09/21/10	011 Outfall 011 11/22/10	011 OUTFALL 011 01/26/11	011 OUTFALL 011 02/24/11	013 MH 13-6 03/31/10	013 MH 13-6 09/21/10	013 MH 13-6 10/27/10	013 MH 13-6 11/22/10	013 MH 13-6 12/20/10	013 MH 13-6 01/26/11
PCB													
Aroclor-1016 (PCB-1016)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221 (PCB-1221)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232 (PCB-1232)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242 (PCB-1242)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248 (PCB-1248)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254 (PCB-1254)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260 (PCB-1260)	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.2(M)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganic													
Antimony	130(X)	ug/L	<5.0	<1.0	<5.0	<5.0	<5.0	<1.0	<1.0	<5.0	<5.0	<5.0	<5.0
Arsenic	10	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	1.0	<2.0	<2.0	2.0	<2.0	9.0
Barium	1,308(G)	ug/L	82	63	87	86	86	84	82	68	76	82	210
Beryllium	32.3(G)	ug/L	<1.0	<0.80	<1.0	<1.0	<1.0	<1.0	<0.80	<1.0	<1.0	<1.0	<1.0
Cadmium	4.8(G,X)	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50
Chromium Total	11	ug/L	<5.0	<5.0	10	<5.0	<5.0	<5.0	<5.0	<5.0	10	<5.0	7.0
Cobalt	100	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Copper	21.6(G)	ug/L	<4.0	2.0	<4.0	<4.0	<4.0	4.0	3.0	<4.0	**31**	<4.0	5.0
Cyanide (total)	5.2	ug/L	<5.0	NA	<5.0	<5.0	<5.0	**28**	<5.0	<5.0	<5.0	<5.0	<5.0
Iron	NA	ug/L	150	NA	NA	NA	NA	300	NA	NA	NA	NA	NA
Lead	30.9(G,X)	ug/L	<3.0	<1.0	<3.0	<3.0	7.0	<1.0	<1.0	<3.0	12	<3.0	7.0
Manganese	4,767(G,X)	ug/L	66	24	62	58	62	60	26	28	70	46	1,900
Mercury	1.3	ng/L	0.705	NA	<0.50	<0.51	0.53	**2.0**	**2.5**	**1.9**	**42**	0.55	<0.51
Nickel	124.3(G)	ug/L	<5.0	<5.0	9.0	<5.0	<5.0	<5.0	<5.0	<5.0	13	<5.0	7.0
Selenium	5	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<1.0	<5.0	**6.0**	<5.0	<5.0	<5.0
Silver	0.2(M)	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	**0.80**	<0.50	<0.50
Thallium	3.7(X)	ug/L	<1.0	<0.40	<1.0	<1.0	<1.0	<1.0	<0.40	<1.0	<1.0	<1.0	<1.0
Vanadium	12	ug/L	<4.0	<4.0	5.0	<4.0	<4.0	<4.0	<4.0	<4.0	7.0	<4.0	<4.0
Zinc	282.7(G)	ug/L	12	<5.0	<5.0	<5.0	<5.0	9.0	7.0	30	45	<5.0	56
Inorganic-Dissolved													
Antimony (Dissolved)	130(X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic (Dissolved)	10	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium (Dissolved)	1,308(G)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium (Dissolved)	32.3(G)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium (Dissolved)	4.8(G,X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium Total (Dissolved)	11	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt (Dissolved)	100	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper (Dissolved)	21.6(G)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead (Dissolved)	30.9(G,X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese (Dissolved)	4,767(G,X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury (Dissolved)	1.3	ng/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel (Dissolved)	124.3(G)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium (Dissolved)	5	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver (Dissolved)	0.2(M)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium (Dissolved)	3.7(X)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium (Dissolved)	12	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc (Dissolved)	282.7(G)	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous													
Oil and Grease	- -	ug/L	<1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Suspended Solids (TSS)	- -	ug/L	NA	NA	NA	NA	<1,000	NA	NA	NA	NA	NA	NA

Notes:
Bolded and highlighted detections exceed criteria.
NA - Not Analyzed
ug/L - micrograms per liter

Table 12: AOI 09 A Soil Investigation - Benz(a)pyrene Delineation
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: Sample Depth(ft): Boring Location Date Collected:	Units	RDC	RDWP	RPSIC	RSVIA	RVSIC2	RVSIC5	RVSICI	CSAT	GCCP	GSIP	NDC	NPSIC	NSVIA	NVSIC	SB-09-01 0 - 2 On-Site 08/16/10
SVOC																
1,2,4-Trichlorobenzene	mg/kg	990(DD)	4.2	25,000,000	1,100(C)	28,000	28,000	28,000	1,100	1,100(C)	5.9, (X)	1,100(C,DD)	11,000,000	1,100(C)	34,000	<0.30
1,2-Dichlorobenzene	mg/kg	210(C)	14	100,000,000	210(C)	52,000	39,000	39,000	210	210(C)	0.28	210(C)	44,000,000	210(C)	46,000	<0.30
1,2-Diphenylhydrazine	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30
1,3-Dichlorobenzene	mg/kg	170(C)	0.17	200,000	26	110	79	79	170	51	0.68	170(C)	88,000	48	94	<0.30
1,4-Dichlorobenzene	mg/kg	400	1.7	450,000	19	110	77	77	NA	140	0.36	1,900	570,000	100	260	<0.30
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30
2,4,5-Trichlorophenol	mg/kg	23,000	39	23,000,000	NLV	NLV	NLV	NLV	NA	9,100	NA	73,000	10,000,000	NLV	NLV	<0.30
2,4,6-Trichlorophenol	mg/kg	710	2.4	1,000,000	NLV	NLV	NLV	NLV	NA	200	0.33(M);	3,300	1,300,000	NLV	NLV	<0.30
2,4-Dichlorophenol	mg/kg	660(DD)	1.5	5,100,000	NLV	NLV	NLV	NLV	1,800	960	0.33(M);	1,800(C,DD)	2,300,000	NLV	NLV	<0.30
2,4-Dimethylphenol	mg/kg	11,000	7.4	4,700,000	NLV	NLV	NLV	NLV	NA	10,000	7.6	36,000	2,100,000	NLV	NLV	<0.30
2,4-Dinitrophenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.80
2,4-Dinitrotoluene	mg/kg	48	0.43	16,000	NLV	NLV	NLV	NLV	NA	170	NA	220	20,000	NLV	NLV	<0.30
2,6-Dinitrotoluene	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30
2-Chloronaphthalene	mg/kg	56,000	620	ID	ID	ID	ID	ID	NA	2,300	NA	180,000	ID	ID	ID	<0.30
2-Chlorophenol	mg/kg	1,400	0.9	1,200,000	430	960	960	960	19,000	1,900	0.36	4,500	530,000	800	1,100	<0.30
2-Methylnaphthalene	mg/kg	8,100	57	670,000	2,700	1,500	1,500	1,500	NA	5,500	4.2	26,000	290,000	4,900	1,800	<0.30
2-Methylphenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30
2-Nitroaniline	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.80
2-Nitrophenol	mg/kg	630	0.4	ID	NLV	NLV	NLV	NLV	NA	1,600	ID	2,000	ID	NLV	NLV	<0.30
3&4-Methylphenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30
3,3'-Dichlorobenzidine	mg/kg	6.6	2, (M);	6,500	NLV	NLV	NLV	NLV	NA	4.6	2, (M);	30	8,200	NLV	NLV	<2.0
3-Nitroaniline	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.80
4,6-Dinitro-2-methylphenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.80
4-Bromophenyl phenyl ether	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30
4-Chloro-3-methylphenol	mg/kg	4,500	5.8	ID	NLV	NLV	NLV	NLV	NA	3,000	0.28	15,000	ID	NLV	NLV	<0.30
4-Chloroaniline	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30
4-Chlorophenyl phenyl ether	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30
4-Nitroaniline	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.80
4-Nitrophenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.80
Acenaphthene	mg/kg	41,000	300	14,000,000	190,000	81,000	81,000	81,000	NA	970	8.7	130,000	6,200,000	350,000	97,000	<0.30
Acenaphthylene	mg/kg	1,600	5.9	2,300,000	1,600	2,200	2,200	2,200	NA	440	ID	5,200	1,000,000	3,000	2,700	<0.30
Anthracene	mg/kg	230,000	41	67,000,000	1.00E+06(D)	1,400,000	1,400,000	1,400,000	NA	41	ID	730,000	29,000,000	1.00E+06(D)	1,600,000	<0.30
Benzo(a)anthracene	mg/kg	20	NLL	ID	NLV	NLV	NLV	NLV	NA	NLL	NLL	80	ID	NLV	NLV	0.40
Benzo(a)pyrene	mg/kg	2	NLL	1,500	NLV	NLV	NLV	NLV	NA	NLL	NLL	8	1,900	NLV	NLV	0.40
Benzo(b)fluoranthene	mg/kg	20	NLL	ID	ID	ID	ID	ID	NA	NLL	NLL	80	ID	ID	ID	0.40
Benzo(g,h,i)perylene	mg/kg	2,500	NLL	800,000	NLV	NLV	NLV	NLV	NA	NLL	NLL	7,000	350,000	NLV	NLV	<0.30
Benzo(k)fluoranthene	mg/kg	200	NLL	ID	NLV	NLV	NLV	NLV	NA	NLL	NLL	800	ID	NLV	NLV	0.40
bis(2-Chloroethoxy)methane	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30
bis(2-Chloroethyl)ether	mg/kg	13	0.1	9,400	8.3	3.8	3.8	3.8	2,200	110	0.1(M);	58	12,000	44	13	<0.30
bis(2-Ethylhexyl)phthalate	mg/kg	2,800	NLL	700,000	NLV	NLV	NLV	NLV	10,000	NLL	NLL	10,000(C)	890,000	NLV	NLV	<0.30
Butyl benzylphthalate	mg/kg	310(C)	310(C)	47,000,000	NLV	NLV	NLV	NLV	310	310(C)	120(X)	310(C)	21,000,000	NLV	NLV	<0.30
Chrysene	mg/kg	2,000	NLL	ID	ID	ID	ID	ID	NA	NLL	NLL	8,000	ID	ID	ID	0.40
Dibenz(a,h)anthracene	mg/kg	2	NLL	ID	NLV	NLV	NLV	NLV	NA	NLL	NLL	8	ID	NLV	NLV	<0.30
Dibenzofuran	mg/kg	ID	ID	6,700	2,000	130	130	130	NA	ID	1.7	ID	2,900	3,600	160	<0.30
Diethyl phthalate	mg/kg	740(C)	110	3,300,000	NLV	NLV	NLV	NLV	740	740(C)	2.2	740(C)	1,500,000	NLV	NLV	<0.30
Dimethyl phthalate	mg/kg	790(C)	790(C)	3,300,000	NLV	NLV	NLV	NLV	790	790(C)	NA	790(C)	1,500,000	NLV	NLV	<0.30
Di-n-butylphthalate	mg/kg	760(C)	760(C)	3,300,000	NLV	NLV	NLV	NLV	760	760(C)	11	760(C)	1,500,000	NLV	NLV	<0.30
Di-n-octyl phthalate	mg/kg	6,900	100,000	31,000,000	NLV	NLV	NLV	NLV	140,000	1.40E+05(C)	ID	20,000	14,000,000	NLV	NLV	<0.30
Fluoranthene	mg/kg	46,000	730	9,300,000	1.00E+06(D)	740,000	740,000	740,000	NA	730	5.5	130,000	4,100,000	1.00E+06(D)	890,000	0.80
Fluorene	mg/kg	27,000	390	9,300,000	580,000	130,000	130,000	130,000	NA	890	5.3	87,000	4,100,000	1.00E+06(D)	150,000	<0.30
Hexachlorobenzene	mg/kg	8.9	1.8	6,800	41	17	17	17	NA	8.2	0.35	37	8,500	220	56	<0.30
Hexachlorobutadiene	mg/kg	100	26	140,000	130	130	130	130	350	350(C)	0.091	350(C)	180,000	350(C)	460	<0.30
Hexachlorocyclopentadiene	mg/kg	720(C)	320	13,000	30	50	50	50	720	720(C)	ID	720(C)	5,900	56	60	<0.30
Hexachloroethane	mg/kg	230	0.43	230,000	40	930	930	550	NA	110	1.8, (X)	730	100,000	79	660	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	20	NLL	ID	NLV	NLV	NLV	NLV	NA	NLL	NLL	80	ID	NLV	NLV	<0.30
Isophorone	mg/kg	2,400(C)	15	12,000,000	NLV	NLV	NLV	NLV	2,400	2,400(C)	26, (X)	2,400(C)	8,200,000	NLV	NLV	<0.30
Naphthalene	mg/kg	16,000	35	200,000	250	300	300	300	NA	2,100	0.73	52,000	88,000	470	350	<0.30
Nitrobenzene	mg/kg	100	0.33(M);	47,000	91	54	54	54	490	220	3.6, (X)	340	21,000	170	64	<0.30
N-Nitrosodi-n-propylamine	mg/kg	1.2	0.33(M);	1,600	NLV	NLV	NLV	NLV	1,500	7.2	NA	5.4	2,000	NLV	NLV	<0.30
N-Nitrosodiphenylamine	mg/kg	1,700	5.4	2,200,000	NLV	NLV	NLV	NLV	NA	700	NA	7,800	2,800,000	NLV	NLV	<0.30
Pentachlorophenol	mg/kg	90	0.022	100,000	NLV	NLV	NLV	NLV	NA	4.3	27, (X)	320	130,000	NLV	NLV	<0.30
Phenanthrene	mg/kg	1,600	56	6,700	2,800	160	160	160	NA	1,100	2.1	5,200	2,900	5,100	190	0.50
Phenol	mg/kg	12,000(C,DD)	88	40,000,000	NLV	NLV	NLV	NLV	12,000	12,000(C)	9	12,000(C,DD)	18,000,000	NLV	NLV	<0.30
Pyrene	mg/kg	29,000	480	6,700,000	1.00E+06(D)	650,000	650,000	650,000	NA	480	ID	84,000	2,900,000	1.00E+06(D)	780,000	0.70

Table 12: AOI 09 A Soil Investigation - Benz(a)pyrene Delineation
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: Sample Depth(ft): Boring Location Date Collected:	Units	RDC	RDWP	RPSIC	RSVIA	RVSIC2	RVSIC5	RVSICI	CSAT	GCCP	GSIP	NDC	NPSIC	NSVIA	NVSIC	SB-09-02 0 - 2 CSX Property 08/16/10
SVOC																
1,2,4-Trichlorobenzene	mg/kg	990(DD)	4.2	25,000,000	1,100(C)	28,000	28,000	28,000	1,100	1,100(C)	5.9, (X)	1,100(C,DD)	11,000,000	1,100(C)	34,000	<5.0 [<2.0]
1,2-Dichlorobenzene	mg/kg	210(C)	14	100,000,000	210(C)	52,000	39,000	39,000	210	210(C)	0.28	210(C)	44,000,000	210(C)	46,000	<5.0 [<2.0]
1,2-Diphenylhydrazine	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<5.0 [<2.0]
1,3-Dichlorobenzene	mg/kg	170(C)	0.17	200,000	26	110	79	79	170	51	0.68	170(C)	88,000	48	94	<5.0 [<2.0]
1,4-Dichlorobenzene	mg/kg	400	1.7	450,000	19	110	77	77	NA	140	0.36	1,900	570,000	100	260	<5.0 [<2.0]
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<5.0 [<2.0]
2,4,5-Trichlorophenol	mg/kg	23,000	39	23,000,000	NLV	NLV	NLV	NLV	NA	9,100	NA	73,000	10,000,000	NLV	NLV	<5.0 [<2.0]
2,4,6-Trichlorophenol	mg/kg	710	2.4	1,000,000	NLV	NLV	NLV	NLV	NA	200	0.33(M);	3,300	1,300,000	NLV	NLV	<5.0 [<2.0]
2,4-Dichlorophenol	mg/kg	660(DD)	1.5	5,100,000	NLV	NLV	NLV	NLV	1,800	960	0.33(M);	1,800(C,DD)	2,300,000	NLV	NLV	<5.0 [<2.0]
2,4-Dimethylphenol	mg/kg	11,000	7.4	4,700,000	NLV	NLV	NLV	NLV	NA	10,000	7.6	36,000	2,100,000	NLV	NLV	<5.0 [<2.0]
2,4-Dinitrophenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<5.0 [<2.0]
2,4-Dinitrotoluene	mg/kg	48	0.43	16,000	NLV	NLV	NLV	NLV	NA	170	NA	220	20,000	NLV	NLV	<5.0 [<2.0]
2,6-Dinitrotoluene	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<5.0 [75]
2-Chloronaphthalene	mg/kg	56,000	620	ID	ID	ID	ID	ID	NA	2,300	NA	180,000	ID	ID	ID	<5.0 [<2.0]
2-Chlorophenol	mg/kg	1,400	0.9	1,200,000	430	960	960	960	19,000	1,900	0.36	4,500	530,000	800	1,100	<5.0 [<2.0]
2-Methylnaphthalene	mg/kg	8,100	57	670,000	2,700	1,500	1,500	1,500	NA	5,500	4.2	26,000	290,000	4,900	1,800	**12 (GSIP) [3.0]**
2-Methylphenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<5.0 [<2.0]
2-Nitroaniline	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<5.0 [<2.0]
2-Nitrophenol	mg/kg	630	0.4	ID	NLV	NLV	NLV	NLV	NA	1,600	ID	2,000	ID	NLV	NLV	<5.0 [<2.0]
3&4-Methylphenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<5.0 [<2.0]
3,3'-Dichlorobenzidine	mg/kg	6.6	2, (M);	6,500	NLV	NLV	NLV	NLV	NA	4.6	2, (M);	30	8,200	NLV	NLV	<5.0 [<2.0]
3-Nitroaniline	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<5.0 [<2.0]
4,6-Dinitro-2-methylphenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<5.0 [<2.0]
4-Bromophenyl phenyl ether	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<5.0 [<2.0]
4-Chloro-3-methylphenol	mg/kg	4,500	5.8	ID	NLV	NLV	NLV	NLV	NA	3,000	0.28	15,000	ID	NLV	NLV	<5.0 [<2.0]
4-Chloroaniline	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<5.0 [<2.0]
4-Chlorophenyl phenyl ether	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<5.0 [<2.0]
4-Nitroaniline	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<5.0 [<2.0]
4-Nitrophenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<5.0 [<2.0]
Acenaphthene	mg/kg	41,000	300	14,000,000	190,000	81,000	81,000	81,000	NA	970	8.7	130,000	6,200,000	350,000	97,000	**68 (GSIP) [16 (GSIP)]**
Acenaphthylene	mg/kg	1,600	5.9	2,300,000	1,600	2,200	2,200	2,200	NA	440	ID	5,200	1,000,000	3,000	2,700	<5.0 [<2.0]
Anthracene	mg/kg	230,000	41	67,000,000	1.00E+06(D)	1,400,000	1,400,000	1,400,000	NA	41	ID	730,000	29,000,000	1.00E+06(D)	1,600,000	**170 (GCCP,RDWP) [39]**
Benzo(a)anthracene	mg/kg	20	NLL	ID	NLV	NLV	NLV	NLV	NA	NLL	NLL	80	ID	NLV	NLV	**200 (NDC,RDC) [56 (RDC)]**
Benzo(a)pyrene	mg/kg	2	NLL	1,500	NLV	NLV	NLV	NLV	NA	NLL	NLL	8	1,900	NLV	NLV	**200 (NDC,RDC) [51 (NDC,RDC)]**
Benzo(b)fluoranthene	mg/kg	20	NLL	ID	ID	ID	ID	ID	NA	NLL	NLL	80	ID	ID	ID	**200 (NDC,RDC) [44 (RDC)]**
Benzo(g,h,i)perylene	mg/kg	2,500	NLL	800,000	NLV	NLV	NLV	NLV	NA	NLL	NLL	7,000	350,000	NLV	NLV	63 [21]
Benzo(k)fluoranthene	mg/kg	200	NLL	ID	NLV	NLV	NLV	NLV	NA	NLL	NLL	800	ID	NLV	NLV	150 [41]
bis(2-Chloroethoxy)methane	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<5.0 [<2.0]
bis(2-Chloroethyl)ether	mg/kg	13	0.1	9,400	8.3	3.8	3.8	3.8	2,200	110	0.1(M);	58	12,000	44	13	<5.0 [<2.0]
bis(2-Ethylhexyl)phthalate	mg/kg	2,800	NLL	700,000	NLV	NLV	NLV	NLV	10,000	NLL	NLL	10,000(C)	890,000	NLV	NLV	<5.0 [<2.0]
Butyl benzylphthalate	mg/kg	310(C)	310(C)	47,000,000	NLV	NLV	NLV	NLV	310	310(C)	120(X)	310(C)	21,000,000	NLV	NLV	<5.0 [<2.0]
Chrysene	mg/kg	2,000	NLL	ID	ID	ID	ID	ID	NA	NLL	NLL	8,000	ID	ID	ID	180 [51]
Dibenz(a,h)anthracene	mg/kg	2	NLL	ID	NLV	NLV	NLV	NLV	NA	NLL	NLL	8	ID	NLV	NLV	<5.0 [<2.0]
Dibenzofuran	mg/kg	ID	ID	6,700	2,000	130	130	130	NA	ID	1.7	ID	2,900	3,600	160	**48 (GSIP) [9.0 (GSIP)]**
Diethyl phthalate	mg/kg	740(C)	110	3,300,000	NLV	NLV	NLV	NLV	740	740(C)	2.2	740(C)	1,500,000	NLV	NLV	<5.0 [<2.0]
Dimethyl phthalate	mg/kg	790(C)	790(C)	3,300,000	NLV	NLV	NLV	NLV	790	790(C)	NA	790(C)	1,500,000	NLV	NLV	<5.0 [<2.0]
Di-n-butylphthalate	mg/kg	760(C)	760(C)	3,300,000	NLV	NLV	NLV	NLV	760	760(C)	11	760(C)	1,500,000	NLV	NLV	<5.0 [<2.0]
Di-n-octyl phthalate	mg/kg	6,900	100,000	31,000,000	NLV	NLV	NLV	NLV	140,000	1.40E+05(C)	ID	20,000	14,000,000	NLV	NLV	<5.0 [<2.0]
Fluoranthene	mg/kg	46,000	730	9,300,000	1.00E+06(D)	740,000	740,000	740,000	NA	730	5.5	130,000	4,100,000	1.00E+06(D)	890,000	**540 (GSIP) [150 (GSIP)]**
Fluorene	mg/kg	27,000	390	9,300,000	580,000	130,000	130,000	130,000	NA	890	5.3	87,000	4,100,000	1.00E+06(D)	150,000	**82 (GSIP) [18 (GSIP)]**
Hexachlorobenzene	mg/kg	8.9	1.8	6,800	41	17	17	17	NA	8.2	0.35	37	8,500	220	56	<5.0 [<2.0]
Hexachlorobutadiene	mg/kg	100	26	140,000	130	130	130	130	350	350(C)	0.091	350(C)	180,000	350(C)	460	<5.0 [<2.0]
Hexachlorocyclopentadiene	mg/kg	720(C)	320	13,000	30	50	50	50	720	720(C)	ID	720(C)	5,900	56	60	<5.0 [<2.0]
Hexachloroethane	mg/kg	230	0.43	230,000	40	930	930	550	NA	110	1.8, (X)	730	100,000	79	660	<5.0 [<2.0]
Indeno(1,2,3-cd)pyrene	mg/kg	20	NLL	ID	NLV	NLV	NLV	NLV	NA	NLL	NLL	80	ID	NLV	NLV	**61 (RDC) [20]**
Isophorone	mg/kg	2,400(C)	15	12,000,000	NLV	NLV	NLV	NLV	2,400	2,400(C)	26, (X)	2,400(C)	8,200,000	NLV	NLV	<5.0 [<2.0]
Naphthalene	mg/kg	16,000	35	200,000	250	300	300	300	NA	2,100	0.73	52,000	88,000	470	350	**30 (GSIP) [6.0 (GSIP)]**
Nitrobenzene	mg/kg	100	0.33(M);	47,000	91	54	54	54	490	220	3.6, (X)	340	21,000	170	64	<5.0 [<2.0]
N-Nitrosodi-n-propylamine	mg/kg	1.2	0.33(M);	1,600	NLV	NLV	NLV	NLV	1,500	7.2	NA	5.4	2,000	NLV	NLV	<5.0 [<2.0]
N-Nitrosodiphenylamine	mg/kg	1,700	5.4	2,200,000	NLV	NLV	NLV	NLV	NA	700	NA	7,800	2,800,000	NLV	NLV	<5.0 [<2.0]
Pentachlorophenol	mg/kg	90	0.022	100,000	NLV	NLV	NLV	NLV	NA	4.3	27, (X)	320	130,000	NLV	NLV	<5.0 [<2.0]
Phenanthrene	mg/kg	1,600	56	6,700	2,800	160	160	160	NA	1,100	2.1	5,200	2,900	5,100	190	**550 (GSIP,NVSICI,RDWP,RVSIC2,RVSIC5,RVSICI) [130 (GSIP,RDWP)]**
Phenol	mg/kg	12,000(C,DD)	88	40,000,000	NLV	NLV	NLV	NLV	12,000	12,000(C)	9	12,000(C,DD)	18,000,000	NLV	NLV	<5.0 [<2.0]
Pyrene	mg/kg	29,000	480	6,700,000	1.00E+06(D)	650,000	650,000	650,000	NA	480	ID	84,000	2,900,000	1.00E+06(D)	780,000	**530 (GCCP,RDWP) [130]**

Table 12: AOI 09 A Soil Investigation - Benz(a)pyrene Delineation
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: Sample Depth(ft): Boring Location Date Collected:	Units	RDC	RDWP	RPSIC	RSVIA	RVSIC2	RVSIC5	RVSICI	CSAT	GCCP	GSIP	NDC	NPSIC	NSVIA	NVSIC	SB-09-02 2 - 4 CSX Property 08/16/10	SB-09-03 0 - 2 CSX Property 08/16/10	SB-09-04 0 - 2 CSX Property 08/16/10	SB-09-33 0 - 2 CSX Property 08/19/10	SB-09-34 0 - 2 CSX Property 08/19/10	SB-09-35 0 - 2 CSX Property 08/19/10	SB-09-36 1 - 2 CSX Property 08/19/10
SVOC																						
1,2,4-Trichlorobenzene	mg/kg	990(DD)	4.2	25,000,000	1,100(C)	28,000	28,000	28,000	1,100	1,100(C)	5.9, (X)	1,100(C,DD)	11,000,000	1,100(C)	34,000	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
1,2-Dichlorobenzene	mg/kg	210(C)	14	100,000,000	210(C)	52,000	39,000	39,000	210	210(C)	0.28	210(C)	44,000,000	210(C)	46,000	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
1,2-Diphenylhydrazine	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
1,3-Dichlorobenzene	mg/kg	170(C)	0.17	200,000	26	110	79	79	170	51	0.68	170(C)	88,000	48	94	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
1,4-Dichlorobenzene	mg/kg	400	1.7	450,000	19	110	77	77	NA	140	0.36	1,900	570,000	100	260	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
2,4,5-Trichlorophenol	mg/kg	23,000	39	23,000,000	NLV	NLV	NLV	NLV	NA	9,100	NA	73,000	10,000,000	NLV	NLV	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
2,4,6-Trichlorophenol	mg/kg	710	2.4	1,000,000	NLV	NLV	NLV	NLV	NA	200	0.33(M);	3,300	1,300,000	NLV	NLV	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
2,4-Dichlorophenol	mg/kg	660(DD)	1.5	5,100,000	NLV	NLV	NLV	NLV	1,800	960	0.33(M);	1,800(C,DD)	2,300,000	NLV	NLV	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
2,4-Dimethylphenol	mg/kg	11,000	7.4	4,700,000	NLV	NLV	NLV	NLV	NA	10,000	7.6	36,000	2,100,000	NLV	NLV	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
2,4-Dinitrophenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80
2,4-Dinitrotoluene	mg/kg	48	0.43	16,000	NLV	NLV	NLV	NLV	NA	170	NA	220	20,000	NLV	NLV	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
2,6-Dinitrotoluene	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
2-Chloronaphthalene	mg/kg	56,000	620	ID	ID	ID	ID	ID	NA	2,300	NA	180,000	ID	ID	ID	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
2-Chlorophenol	mg/kg	1,400	0.9	1,200,000	430	960	960	960	19,000	1,900	0.36	4,500	530,000	800	1,100	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
2-Methylnaphthalene	mg/kg	8,100	57	670,000	2,700	1,500	1,500	1,500	NA	5,500	4.2	26,000	290,000	4,900	1,800	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
2-Methylphenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
2-Nitroaniline	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80
2-Nitrophenol	mg/kg	630	0.4	ID	NLV	NLV	NLV	NLV	NA	1,600	ID	2,000	ID	NLV	NLV	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
3&4-Methylphenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
3,3'-Dichlorobenzidine	mg/kg	6.6	2, (M);	6,500	NLV	NLV	NLV	NLV	NA	4.6	2, (M);	30	8,200	NLV	NLV	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
3-Nitroaniline	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80
4,6-Dinitro-2-methylphenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80
4-Bromophenyl phenyl ether	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
4-Chloro-3-methylphenol	mg/kg	4,500	5.8	ID	NLV	NLV	NLV	NLV	NA	3,000	0.28	15,000	ID	NLV	NLV	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
4-Chloroaniline	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
4-Chlorophenyl phenyl ether	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
4-Nitroaniline	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80
4-Nitrophenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80	<0.80
Acenaphthene	mg/kg	41,000	300	14,000,000	190,000	81,000	81,000	81,000	NA	970	8.7	130,000	6,200,000	350,000	97,000	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.80
Acenaphthylene	mg/kg	1,600	5.9	2,300,000	1,600	2,200	2,200	2,200	NA	440	ID	5,200	1,000,000	3,000	2,700	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Anthracene	mg/kg	230,000	41	67,000,000	1.00E+06(D)	1,400,000	1,400,000	1,400,000	NA	41	ID	730,000	29,000,000	1.00E+06(D)	1,600,000	0.60	<0.30	<0.30	<0.30	<0.30	<0.30	2.9
Benzo(a)anthracene	mg/kg	20	NLL	ID	NLV	NLV	NLV	NLV	NA	NLL	NLL	80	ID	NLV	NLV	1.0	<0.30	0.60	1.5	0.40	0.80	7.4
Benzo(a)pyrene	mg/kg	2	NLL	1,500	NLV	NLV	NLV	NLV	NA	NLL	NLL	8	1,900	NLV	NLV	0.90	<0.30	0.70	1.8	0.50	0.90	**8.6 (NDC,RDC)**
Benzo(b)fluoranthene	mg/kg	20	NLL	ID	ID	ID	ID	ID	NA	NLL	NLL	80	ID	ID	ID	0.80	<0.30	0.70	1.8	0.40	0.80	8.6
Benzo(g,h,i)perylene	mg/kg	2,500	NLL	800,000	NLV	NLV	NLV	NLV	NA	NLL	NLL	7,000	350,000	NLV	NLV	0.50	<0.30	<0.30	0.80	0.30	0.40	3.2
Benzo(k)fluoranthene	mg/kg	200	NLL	ID	NLV	NLV	NLV	NLV	NA	NLL	NLL	800	ID	NLV	NLV	0.60	<0.30	0.60	1.5	0.40	0.60	6.8
bis(2-Chloroethoxy)methane	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
bis(2-Chloroethyl)ether	mg/kg	13	0.1	9,400	8.3	3.8	3.8	3.8	2,200	110	0.1(M);	58	12,000	44	13	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
bis(2-Ethylhexyl)phthalate	mg/kg	2,800	NLL	700,000	NLV	NLV	NLV	NLV	10,000	NLL	NLL	10,000(C)	890,000	NLV	NLV	<0.30	<0.30	0.40	1.1	0.40	0.30	0.80
Butyl benzylphthalate	mg/kg	310(C)	310(C)	47,000,000	NLV	NLV	NLV	NLV	310	310(C)	120(X)	310(C)	21,000,000	NLV	NLV	<0.30	<0.30	<0.30	0.50	<0.30	<0.30	<0.30
Chrysene	mg/kg	2,000	NLL	ID	ID	ID	ID	ID	NA	NLL	NLL	8,000	ID	ID	ID	0.90	<0.30	0.60	1.7	0.40	0.90	7.0
Dibenz(a,h)anthracene	mg/kg	2	NLL	ID	NLV	NLV	NLV	NLV	NA	NLL	NLL	8	ID	NLV	NLV	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Dibenzofuran	mg/kg	ID	ID	6,700	2,000	130	130	130	NA	ID	1.7	ID	2,900	3,600	160	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.40
Diethyl phthalate	mg/kg	740(C)	110	3,300,000	NLV	NLV	NLV	NLV	740	740(C)	2.2	740(C)	1,500,000	NLV	NLV	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Dimethyl phthalate	mg/kg	790(C)	790(C)	3,300,000	NLV	NLV	NLV	NLV	790	790(C)	NA	790(C)	1,500,000	NLV	NLV	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Di-n-butylphthalate	mg/kg	760(C)	760(C)	3,300,000	NLV	NLV	NLV	NLV	760	760(C)	11	760(C)	1,500,000	NLV	NLV	<0.30	<0.30	<0.30	1.5	0.40	<0.30	<0.30
Di-n-octyl phthalate	mg/kg	6,900	100,000	31,000,000	NLV	NLV	NLV	NLV	140,000	1.40E+05(C)	ID	20,000	14,000,000	NLV	NLV	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Fluoranthene	mg/kg	46,000	730	9,300,000	1.00E+06(D)	740,000	740,000	740,000	NA	730	5.5	130,000	4,100,000	1.00E+06(D)	890,000	2.7	0.50	1.3	3.4	0.80	1.4	**18 (GSIP)**
Fluorene	mg/kg	27,000	390	9,300,000	580,000	130,000	130,000	130,000	NA	890	5.3	87,000	4,100,000	1.00E+06(D)	150,000	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.80
Hexachlorobenzene	mg/kg	8.9	1.8	6,800	41	17	17	17	NA	8.2	0.35	37	8,500	220	56	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Hexachlorobutadiene	mg/kg	100	26	140,000	130	130	130	130	350	350(C)	0.091	350(C)	180,000	350(C)	460	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Hexachlorocyclopentadiene	mg/kg	720(C)	320	13,000	30	50	50	50	720	720(C)	ID	720(C)	5,900	56	60	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Hexachloroethane	mg/kg	230	0.43	230,000	40	930	930	550	NA	110	1.8, (X)	730	100,000	79	660	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	20	NLL	ID	NLV	NLV	NLV	NLV	NA	NLL	NLL	80	ID	NLV	NLV	0.50	<0.30	<0.30	0.70	<0.30	0.40	3.0
Isophorone	mg/kg	2,400(C)	15	12,000,000	NLV	NLV	NLV	NLV	2,400	2,400(C)	26, (X)	2,400(C)	8,200,000	NLV	NLV	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Naphthalene	mg/kg	16,000	35	200,000	250	300	300	300	NA	2,100	0.73	52,000	88,000	470	350	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.40
Nitrobenzene	mg/kg	100	0.33(M);	47,000	91	54	54	54	490	220	3.6, (X)	340	21,000	170	64	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
N-Nitrosodi-n-propylamine	mg/kg	1.2	0.33(M);	1,600	NLV	NLV	NLV	NLV	1,500	7.2	NA	5.4	2,000	NLV	NLV	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
N-Nitrosodiphenylamine	mg/kg	1,700	5.4	2,200,000	NLV	NLV	NLV	NLV	NA	700	NA	7,800	2,800,000	NLV	NLV	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Pentachlorophenol	mg/kg	90	0.022	100,000	NLV	NLV	NLV	NLV	NA	4.3	27, (X)	320	130,000	NLV	NLV	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Phenanthrene	mg/kg	1,600	56	6,700	2,800	160	160	160	NA	1,100	2.1	5,200	2,900	5,100	190	2.1	<0.30	0.60	1.5	0.40	0.70	**11 (GSIP)**
Phenol	mg/kg	12,000(C,DD)	88	40,000,000	NLV	NLV	NLV	NLV	12,000	12,000(C)	9	12,000(C,DD)	18,000,000	NLV	NLV	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Pyrene	mg/kg	29,000	480	6,700,000	1.00E+06(D)	650,000	650,000	650,000	NA	480	ID	84,000	2,900,000	1.00E+06(D)	780,000	2.2	0.50	1.4	3.0	0.70	1.5	17

Table 12: AOI 09 A Soil Investigation - Benz(a)pyrene Delineation
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: Sample Depth(ft): Boring Location Date Collected:	Units	RDC	RDWP	RPSIC	RSVIA	RVSIC2	RVSIC5	RVSICI	CSAT	GCCP	GSIP	NDC	NPSIC	NSVIA	NVSIC	SB-09-36 2 - 4 CSX Property 08/19/10
SVOC																
1,2,4-Trichlorobenzene	mg/kg	990(DD)	4.2	25,000,000	1,100(C)	28,000	28,000	28,000	1,100	1,100(C)	5.9, (X)	1,100(C,DD)	11,000,000	1,100(C)	34,000	<0.30
1,2-Dichlorobenzene	mg/kg	210(C)	14	100,000,000	210(C)	52,000	39,000	39,000	210	210(C)	0.28	210(C)	44,000,000	210(C)	46,000	<0.30
1,2-Diphenylhydrazine	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30
1,3-Dichlorobenzene	mg/kg	170(C)	0.17	200,000	26	110	79	79	170	51	0.68	170(C)	88,000	48	94	<0.30
1,4-Dichlorobenzene	mg/kg	400	1.7	450,000	19	110	77	77	NA	140	0.36	1,900	570,000	100	260	<0.30
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30
2,4,5-Trichlorophenol	mg/kg	23,000	39	23,000,000	NLV	NLV	NLV	NLV	NA	9,100	NA	73,000	10,000,000	NLV	NLV	<0.30
2,4,6-Trichlorophenol	mg/kg	710	2.4	1,000,000	NLV	NLV	NLV	NLV	NA	200	0.33(M);	3,300	1,300,000	NLV	NLV	<0.30
2,4-Dichlorophenol	mg/kg	660(DD)	1.5	5,100,000	NLV	NLV	NLV	NLV	1,800	960	0.33(M);	1,800(C,DD)	2,300,000	NLV	NLV	<0.30
2,4-Dimethylphenol	mg/kg	11,000	7.4	4,700,000	NLV	NLV	NLV	NLV	NA	10,000	7.6	36,000	2,100,000	NLV	NLV	<0.30
2,4-Dinitrophenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.80
2,4-Dinitrotoluene	mg/kg	48	0.43	16,000	NLV	NLV	NLV	NLV	NA	170	NA	220	20,000	NLV	NLV	<0.30
2,6-Dinitrotoluene	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30
2-Chloronaphthalene	mg/kg	56,000	620	ID	ID	ID	ID	ID	NA	2,300	NA	180,000	ID	ID	ID	<0.30
2-Chlorophenol	mg/kg	1,400	0.9	1,200,000	430	960	960	960	19,000	1,900	0.36	4,500	530,000	800	1,100	<0.30
2-Methylnaphthalene	mg/kg	8,100	57	670,000	2,700	1,500	1,500	1,500	NA	5,500	4.2	26,000	290,000	4,900	1,800	<0.30
2-Methylphenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30
2-Nitroaniline	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.80
2-Nitrophenol	mg/kg	630	0.4	ID	NLV	NLV	NLV	NLV	NA	1,600	ID	2,000	ID	NLV	NLV	<0.30
3&4-Methylphenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30
3,3'-Dichlorobenzidine	mg/kg	6.6	2, (M);	6,500	NLV	NLV	NLV	NLV	NA	4.6	2, (M);	30	8,200	NLV	NLV	<2.0
3-Nitroaniline	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.80
4,6-Dinitro-2-methylphenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.80
4-Bromophenyl phenyl ether	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30
4-Chloro-3-methylphenol	mg/kg	4,500	5.8	ID	NLV	NLV	NLV	NLV	NA	3,000	0.28	15,000	ID	NLV	NLV	<0.30
4-Chloroaniline	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30
4-Chlorophenyl phenyl ether	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30
4-Nitroaniline	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.80
4-Nitrophenol	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.80
Acenaphthene	mg/kg	41,000	300	14,000,000	190,000	81,000	81,000	81,000	NA	970	8.7	130,000	6,200,000	350,000	97,000	<0.30
Acenaphthylene	mg/kg	1,600	5.9	2,300,000	1,600	2,200	2,200	2,200	NA	440	ID	5,200	1,000,000	3,000	2,700	<0.30
Anthracene	mg/kg	230,000	41	67,000,000	1.00E+06(D)	1,400,000	1,400,000	1,400,000	NA	41	ID	730,000	29,000,000	1.00E+06(D)	1,600,000	<0.30
Benzo(a)anthracene	mg/kg	20	NLL	ID	NLV	NLV	NLV	NLV	NA	NLL	NLL	80	ID	NLV	NLV	<0.30
Benzo(a)pyrene	mg/kg	2	NLL	1,500	NLV	NLV	NLV	NLV	NA	NLL	NLL	8	1,900	NLV	NLV	<0.30
Benzo(b)fluoranthene	mg/kg	20	NLL	ID	ID	ID	ID	ID	NA	NLL	NLL	80	ID	ID	ID	<0.30
Benzo(g,h,i)perylene	mg/kg	2,500	NLL	800,000	NLV	NLV	NLV	NLV	NA	NLL	NLL	7,000	350,000	NLV	NLV	<0.30
Benzo(k)fluoranthene	mg/kg	200	NLL	ID	NLV	NLV	NLV	NLV	NA	NLL	NLL	800	ID	NLV	NLV	<0.30
bis(2-Chloroethoxy)methane	mg/kg	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	<0.30
bis(2-Chloroethyl)ether	mg/kg	13	0.1	9,400	8.3	3.8	3.8	3.8	2,200	110	0.1(M);	58	12,000	44	13	<0.30
bis(2-Ethylhexyl)phthalate	mg/kg	2,800	NLL	700,000	NLV	NLV	NLV	NLV	10,000	NLL	NLL	10,000(C)	890,000	NLV	NLV	<0.30
Butyl benzylphthalate	mg/kg	310(C)	310(C)	47,000,000	NLV	NLV	NLV	NLV	310	310(C)	120(X)	310(C)	21,000,000	NLV	NLV	<0.30
Chrysene	mg/kg	2,000	NLL	ID	ID	ID	ID	ID	NA	NLL	NLL	8,000	ID	ID	ID	<0.30
Dibenz(a,h)anthracene	mg/kg	2	NLL	ID	NLV	NLV	NLV	NLV	NA	NLL	NLL	8	ID	NLV	NLV	<0.30
Dibenzofuran	mg/kg	ID	ID	6,700	2,000	130	130	130	NA	ID	1.7	ID	2,900	3,600	160	<0.30
Diethyl phthalate	mg/kg	740(C)	110	3,300,000	NLV	NLV	NLV	NLV	740	740(C)	2.2	740(C)	1,500,000	NLV	NLV	<0.30
Dimethyl phthalate	mg/kg	790(C)	790(C)	3,300,000	NLV	NLV	NLV	NLV	790	790(C)	NA	790(C)	1,500,000	NLV	NLV	<0.30
Di-n-butylphthalate	mg/kg	760(C)	760(C)	3,300,000	NLV	NLV	NLV	NLV	760	760(C)	11	760(C)	1,500,000	NLV	NLV	<0.30
Di-n-octyl phthalate	mg/kg	6,900	100,000	31,000,000	NLV	NLV	NLV	NLV	140,000	1.40E+05(C)	ID	20,000	14,000,000	NLV	NLV	<0.30
Fluoranthene	mg/kg	46,000	730	9,300,000	1.00E+06(D)	740,000	740,000	740,000	NA	730	5.5	130,000	4,100,000	1.00E+06(D)	890,000	<0.30
Fluorene	mg/kg	27,000	390	9,300,000	580,000	130,000	130,000	130,000	NA	890	5.3	87,000	4,100,000	1.00E+06(D)	150,000	<0.30
Hexachlorobenzene	mg/kg	8.9	1.8	6,800	41	17	17	17	NA	8.2	0.35	37	8,500	220	56	<0.30
Hexachlorobutadiene	mg/kg	100	26	140,000	130	130	130	130	350	350(C)	0.091	350(C)	180,000	350(C)	460	<0.30
Hexachlorocyclopentadiene	mg/kg	720(C)	320	13,000	30	50	50	50	720	720(C)	ID	720(C)	5,900	56	60	<0.30
Hexachloroethane	mg/kg	230	0.43	230,000	40	930	930	550	NA	110	1.8, (X)	730	100,000	79	660	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	20	NLL	ID	NLV	NLV	NLV	NLV	NA	NLL	NLL	80	ID	NLV	NLV	<0.30
Isophorone	mg/kg	2,400(C)	15	12,000,000	NLV	NLV	NLV	NLV	2,400	2,400(C)	26, (X)	2,400(C)	8,200,000	NLV	NLV	<0.30
Naphthalene	mg/kg	16,000	35	200,000	250	300	300	300	NA	2,100	0.73	52,000	88,000	470	350	<0.30
Nitrobenzene	mg/kg	100	0.33(M);	47,000	91	54	54	54	490	220	3.6, (X)	340	21,000	170	64	<0.30
N-Nitrosodi-n-propylamine	mg/kg	1.2	0.33(M);	1,600	NLV	NLV	NLV	NLV	1,500	7.2	NA	5.4	2,000	NLV	NLV	<0.30
N-Nitrosodiphenylamine	mg/kg	1,700	5.4	2,200,000	NLV	NLV	NLV	NLV	NA	700	NA	7,800	2,800,000	NLV	NLV	<0.30
Pentachlorophenol	mg/kg	90	0.022	100,000	NLV	NLV	NLV	NLV	NA	4.3	27, (X)	320	130,000	NLV	NLV	<0.30
Phenanthrene	mg/kg	1,600	56	6,700	2,800	160	160	160	NA	1,100	2.1	5,200	2,900	5,100	190	<0.30
Phenol	mg/kg	12,000(C,DD)	88	40,000,000	NLV	NLV	NLV	NLV	12,000	12,000(C)	9	12,000(C,DD)	18,000,000	NLV	NLV	<0.30
Pyrene	mg/kg	29,000	480	6,700,000	1.00E+06(D)	650,000	650,000	650,000	NA	480	ID	84,000	2,900,000	1.00E+06(D)	780,000	<0.30

Table 12. AOI 09 A Soil Investigation - Benz(a)pyrene Delineation
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Notes:
mg/kg - milligrams per kilogram
CSAT - Soil Saturation Concentration Screening Levels
GCCP - Groundwater Contact Protection Criteria
GSIP - Groundwater Surface Water Interface Protection
NDC - Non-Residential Direct Contact Criteria
NPSIC - Non-Residential Particulate Soil Inhalation Criteria
NSVIA - Non-Residential Soil Volatilization to Indoor Air Inhalation Criteria
NVSIC - Non-Residential Infinite Source Volatile Soil Inhalation Criteria
RDC - Residential Direct Contact Criteria
RDWP - Residential Drinking water Protection Criteria
RPSIC - Residential Particulate Soil Inhalation Criteria
RSVIA - Residential Soil Volatilization to Indoor Air Inhalation Criteria
RVSIC2 - Residential Finite VSIC for 2 Meter Source Thickness
RVSIC5 - Non-Residential Finite VSIC for 5 Meter Source Thickness
RVSIC - Residential Infinite Source Volatile Soil Inhalation Criteria
U - analyzed for but not detected.

Table 13. AOI-09 Lead Soil Boring Sample Results
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: Sample Depth(ft): Boring Location: Date Collected:	Units	RCRA Criteria [1]	RDC	RDWP	RVSIC2	RVSIC5	GCCP	GSIP	RVSIC	RPSIC	CSAT	RSVIA	NDC	NVSIC	NPSIC	NSVIA	SB-09-05 4 - 5 ON SITE 08/16/10	SB-09-05 7 - 8.5 ON SITE 08/16/10	SB-09-06 1 - 2 ON SITE 08/16/10	SB-09-08 1.5 - 2.5 ON SITE 08/19/10	SB-09-08 2.5 - 3.5 ON SITE 08/16/10	SB-09-09 1 - 2 ON SITE 08/17/10	SB-09-09 2 - 3 ON SITE 08/17/10
Inorganic																							
Lead	mg/kg		400	700	NLV	NLV	ID	5,400	NLV	1.00E+05	NA	NLV	900	NLV	44000	NLV	27	9.0	510	**2,500 (NDC)**	580	**3,300 (NDC)**	**13,000 (NDC)**
Lead - fine fraction	mg/kg		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	11,000
Lead - total (fine + coarse)	mg/kg		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	12,000
TCLP Inorganic																							
Lead	mg/L	5	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	1.3	**91 (RCRA)**	2.1	**47 (RCRA)**	**14 (RCRA)**

Notes:

1. Criteria from 40 CFR 261.24 - Table 1. A solid waste exhibits the characteristic of toxicity if using the Toxicity Characteristic Leaching Procedure, test Method 1311, the extract from a representative sample contains any of the contaminants listed in Table 1 at a concentration equal to or greater the respective value given in the table.

Bolded and highlighted detections exceed criteria.

mg/kg - milligrams per kilogram
CSAT - Soil Saturation Concentration Screening Levels
GCCP - Groundwater Contact Protection Criteria
GSIP - Groundwater Surface Water Interface Protection
ID - insufficient data to develop criterion
NA - Not analyzed
NDC - Non-Residential Direct Contact Criteria
NLV- hazardous substance not likely to volatilize
NPSIC - Non-Residential Particulate Soil Inhalation Criteria
NSVIA - Non-Residential Soil Volatilization to Indoor Air Inhalation Criteria
NVSIC - Non-Residential Infinite Source Volatile Soil Inhalation Criteria
RDC - Residential Direct Contact Criteria
RDWP - Residential Drinking water Protection Criteria
RPSIC - Residential Particulate Soil Inhalation Criteria
RSVIA - Residential Soil Volatilization to Indoor Air Inhalation Criteria
RVSIC2 - Residential Finite VSIC for 2 Meter Source Thickness
RVSIC5 - Non-Residential Finite VSIC for 5 Meter Source Thickness
RVSIC - Residential Infinite Source Volatile Soil Inhalation Criteria

Table 13. AOI-09 Lead Soil Boring Sample Results
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: / Sample Depth(ft): / Boring Location: / Date Collected:	Units	RCRA Criteria [1]	RDC	RDWP	RVSIC2	RVSIC5	GCCP	GSIP	RVSIC	RPSIC	CSAT	RSVIA	NDC	NVSIC	NPSIC	NSVIA	SB-09-12 2 - 3 ON SITE 08/17/10	SB-09-14 1 - 2 ON SITE 08/17/10	SB-09-39 1 - 2 ON SITE 08/19/10	SB-09-39 2 - 3 ON SITE 08/19/10
Inorganic																				
Lead	mg/kg		400	700	NLV	NLV	ID	5,400	NLV	1.00E+05	NA	NLV	900	NLV	44000	NLV	**130,000 (NDC,NPSIC) [190,000 (NDC,NPSIC)]**	**68,000 (NDC,NPSIC)**	**35,000 (NDC)**	630
Lead - fine fraction	mg/kg		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA
Lead - total (fine + coarse)	mg/kg		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA
TCLP Inorganic																				
Lead	mg/L	5	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	**570 (RCRA)**	**72 (RCRA)**

Notes:

1. Criteria from 40 CFR 261.24 - Table 1. A solid waste exhibits the characteristic of toxicity if using the Toxicity Characteristic Leaching Procedure, test Method 1311, the extract from a representative sample contains any of the contaminants listed in Table 1 at a concentration equal to or greater the respective value given in the table.

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Table 13. AOI-09 Lead Soil Boring Sample Results
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: Sample Depth(ft): Boring Location: Date Collected:	Units	RCRA Criteria [1]	RDC	RDWP	RVSIC2	RVSIC5	GCCP	GSIP	RVSIC	RPSIC	CSAT	RSVIA	NDC	NVSIC	NPSIC	NSVIA	SB-09-49 1 - 2 CSX Property 08/20/10	SB-09-49 2 - 3 CSX Property 08/20/10	SB-09-50 1 - 2 ON SITE 08/20/10	SB-09-50 2 - 3 ON SITE 08/20/10	SB-09-52 1 - 2 ON SITE 08/20/10	SB-09-52 2 - 3 ON SITE 08/20/10
Inorganic																						
Lead	mg/kg		400	700	NLV	NLV	ID	5,400	NLV	1.00E+05	NA	NLV	900	NLV	44000	NLV	**950 (NDC,RDC,RDWP)**	**960 (NDC,RDC,RDWP)**	**910 (NDC)**	130	**4,200 (NDC)**	33
Lead - fine fraction	mg/kg		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA
Lead - total (fine + coarse)	mg/kg		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA
TCLP Inorganic																						
Lead	mg/L	5	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA

Notes:

1. Criteria from 40 CFR 261.24 - Table 1. A solid waste exhibits the characteristic of toxicity if using the Toxicity Characteristic Leaching Procedure, test Method 1311, the extract from a representative sample contains any of the contaminants listed in Table 1 at a concentration equal to or greater the respective value given in the table.

Bolded and highlighted detections exceed criteria.

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NA - Not analyzed
NDC - Non-Residential Direct Contact Criteria
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RPSIC - Residential Particulate Soil Inhalation Criteria
RSVIA - Residential Soil Volatilization to Indoor Air Inhalation Criteria
RVSIC2 - Residential Finite VSIC for 2 Meter Source Thickness
RVSIC5 - Non-Residential Finite VSIC for 5 Meter Source Thickness
RVSIC - Residential Infinite Source Volatile Soil Inhalation Criteria

Table 13. AOI-09 Lead Soil Boring Sample Results
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location ID: Sample Depth(ft): Boring Location: Date Collected:	Units	RCRA Criteria [1]	RDC	RDWP	RVSIC2	RVSIC5	GCCP	GSIP	RVSIC	RPSIC	CSAT	RSVIA	NDC	NVSIC	NPSIC	NSVIA	SB-09-53 1 - 2 ON SITE 08/20/10	SB-09-53 2 - 3 ON SITE 08/20/10	SB-09-53 3 - 4 ON SITE 08/20/10	SB-09-53 4 - 5 ON SITE 08/20/10	SB-09-54 1 - 2 CSX Property 08/20/10	SB-09-54 2 - 3 CSX Property 08/20/10
Inorganic																						
Lead	mg/kg		400	700	NLV	NLV	ID	5,400	NLV	1.00E+05	NA	NLV	900	NLV	44000	NLV	**19,000 (NDC)**	290	36	5.6	**4,400 (NDC,RDC,RDWP)**	360
Lead - fine fraction	mg/kg		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA
Lead - total (fine + coarse)	mg/kg		- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA
TCLP Inorganic																						
Lead	mg/L	5	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	**470 (RCRA)**	NA	NA	NA	NA	NA

Notes:

1. Criteria from 40 CFR 261.24 - Table 1. A solid waste exhibits the characteristic of toxicity if using the Toxicity Characteristic Leaching Procedure, test Method 1311, the extract from a representative sample contains any of the contaminants listed in Table 1 at a concentration equal to or greater the respective value given in the table.

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NVSIC - Non-Residential Infinite Source Volatile Soil Inhalation Criteria
RDC - Residential Direct Contact Criteria
RDWP - Residential Drinking water Protection Criteria
RPSIC - Residential Particulate Soil Inhalation Criteria
RSVIA - Residential Soil Volatilization to Indoor Air Inhalation Criteria
RVSIC2 - Residential Finite VSIC for 2 Meter Source Thickness
RVSIC5 - Non-Residential Finite VSIC for 5 Meter Source Thickness
RVSIC - Residential Infinite Source Volatile Soil Inhalation Criteria

Table 14. AOI 09-A XRF Readings
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location	On Site or CSX Property	Depth	XRF Reading (ppm)	Confidence Range (+/-)
SB-09-05	On Site	10-20"	247	29
		20-34"	156	25
		34-46"	180	29
		46"-60"	100	18
		5-6'	-6	11
		6-7'	46	16
		7-8.5'	5	13
SB-09-06	On Site	1-2'	761	63
		2-3'	116	24
		3-4'	68	19
		4-5'	59	17
		5-6'	ND <10.4	NA
		6-7'	ND <14.4	NA
		7-8'	12	13
		8-9'	20	13
		9-10'	ND <11.7	NA
SB-09-07	On Site	1-2'	concrete	NA
		2-3'	concrete	NA
		3-4'	concrete	NA
		4-5'	concrete	NA
		5-6'	2	11
		6-7'	ND	10.4
SB-09-08	On Site	1-1.5'	steel chunks	NA
		1.5-2.5'	7164	285
		2.5-3.5'	2361	108
		3.5-5'	409	38
		5 - 6	ND <21.5	NA
		6 - 7	ND <19.1	NA
		7 - 8	34	16
		8 - 9.5	ND <17.1	NA
SB-09-09	On Site	1-2'	945	73
		2-3'	400	37
		3-4'	82	19
		4-5'	ND <22.7	NA
		5-6.5'	ND <17.5	NA
SB-09-10	On Site	1-2'	75	19
		2-3'	54	18
		3-4'	47	17
		4-5'	ND <14.3	NA
		5-6'	ND <18.7	NA
		6-7'	ND <18	NA
		7-8.5'	ND <16	NA
SB-09-11	On Site	1-2'	669	53
		2-3'	629	50
		3-4'	19	13
		4-5'	ND <22.2	NA
		5-6'	ND <19.3	NA
		6-7'	ND <21.3	NA
		7-8'	ND <14.3	NA
		8-9.5'	ND <19.9	NA

Table 14. AOI 09-A XRF Readings

2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location	On Site or CSX Property	Depth	XRF Reading (ppm)	Confidence Range (+/-)
SB-09-12	On Site	1-2'	2972	112
		2-3'	117000	1300
		3-4'	639	52
		4-5'	2183	82
		5-6'	ND <12.4	NA
		6-7'	ND <18.3	NA
		7-8'	ND <21.9	NA
		8-9.2'	ND <12.8	NA
SB-09-13	On Site	1-2'	153	27
		2-3'	2835	118
		3-4'	148	26
		4-5'	400	41
		5-6'	ND <17.3	NA
		6-7'	ND <22.8	NA
		7-8'	ND <19	NA
		8-9.3'	ND <21.5	NA
SB-09-14	On Site	1-2'	49000	500
		2-3'	619	49
		3-4'	1036	62
		4-5'	183	28
		5-6'	31	18
		6-7'	ND <19.7	NA
		7-8'	ND <20.5	NA
		8-9'	ND <20.3	NA
		9-10'	ND <15.3	NA
SB-09-15	On Site	2-3'	51	19
		3-4'	ND <17.1	NA
		4-5'	ND <14.7	NA
		5-6'	ND <13.5	NA
		6-7'	ND <16	NA
		7-8'	ND <19.6	NA
		8-9'	ND <17.5	NA
		9-10'	ND <21.1	NA
SB-09-16	On Site	1.5-2'	40	18
		2-3'	ND <17.6	NA
		3-4'	ND <17.4	NA
		4-5'	ND <17.1	NA
		5-6'	ND <15.5	NA
		6-7'	ND <21.1	NA
		7-8'	ND <13.5	NA
		8-9'	ND <18.0	NA
		9-10'	ND <18.5	NA
SB-09-17	CSX	1.5-2'	476	47
		2-3'	ND <20.4	NA
		3-4'	209	29
		4-5'	ND <17.2	NA
		5-6'	25	15
		6-7.6'	ND <18.8	NA
SB-09-18	On Site	1-2'	338	37
		2-3'	255	26
		3-4'	ND <13.4	NA
		4-5'	ND <12.2	NA
		5-6'	ND <16.4	NA
		6-7'	ND <15.0	NA
		7-8'	ND <20.0	NA
		8-9'	ND <21.6	NA
		9-10'	ND <16.8	NA

Table 14. AOI 09-A XRF Readings
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location	On Site or CSX Property	Depth	XRF Reading (ppm)	Confidence Range (+/-)
SB-09-19	CSX	1-2'	163	30
		2-3'	89	13
		3-4'	ND <14.4	NA
		4-5'	ND <19.5	NA
		5-6'	ND <17.2	NA
		6-7.3'	ND <20.6	NA
SB-09-20	On Site	1-2'	432	44
		2-3'	186	30
		3-4'	114	25
		4-5'	ND <19.6	NA
		5-6'	ND < 21	NA
		6-7'	ND < 16.8	NA
		7-8'	ND < 15.4	NA
		8-9'	ND < 17.5	NA
		9-10'	ND < 17.0	NA
SB-09-21	CSX	0-1'	291	35
		1-2'	223	28
		2-3'	87	20
		3-4'	31	16
		4-5'	ND < 18	NA
		5-6'	61	20
		6-7'	ND < 13.5	NA
		7-8'	ND < 28.8	NA
		8-9.8'	ND < 19.6	NA
SB-09-22	CSX	0-1'	342	38
		1-2'	155	31
		2-3'	53	19
		3-4'	ND <14.6	NA
		4-5'	ND <18.2	NA
		5-6'	ND <19.2	NA
		6-7'	ND <18.3	NA
		7-8'	ND <18.5	NA
		8-9'	ND <19.1	NA
		9-10'	ND <16.1	NA
SB-09-23	CSX	0-1'	439	39
		1-2'	224	35
		2-3'	39	15
		3-4'	ND < 18.3	NA
		4-5'	ND <19.3	NA
		5-6'	ND <19.6	NA
		6-7'	ND <16.4	NA
		7-8.7'	ND <16.1	NA
SB-09-24	CSX	0-1'	245	33
		1-2'	179	27
		2-3'	ND <19.2	NA
		3-4'	ND <14.9	NA
		4-5'	ND <15.4	NA
		5-6'	ND <19.1	NA
		6-7'	ND <17.3	NA
		7-8'	ND <16	NA
		8-9'	ND <21.9	NA
		9-10'	ND <17.5	NA

Table 14. AOI 09-A XRF Readings
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location	On Site or CSX Property	Depth	XRF Reading (ppm)	Confidence Range (+/-)
SB-09-25	CSX	0-1'	230	32
		1-2'	26	15
		2-3'	ND <17.6	NA
		3-4'	ND <17.3	NA
		4-5'	ND <17.8	NA
		5-6'	ND <20.2	NA
		6-7'	ND <24.4	NA
		7-8'	ND <19.4	NA
		8-9.2'	ND <18.8	NA
SB-09-26	CSX	0-1'	319	41
		1-2'	484	40
		2-3'	74	70
		3-4'	ND <20.5	NA
		4-5'	155	27
		5-6'	ND <18.9	NA
		6-6.9'	ND <17.2	NA
SB-09-27	CSX	0-1'	RR ballast	NA
		1-2'	52	18
		2-3'	ND <19.5	NA
		3-4'	ND <16	NA
		4-5'	ND <14.5	NA
		5-6'	ND <14.8	NA
		6-7'	ND <15.1	NA
		7-8'	ND <15.7	NA
		8-9.6'	ND <19.5	NA
SB-09-28	CSX	0-1'	383	41
		1-2'	223	34
		2-3'	28	13
		3-4'	ND <17.5	NA
		4-5'	23	11
		5-6'	ND <17.5	NA
		6-7'	ND <16.9	NA
		7-8'	ND <17.1	NA
SB-09-29	CSX	0-1'	290	47
		1-2'	171	30
		2-3'	ND <20.7	NA
		3-4'	ND <21.5	NA
		4-5'	ND <21.9	NA
		5-6.4'	ND <16.9	NA
SB-09-30	CSX	0-1'	410	40
		1-2'	224	31
		2-3'	ND <14.4	NA
		3-4'	ND <20.4	NA
		4-5'	ND <14.1	NA
		5-6'	ND <21.1	NA
		6-7'	ND <16.6	NA
		7-8'	ND <18.5	NA
		8-9.6'	ND <16.9	NA
SB-09-31	CSX	1-2'	320	32
		2-3'	ND <19	NA
		3-4'	ND <18.9	NA
		4-5'	ND <18	NA
		5-6'	ND <17.1	NA
		6-7'	ND <19.4	NA
		7-8.6'	ND <19	NA

Table 14. AOI 09-A XRF Readings
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location	On Site or CSX Property	Depth	XRF Reading (ppm)	Confidence Range (+/-)
SB-09-32	CSX	0-1'	291	38
		1-2'	84	22
		2-3'	ND <15.5	NA
		3-4'	55	20
		4-5'	ND <16.7	NA
		5-6.7'	ND <18	NA
SB-09-37	On Site	3-4'	ND <15	34
		4-5'	ND <13.8	13
		5-6'	ND <18.9	NA
		6-7'	ND <20.6	11
		7-8.6'	ND <19.4	NA
SB-09-38	On Site	1-2'	18000	4000
		2-3'	188	29
		3-4'	73	19
		4-5'	84	20
		5-6'	ND <19.6	NA
		6-7'	ND <18.9	NA
		7-8'	ND <20.6	NA
		8-9'	29	18
SB-09-39	On Site	1-2'	14700	3000
		2-3'	3953	137
		3-4'	1129	80
		4-5'	304	38
		5-6'	ND <16.8	NA
		6-7'	ND <19	NA
		7-8'	ND <17.3	NA
		8-9'	ND <16.8	NA
SB-09-40	CSX	1-2'	1160	74
		2-3'	135	25
		3-4'	24	14
		4-5'	ND <13.7	NA
		5-6'	ND <17.1	NA
		6-7'	ND <22.1	NA
		7-8.7'	ND <18.4	NA
SB-09-41	On Site	1-2'	1062	75
		2-3'	104	23
		3-4'	200	30
		4-5'	ND <21.3	NA
		5-6'	ND <18.2	NA
		6-7'	ND <15.7	NA
		7-8'	ND <23.8	NA
		8-9.1'	ND <16.9	NA
SB-09-42	CSX	1-2'	69700	9000
		2-3'	1588	82
		3-4'	ND <19	NA
		4-5'	ND <19.5	NA
		5-6'	ND <17.9	NA
		6-7'	ND <20.7	NA
		7-8'	ND <18.2	NA
		8-9.5'	ND <15.3	NA

Table 14. AOI 09-A XRF Readings
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location	On Site or CSX Property	Depth	XRF Reading (ppm)	Confidence Range (+/-)
SB-09-43	CSX	1-2'	2907	118
		2-3'	165	29
		3-4'	ND < 17.5	NA
		4-5'	110	23
		5-6'	ND <17.2	NA
		6-7'	ND <16.7	NA
		7-8'	ND <16.5	NA
		8-9'	ND <23.9	NA
		9-9.8'	ND <15.6	NA
SB-09-44	On Site	1-2'	585	54
		2-3'	411	44
		3-4'	208	31
		4-5'	ND <14.4	NA
		5-6'	ND <15.4	NA
		6-7'	ND <18.8	NA
		7-8'	ND <18.6	NA
		8-9'	ND <15.9	NA
		9-9.8'	ND <16.1	NA
SB-09-45	CSX	1-2'	252	34
		2-3'	650	53
		3-4'	290	34
		4-5'	115	23
		5-6'	ND <18	NA
		6-7'	ND <19.6	NA
		7-8'	ND <20.8	NA
		8-9'	ND <19.7	NA
		9-10'	ND <20.6	NA
SB-09-46	On Site	1-2'	2895	126
		2-3'	126	30
		3-4'	197	28
		4-5'	ND <14	NA
		5-6'	ND <14.9	NA
		6-7'	ND <19.5	NA
		7-8'	ND <19.5	NA
		8-9'	ND <19.4	NA
		9-10'	ND <15.6	NA
SB-09-47	On Site	1-2'	ND <20.3	NA
		2-3'	ND <17	NA
		3-4'	ND <16.8	NA
		4-5'	ND <17.1	NA
		5-6'	ND <19.4	NA
		6-7'	ND <20.6	NA
		7-8'	ND <18.3	NA
		8-9.5'	ND <16.7	NA
SB-09-48	CSX	1-2'	ND <22.3	NA
		2-3'	ND <17.5	NA
		3-4'	ND <19	NA
		4-5'	ND <15.4	NA
		5-6'	ND <21.1	NA
		6-7'	ND <15.7	NA
		7-8'	ND <17.8	NA
		8-9.2'	ND <18.4	NA
SB-09-49	CSX	1-2'	843	67
		2-3'	565	55
		3-4'	ND <15.3	NA
		4-5'	ND <19.8	NA

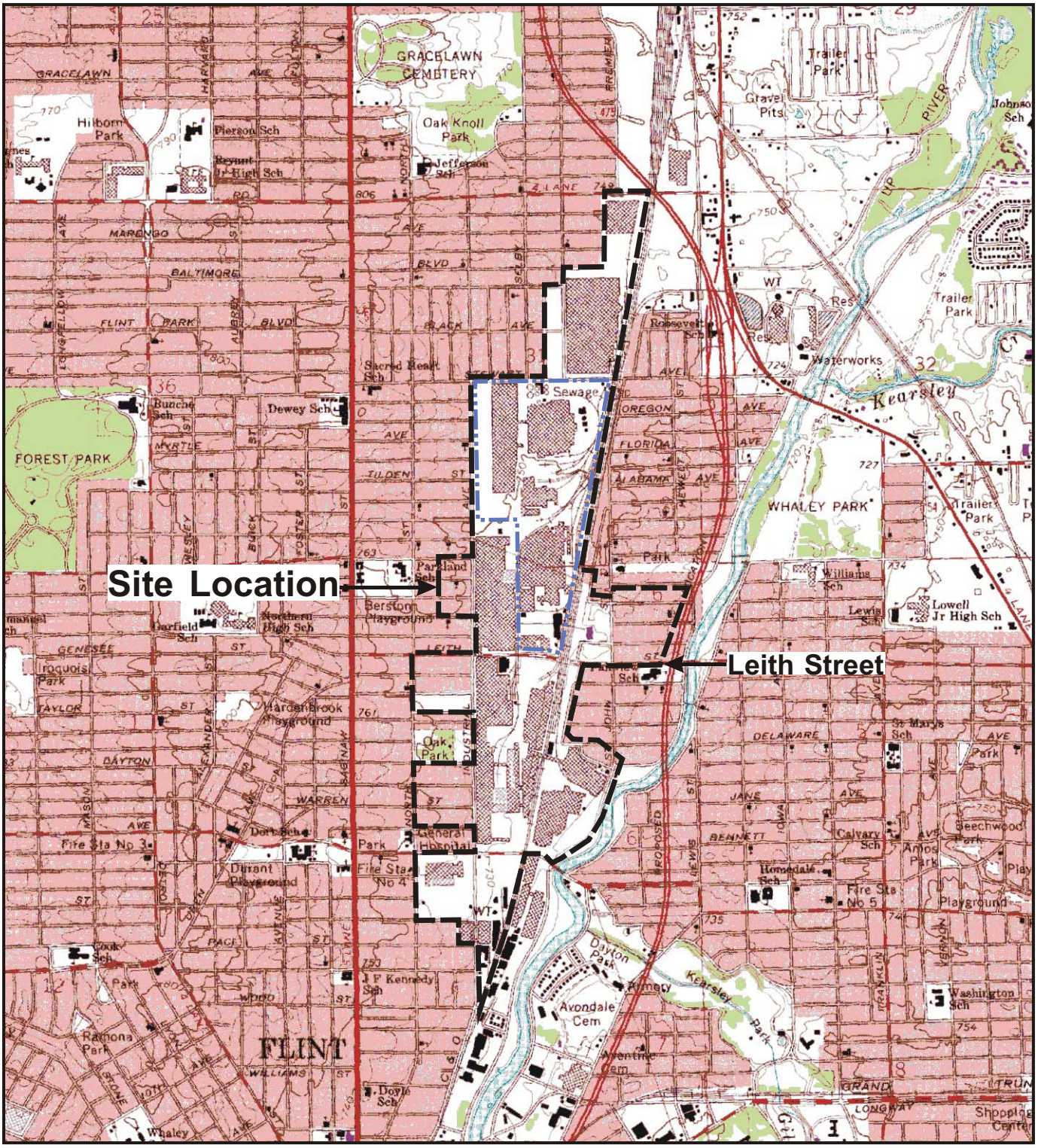
Table 14. AOI 09-A XRF Readings
2010 CMI Annual Report, RACER Trust, NAO Flint Operations Site, Flint, Michigan

Location	On Site or CSX Property	Depth	XRF Reading (ppm)	Confidence Range (+/-)
SB-09-50	On Site	1-2'	749	72
		2-3'	118	25
		3-4'	ND <15.3	NA
SB-09-51	On Site	1-2'	407	43
		2-3'	146	29
		3-4'	ND <24.2	NA
		4-5'	ND <20.3	NA
SB-09-52	On Site	1-2'	2293	101
		2-3'	38	8
		3-4'	ND <18.8	NA
		4-5'	ND <15.8	NA
SB-09-53	On Site	1-2'	8693	235
		2-3'	156	27
		3-4'	33	15
		4-5'	ND <16.5	NA
SB-09-54	CSX	1-2'	1696	89
		2-3'	888	63
		3-4'	ND <15.9	NA
		4-5'	ND <15.5	NA

Notes:
NA- Not Applicable
ND - Not Detected

ARCADIS

Figures



REFERENCE: Base Map Source: USGS 7.5 Min. Topo. Quad., Flint North, Mich. (1969, Photorevised 1975).

2000' 0 2000'

Approximate Scale: 1" = 2000'



Area Location

REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST
NAO FLINT OPERATIONS SITE - FLINT, MICHIGAN

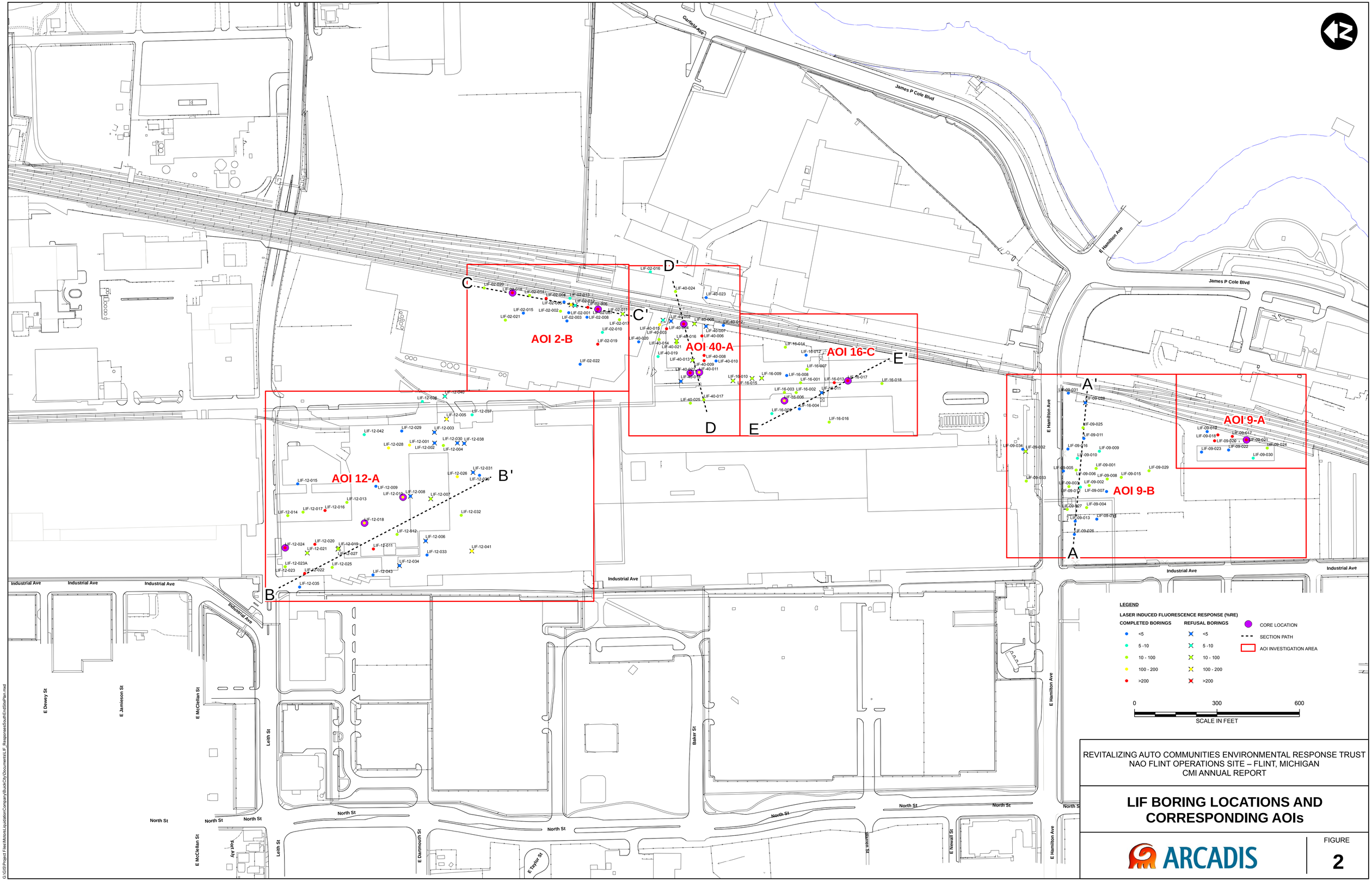
CMI ANNUAL REPORT

SITE LOCATION MAP

ARCADIS

FIGURE
1

04/11/2011 SYRACUSE, NY-ENV/CAD-141-DJHOWES
B0064410/4010/00004/CDR/64410N01.CDR



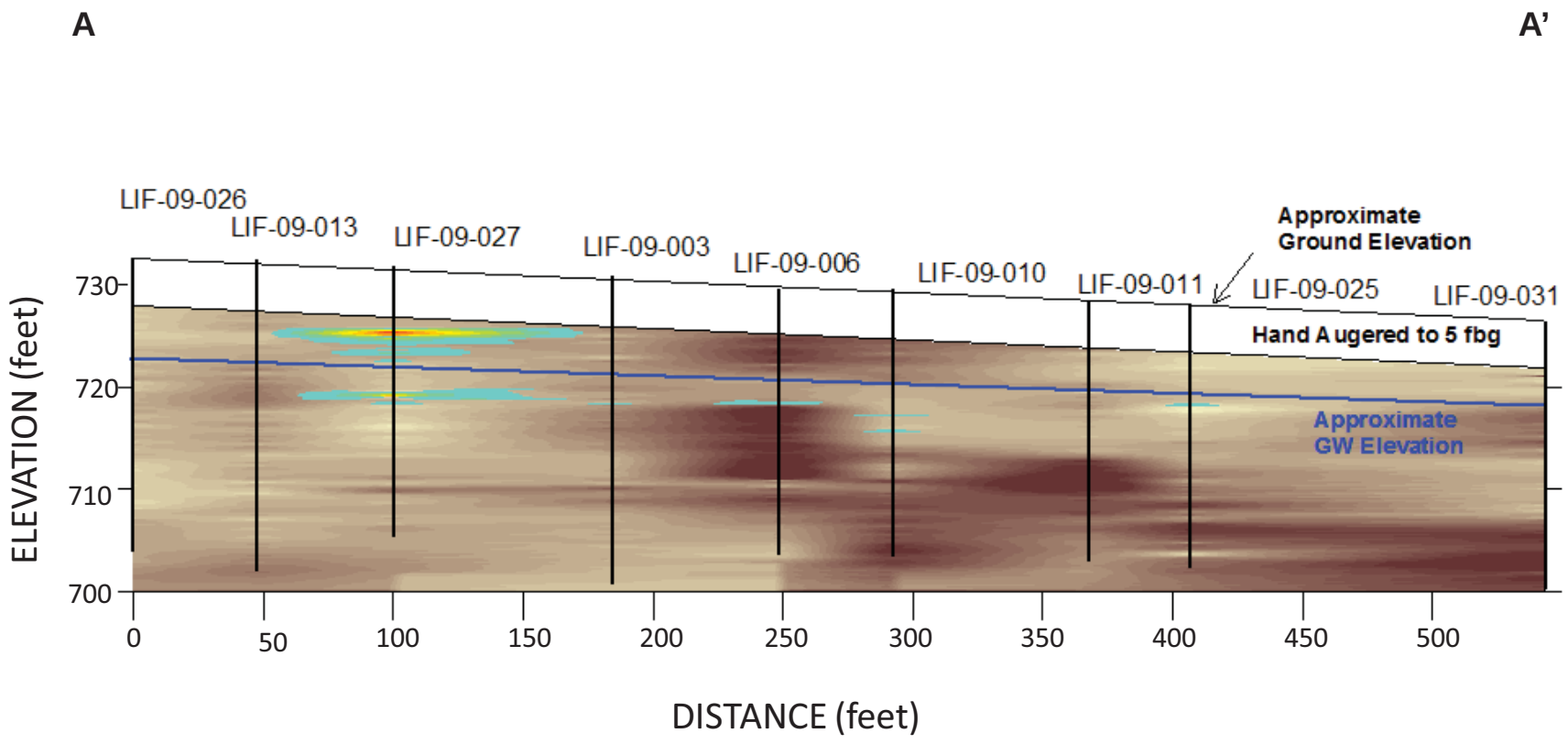
REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST
NAO FLINT OPERATIONS SITE – FLINT, MICHIGAN
CMI ANNUAL REPORT

LIF BORING LOCATIONS AND CORRESPONDING AOIs

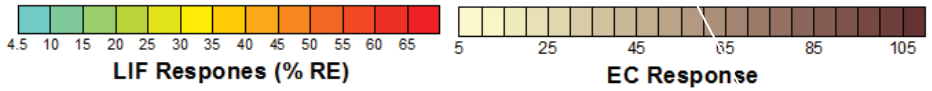
ARCADIS

FIGURE
2

PROJECT NUMBER:
CITY:NOVI DIV/GROUP:ENV DB: PIC: PM: TM: TR:
G:\GIS\Project Files\Motors\LiquidationCompany\BuickCity\Documents\LIF_ResponsesSouthEndSitePlan.mxd



LEGEND



Approximate Groundwater Elevation

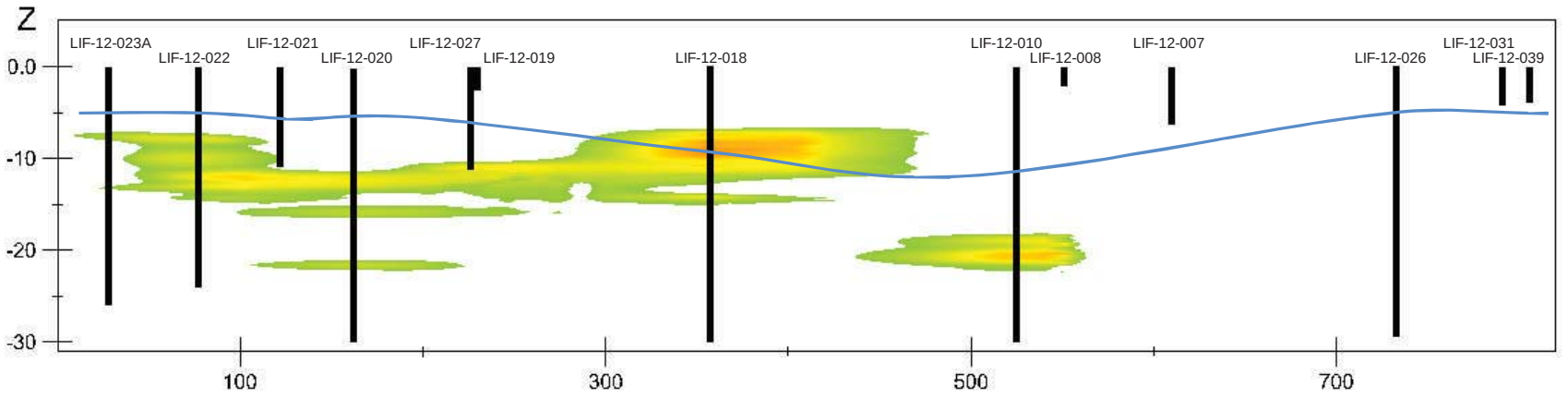
NOTE:
Cross section exported from three-dimensional model and represents a two-dimensional projection of the displayed data.

Revitalizing Auto Communities Environmental Response Trust
NAP Flint Operations Site – Flint, MI
CMI Annual Report

LIF SOIL PROBE CROSS SECTION
AOI 09-B

ARCADIS

FIGURE
3



LEGEND

LIF RESPONSE

1000%

5%

Approximate Groundwater Elevation

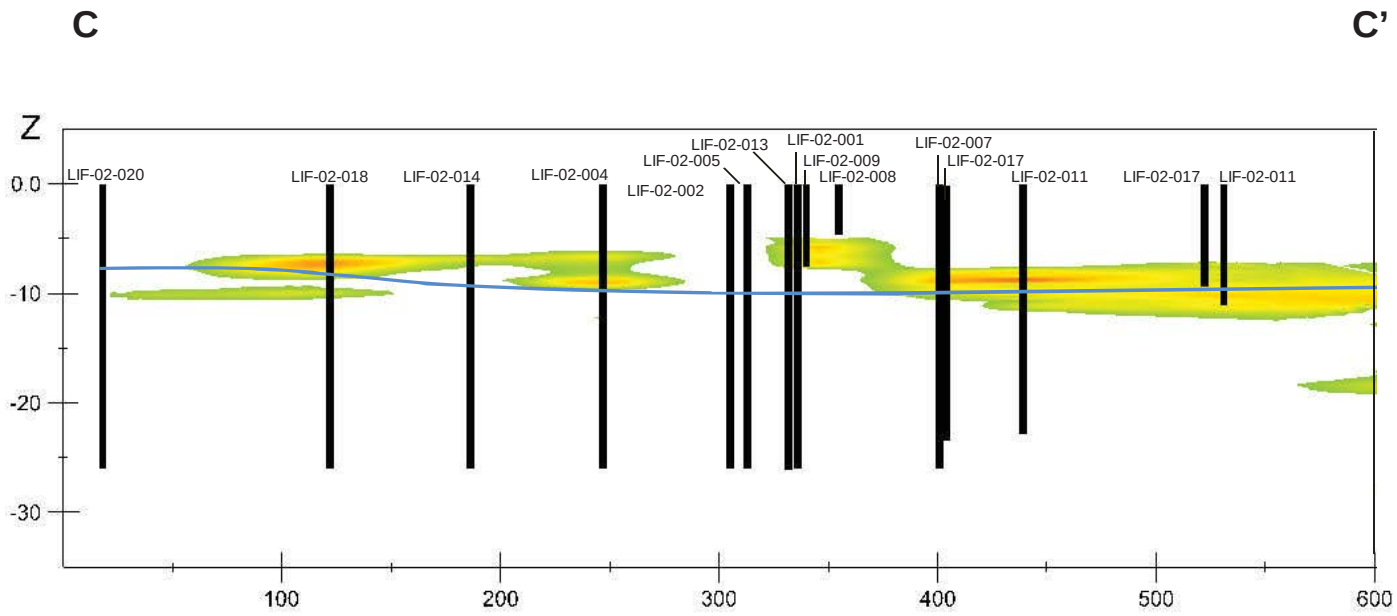
NOTE:
Cross section exported from three-dimensional model and represents a two-dimensional projection of the displayed data.

Revitalizing Auto Communities Environmental Response Trust
NAP Flint Operations Site – Flint, MI
CMI Annual Report

LIF SOIL PROBE CROSS SECTION
AOI 12-A, 12-B, and 12-C

ARCADIS

FIGURE
4



LEGEND

LIF RESPONSE

1000%

5%

Approximate Groundwater Elevation

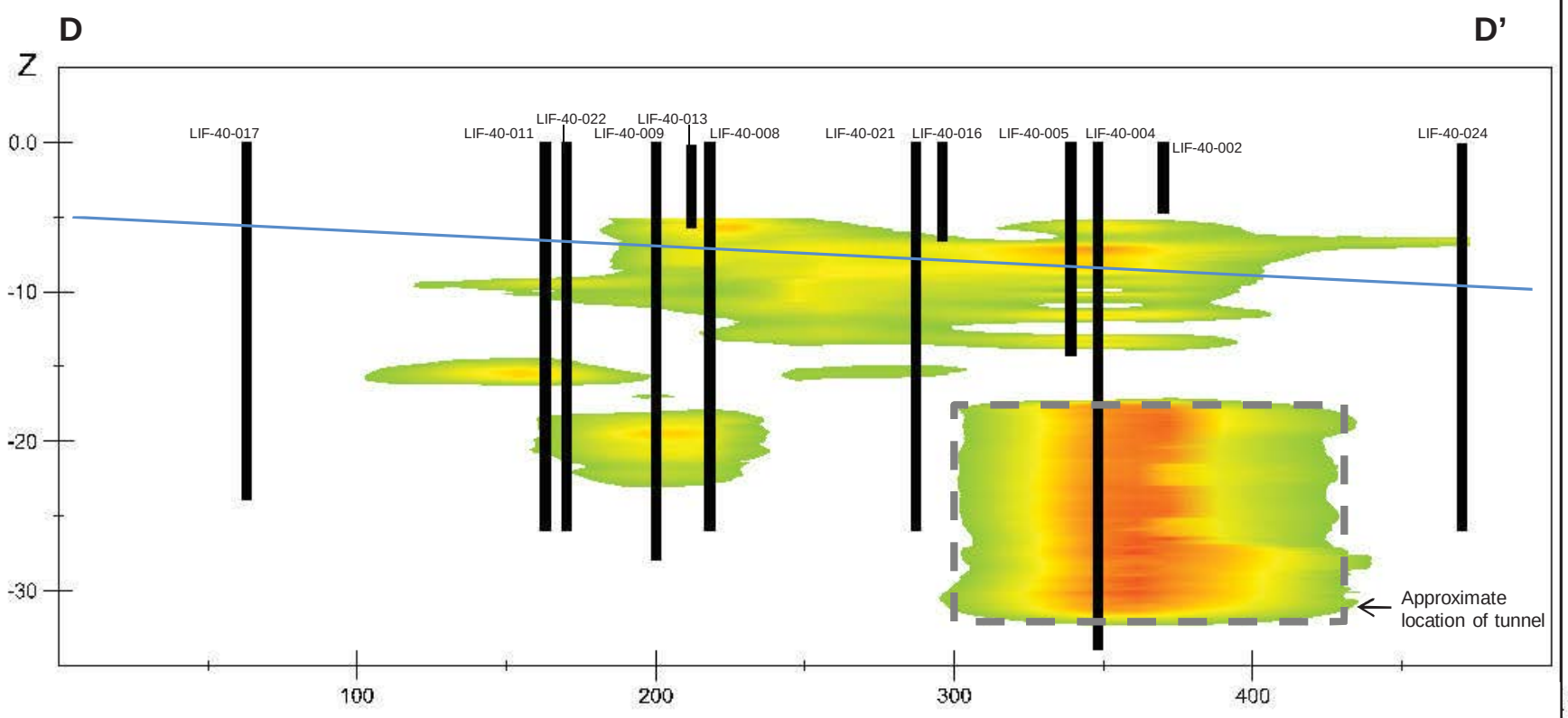
NOTE:
Cross section exported from three-dimensional model and represents a two-dimensional projection of the displayed data.

Revitalizing Auto Communities Environmental Response Trust
NAP Flint Operations Site – Flint, MI
CMI Annual Report

LIF SOIL PROBE CROSS SECTION
AOI 02-B

ARCADIS

FIGURE
5



LEGEND

LIF RESPONSE

1000%

5%

Approximate Groundwater Elevation

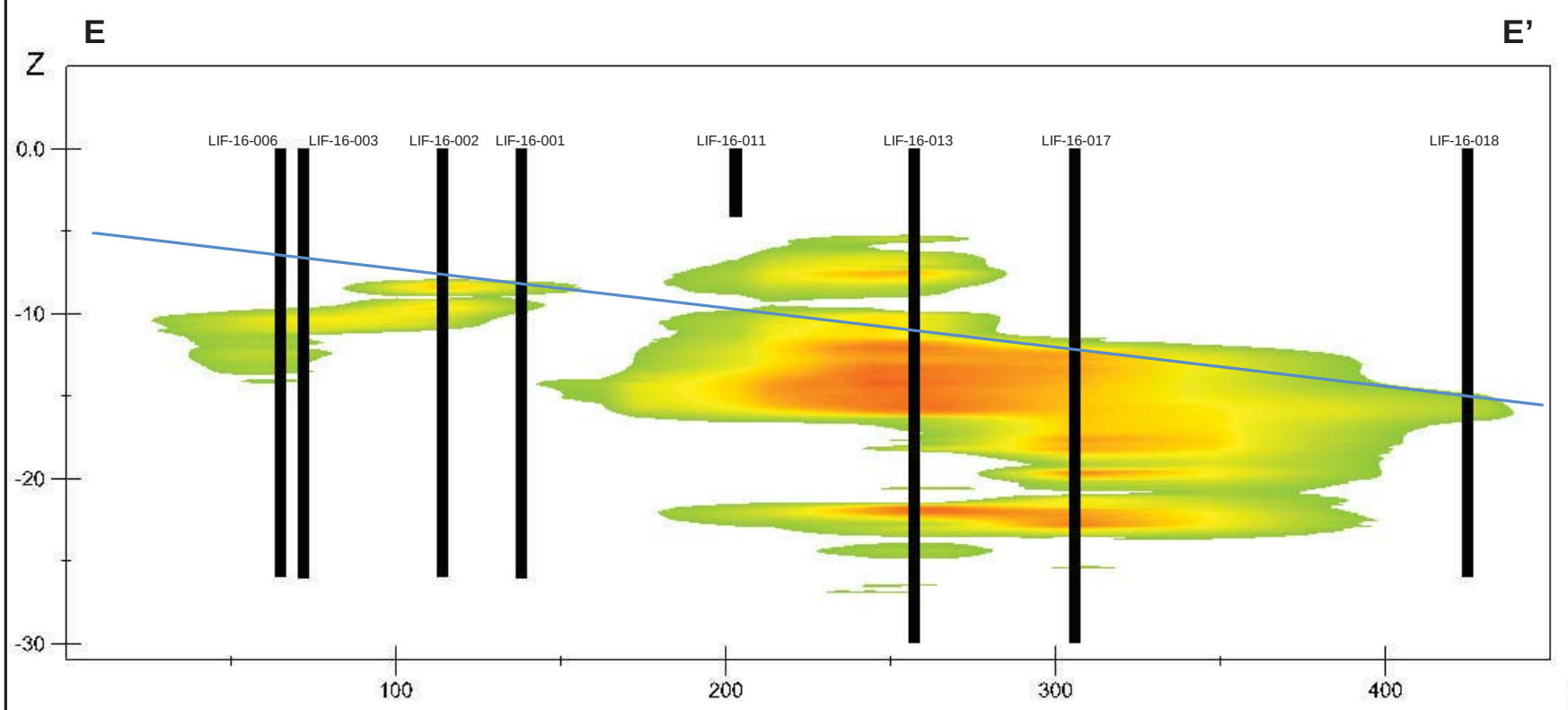
NOTE:
Cross section exported from three-dimensional model and represents a two-dimensional projection of the displayed data.

Revitalizing Auto Communities Environmental Response Trust
NAP Flint Operations Site – Flint, MI
CMI Annual Report

LIF SOIL PROBE CROSS SECTION
AOI 40-A and 40-C

ARCADIS

FIGURE
6



LEGEND

LIF RESPONSE

1000%

5%

Approximate Groundwater Elevation

NOTE:
Cross section exported from three-dimensional model and represents a two-dimensional projection of the displayed data.

Revitalizing Auto Communities Environmental Response Trust
NAP Flint Operations Site – Flint, MI
CMI Annual Report

LIF SOIL PROBE CROSS SECTION
AOI 16-C

ARCADIS

FIGURE
7

CITY: SYRACUSE DIV/GROUP: 141 DB: GMS PM:(Reqd) LYR: ON=*;OFF=*REF*,|SHID-BUILDING,|HIST_SB
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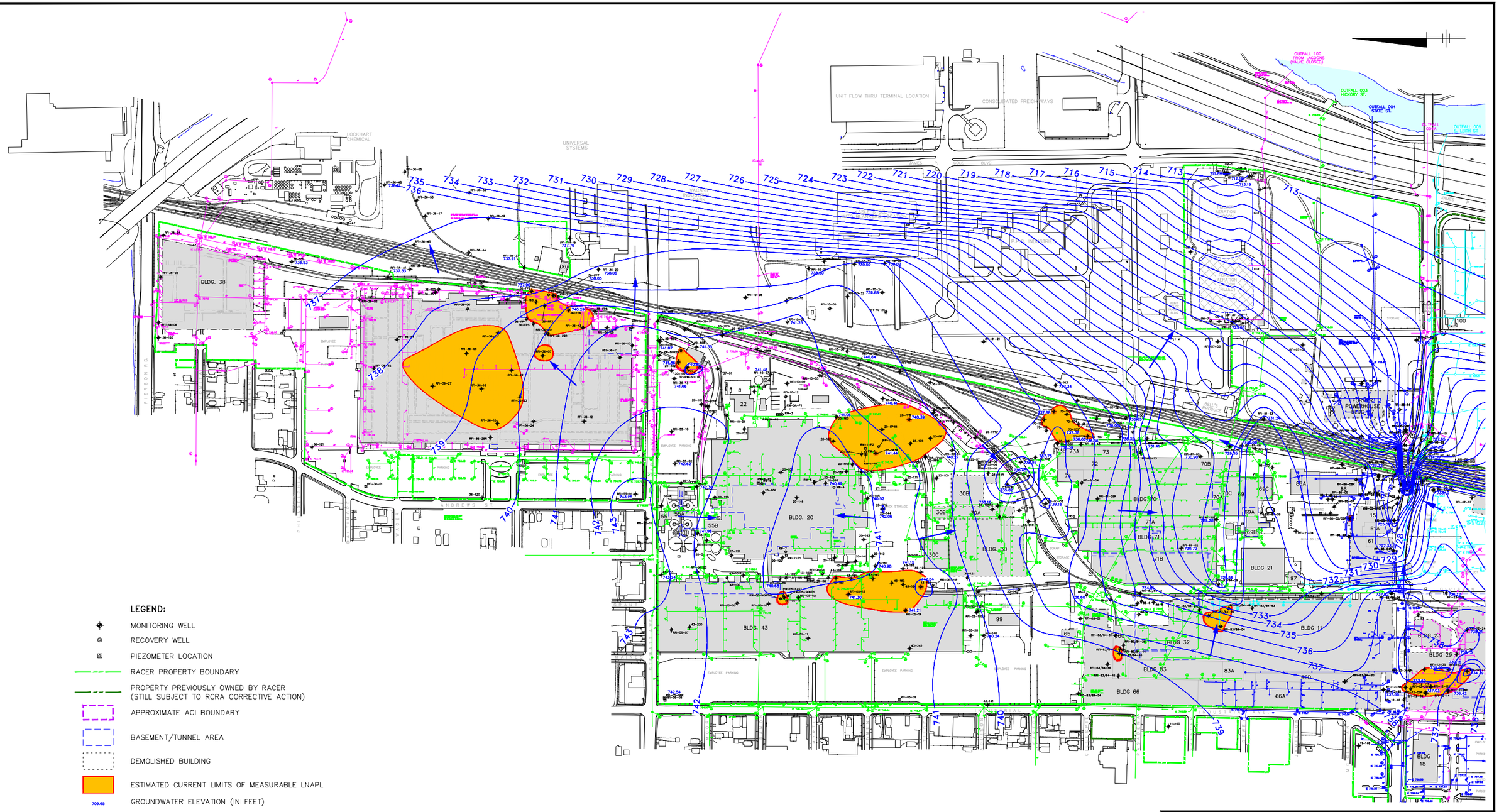
XREFS: IMAGES: PROJECTNAME: ---
64410X01
64410X7A
64410X0I
64410X6A



LEGEND:

- MONITORING WELL
- RECOVERY WELL
- PIEZOMETER LOCATION
- RACER PROPERTY BOUNDARY
- PROPERTY PREVIOUSLY OWNED BY RACER (STILL SUBJECT TO RCRA CORRECTIVE ACTION)
- APPROXIMATE AOI BOUNDARY
- BASEMENT/TUNNEL AREA
- DEMOLISHED BUILDING
- ESTIMATED CURRENT LIMITS OF MEASURABLE LNAPL
- 709.65 GROUNDWATER ELEVATION (IN FEET)
- 726 GROUNDWATER ELEVATION CONTOUR (IN FEET)
- GENERALIZED FLOW DIRECTION
- [709.55] ANOMALOUS GROUNDWATER ELEVATION (IN FEET) NOT USED TO GENERATE GROUNDWATER ELEVATION CONTOURS
- LOCATION WHERE MEASURABLE LNAPL HAS BEEN DETECTED IN 2010

NOTES:

1. BASE MAP INFORMATION FROM A SURVEY BY BMJ INC., DATED APRIL 2001, AT A SCALE OF 1:100.
2. ALL LOCATIONS ARE APPROXIMATE.

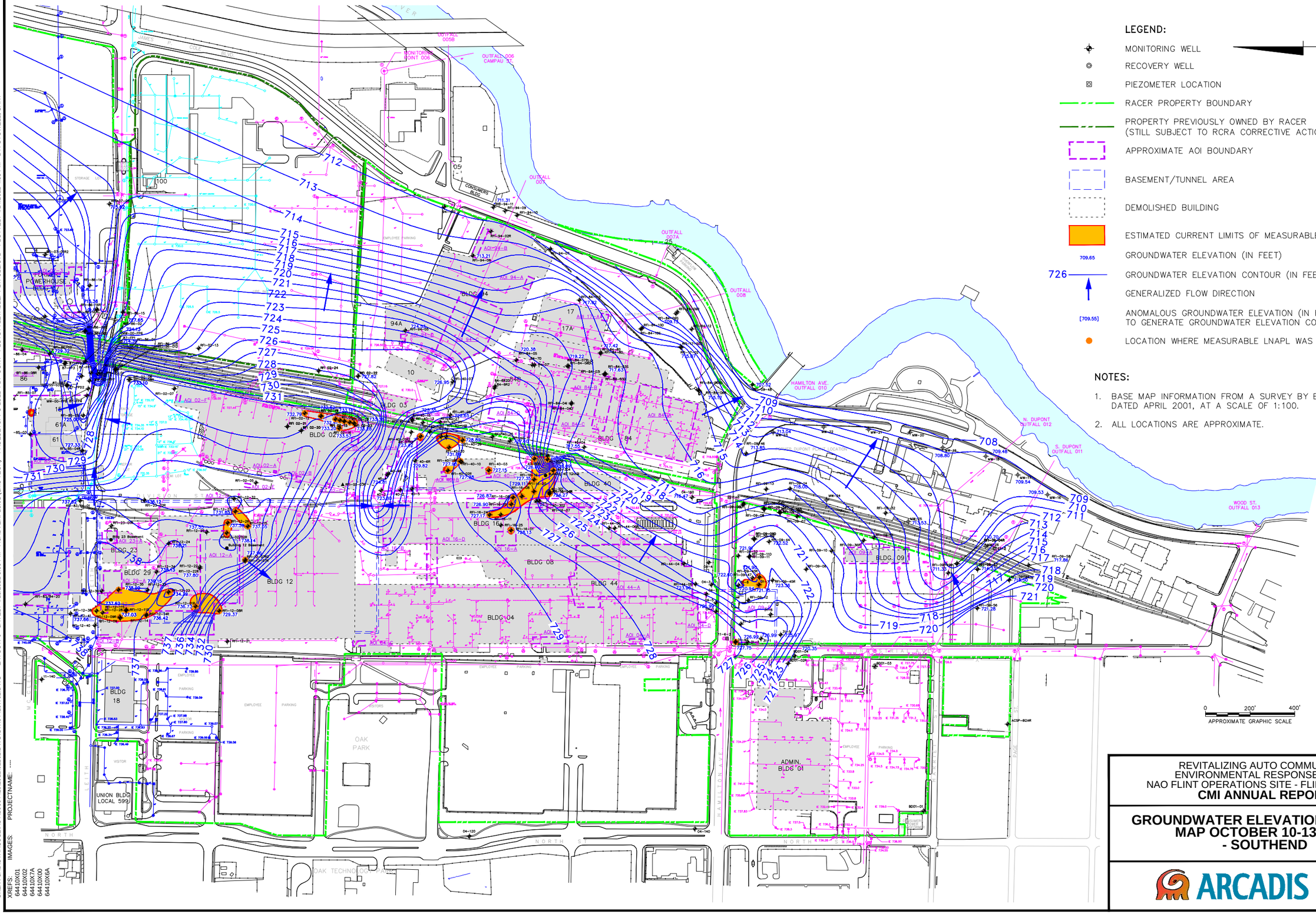
0 250' 500'
GRAPHIC SCALE

REVITALIZING AUTO COMMUNITIES
ENVIRONMENTAL RESPONSE TRUST
NAO FLINT OPERATIONS SITE - FLINT, MICHIGAN
CMI ANNUAL REPORT

GROUNDWATER ELEVATION CONTOUR MAP OCTOBER 10-13, 2010 - NORTHEND

ARCADIS

FIGURE
8



LEGEND:

- MONITORING WELL
- RECOVERY WELL
- PIEZOMETER LOCATION
- RACER PROPERTY BOUNDARY
- PROPERTY PREVIOUSLY OWNED BY RACER (STILL SUBJECT TO RCRA CORRECTIVE ACTION)
- APPROXIMATE AOI BOUNDARY
- BASEMENT/TUNNEL AREA
- DEMOLISHED BUILDING
- ESTIMATED CURRENT LIMITS OF MEASURABLE LNAPL
- 709.65 GROUNDWATER ELEVATION (IN FEET)
- 726 GROUNDWATER ELEVATION CONTOUR (IN FEET)
- GENERALIZED FLOW DIRECTION
- [709.55] ANOMALOUS GROUNDWATER ELEVATION (IN FEET) NOT USED TO GENERATE GROUNDWATER ELEVATION CONTOURS
- LOCATION WHERE MEASURABLE LNAPL WAS DETECTED IN 2010

NOTES:

1. BASE MAP INFORMATION FROM A SURVEY BY BMJ INC., DATED APRIL 2001, AT A SCALE OF 1:100.
2. ALL LOCATIONS ARE APPROXIMATE.

REVITALIZING AUTO COMMUNITIES
ENVIRONMENTAL RESPONSE TRUST
NAO FLINT OPERATIONS SITE - FLINT, MICHIGAN
CMI ANNUAL REPORT

GROUNDWATER ELEVATION CONTOUR MAP OCTOBER 10-13, 2010 - SOUTHEND

ARCADIS

FIGURE
9

CITY: SYRACUSE DIV/GROUP: 141 DB: GMS PM:(Reqd) LYR: ON=*;OFF=*REF*,|SHD-BUILDING,|HIST_SB
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XREFS: 64410X01 64410X02 64410X7A 64410X00 64410X6A IMAGES: PROJECTNAME: ----

CITY: SYRACUSE DIV/GROUP: 141 DB: GMS PM:(Req'd) LYR: ON=*;OFF=*REF*; |SHD-BUILDING, |HIST_SB
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XREFS: IMAGES: PROJECTNAME: ---
64410X01
64410X00
64410X6A
64410X02

RFI-36-55	6/18/2008	9/17/2008	12/4/2008
VOC			
1,1-Dichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Benzene	ND(0.001)	ND(0.001)	ND(0.001)
n-Propylbenzene	NS	NS	NS
Tetrachloroethene	0.005 (NDW,RDW)	0.005	0.0005 J
Trichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Vinyl chloride	ND(0.001)	0.0002 J	0.001 J

RFI-36-56	6/18/2008	9/17/2008	12/4/2008
VOC			
1,1-Dichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Benzene	ND(0.001)	ND(0.001)	ND(0.001)
n-Propylbenzene	NS	NS	NS
Tetrachloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Trichloroethene	0.0002 J	0.0007 J	0.0004 J
Vinyl chloride	ND(0.001)	ND(0.001)	ND(0.001)

RFI-36-19	12/4/2008	9/25/2009	10/15/2010
VOC			
1,1-Dichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Benzene	ND(0.001)	ND(0.001)	ND(0.001)
n-Propylbenzene	NS	NS	ND(0.001)
Tetrachloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Trichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Vinyl chloride	ND(0.001)	ND(0.001)	ND(0.001)

RFI-10-28	6/18/2008	9/17/2008	12/3/2008
VOC			
1,1-Dichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Benzene	ND(0.001)	ND(0.001)	ND(0.001)
n-Propylbenzene	NS	NS	NS
Tetrachloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Trichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Vinyl chloride	ND(0.001)	ND(0.001)	ND(0.001)

RFI-10-29	9/17/2008	12/3/2008	10/14/2010
VOC			
1,1-Dichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Benzene	ND(0.001)	ND(0.001)	ND(0.001)
n-Propylbenzene	NS	NS	ND(0.001)
Tetrachloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Trichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Vinyl chloride	ND(0.001)	ND(0.001)	ND(0.001)

RFI-10-35	9/17/2008	12/3/2008	10/14/2010
VOC			
1,1-Dichloroethene	0.004	0.005	0.005
Benzene	ND(0.001)	ND(0.001)	ND(0.001)
n-Propylbenzene	NS	NS	ND(0.001)
Tetrachloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Trichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Vinyl chloride	ND(0.001)	ND(0.001)	ND(0.001)

RFI-10-36	9/15/2008	12/3/2008	10/14/2010
VOC			
1,1-Dichloroethene	ND(0.001)	ND(0.001)	ND(0.001) /ND(0.001)
Benzene	ND(0.001)	ND(0.001)	ND(0.001) /ND(0.001)
n-Propylbenzene	NS	NS	ND(0.001) /ND(0.001)
Tetrachloroethene	ND(0.001)	ND(0.001)	ND(0.001) /ND(0.001)
Trichloroethene	ND(0.001)	ND(0.001)	ND(0.001) /ND(0.001)
Vinyl chloride	ND(0.001)	ND(0.001)	ND(0.001) /ND(0.001)
Inorganic			
Arsenic	NS	NS	NS
Cyanide (total)	NS	NS	NS
Lead	NS	ND(0.003)	NS
Manganese	NS	NS	NS
Selenium	NS	NS	NS
Silver	NS	NS	NS

RFI-81-50	9/16/2008	9/24/2009	10/18/2010
VOC			
1,1-Dichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Benzene	ND(0.001)	ND(0.001)	ND(0.001)
n-Propylbenzene	NS	NS	ND(0.001)
Tetrachloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Trichloroethene	ND(0.001)	0.0008 J	ND(0.001)
Vinyl chloride	ND(0.001)	ND(0.001)	ND(0.001)

RFI-36-48	9/17/2008	12/4/2008	10/15/2010
VOC			
1,1-Dichloroethene	0.002	0.004	0.006
Benzene	ND(0.001)	ND(0.001)	ND(0.001)
n-Propylbenzene	NS	NS	ND(0.001)
Tetrachloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Trichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Vinyl chloride	0.003 (NDW,RDW)	ND(0.001)	0.003 (NDW,RDW)

RFI-36-37	9/18/2008	9/25/2009	10/15/2010
VOC			
1,1-Dichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Benzene	0.015 (NDW,RDW)	0.015 (NDW,RDW)	0.048 (NDW,RDW)
n-Propylbenzene	NS	NS	ND(0.001)
Tetrachloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Trichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Vinyl chloride	ND(0.001)	ND(0.001)	ND(0.001)

RFI-36-47	9/18/2008	12/4/2008	10/15/2010
VOC			
1,1-Dichloroethene	0.031 (NDW,RDW)	ND(0.001)	0.026 (NDW,RDW)
Benzene	0.0003 J	ND(0.001)	ND(0.001)
n-Propylbenzene	NS	NS	ND(0.001)
Tetrachloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Trichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Vinyl chloride	0.003 (NDW,RDW)	ND(0.001)	0.002

RFI-36-20	6/22/2002	10/6/2004	10/14/2010
VOC			
1,1-Dichloroethene	NS	ND(0.001)	ND(0.001)
Benzene	NS	ND(0.001)	ND(0.001)
n-Propylbenzene	NS	NS	ND(0.001)
Tetrachloroethene	NS	ND(0.001)	ND(0.001)
Trichloroethene	NS	ND(0.001)	ND(0.001)
Vinyl chloride	NS	ND(0.001)	ND(0.001)
Inorganic			
Arsenic	ND(0.001)	NS	NS
Cyanide (total)	ND(0.005)	NS	NS
Lead	0.000089 J	NS	NS
Manganese	0.00054 J	NS	NS
Selenium	ND(0.0014)	NS	NS
Silver	ND(0.0004 J)	NS	NS
Inorganic-Dissolved			
Arsenic	ND(0.001)	NS	NS
Cyanide (total)	ND(0.005)	NS	NS
Lead	ND(0.0004)	NS	NS
Manganese	0.00048 J	NS	NS
Selenium	ND(0.0014)	NS	NS
Silver	ND(0.0004 J)	NS	NS

RFI-36-04	6/18/2002	4/2/2003	9/18/2008
VOC			
1,1-Dichloroethene	NS /NS	NS	ND(0.001)
Benzene	NS /NS	NS	ND(0.001)
n-Propylbenzene	NS /NS	NS	NS
Tetrachloroethene	NS /NS	NS	ND(0.001)
Trichloroethene	NS /NS	NS	ND(0.001)
Vinyl chloride	NS /NS	NS	0.003 (NDW,RDW)
Inorganic			
Arsenic	0.08 (NDW,RDW) /0.08 J (NDW,RDW)	0.087 (NDW,RDW)	NS
Cyanide (total)	ND(0.005) /ND(0.005)	ND(0.005)	NS
Lead	0.001 /0.0009 J	0.0018	NS
Manganese	0.44 /0.56 J	0.6 J	NS
Selenium	ND(0.0014) /0.0013 J	ND(0.0016)	NS
Silver	ND(0.0004) /0.00054	ND(0.0004)	NS

RFI-36-14	10/26/2007	9/15/2008	9/23/2009
VOC			
1,1-Dichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Benzene	ND(0.001)	ND(0.001)	ND(0.001)
n-Propylbenzene	NS	NS	NS
Tetrachloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Trichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Vinyl chloride	ND(0.001)	ND(0.001)	ND(0.001)

20-500R	9/15/2008	9/23/2009	10/14/2010
VOC			
1,1-Dichloroethene	ND(0.001)	ND(0.001)	ND(0.005)
Benzene	0.0004 J	0.0006 J	ND(0.005)
n-Propylbenzene	NS	NS	0.244 (NDW,RDW)
Tetrachloroethene	ND(0.001)	ND(0.001)	ND(0.005)
Trichloroethene	ND(0.001)	ND(0.001)	ND(0.005)
Vinyl chloride	ND(0.001)	ND(0.001)	ND(0.005)

RFI-81-08	10/7/2004	2/24/2005	10/18/2010
VOC			
1,1-Dichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Benzene	ND(0.001)	ND(0.001)	ND(0.001)
n-Propylbenzene	NS	NS	ND(0.001)
Tetrachloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Trichloroethene	0.002	0.002	0.005
Vinyl chloride	0.008 (NDW,RDW)	0.012 J (NDW,RDW)	0.001 J
Inorganic			
Arsenic	NS	NS	NS
Cyanide (total)	NS	NS	NS
Lead	ND(0.003)	NS	NS
Manganese	1.36 (RDW)	NS	NS
Selenium	NS	NS	NS
Silver	NS	NS	NS

07-01	9/20/2001	10/15/2010
VOC		
1,1-Dichloroethene	ND(0.001)	ND(0.001)
Benzene	ND(0.001)	ND(0.001)
n-Propylbenzene	NS	ND(0.001)
Tetrachloroethene	ND(0.001)	0.028 (NDW,RDW)
Trichloroethene	ND(0.001)	0.003
Vinyl chloride	ND(0.001)	ND(0.001)
Inorganic		
Arsenic	NS	NS
Cyanide (total)	0.002 J	NS
Lead	NS	NS
Manganese	NS	NS
Selenium	NS	NS
Silver	NS	NS
Inorganic-Dissolved		
Arsenic	0.001 J	NS
Cyanide (total)	0.0021 J	NS
Lead	ND(0.0004)	NS
Manganese	0.26	NS
Selenium	ND(0.0014)	NS
Silver	0.00041 J	NS

RFI-86-16R	10/29/2007	9/15/2008	10/18/2010
VOC			
1,1-Dichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Benzene	ND(0.001)	ND(0.001)	ND(0.001)
n-Propylbenzene	NS	NS	ND(0.001)
Tetrachloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Trichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Vinyl chloride	ND(0.001)	ND(0.001)	ND(0.001)

RFI-86-01R	4/3/2003	10/7/2004	10/28/2010
VOC			
1,1-Dichloroethene	ND(0.001)	ND(0.001)	ND(0.001) /NS
Benzene	ND(0.001)	ND(0.001)	ND(0.001) /NS
n-Propylbenzene	NS	NS	ND(0.001) /NS
Tetrachloroethene	ND(0.001)	ND(0.001)	ND(0.001) /NS
Trichloroethene	ND(0.001)	ND(0.001)	ND(0.001) /NS
Vinyl chloride	ND(0.001)	ND(0.001)	ND(0.001) /NS
Inorganic			
Arsenic	0.0018	NS	NS /NS
Cyanide (total)	ND(0.005)	NS	NS /NS
Lead	0.0013	NS	ND(0.003) /ND(0.003)
Manganese	0.47 J	NS	0.019 /0.018
Selenium	0.0054	NS	NS /NS
Silver	ND(0.0004)	NS	NS /NS

70-185	9/16/2008	9/24/2009	10/18/2010
VOC			
1,1-Dichloroethene	NS /NS	ND(0.001) /NS	ND(0.001) /NS
Benzene	NS /NS	ND(0.001) /NS	ND(0.001) /NS
n-Propylbenzene	NS /NS	NS /NS	ND(0.001) /NS
Tetrachloroethene	NS /NS	ND(0.001) /NS	ND(0.001) /NS
Trichloroethene	NS /NS	ND(0.001) /NS	ND(0.001) /NS
Vinyl chloride	NS /NS	ND(0.001) /NS	ND(0.001) /NS
Inorganic			
Arsenic	NS /NS	NS /NS	NS /NS
Cyanide (total)	NS /NS	NS /NS	NS /NS
Lead	0.09 (NDW,RDW) /0.092 (NDW,RDW)	0.0489 (NDW,RDW) /0.0492 (NDW,RDW)	0.381 J (NDW,RDW) /0.083 J (NDW,RDW)
Manganese	NS /NS	NS /NS	NS /NS
Selenium	NS /NS	NS /NS	NS /NS
Silver	NS /NS	NS /NS	NS /NS

RFI-10-33	9/17/2008	12/3/2008	10/14/2010
VOC			
1,1-Dichloroethene	0.004	0.015 (NDW,RDW)	0.006
Benzene	ND(0.001)	ND(0.001)	ND(0.001)
n-Propylbenzene	NS	NS	ND(0.001)
Tetrachloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Trichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Vinyl chloride	ND(0.001)	ND(0.001)	ND(0.001)

RFI-10-26	10/26/2007	9/15/2008	10/14/2010
VOC			
1,1-Dichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Benzene	ND(0.001)	ND(0.001)	ND(0.001)
n-Propylbenzene	NS	NS	ND(0.001)
Tetrachloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Trichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Vinyl chloride	ND(0.001)	ND(0.001)	ND(0.001)

RFI-10-24	9/15/2008	12/3/2008	10/14/2010
VOC			
1,1-Dichloroethene	ND(0.001)	ND(0.001)	0.003
Benzene	ND(0.001)	ND(0.001)	ND(0.001)
n-Propylbenzene	NS	NS	ND(0.001)
Tetrachloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Trichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Vinyl chloride	ND(0.001)	ND(0.001)	ND(0.001)

20-FP10R	9/15/2008	9/23/2009	10/14/2010
VOC			
1,1-Dichloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Benzene	ND(0.001)	0.003	0.006 (NDW,RDW)
n-Propylbenzene	NS	NS	ND(0.001)
Tetrachloroethene	ND(0.001)	ND(0.001)	ND(0.001)
Trichloroethene	0.007 (NDW,RDW)	0.008 (NDW,RDW)	0.002
Vinyl chloride	0.0006 J	0.002	0.002

LEGEND:

- MONITORING WELL
- RECOVERY WELL
- PIEZOMETER LOCATION
- RFI SOIL BORING/GRAB GROUNDWATER SAMPLE LOCATION
- RACER PROPERTY BOUNDARY
- PROPERTY PREVIOUSLY OWNED BY RACER (STILL SUBJECT TO RCRA CORRECTIVE ACTION)
- APPROXIMATE AOI BOUNDARY
- BASEMENT/TUNNEL AREA
- DEMOLISHED BUILDING
- ESTIMATED CURRENT LIMITS OF MEASURABLE LNAPL
- ESTIMATED AREA WHERE VOCs AND/OR SVOCs EXCEED MICHIGAN PART 201 GENERIC INDUSTRIAL SCREENING CRITERIA IN GROUNDWATER
- ESTIMATED AREA WHERE INORGANICS EXCEED MICHIGAN PART 201 GENERIC INDUSTRIAL SCREENING CRITERIA IN GROUNDWATER
- 726 GROUNDWATER ELEVATION CONTOUR (IN FEET)
- GENERALIZED FLOW DIRECTION
- EXCEEDS MICHIGAN PART 201 GENERIC NON-RESIDENTIAL SCREENING CRITERIA:

NDW – NON-RESIDENTIAL DRINKING WATER

NOTES:

1. BASE MAP INFORMATION FROM A SURVEY BY BMJ, INC. DATED SEPTEMBER 2001, AT A SCALE OF 1:100.
2. WATER TABLE ELEVATION CONTOURS MEASURED ON OCTOBER 10–13, 2010.
3. ALL LOCATIONS ARE APPROXIMATE.
4. CONSTITUENTS PRESENTED HERE ARE THOSE WHICH EXCEED ONE OR MORE MICHIGAN PART 201 GENERIC RESIDENTIAL IN GROUNDWATER SAMPLES COLLECTED IN THE AREA SHOWN ON THIS FIGURE.
5. ALL CONCENTRATIONS PRESENTED IN MILLIGRAMS PER LITER (mg/L).
6. ND (1.0)–CONSTITUENT NOT DETECTED. ASSOCIATED DETECTION LIMIT PRESENTED IN PARENTHESES.
7. DUPLICATE ANALYSES SEPARATED BY SLASHES (/).
8. NS–NOT ANALYZED FOR THIS CONSTITUENT.
9. J–ESTIMATED CONCENTRATION.
10. D–CONCENTRATION BASED ON A DILUTED SAMPLE ANALYSIS.
11. RDW–EXCEEDS MICHIGAN PART 201 RESIDENTIAL DRINKING WATER CRITERIA.
12. GSI CRITERIA COMPARED TO SAMPLES LOCATED WITHIN 500 FEET OF THE FLINT RIVER.
13. ANALYTICAL DATA SHOWN ARE FROM MOST RECENT SAMPLING EVENT AT EACH LOCATION.

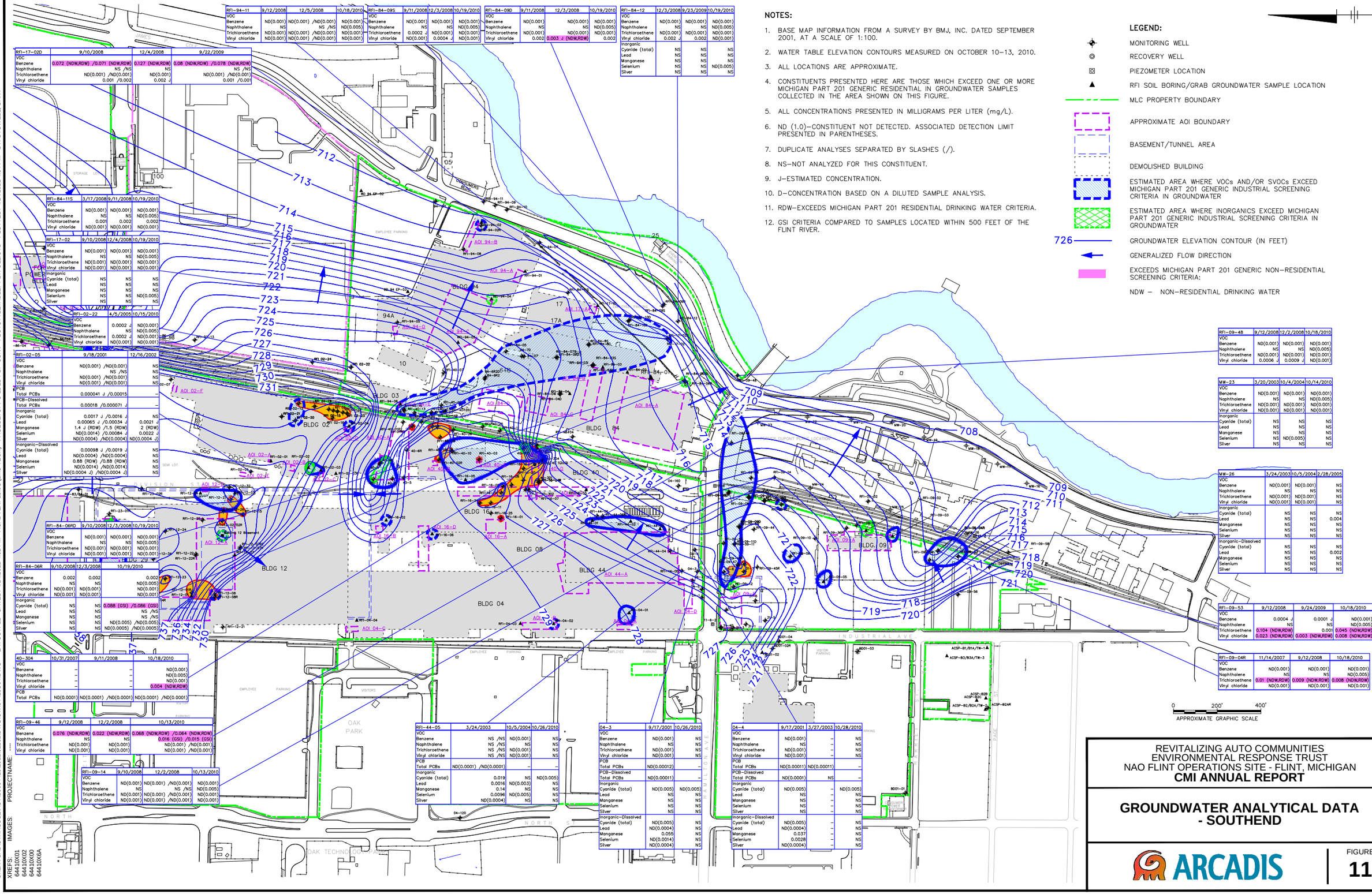
0 250' 500'
GRAPHIC SCALE

REVITALIZING AUTO COMMUNITIES
ENVIRONMENTAL RESPONSE TRUST
NAO FLINT OPERATIONS SITE - FLINT, MICHIGAN
CMI ANNUAL REPORT

GROUNDWATER ANALYTICAL DATA - NORTHEND

ARCADIS

FIGURE
10


RFI-94-11 | 9/12/2008 | 12/5/2008 | 10/18/2010
VOC
Benzene | ND(0.001) | ND(0.001) /ND(0.001) | ND(0.001)
Naphthalene | NS | NS /NS | ND(0.005)
Trichloroethene | ND(0.001) | ND(0.001) /ND(0.001) | ND(0.001)
Vinyl chloride | ND(0.001) | ND(0.001) /ND(0.001) | ND(0.001)
RFI-84-09S | 9/11/2008 | 12/3/2008 | 10/19/2010
VOC
Benzene | ND(0.001) | ND(0.001) | ND(0.001)
Naphthalene | NS | NS | ND(0.005)
Trichloroethene | 0.0002 J | ND(0.001) | ND(0.001)
Vinyl chloride | ND(0.001) | 0.0004 J | ND(0.001)
RFI-84-09D | 9/11/2008 | 12/3/2008 | 10/19/2010
VOC
Benzene | ND(0.001) | ND(0.001) | ND(0.001)
Naphthalene | NS | NS | ND(0.005)
Trichloroethene | ND(0.001) | ND(0.001) | ND(0.001)
Vinyl chloride | 0.002 | 0.003 J (NDW,RDW) | 0.002
RFI-84-12 | 12/3/2008 | 9/23/2009 | 10/19/2010
VOC
Benzene | ND(0.001) | ND(0.001) | ND(0.001)
Naphthalene | NS | NS | ND(0.005)
Trichloroethene | ND(0.001) | ND(0.001) | ND(0.001)
Vinyl chloride | 0.002 J | 0.002 | ND(0.001)
Inorganic
Cyanide (total) | NS | NS | NS
Lead | NS | NS | NS
Manganese | NS | NS | NS
Selenium | NS | NS | ND(0.005)
Silver | NS | NS | NS
RFI-17-02D | 9/10/2008 | 12/4/2008 | 9/22/2009
VOC
Benzene | 0.072 (NDW,RDW) /0.071 (NDW,RDW) | 0.127 (NDW,RDW) | 0.08 (NDW,RDW) /0.078 (NDW,RDW)
Naphthalene | NS /NS | NS | NS /NS
Trichloroethene | ND(0.001) /ND(0.001) | ND(0.001) | ND(0.001) /ND(0.001)
Vinyl chloride | 0.001 /0.002 | 0.002 J | 0.001 /0.001
RFI-84-11S | 3/17/2008 | 9/11/2008 | 10/19/2010
VOC
Benzene | ND(0.001) | ND(0.001) | ND(0.001)
Naphthalene | NS | NS | ND(0.005)
Trichloroethene | 0.001 | 0.002 | 0.002
Vinyl chloride | ND(0.001) | ND(0.001) | ND(0.001)
RFI-17-02 | 9/10/2008 | 12/4/2008 | 10/19/2010
VOC
Benzene | ND(0.001) | ND(0.001) | ND(0.001)
Naphthalene | NS | NS | ND(0.005)
Trichloroethene | ND(0.001) | ND(0.001) | ND(0.001)
Vinyl chloride | ND(0.001) | ND(0.001) | ND(0.001)
Inorganic
Cyanide (total) | NS | NS | NS
Lead | NS | NS | NS
Manganese | NS | NS | NS
Selenium | NS | NS | ND(0.005)
Silver | NS | NS | NS
RFI-02-22 | 4/5/2005 | 10/15/2010
VOC
Benzene | 0.0002 J | ND(0.001)
Naphthalene | NS | ND(0.005)
Trichloroethene | 0.0002 J | ND(0.001)
Vinyl chloride | ND(0.001) | ND(0.001)
RFI-02-05 | 9/18/2001 | 12/16/2002
VOC
Benzene | ND(0.001) /ND(0.001) | NS
Naphthalene | NS /NS | NS
Trichloroethene | ND(0.001) /ND(0.001) | NS
Vinyl chloride | ND(0.001) /ND(0.001) | NS
PCB
Total PCBs | 0.000041 J /0.00015 | –
PCB-Dissolved
Total PCBs | 0.00018 /0.000071 J | –
Inorganic
Cyanide (total) | 0.0017 J /0.0016 J | NS
Lead | 0.00065 J /0.00034 J | 0.0001 J
Manganese | 1.4 J (RDW) /1.5 (RDW) | 2 (RDW)
Selenium | ND(0.0014) /0.00084 J | 0.0022 J
Silver | ND(0.0004) /ND(0.0004) | ND(0.0004 J)
Inorganic-Dissolved
Cyanide (total) | 0.00098 J /0.0019 J | NS
Lead | ND(0.0004) /ND(0.0004) | NS
Manganese | 0.88 (RDW) /0.88 (RDW) | NS
Selenium | ND(0.0014) /ND(0.0014) | NS
Silver | ND(0.0004 J) /ND(0.0004 J) | NS
RFI-84-06RD | 9/10/2008 | 12/3/2008 | 10/19/2010
VOC
Benzene | ND(0.001) | ND(0.001) | ND(0.001)
Naphthalene | NS | NS | ND(0.005)
Trichloroethene | ND(0.001) | ND(0.001) | ND(0.001)
Vinyl chloride | ND(0.001) | ND(0.001) | ND(0.001)
RFI-84-06R | 9/10/2008 | 12/3/2008 | 10/19/2010
VOC
Benzene | 0.002 | 0.002 | 0.002
Naphthalene | NS | NS | ND(0.005)
Trichloroethene | ND(0.001) | ND(0.001) | ND(0.001)
Vinyl chloride | ND(0.001) | ND(0.001) | ND(0.001)
Inorganic
Cyanide (total) | NS | NS | 0.088 (GSI) /0.086 (GSI)
Lead | NS | NS | NS /NS
Manganese | NS | NS | NS /NS
Selenium | NS | NS | ND(0.005) /ND(0.005)
Silver | NS | NS | ND(0.0005) /ND(0.0005)
40-304 | 10/31/2007 | 9/11/2008 | 10/18/2010
VOC
Benzene | – | – | ND(0.001)
Naphthalene | – | – | ND(0.005)
Trichloroethene | – | – | ND(0.001)
Vinyl chloride | – | – | 0.004 (NDW,RDW)
PCB
Total PCBs | ND(0.0001) | ND(0.0001) /ND(0.0001) | ND(0.0001) /ND(0.0001)
RFI-09-46 | 9/12/2008 | 12/2/2008 | 10/13/2010
VOC
Benzene | 0.076 (NDW,RDW) | 0.022 (NDW,RDW) | 0.068 (NDW,RDW) /0.064 (NDW,RDW)
Naphthalene | NS | NS | 0.016 (GSI) /0.015 (GSI)
Trichloroethene | ND(0.001) | ND(0.001) | ND(0.001) /ND(0.001)
Vinyl chloride | ND(0.001) | ND(0.001) | ND(0.001) /ND(0.001)
RFI-09-14 | 9/10/2008 | 12/2/2008 | 10/13/2010
VOC
Benzene | ND(0.001) | ND(0.001) /ND(0.001) | ND(0.001)
Naphthalene | NS | NS /NS | ND(0.005)
Trichloroethene | ND(0.001) | ND(0.001) /ND(0.001) | ND(0.001)
Vinyl chloride | ND(0.001) | ND(0.001) /ND(0.001) | ND(0.001)
RFI-44-05 | 3/24/2003 | 10/5/2004 | 10/26/2010
VOC
Benzene | NS /NS | ND(0.001) | NS
Naphthalene | NS /NS | NS | NS
Trichloroethene | NS /NS | ND(0.001) | NS
Vinyl chloride | NS /NS | ND(0.001) | NS
PCB
Total PCBs | ND(0.0001) /ND(0.0001) | – | –
Inorganic
Cyanide (total) | 0.019 | NS | ND(0.005)
Lead | 0.0016 | ND(0.003) | NS
Manganese | 0.14 | NS | NS
Selenium | 0.0096 | ND(0.005) | NS
Silver | ND(0.0004) | NS | NS
04-3 | 9/17/2001 | 10/26/2010
VOC
Benzene | ND(0.001) | NS
Naphthalene | NS | NS
Trichloroethene | ND(0.001) | NS
Vinyl chloride | ND(0.001) | NS
PCB
Total PCBs | ND(0.00012) | –
PCB-Dissolved
Total PCBs | ND(0.00011) | –
Inorganic
Cyanide (total) | ND(0.005) | ND(0.005)
Lead | NS | NS
Manganese | NS | NS
Selenium | NS | NS
Silver | NS | NS
Inorganic-Dissolved
Cyanide (total) | ND(0.005) | NS
Lead | ND(0.0004) | NS
Manganese | 0.055 | NS
Selenium | ND(0.0014) | NS
Silver | ND(0.0004) | NS
04-4 | 9/17/2001 | 3/27/2003 | 10/28/2010
VOC
Benzene | ND(0.001) | – | NS
Naphthalene | NS | – | NS
Trichloroethene | ND(0.001) | – | NS
Vinyl chloride | ND(0.001) | – | NS
PCB
Total PCBs | ND(0.00011) | ND(0.00011) | –
PCB-Dissolved
Total PCBs | ND(0.0001) | NS | –
Inorganic
Cyanide (total) | ND(0.005) | – | ND(0.005)
Lead | NS | – | NS
Manganese | NS | – | NS
Selenium | NS | – | NS
Silver | NS | – | NS
Inorganic-Dissolved
Cyanide (total) | ND(0.005) | – | NS
Lead | ND(0.0004) | – | NS
Manganese | 0.037 | – | NS
Selenium | 0.0028 | – | NS
Silver | ND(0.0004) | – | NS
RFI-09-48 | 9/12/2008 | 12/2/2008 | 10/18/2010
VOC
Benzene | ND(0.001) | ND(0.001) | ND(0.001)
Naphthalene | NS | NS | ND(0.005)
Trichloroethene | ND(0.001) | ND(0.001) | ND(0.001)
Vinyl chloride | 0.0006 J | 0.0009 J | ND(0.001)
MW-23 | 3/20/2003 | 10/4/2004 | 10/14/2010
VOC
Benzene | ND(0.001) | ND(0.001) | ND(0.001)
Naphthalene | NS | NS | ND(0.005)
Trichloroethene | ND(0.001) | ND(0.001) | ND(0.001)
Vinyl chloride | ND(0.001) | ND(0.001) | ND(0.001)
Inorganic
Cyanide (total) | NS | NS | NS
Lead | NS | NS | NS
Manganese | NS | NS | NS
Selenium | NS | ND(0.005) | NS
Silver | NS | NS | NS
MW-26 | 3/24/2003 | 10/5/2004 | 2/28/2005
VOC
Benzene | ND(0.001) | ND(0.001) | NS
Naphthalene | NS | NS | NS
Trichloroethene | ND(0.001) | ND(0.001) | NS
Vinyl chloride | ND(0.001) | ND(0.001) | NS
Inorganic
Cyanide (total) | NS | NS | NS
Lead | NS | NS | 0.004
Manganese | NS | NS | NS
Selenium | NS | NS | NS
Silver | NS | NS | NS
Inorganic-Dissolved
Cyanide (total) | NS | NS | NS
Lead | NS | NS | 0.002
Manganese | NS | NS | NS
Selenium | NS | NS | NS
Silver | NS | NS | NS
RFI-09-53 | 9/12/2008 | 9/24/2009 | 10/18/2010
VOC
Benzene | 0.0004 J | 0.0001 J | ND(0.001)
Naphthalene | NS | NS | ND(0.005)
Trichloroethene | 0.104 (NDW,RDW) | 0.001 | 0.045 (NDW,RDW)
Vinyl chloride | 0.023 (NDW,RDW) | 0.003 (NDW,RDW) | 0.008 (NDW,RDW)
RFI-09-04R | 11/14/2007 | 9/12/2008 | 10/18/2010
VOC
Benzene | ND(0.001) | ND(0.001) | ND(0.001)
Naphthalene | NS | NS | ND(0.005)
Trichloroethene | 0.01 (NDW,RDW) | 0.009 (NDW,RDW) | 0.008 (NDW,RDW)
Vinyl chloride | ND(0.001) | ND(0.001) | ND(0.001)
NOTES:
1. BASE MAP INFORMATION FROM A SURVEY BY BMJ, INC. DATED SEPTEMBER 2001, AT A SCALE OF 1:100.
2. WATER TABLE ELEVATION CONTOURS MEASURED ON OCTOBER 10–13, 2010.
3. ALL LOCATIONS ARE APPROXIMATE.
4. CONSTITUENTS PRESENTED HERE ARE THOSE WHICH EXCEED ONE OR MORE MICHIGAN PART 201 GENERIC RESIDENTIAL IN GROUNDWATER SAMPLES COLLECTED IN THE AREA SHOWN ON THIS FIGURE.
5. ALL CONCENTRATIONS PRESENTED IN MILLIGRAMS PER LITER (mg/L).
6. ND (1.0)–CONSTITUENT NOT DETECTED. ASSOCIATED DETECTION LIMIT PRESENTED IN PARENTHESES.
7. DUPLICATE ANALYSES SEPARATED BY SLASHES (/).
8. NS–NOT ANALYZED FOR THIS CONSTITUENT.
9. J–ESTIMATED CONCENTRATION.
10. D–CONCENTRATION BASED ON A DILUTED SAMPLE ANALYSIS.
11. RDW–EXCEEDS MICHIGAN PART 201 RESIDENTIAL DRINKING WATER CRITERIA.
12. GSI CRITERIA COMPARED TO SAMPLES LOCATED WITHIN 500 FEET OF THE FLINT RIVER.
LEGEND:
MONITORING WELL
RECOVERY WELL
PIEZOMETER LOCATION
RFI SOIL BORING/GRAB GROUNDWATER SAMPLE LOCATION
MLC PROPERTY BOUNDARY
APPROXIMATE AOI BOUNDARY
BASEMENT/TUNNEL AREA
DEMOLISHED BUILDING
ESTIMATED AREA WHERE VOCs AND/OR SVOCs EXCEED MICHIGAN PART 201 GENERIC INDUSTRIAL SCREENING CRITERIA IN GROUNDWATER
ESTIMATED AREA WHERE INORGANICS EXCEED MICHIGAN PART 201 GENERIC INDUSTRIAL SCREENING CRITERIA IN GROUNDWATER
726 GROUNDWATER ELEVATION CONTOUR (IN FEET)
GENERALIZED FLOW DIRECTION
EXCEEDS MICHIGAN PART 201 GENERIC NON–RESIDENTIAL SCREENING CRITERIA:
NDW – NON–RESIDENTIAL DRINKING WATER
0 200' 400'
APPROXIMATE GRAPHIC SCALE
REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST
NAO FLINT OPERATIONS SITE - FLINT, MICHIGAN
CMI ANNUAL REPORT
GROUNDWATER ANALYTICAL DATA - SOUTHEND
ARCADIS
FIGURE 11
BLDG 02
BLDG 03
BLDG 04
BLDG 08
BLDG 09
BLDG 10
BLDG 12
BLDG 16
BLDG 29
BLDG 40
BLDG 44
BLDG 84
POWER HOUSE BLDG
OAK PARK
OAK TECHNOLOGY PARK
DIVISION STREET
NORTH STREET
INDUSTRIAL AVE
CHEVROLET AVE
CITY: SYRACUSE DV/GROUP: 141 DB: GMS PM:(Read) LYR: ON=*;OFF=*REF*;|SHD=BUILDING,|HIST_SB LAYOUT: 11 SAVED: 4/14/2011 4:01 PM ACADVER: 18.0S (LMS TECH) PAGESETUP: C:\LD2B-PDF-CONV PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 4/14/2011 4:54 PM BY: STOWELL, GARY
G:\ENVCAD\SYRACUSE\ACTIB\0064410\2011\01202\DWG\GW64410C04.DWG
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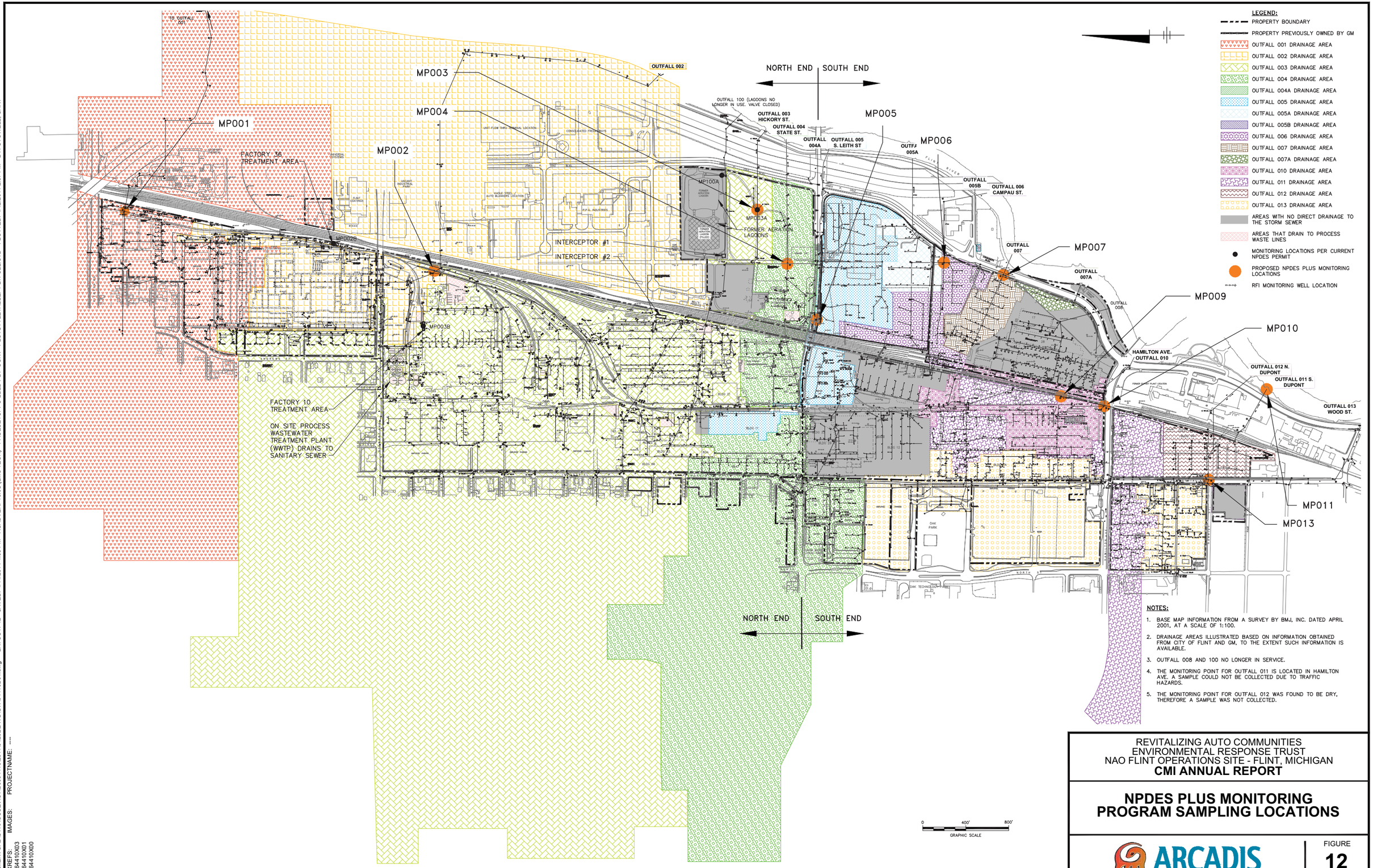
IMAGES: ---
PROJECTNAME: ---



NOTES:

1. BASE MAP INFORMATION FROM A SURVEY BY BMJ, INC. DATED APRIL 2001, AT A SCALE OF 1:100.
2. DRAINAGE AREAS ILLUSTRATED BASED ON INFORMATION OBTAINED FROM CITY OF FLINT AND GM, TO THE EXTENT SUCH INFORMATION IS AVAILABLE.
3. OUTFALL 008 AND 100 NO LONGER IN SERVICE.
4. THE MONITORING POINT FOR OUTFALL 011 IS LOCATED IN HAMILTON AVE. A SAMPLE COULD NOT BE COLLECTED DUE TO TRAFFIC HAZARDS.
5. THE MONITORING POINT FOR OUTFALL 012 WAS FOUND TO BE DRY, THEREFORE A SAMPLE WAS NOT COLLECTED.

REVITALIZING AUTO COMMUNITIES
ENVIRONMENTAL RESPONSE TRUST
NAO FLINT OPERATIONS SITE - FLINT, MICHIGAN
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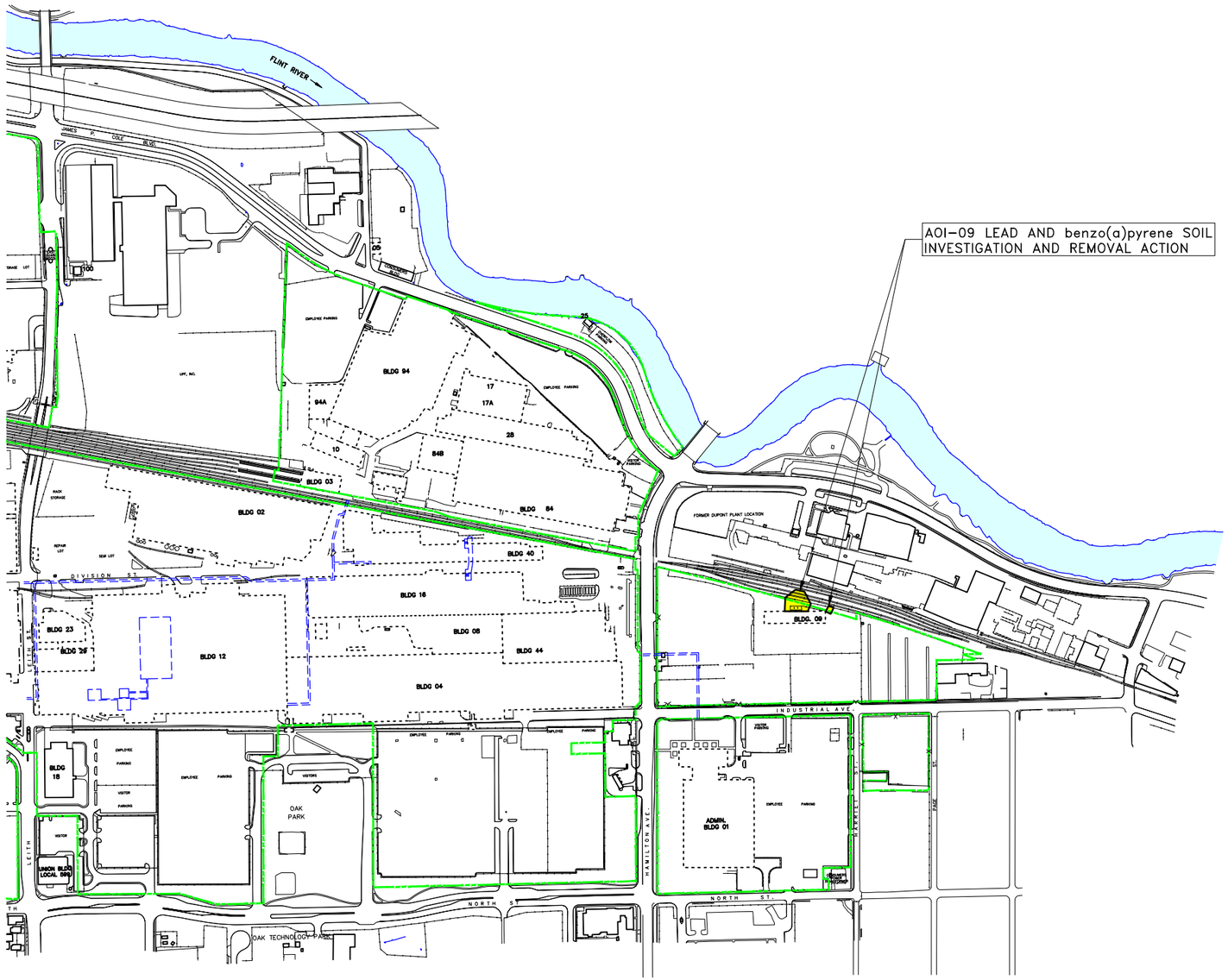
NPDES PLUS MONITORING PROGRAM SAMPLING LOCATIONS

ARCADIS

FIGURE
12

CITY: SYRACUSE DIV/GROUP: 141 DB: G. STOWELL L. FORAKER LD: GMS PM: L. McBURNEY LYR: ON=*;OFF=*REF*
G:\ENVCAD\SYRACUSE\ACT\B0064410\2011\01202\DWG\GW\64410B01.dwg LAYOUT: 12 SAVED: 4/11/2011 1:58 PM ACADVER: 18.0S (LMS TECH) PAGESETUP: C-LD2B-PDF-CONV PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 4/12/2011 2:57 PM BY: STOWELL, GARY
XREFS: 64410X03 64410X01 64410X00 IMAGES: PROJECTNAME: ----



LEGEND:

- PROPERTY BOUNDARY
- DEMOLISHED BUILDING
- AREAS OF IMPACTED SOIL

NOTES:

1. BASE MAP INFORMATION FROM A SURVEY BY BMJ INC., DATED APRIL 2001, AT A SCALE OF 1:100.
2. ALL LOCATIONS ARE APPROXIMATE.
3. BASELINE INSTITUTIONAL CONTROL FOR ENTIRE SITE INCLUDES DEED RESTRICTION LIMITING GROUNDWATER AND PROPERTY USE.

0 300' 600'
GRAPHIC SCALE

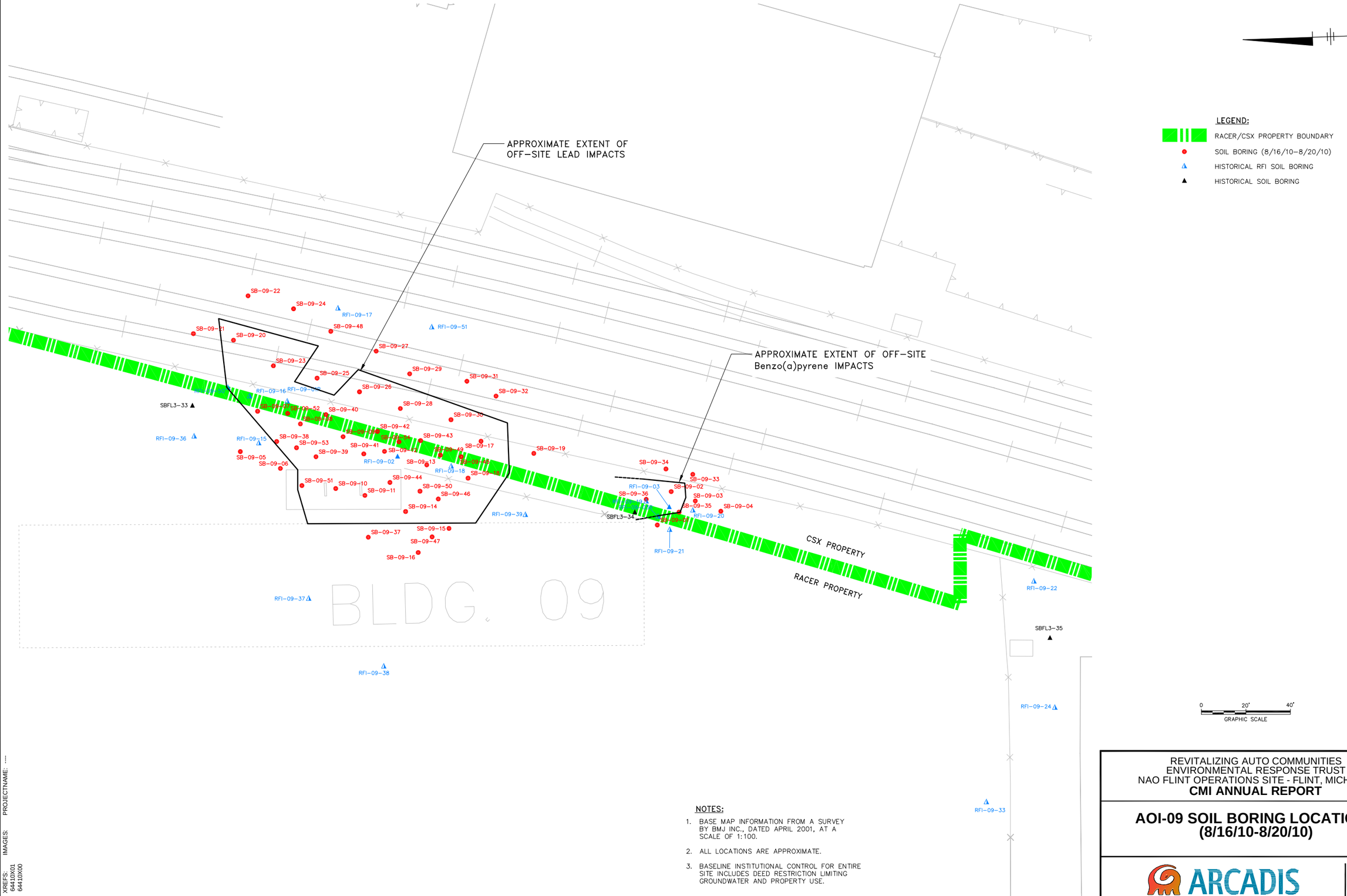
REVITALIZING AUTO COMMUNITIES
ENVIRONMENTAL RESPONSE TRUST
NAO FLINT OPERATIONS SITE - FLINT, MICHIGAN
CMI ANNUAL REPORT

AOI-09 LEAD/BENZO(A)PYRENE INVESTIGATION AND REMOVAL ACTION

ARCADIS

FIGURE
13

CITY: SYRACUSE DIVGROUP: 141 DB: G. STOWELL L. FORAKER LD: GMS PIC: L.McBURNEY PM: C. PETERS TM: D. KAIDING LYR: ON=* OFF=*REF;|PROPERTY-PREV;|SHD-BUILDING_|NAPL_OBS
G:\ENVCAD\SYRACUSE\ACTIB\06441\0\2011012\02\DWG\GW\64410B03.DWG LAYOUT: 13 SAVED: 4/13/2011 4:33 PM ACADVER: 18.0S (LMS TECH) PAGESETUP: C:\LD2B-PDF-CONV- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 4/13/2011 5:09 PM BY: STOWELL, GARY
XREFS:
64410X01
64410X00
IMAGES:
PROJECTNAME: ---



NOTES:

1. BASE MAP INFORMATION FROM A SURVEY BY BMJ INC., DATED APRIL 2001, AT A SCALE OF 1:100.
2. ALL LOCATIONS ARE APPROXIMATE.
3. BASELINE INSTITUTIONAL CONTROL FOR ENTIRE SITE INCLUDES DEED RESTRICTION LIMITING GROUNDWATER AND PROPERTY USE.

REVITALIZING AUTO COMMUNITIES
ENVIRONMENTAL RESPONSE TRUST
NAO FLINT OPERATIONS SITE - FLINT, MICHIGAN
CMI ANNUAL REPORT

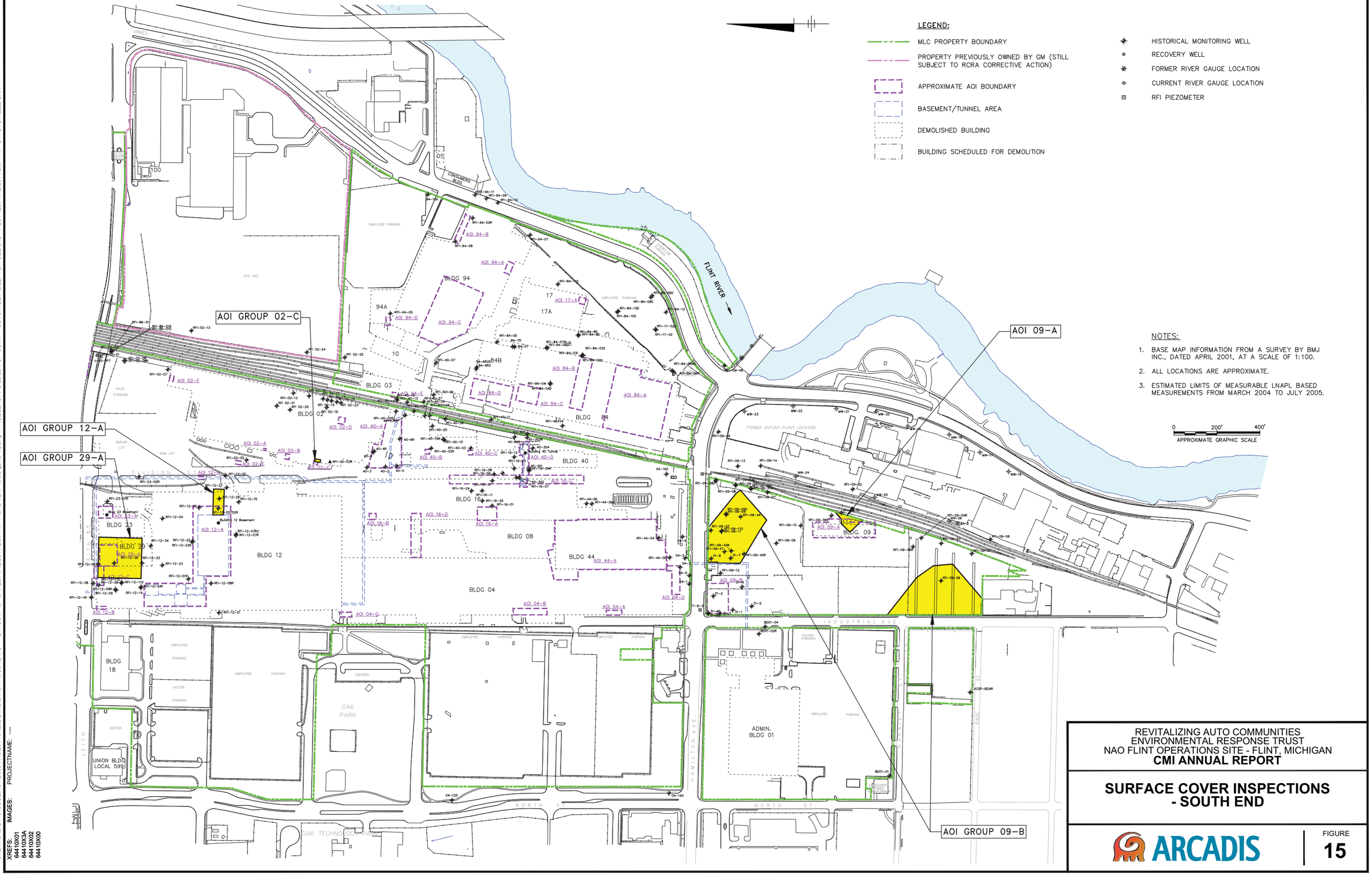
AOI-09 SOIL BORING LOCATIONS (8/16/10-8/20/10)

ARCADIS

FIGURE
14

CITY: SYRACUSE DIV/GROUP: 141 DB: GMS LD: GMS PM: M. LOVEJOY LYR: ON=*;OFF=*REF, |PROPERTY-PREV, |SHD-BUILDING, |NAPL_OBS
G:\ENVCAD\SYRACUSE\ACT\B0064410\2011\01202\DWG\GW64410B02.DWG LAYOUT: 14 SAVED: 4/13/2011 1:58 PM ACADVER: 18.0S (LMS TECH) PAGESETUP: C-LD2B-PDF-CONV PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 4/14/2011 8:24 AM BY: STOWELL, GARY
XREFS: 64410X01 64410X00 IMAGES: PROJECTNAME: ----

CITY: SYRACUSE DIV/GROUP: 141 DB: G. STOWELL L. FORAKER LD: GMS PM: L. McBURNEY LYR: ON=*;OFF=*REF*
G:\ENV\CAD\SYRACUSE\ACTIB0064410\2011\01202\DWG\GW64410G01.DWG LAYOUT: 15 SAVED: 4/12/2011 2:50 PM ACADVER: 18.0S (LMS TECH) PAGESETUP: C-LD2B-PDF-CONV PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 4/12/2011 2:57 PM BY: STOWELL, GARY
XREFS: IMAGES: PROJECTNAME: ---
64410X01
64410X3A
64410X02
64410X00



REVITALIZING AUTO COMMUNITIES
ENVIRONMENTAL RESPONSE TRUST
NAO FLINT OPERATIONS SITE - FLINT, MICHIGAN
CMI ANNUAL REPORT

SURFACE COVER INSPECTIONS - SOUTH END

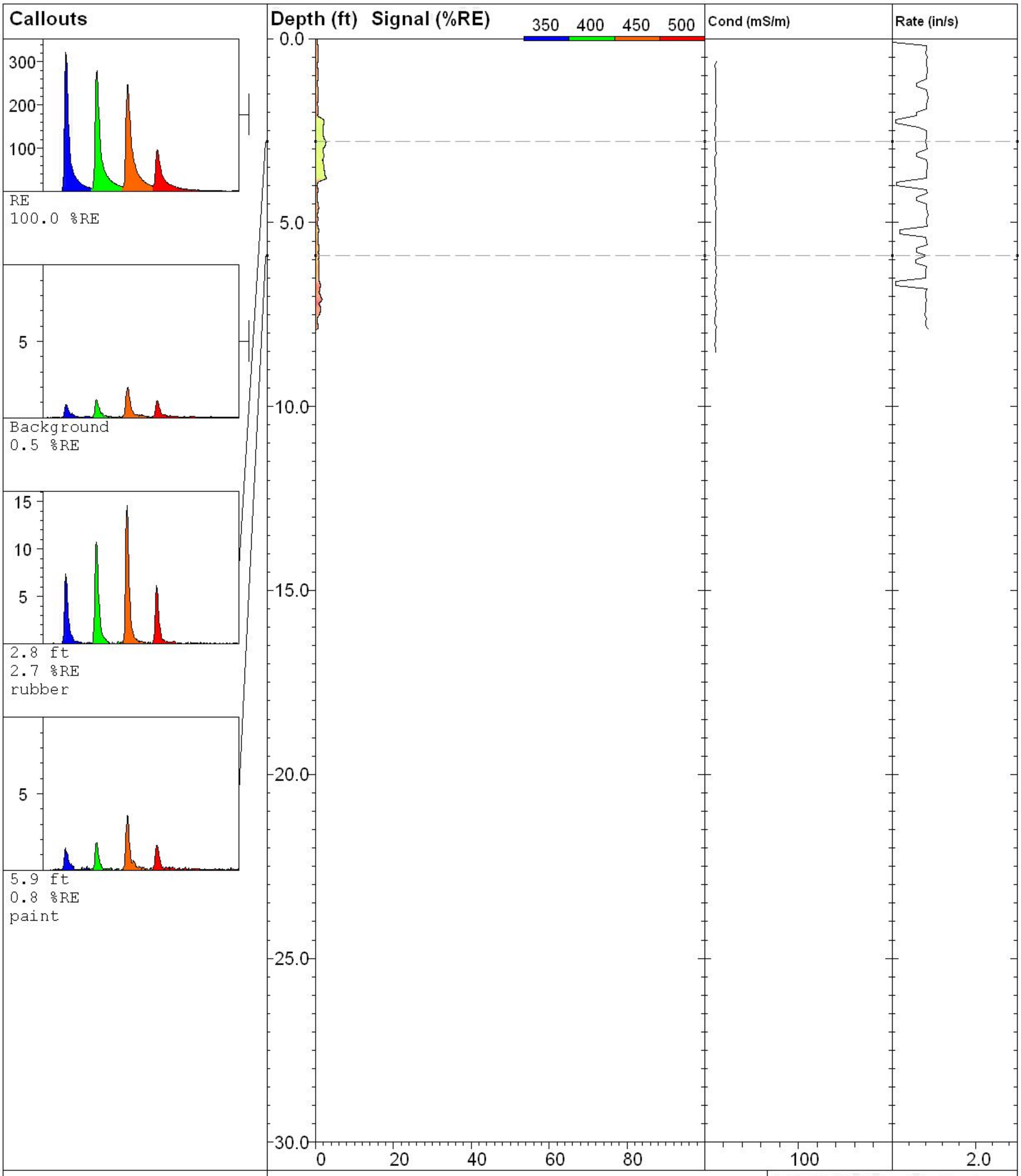
ARCADIS

FIGURE
15

ARCADIS

Appendix A

Matrix Environmental Direct Sensing Report



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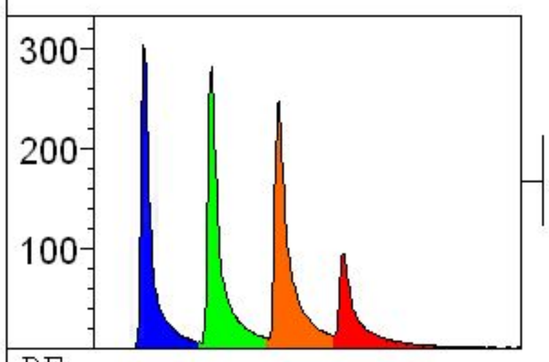
www.matrixenv.com

LIF-emulation 2

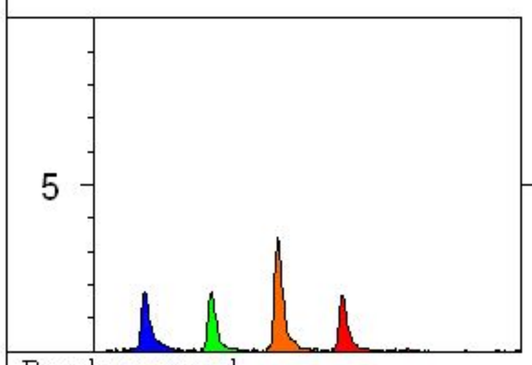
UVOST By Dakota
www.DakotaTechnologies.com

Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **7.90 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **2.9 % @ 3.80 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-17 16:02 CDT**

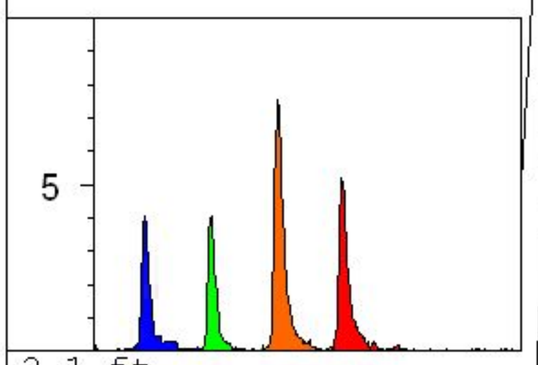
Callouts



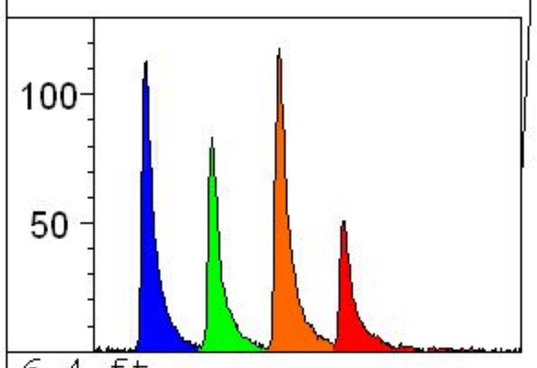
RE
100.0 %RE
HAND AUGERED 5 FT



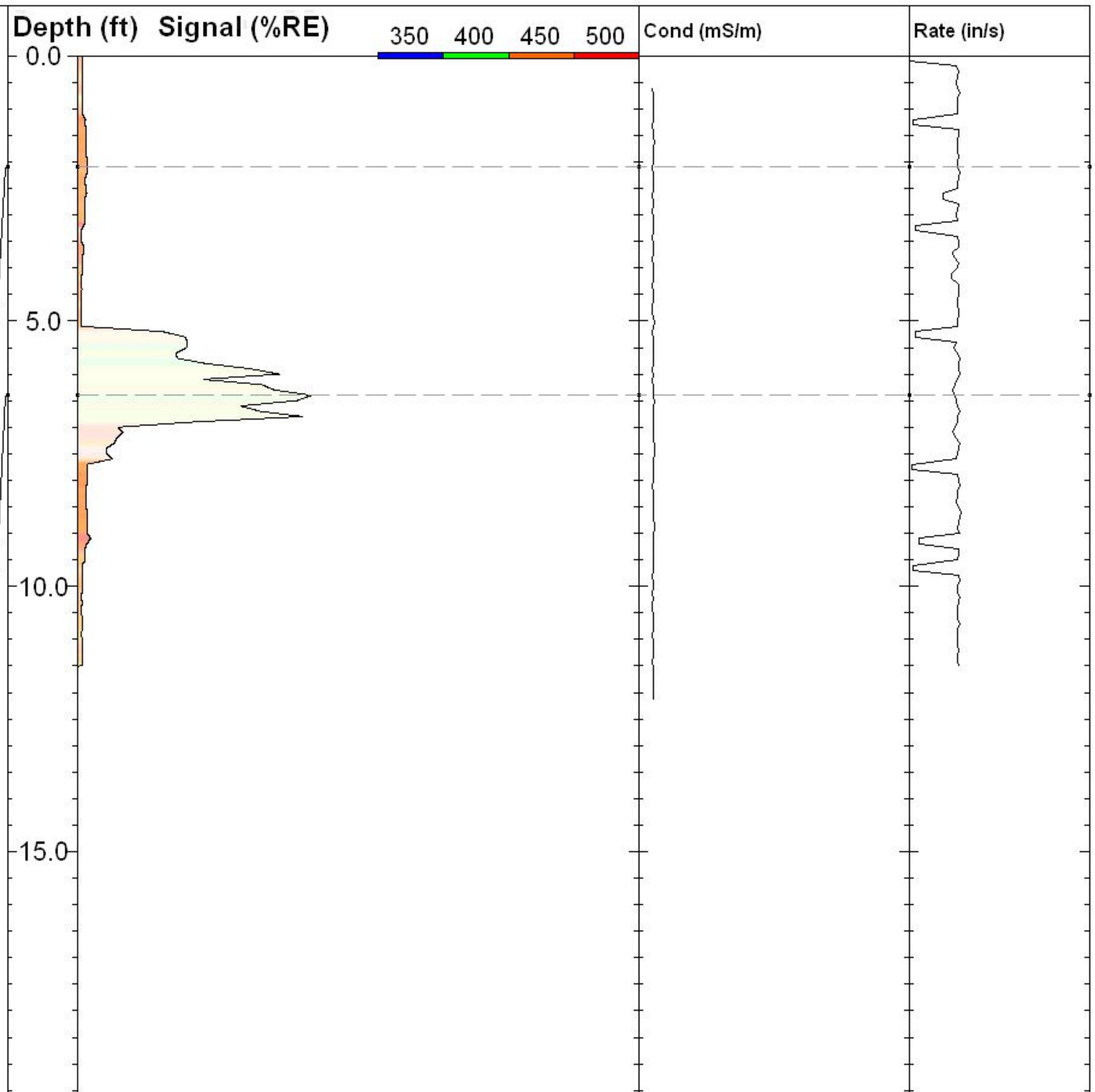
Background
0.7 %RE



2.1 ft
1.7 %RE



6.4 ft
41.6 %RE



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LIF-09-emulation

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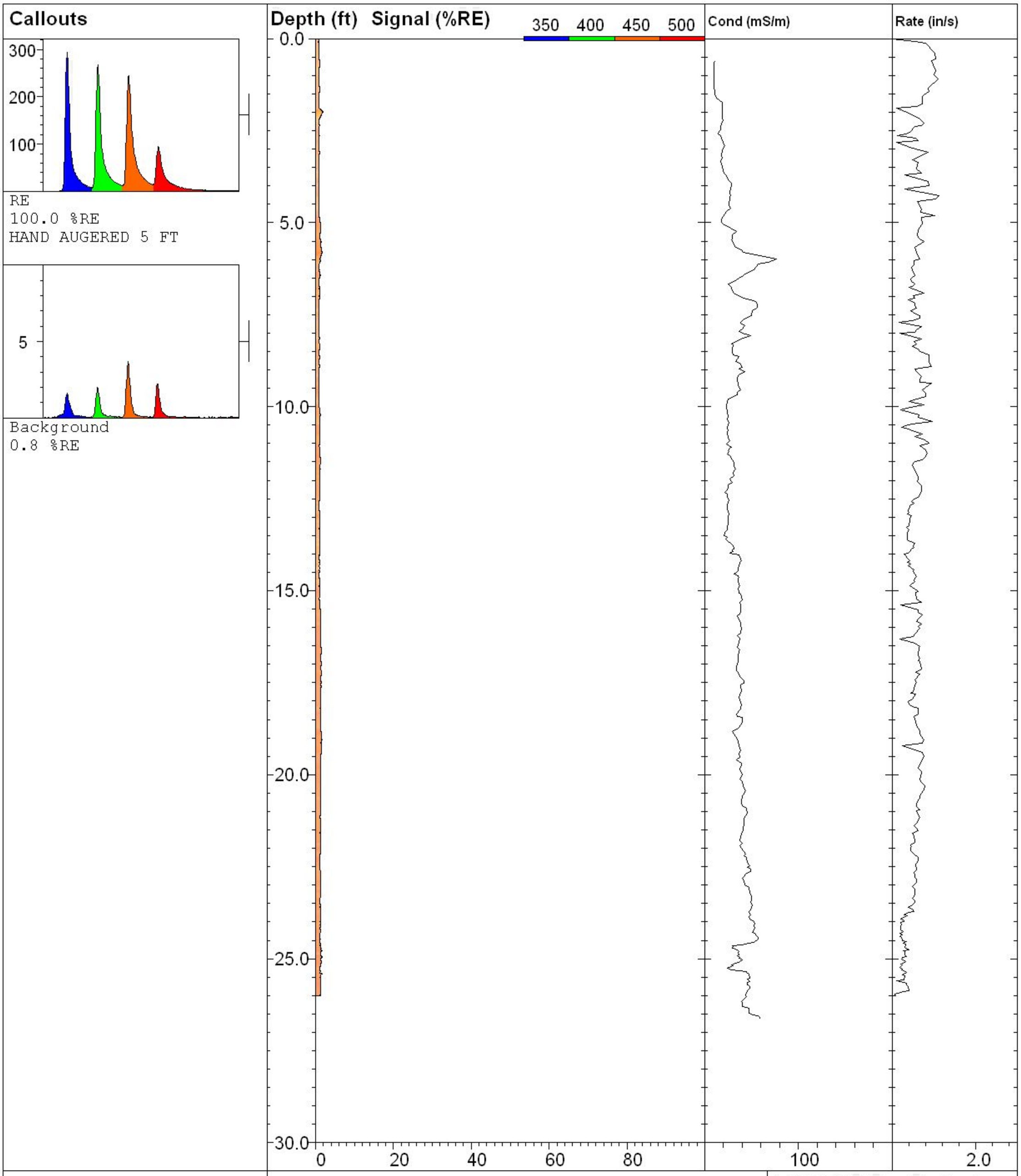
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **11.50 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **41.6 % @ 6.40 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-03 13:22 CDT**



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LIF-02-001

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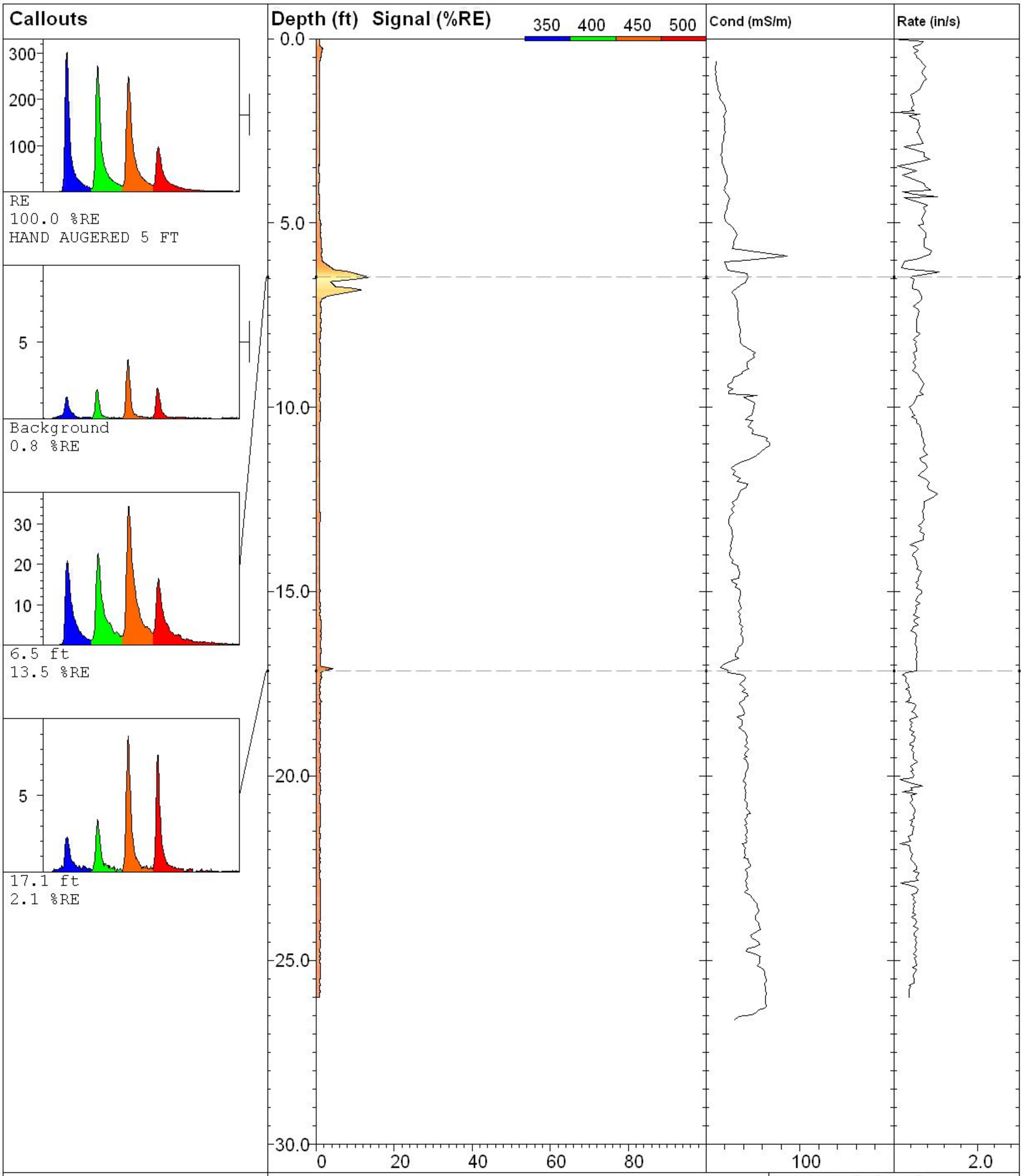
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **2.0 % @ 2.00 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-06 08:39 CDT**



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LIF-02-002

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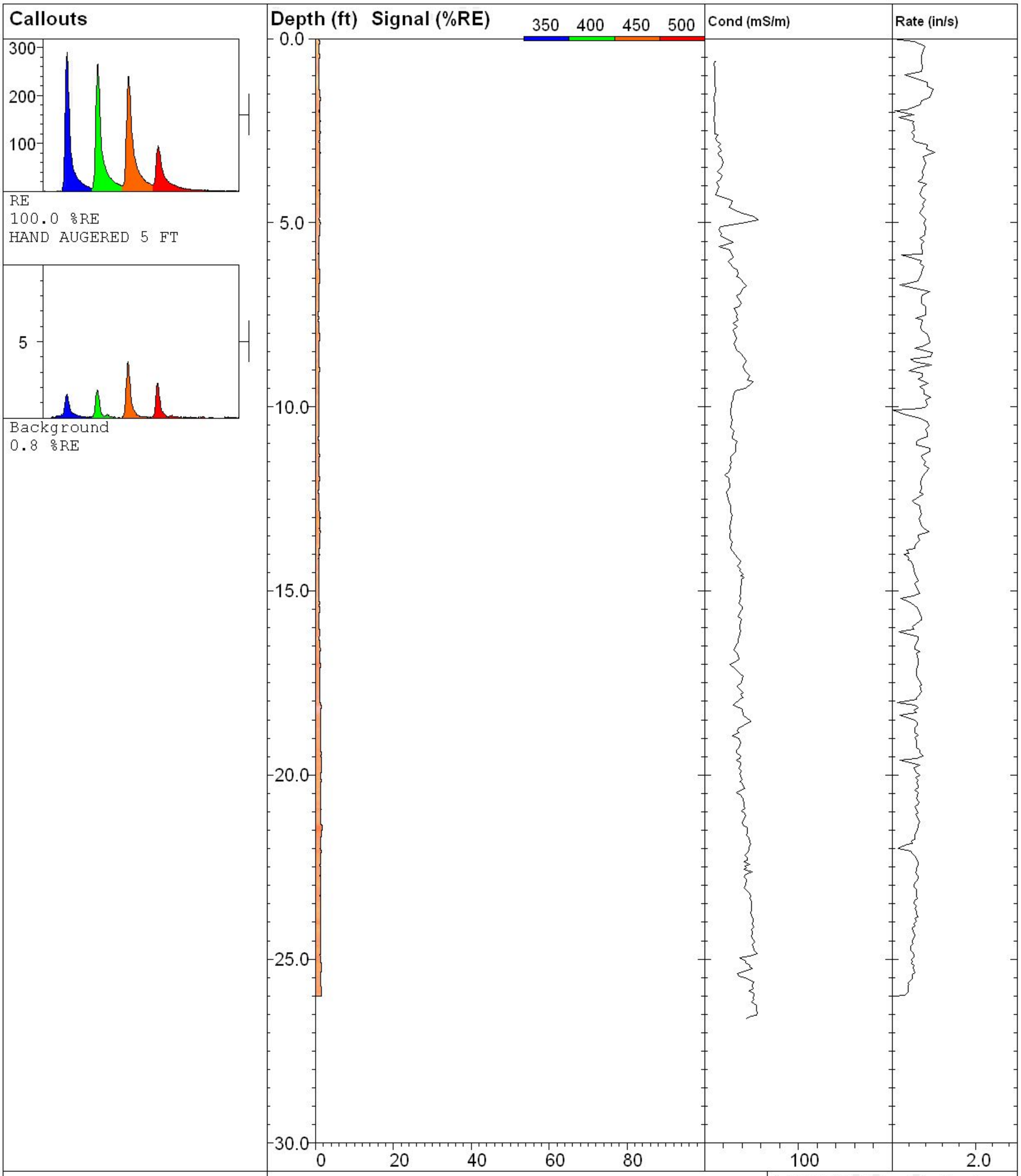
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **13.5 % @ 6.47 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-06 09:14 CDT**



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LIF-02-003

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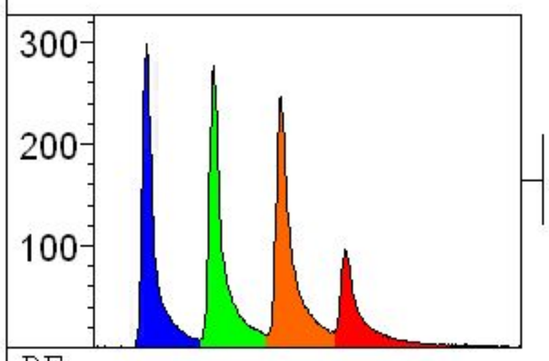
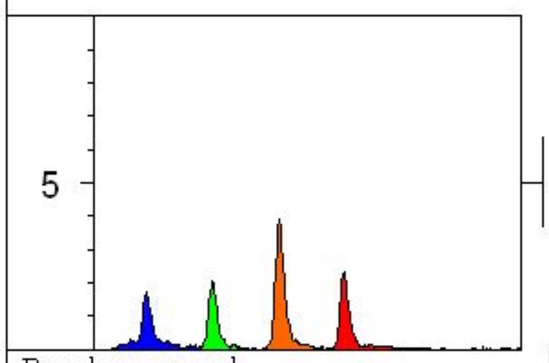
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **1.8 % @ 21.41 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-06 09:46 CDT**

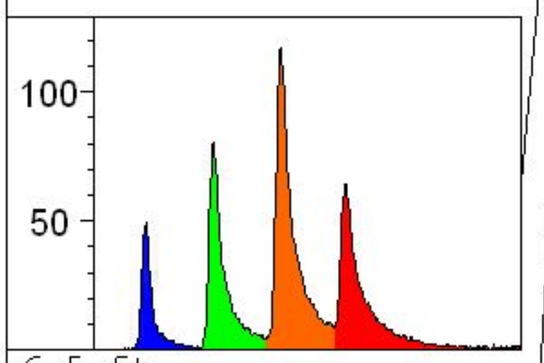
Callouts



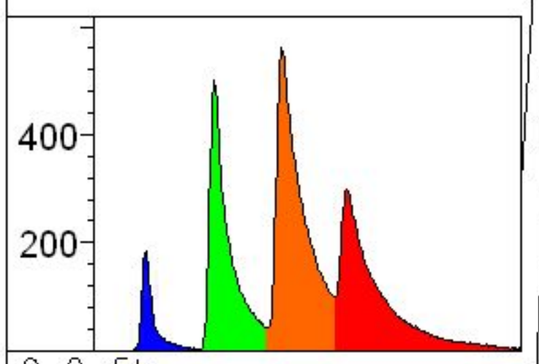
RE
100.0 %RE
HAND AUGERED 5 FT



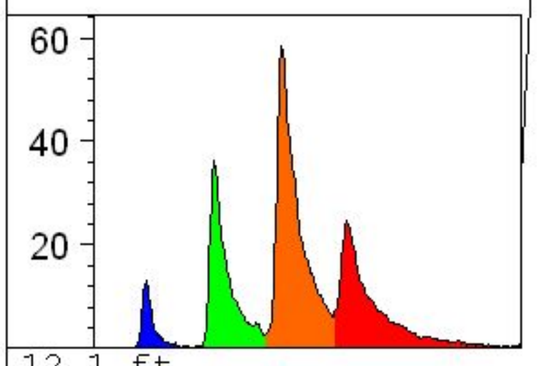
Background
0.8 %RE



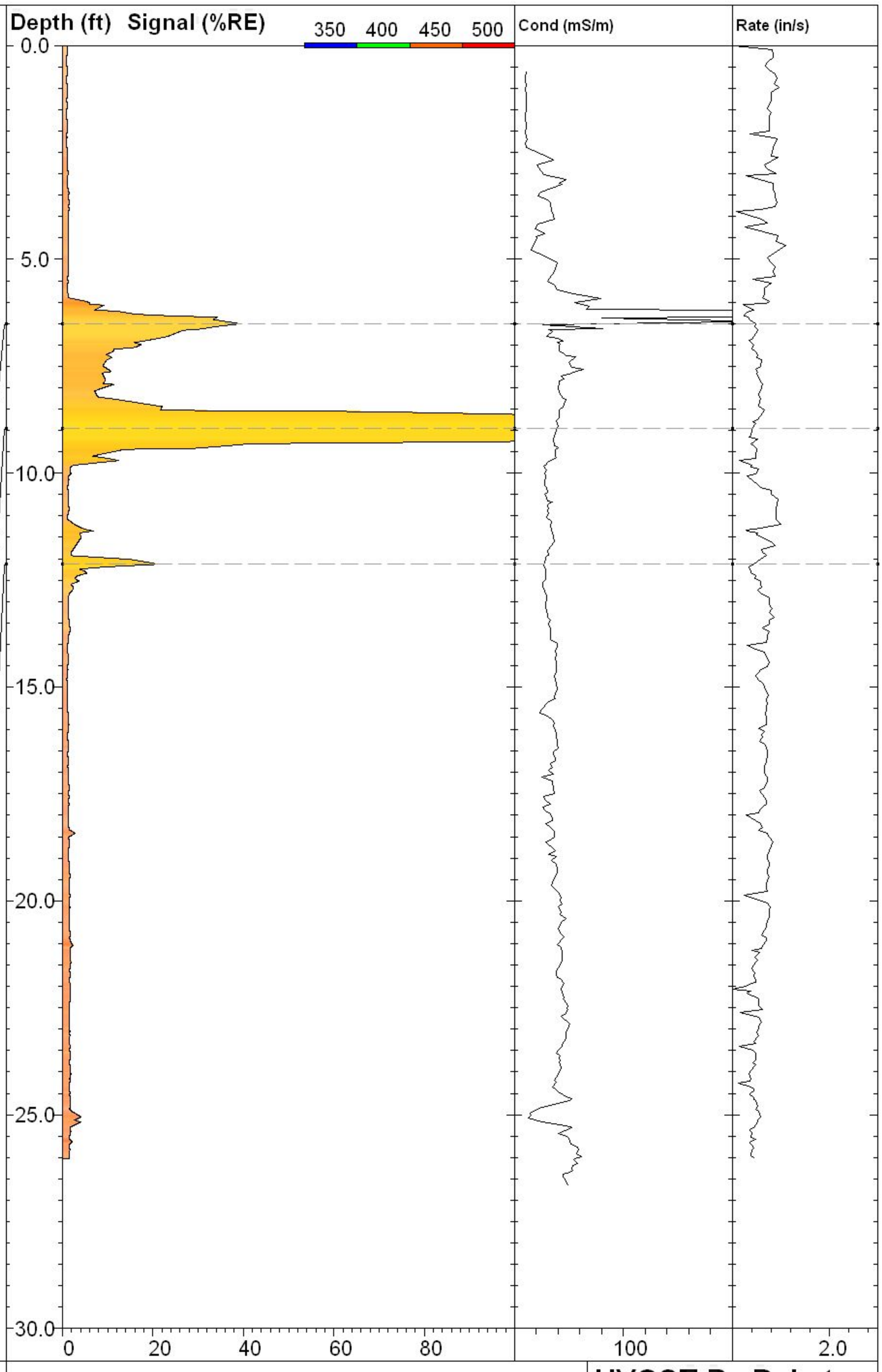
6.5 ft
39.4 %RE



9.0 ft
276.7 %RE



12.1 ft
21.3 %RE



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LIF-02-004

UVOST By Dakota
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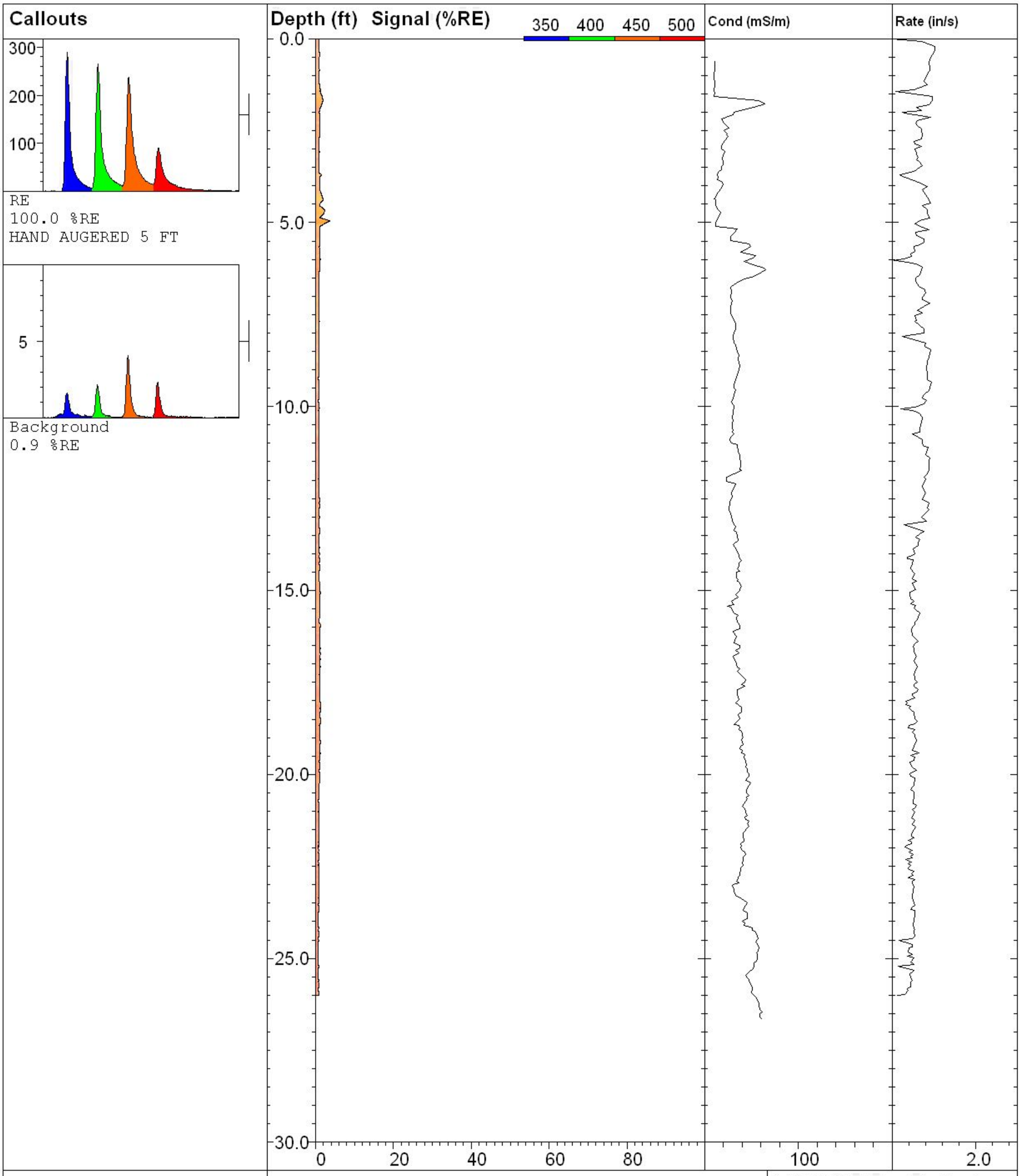
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.02 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **276.7 % @ 8.96 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-06 10:18 CDT**



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LIF-02-005

UVOST By Dakota
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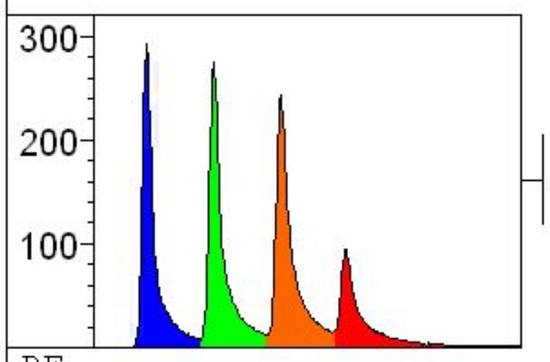
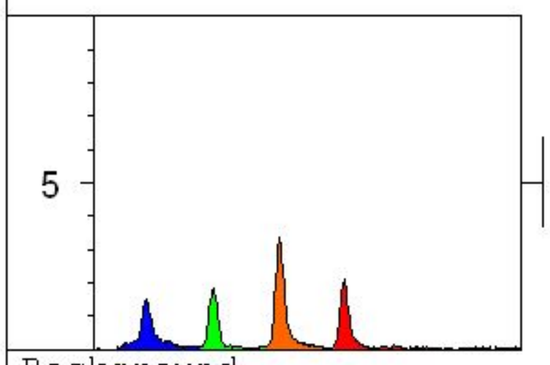
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **3.7 % @ 4.95 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-06 12:59 CDT**

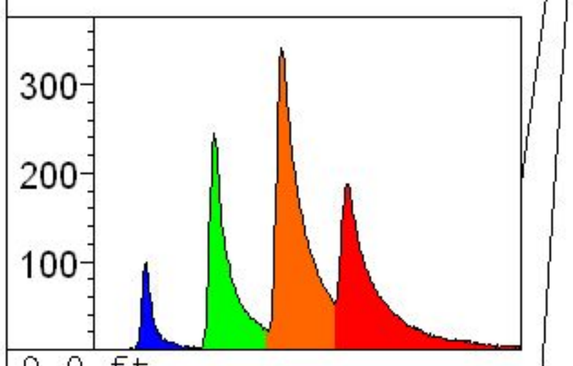
Callouts



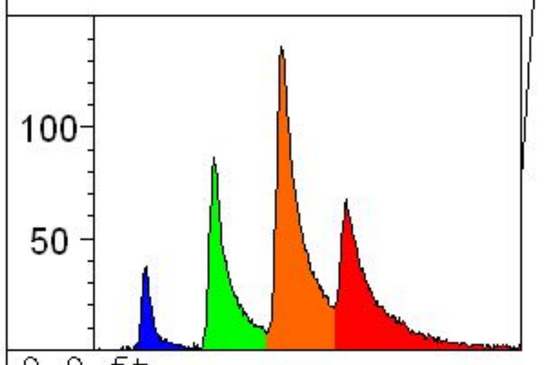
RE
100.0 %RE
HAND AUGERED 5 FT



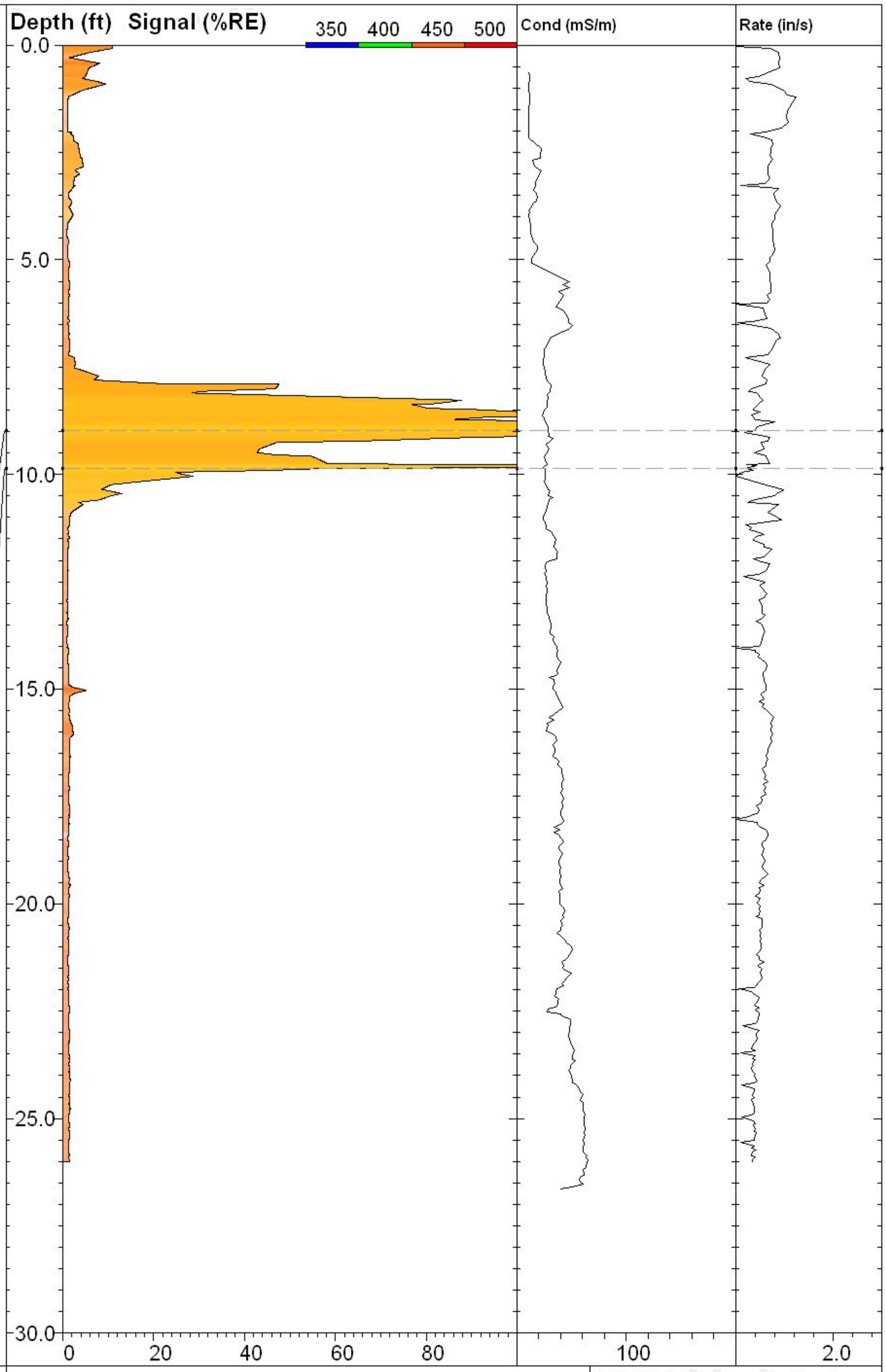
Background
0.8 %RE



9.0 ft
155.5 %RE



9.9 ft
55.1 %RE



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LIF-02-006

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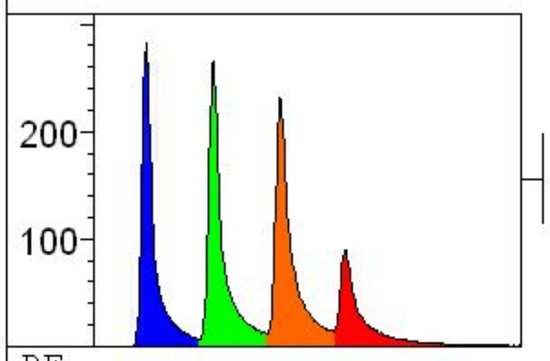
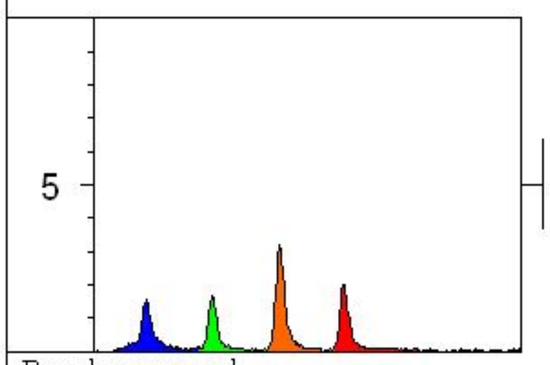
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **216.5 % @ 8.89 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-06 14:04 CDT**

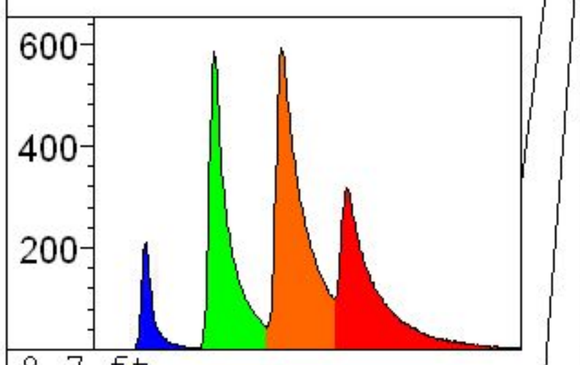
Callouts



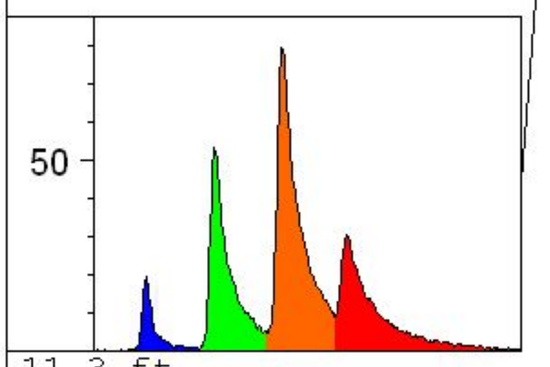
RE
100.0 %RE
HAND AUGERED 5 FT



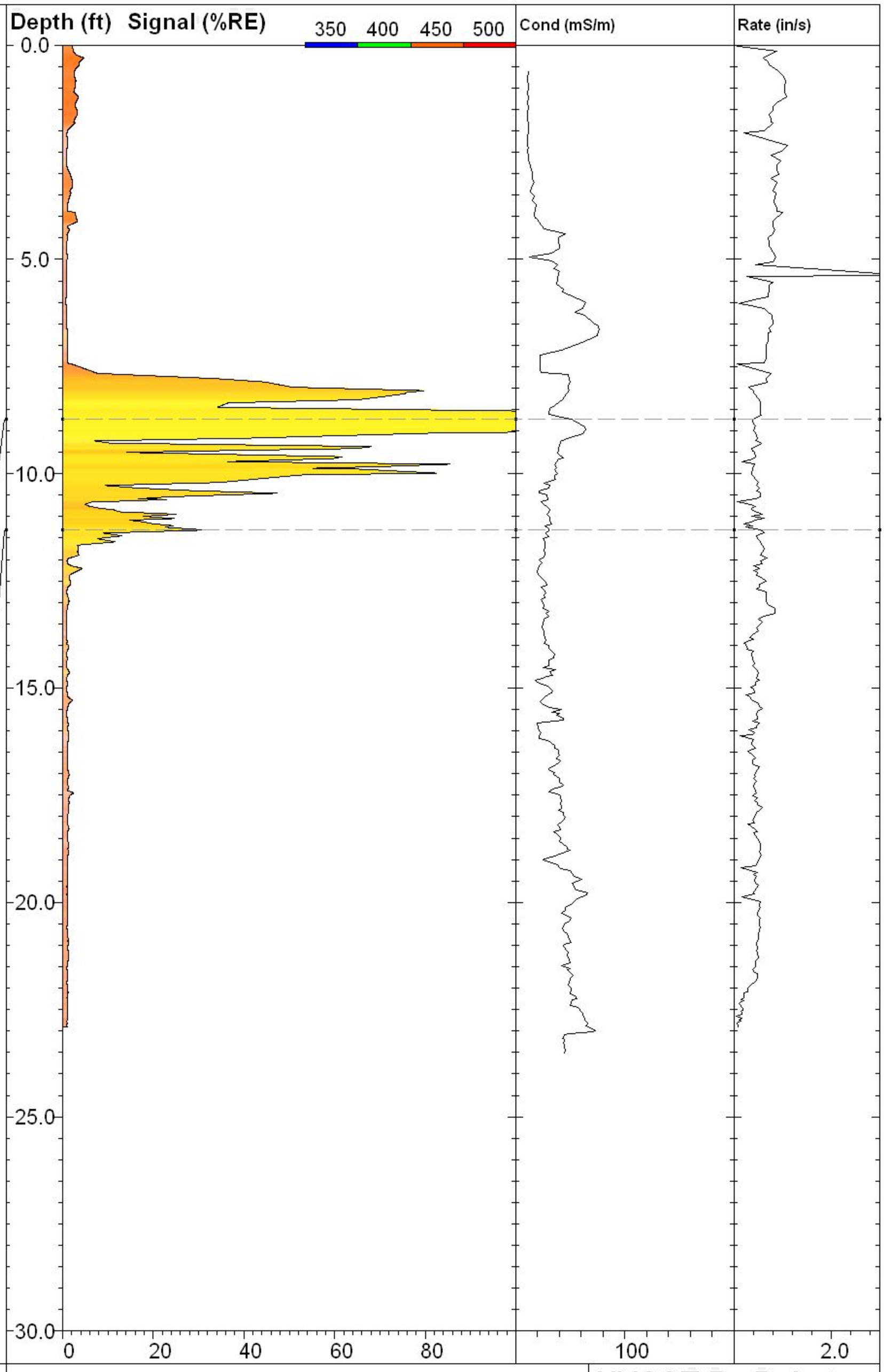
Background
0.7 %RE



8.7 ft
311.1 %RE



11.3 ft
31.6 %RE



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LIF-02-007

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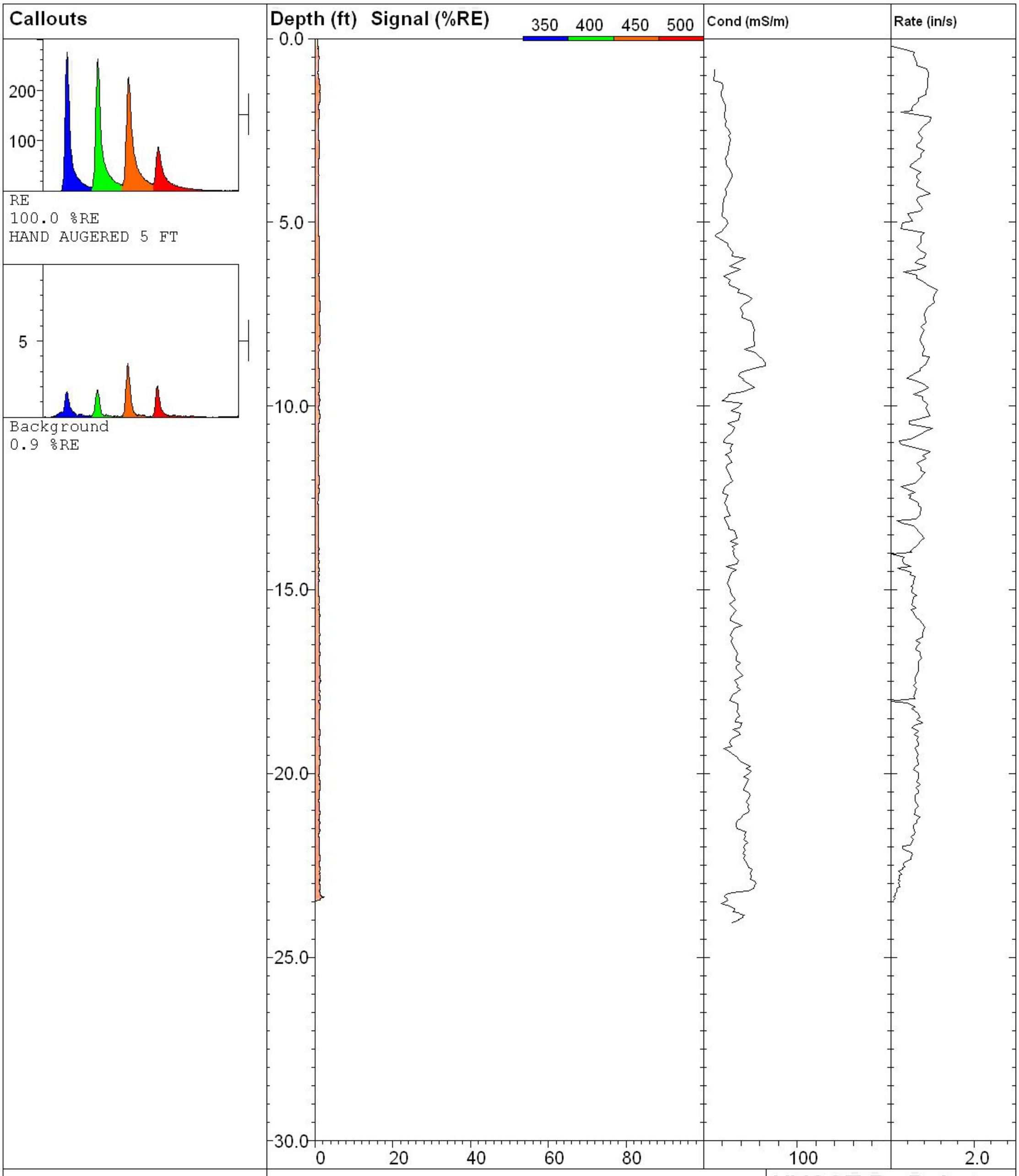
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **22.90 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **311.1 % @ 8.74 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-06 14:41 CDT**



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LIF-02-008

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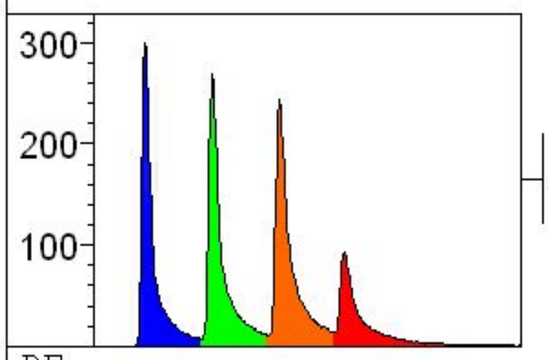
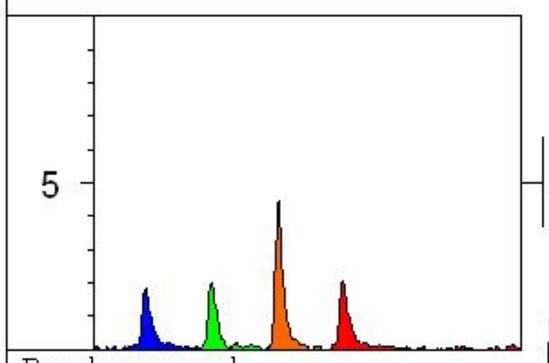
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **23.46 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **2.3 % @ 23.36 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-06 15:16 CDT**

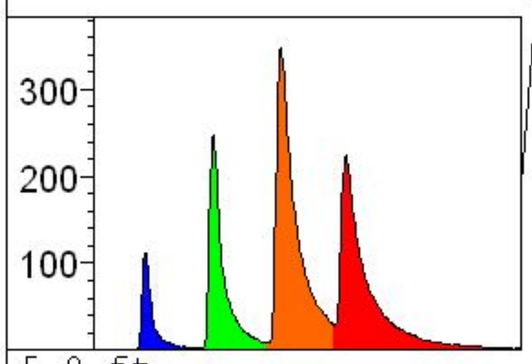
Callouts



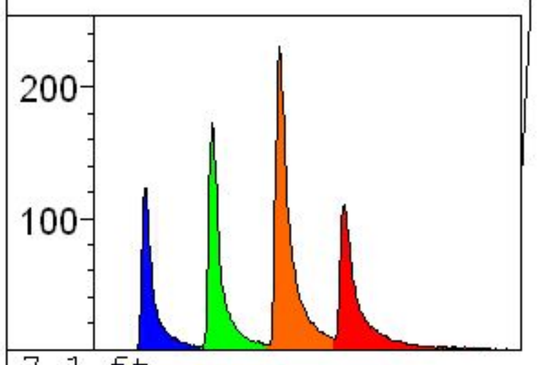
RE
100.0 %RE
HAND AUGERED 5 FT



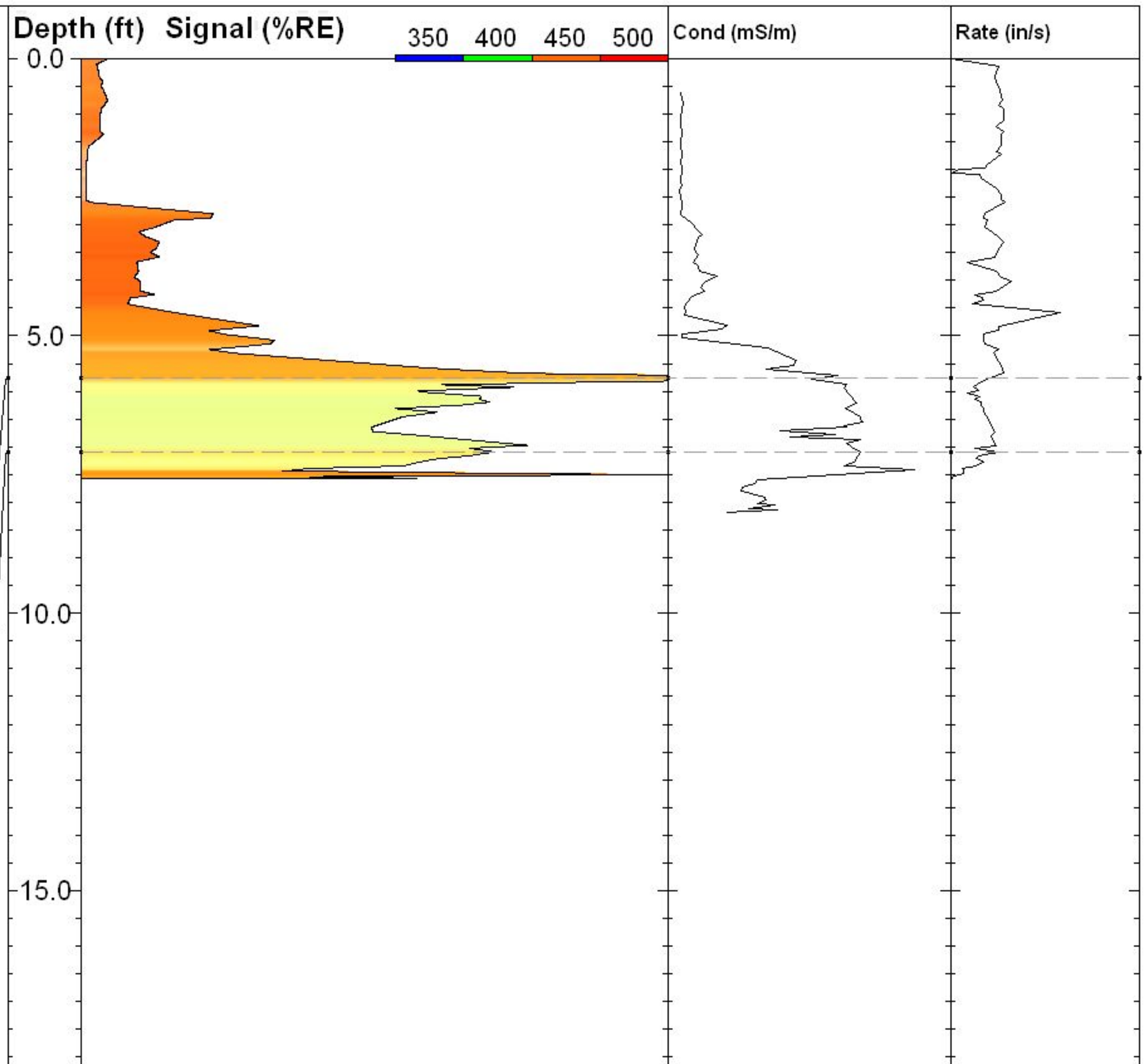
Background
0.8 %RE



5.8 ft
136.6 %RE



7.1 ft
70.5 %RE



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LIF-02-009

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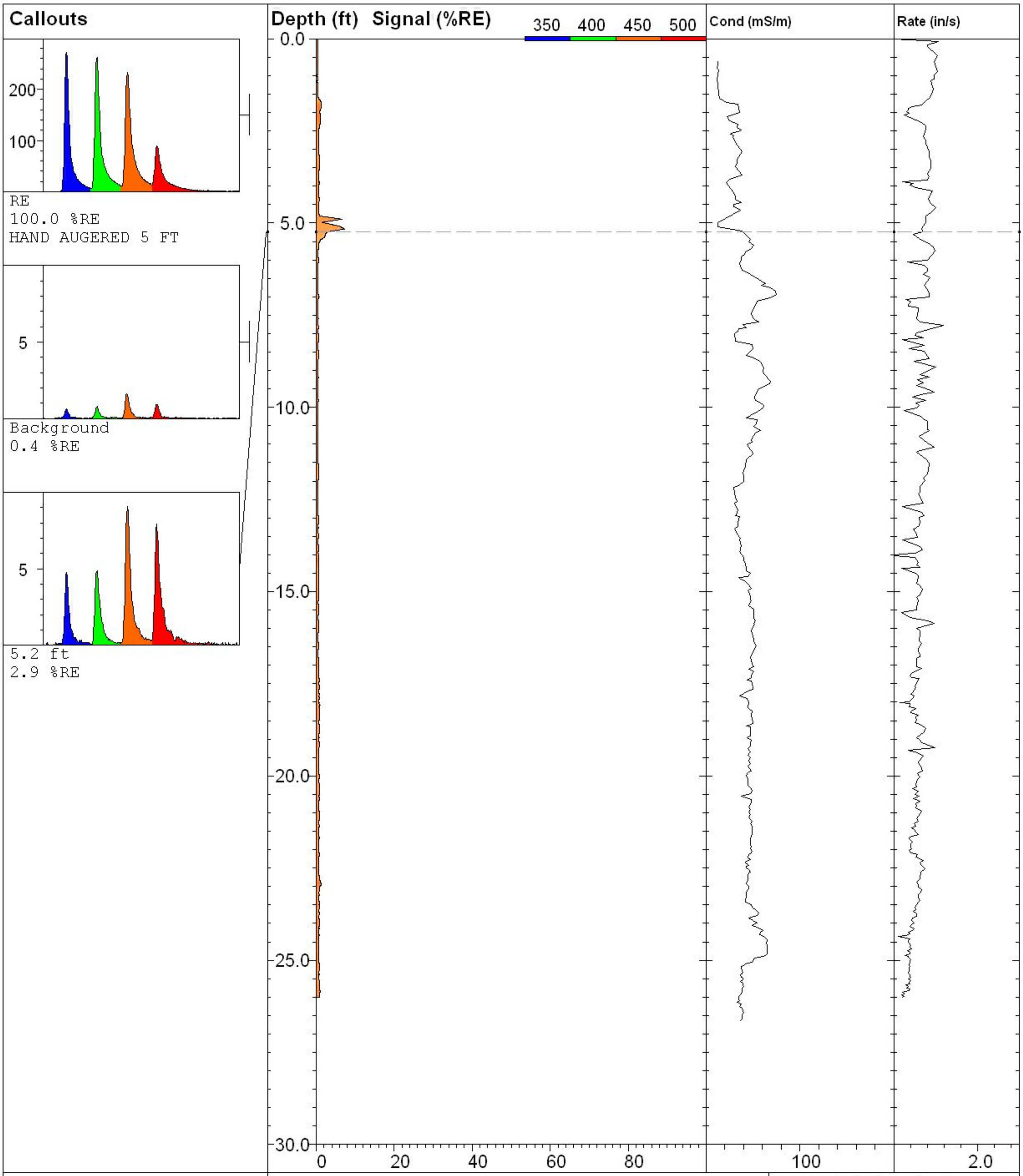
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **7.57 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **136.6 % @ 5.76 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-07 08:13 CDT**



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LIF-02-010

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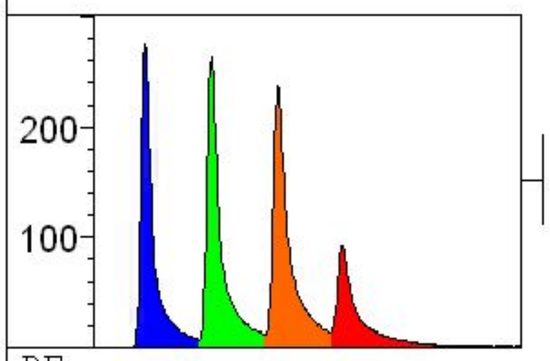
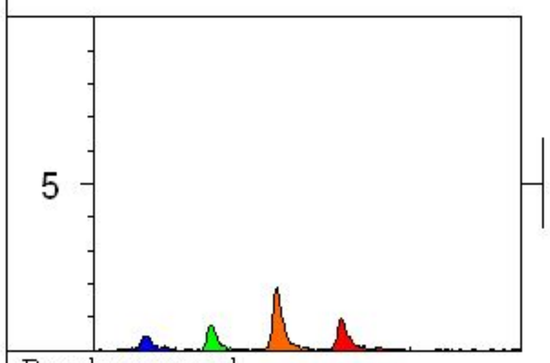
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **7.2 % @ 5.17 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-13 10:54 CDT**

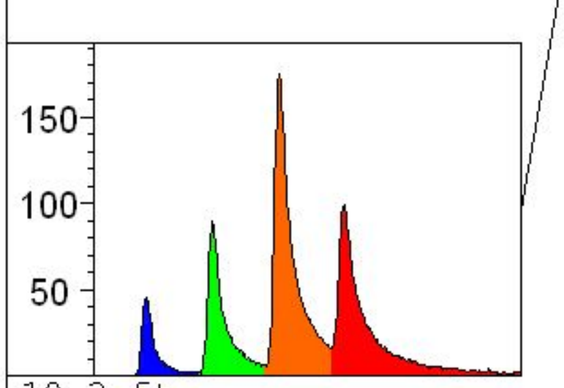
Callouts



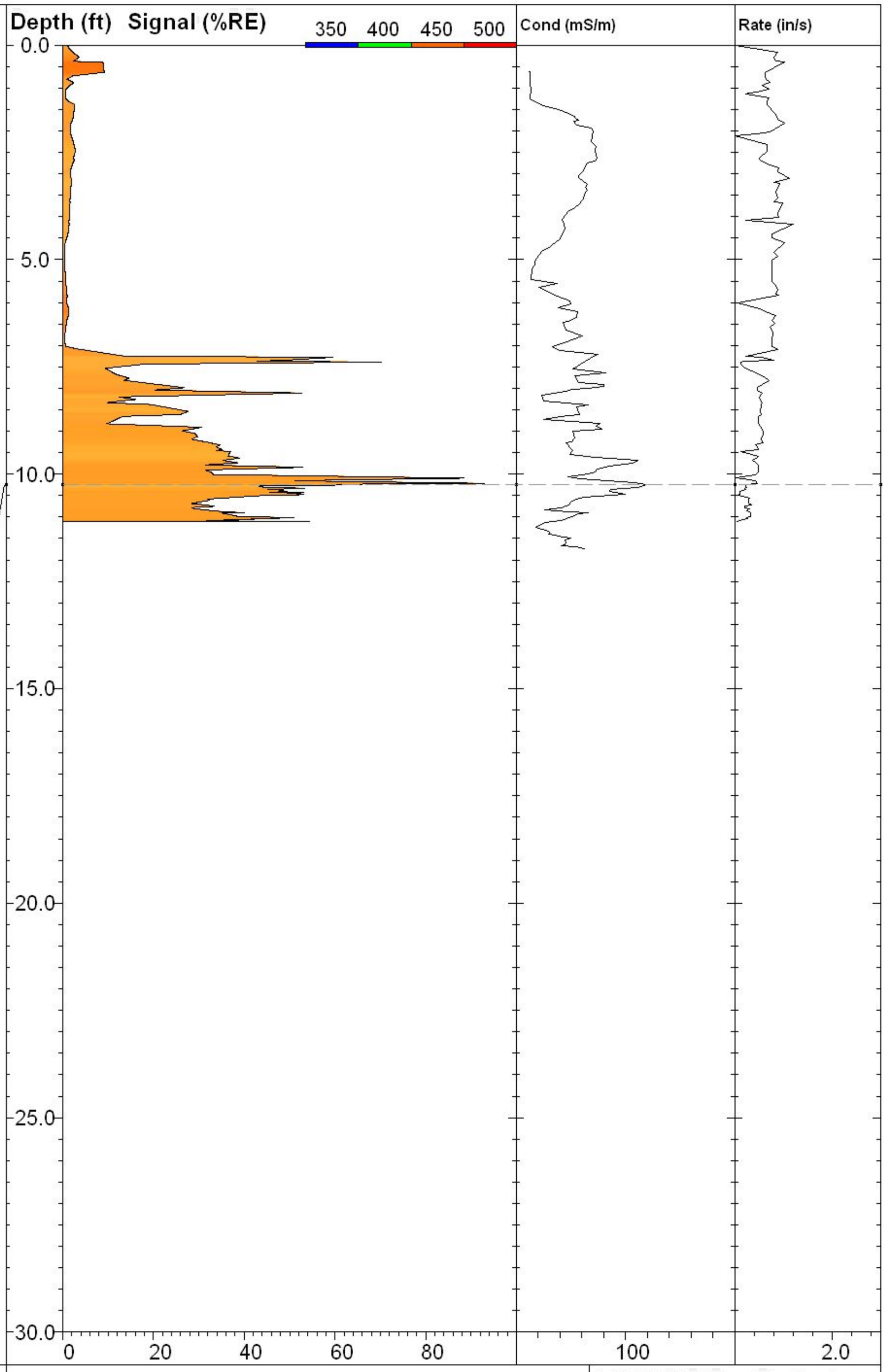
RE
100.0 %RE
HAND AUGERED 5 FT



Background
0.4 %RE



10.3 ft
61.6 %RE



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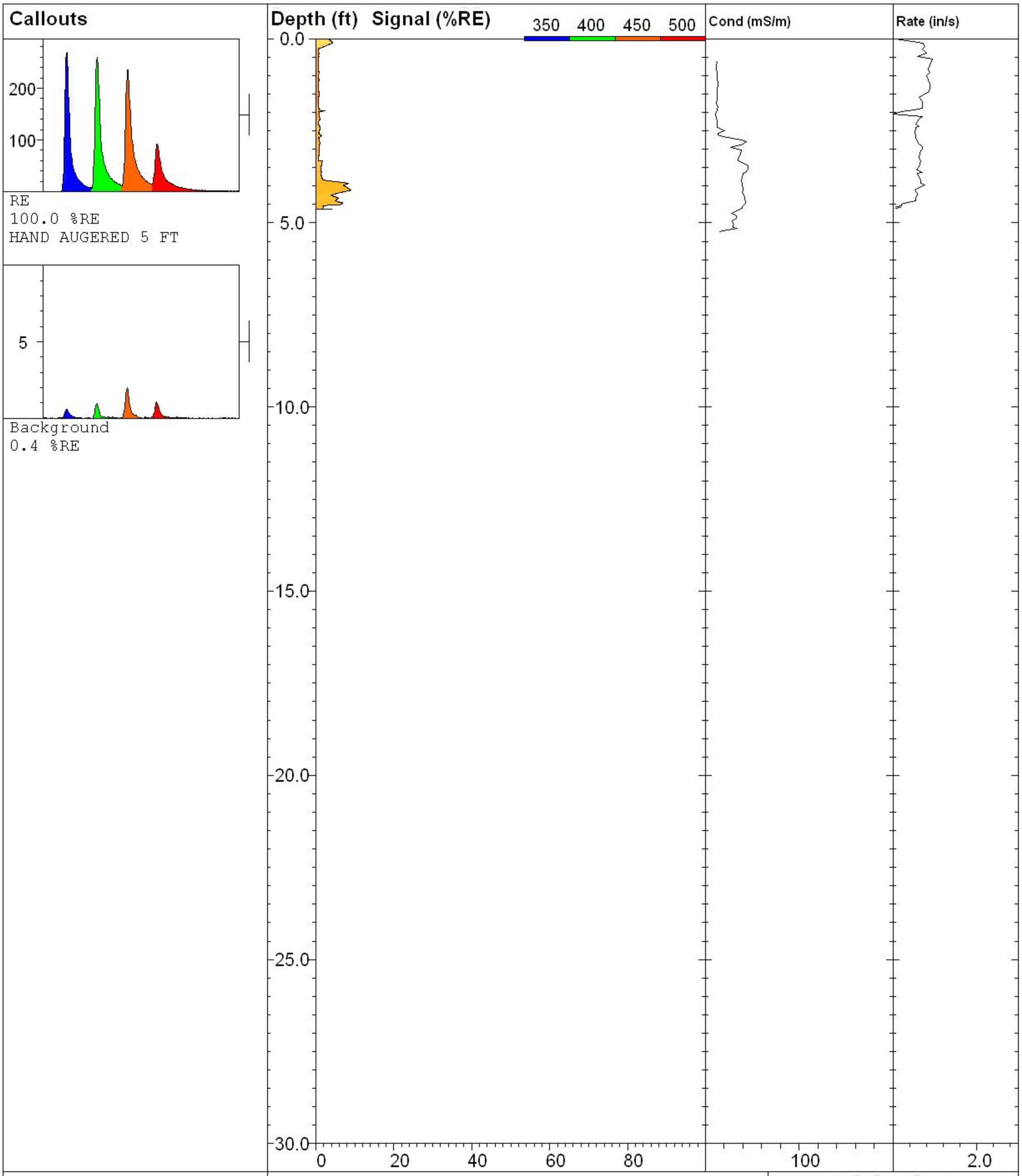
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **11.11 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **93.6 % @ 10.22 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-13 13:26 CDT**



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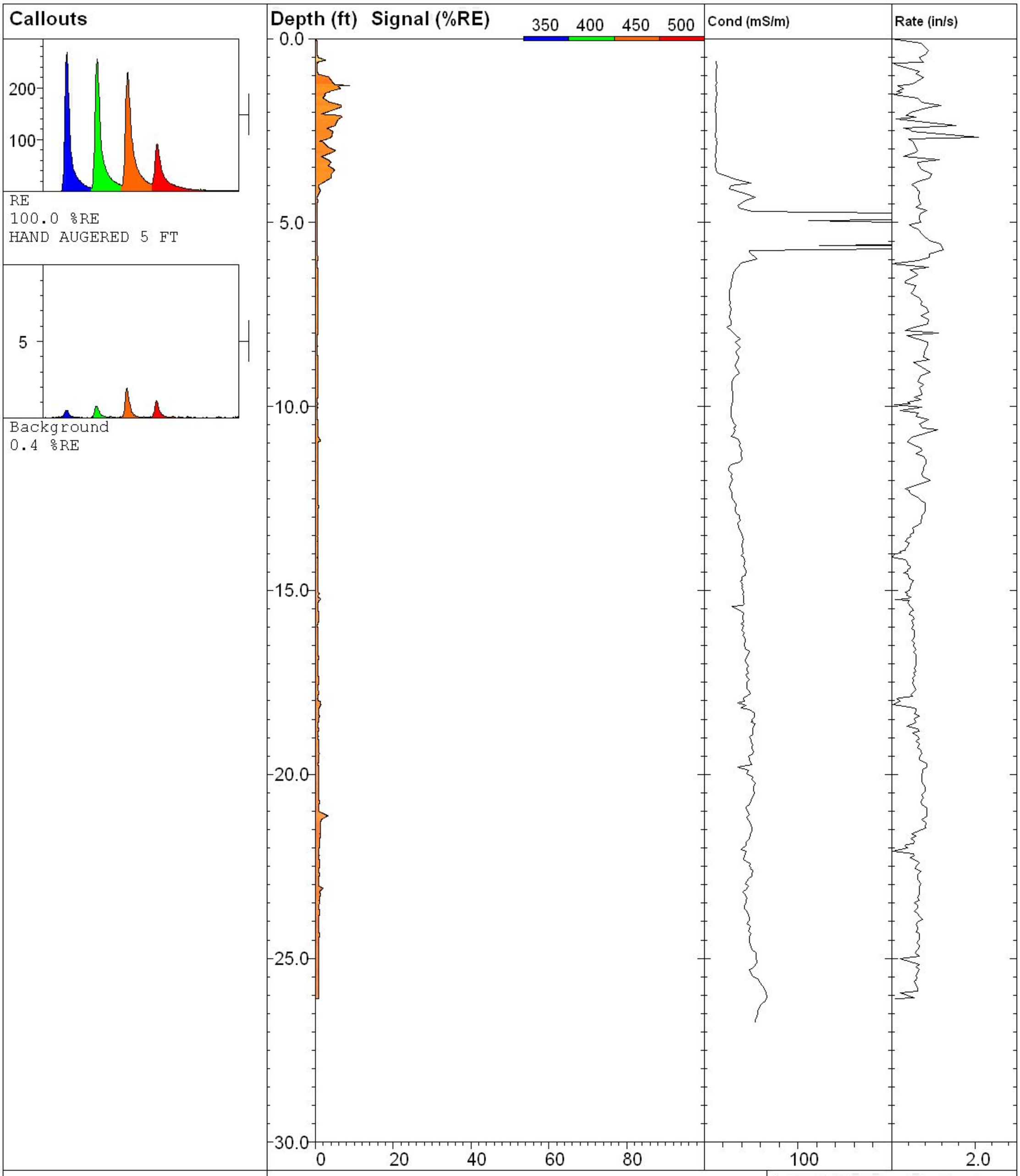
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **4.64 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **9.1 % @ 4.11 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-13 13:53 CDT**



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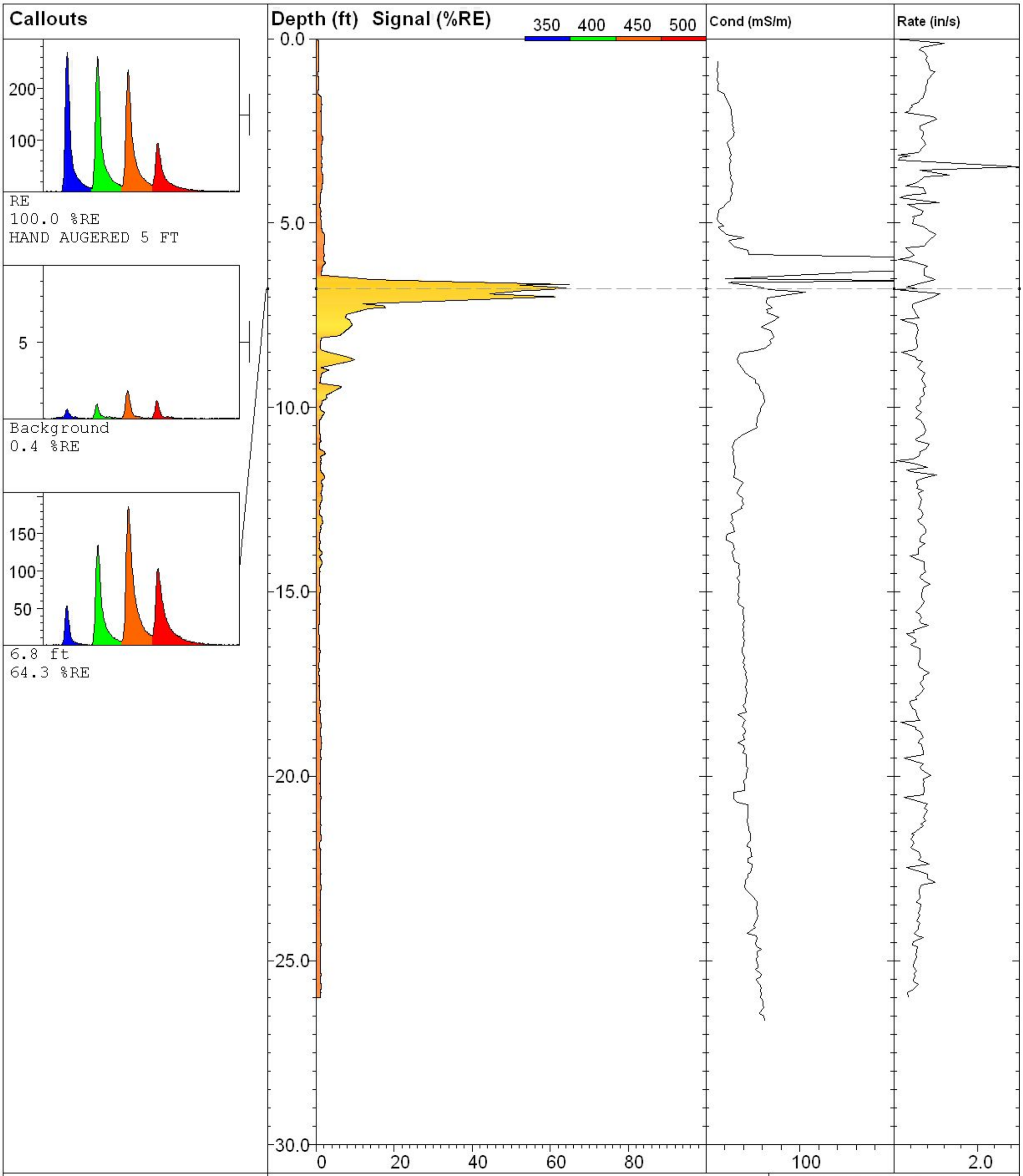
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.09 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **9.0 % @ 1.28 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-13 14:15 CDT**



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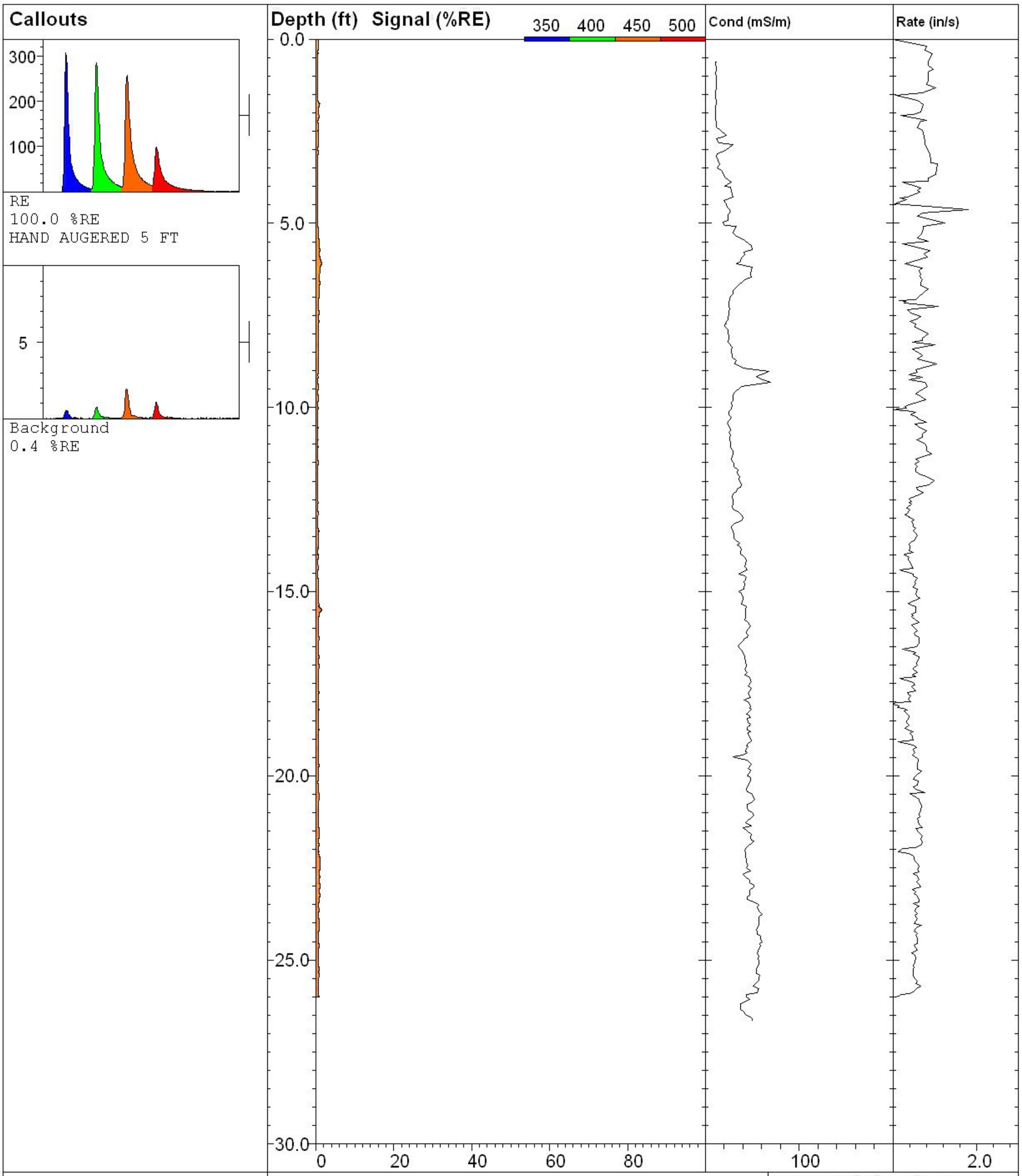
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **65.2 % @ 6.67 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-13 15:16 CDT**



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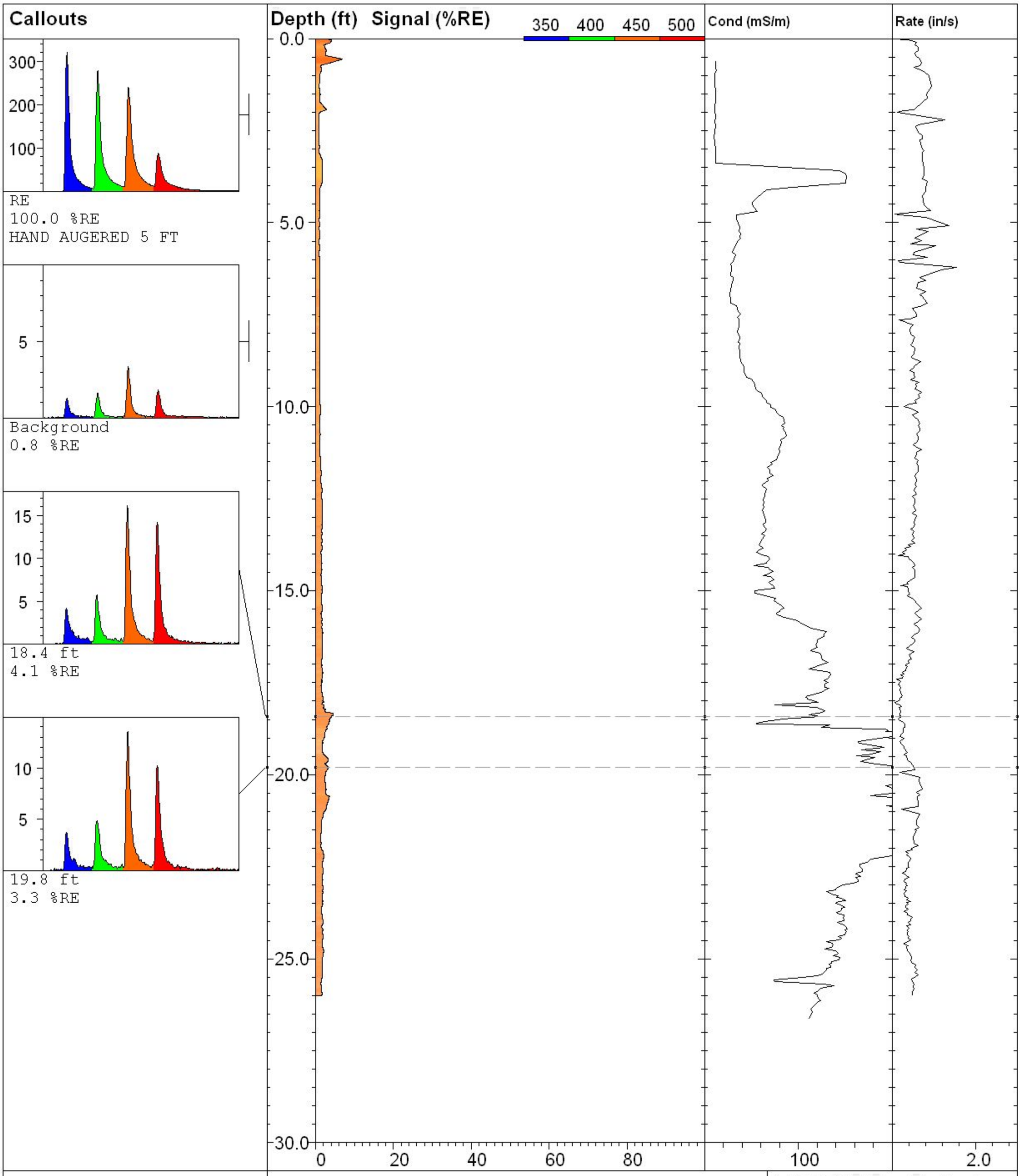
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **1.6 % @ 15.50 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-14 08:58 CDT**



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LIF-02-016

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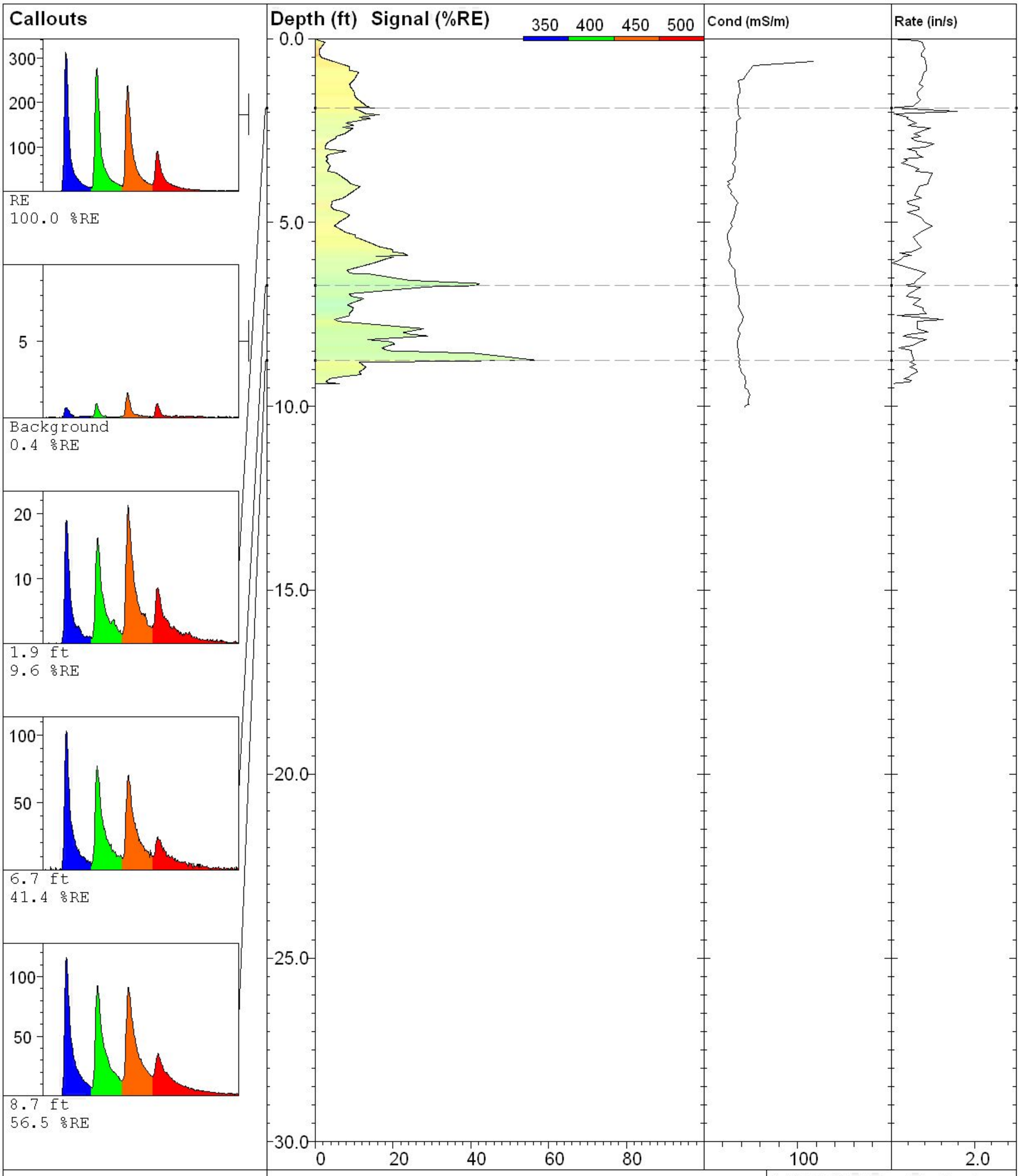
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **7.0 % @ 0.56 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-19 13:44 CDT**



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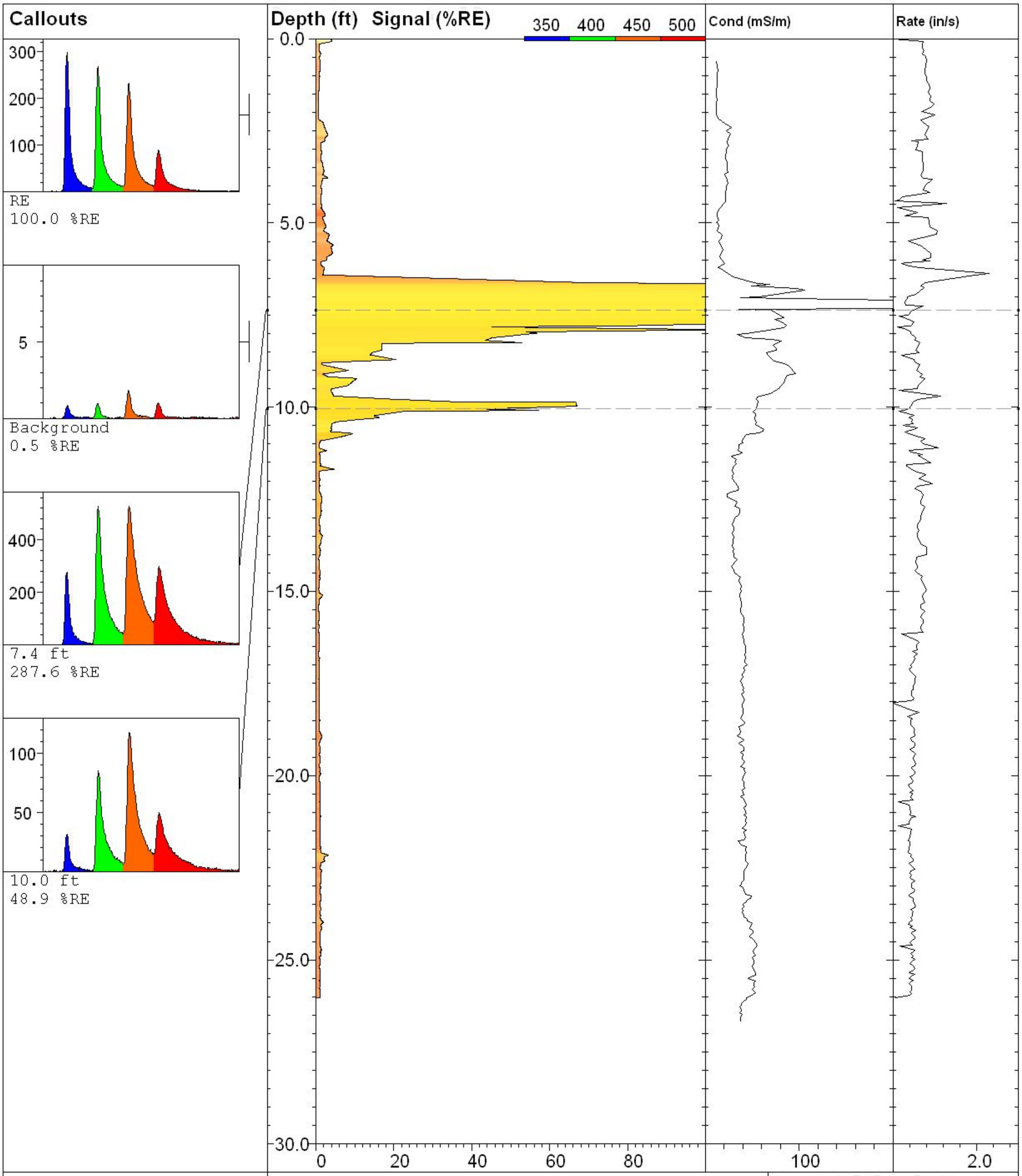
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **9.39 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **56.5 % @ 8.74 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-18 09:33 CDT**



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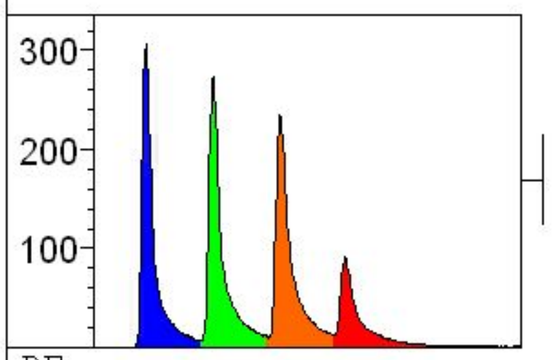
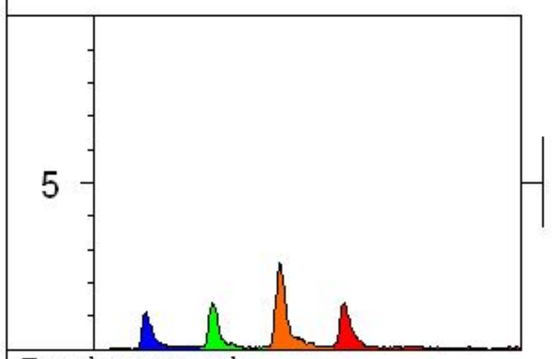
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.03 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **335.5 % @ 7.26 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-18 10:09 CDT**

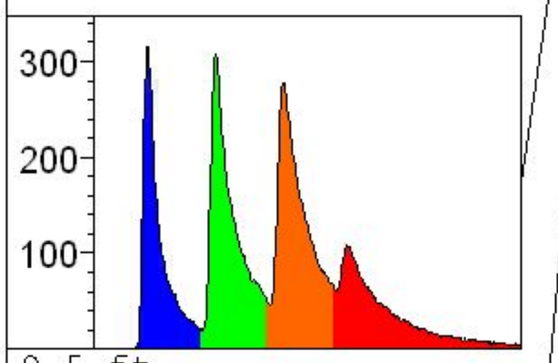
Callouts



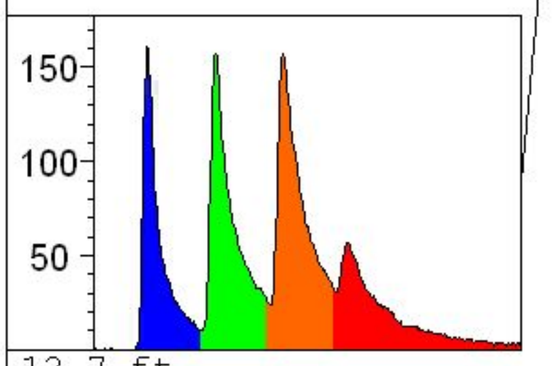
RE
100.0 %RE



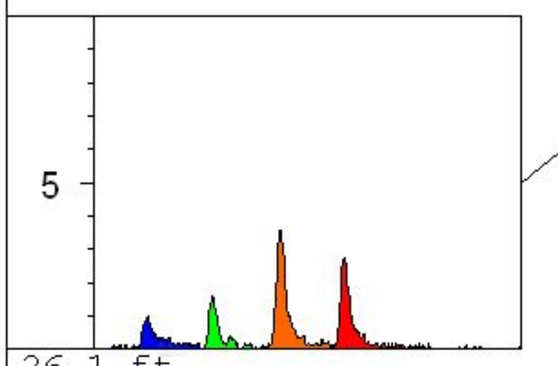
Background
0.7 %RE



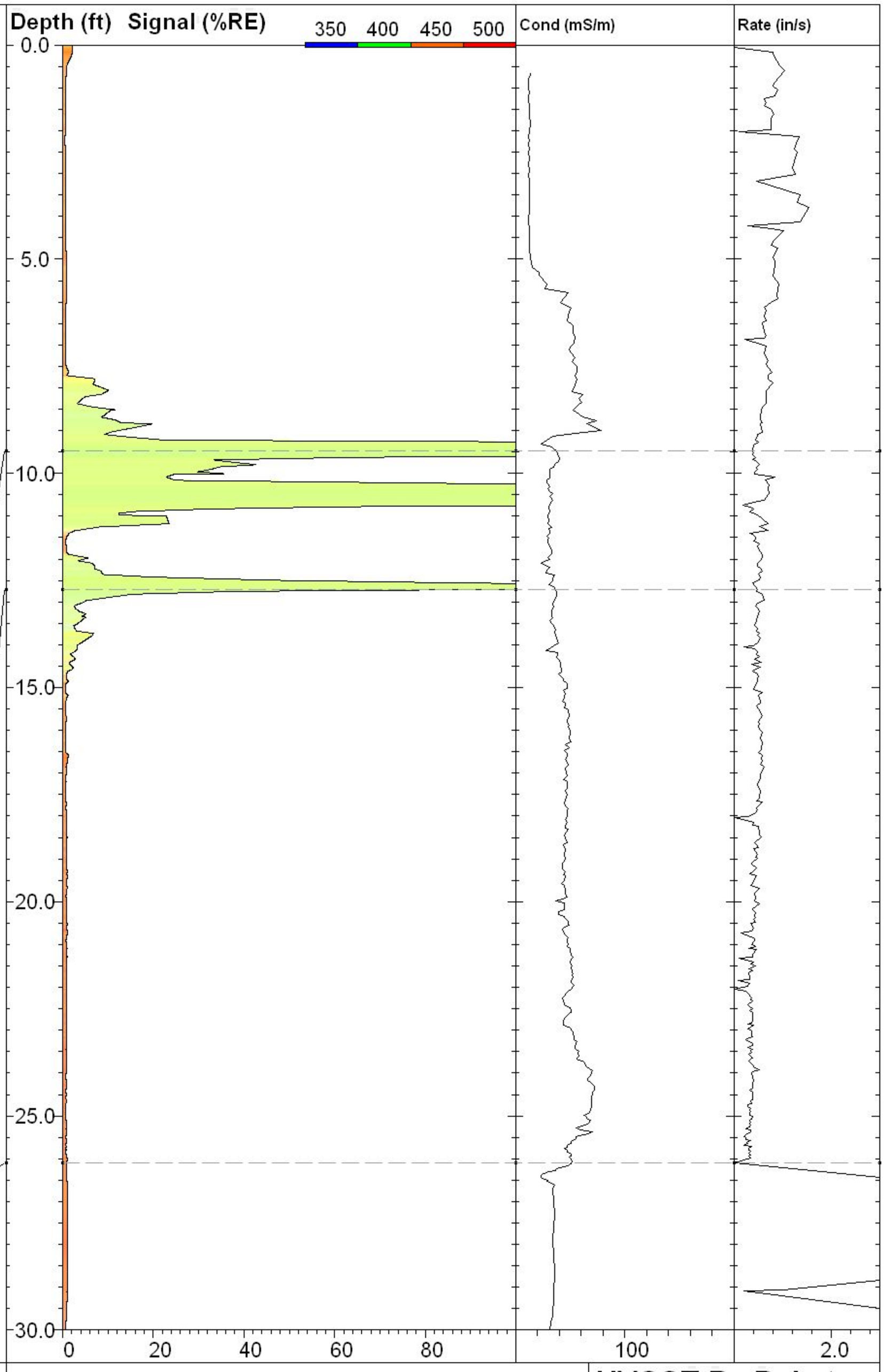
9.5 ft
197.7 %RE



12.7 ft
102.6 %RE



26.1 ft
0.9 %RE
end of boring



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LIF-02-019

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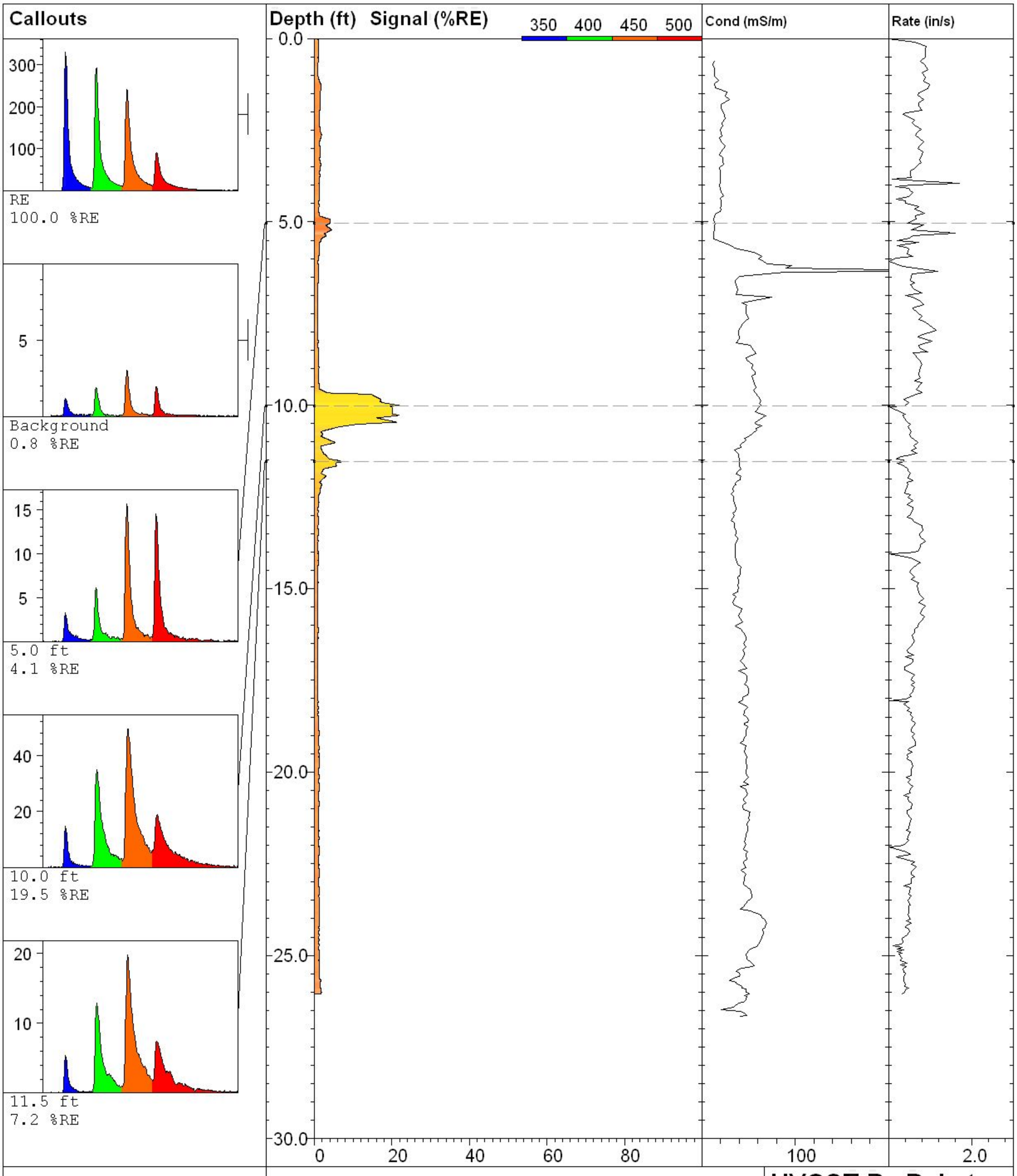
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **38.91 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **258.7 % @ 9.52 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-18 10:47 CDT**



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LIF-02-020

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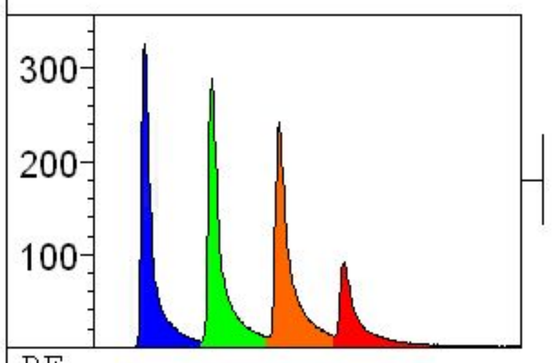
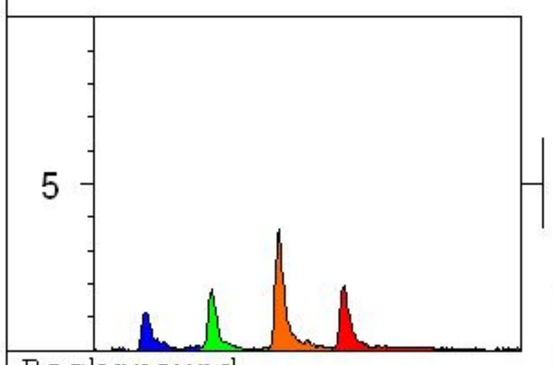
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.04 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **22.4 % @ 10.01 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-19 15:59 CDT**

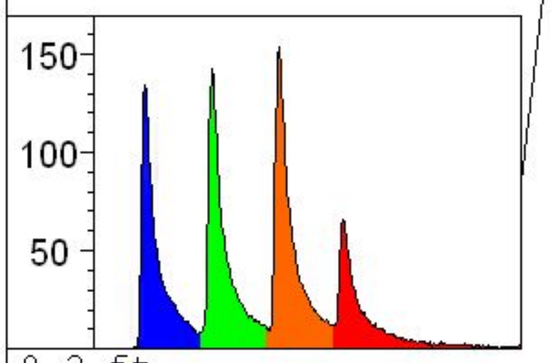
Callouts



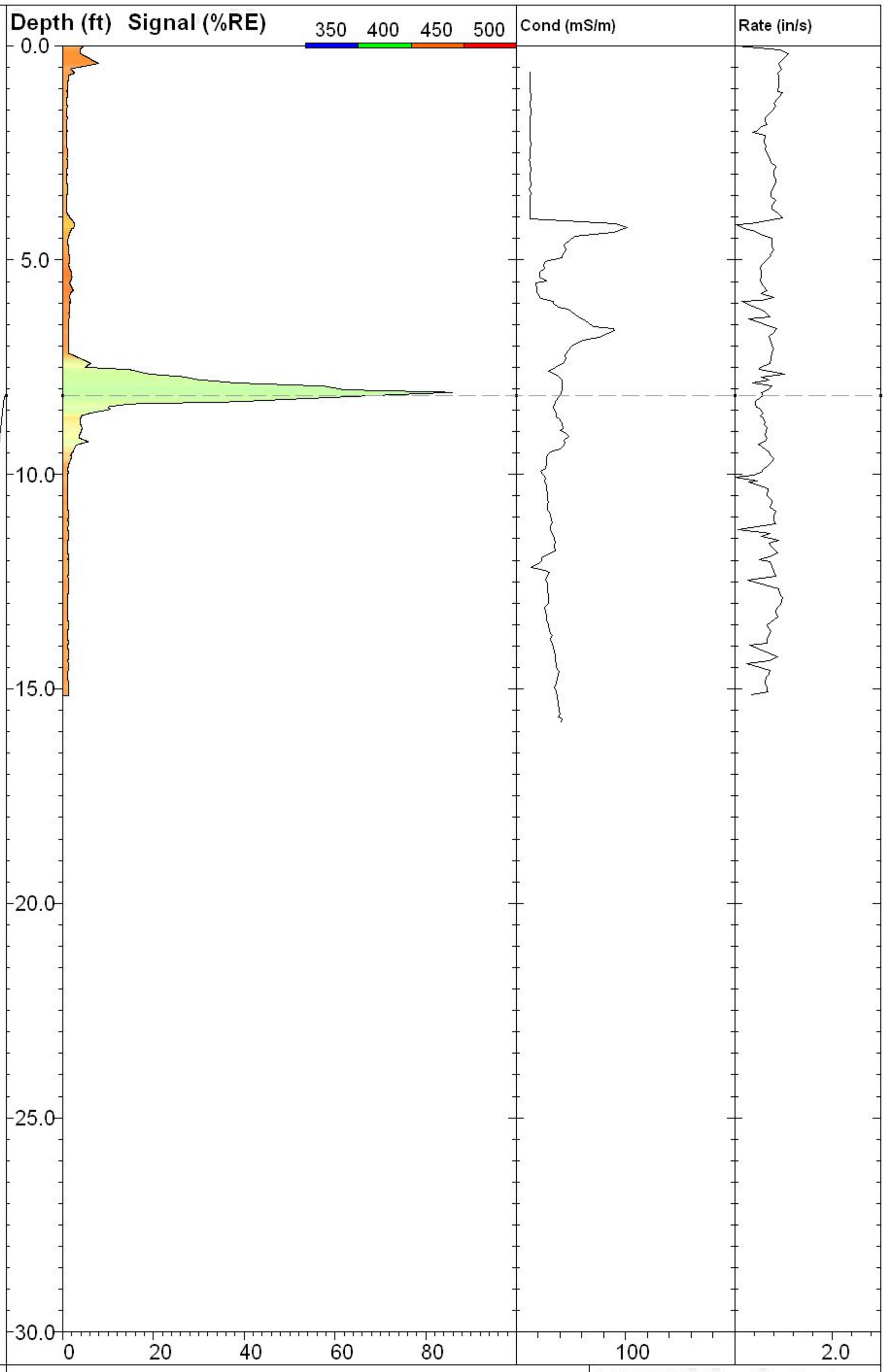
RE
100.0 %RE



Background
0.8 %RE



8.2 ft
67.5 %RE



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LIF-02-021

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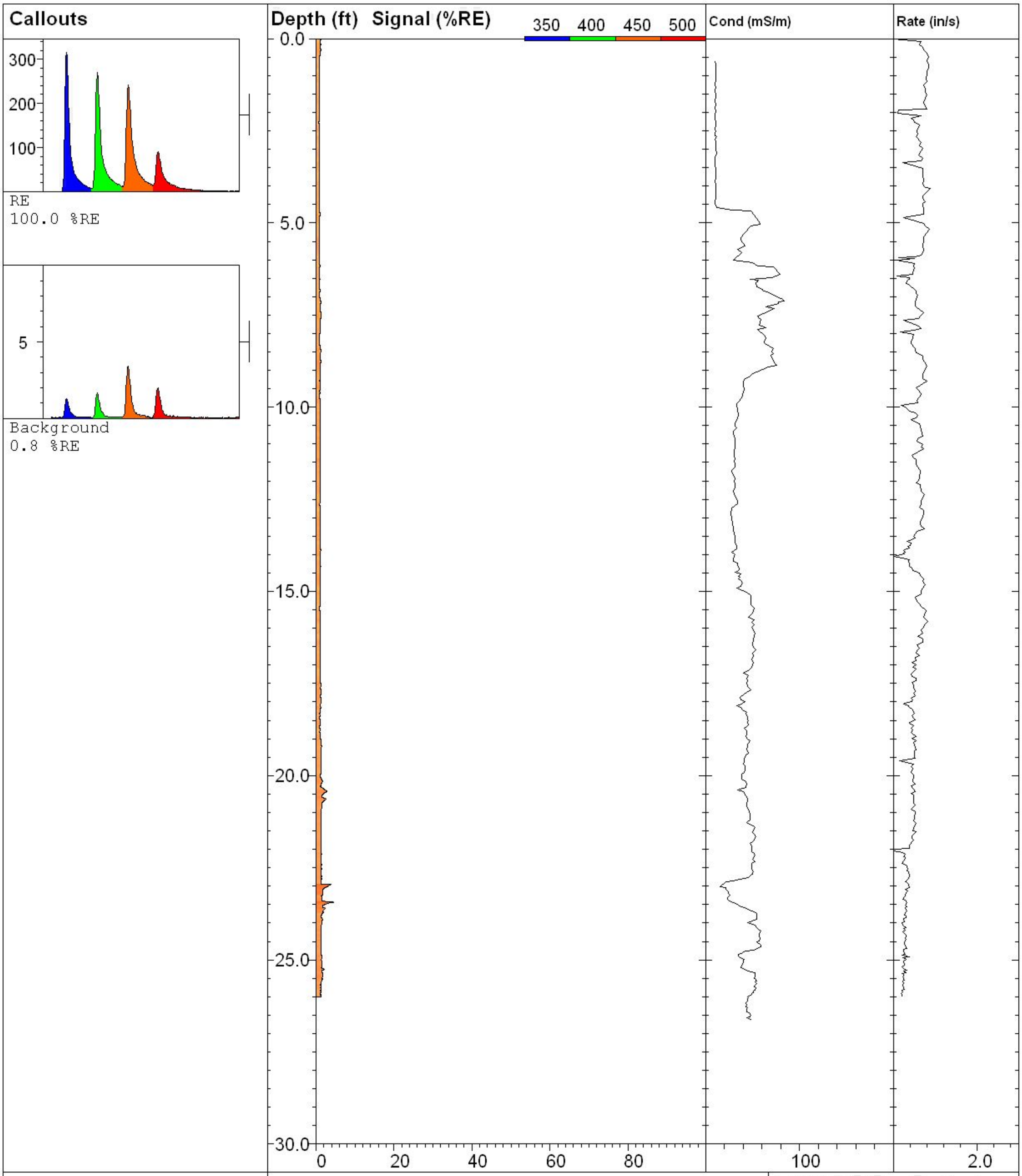
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **15.15 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **86.1 % @ 8.09 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-19 16:34 CDT**



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LIF-02-022

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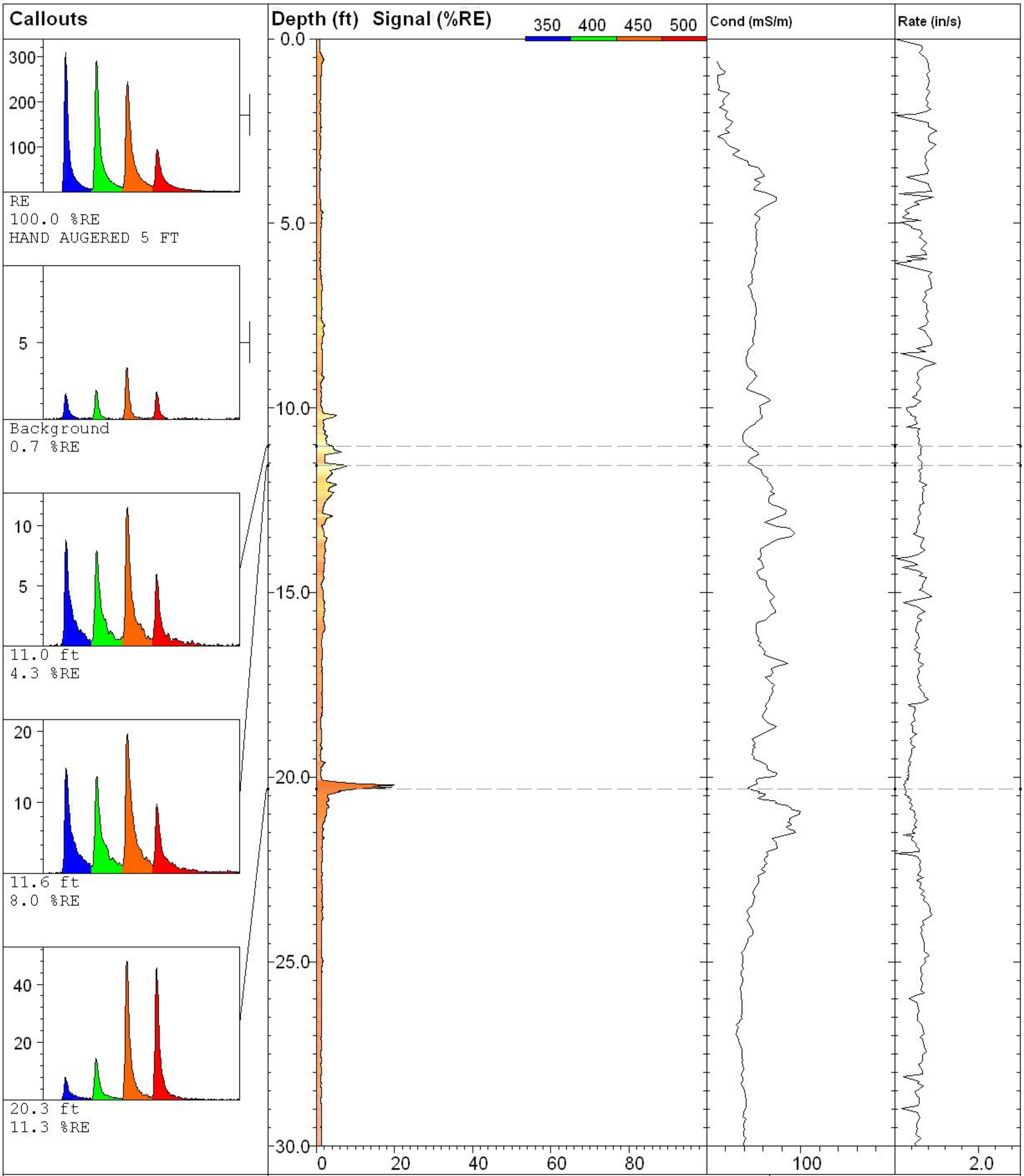
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **4.4 % @ 23.44 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-20 07:25 CDT**



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LIF-09-001

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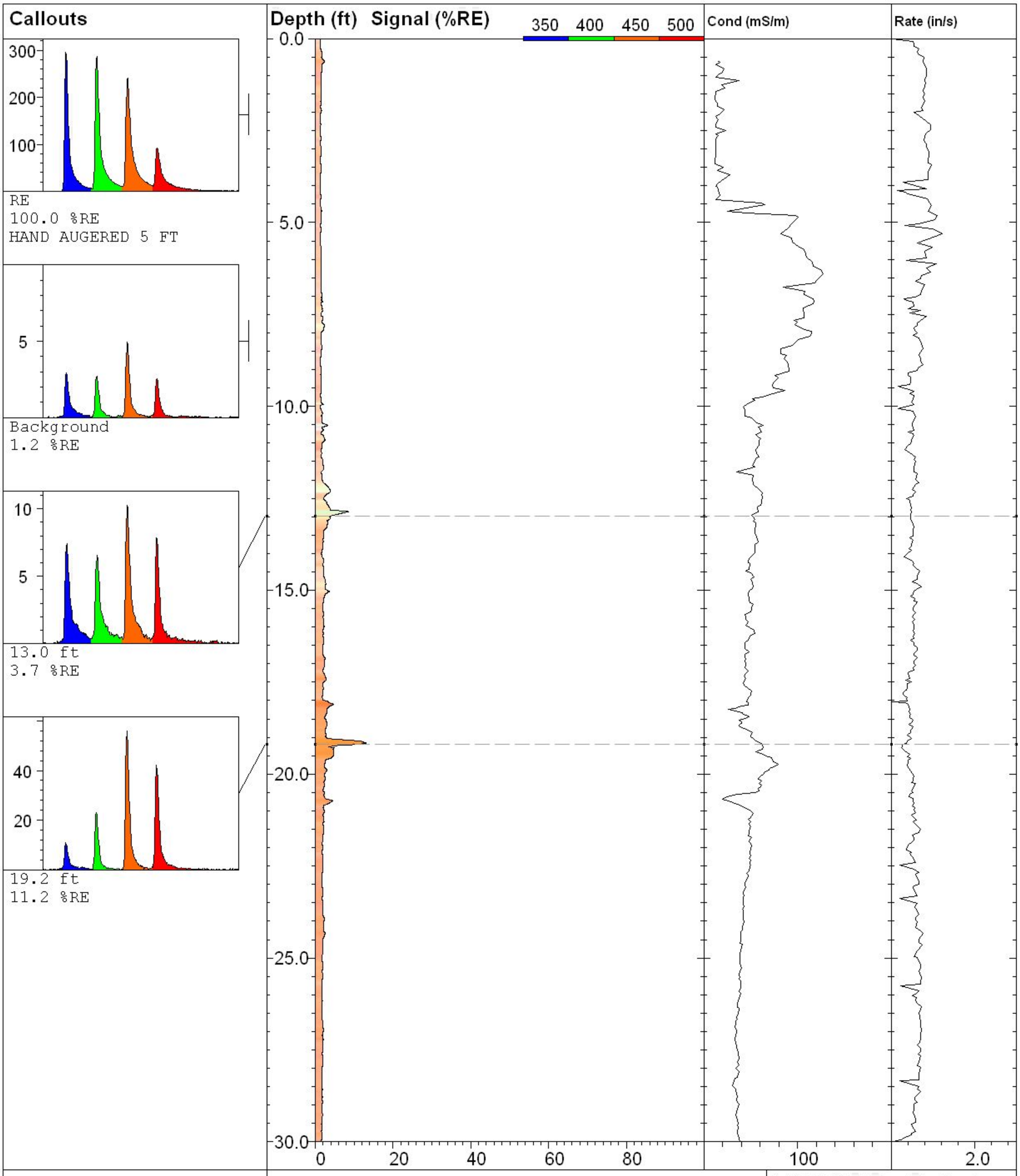
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **30.03 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **20.1 % @ 20.22 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-02 10:41 CDT**



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LIF-09-002

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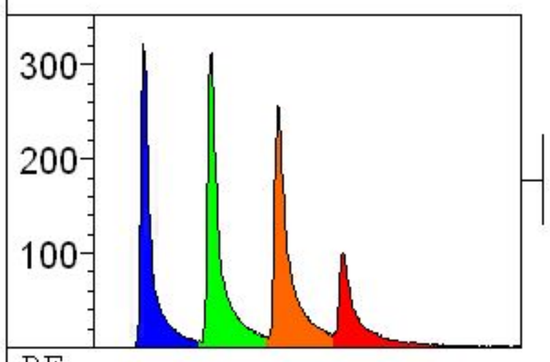
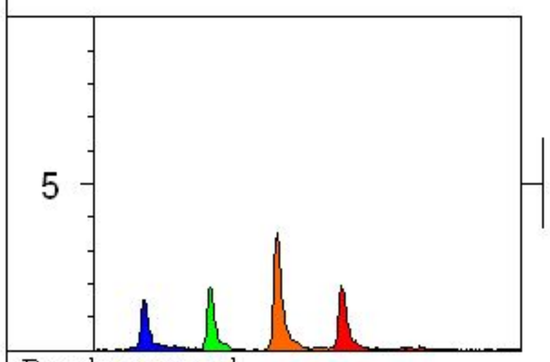
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **30.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **13.1 % @ 19.16 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-02 11:28 CDT**

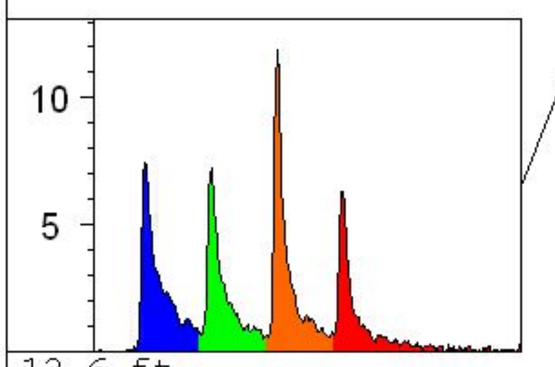
Callouts



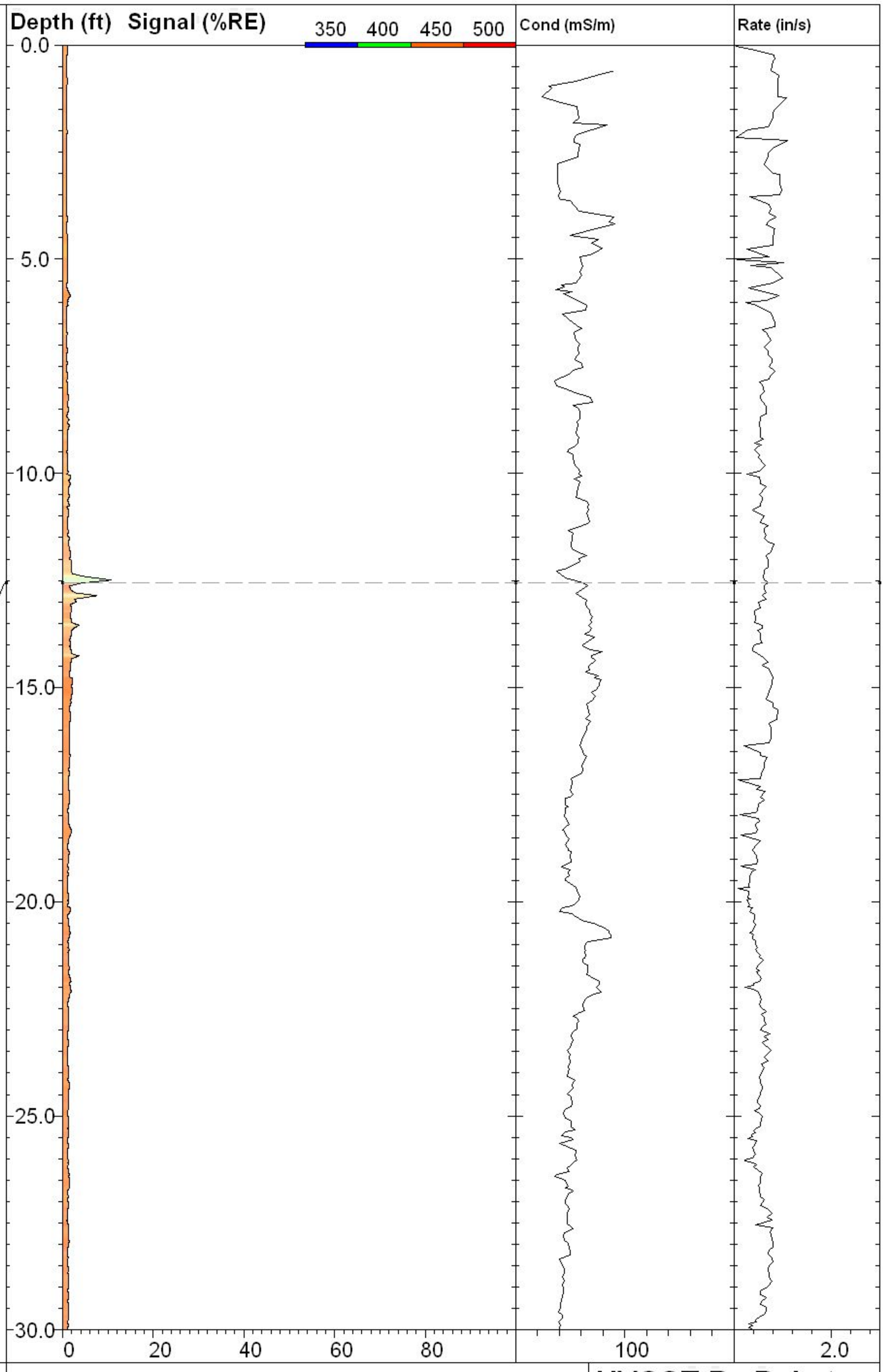
RE
100.0 %RE
HAND AUGERED 5 FT



Background
0.7 %RE



12.6 ft
4.0 %RE



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LIF-09-003

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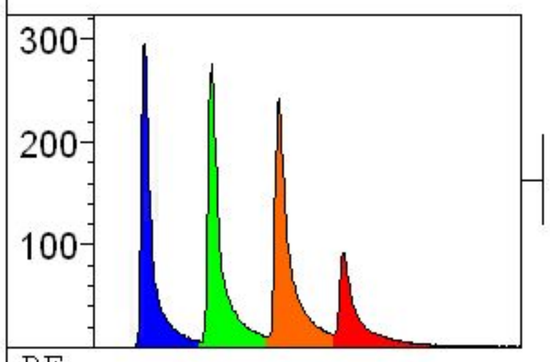
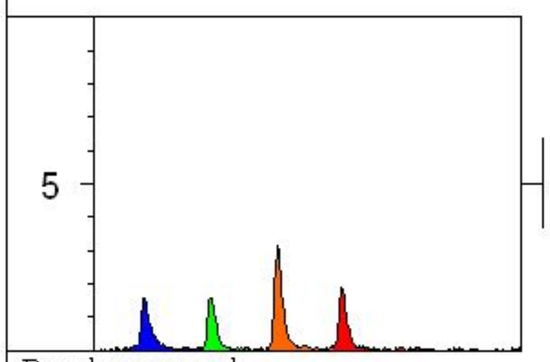
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **30.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **10.8 % @ 12.49 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-02 12:02 CDT**

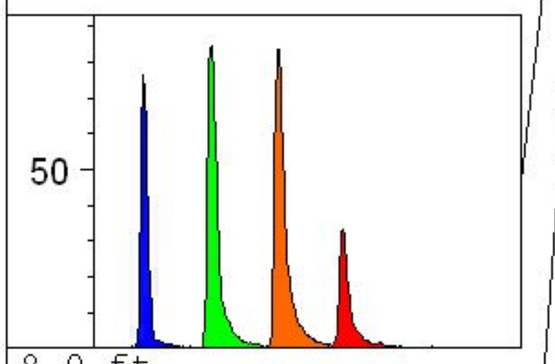
Callouts



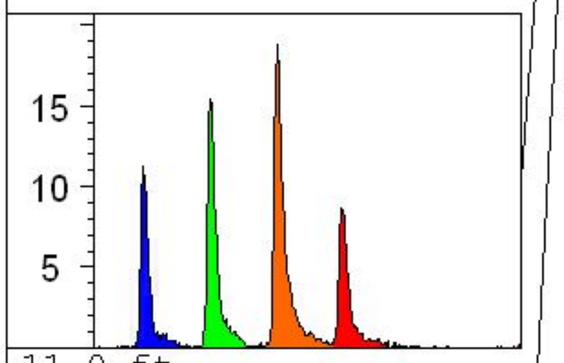
RE
100.0 %RE
HAND AUGERED 5 FT



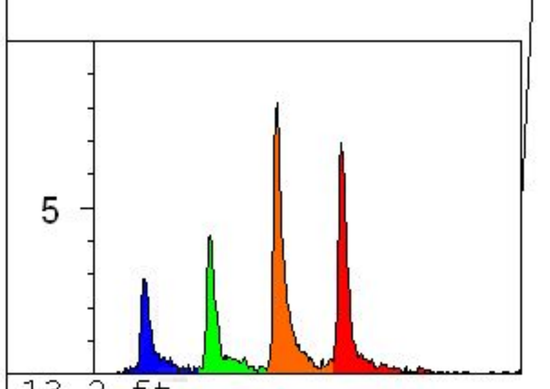
Background
0.7 %RE



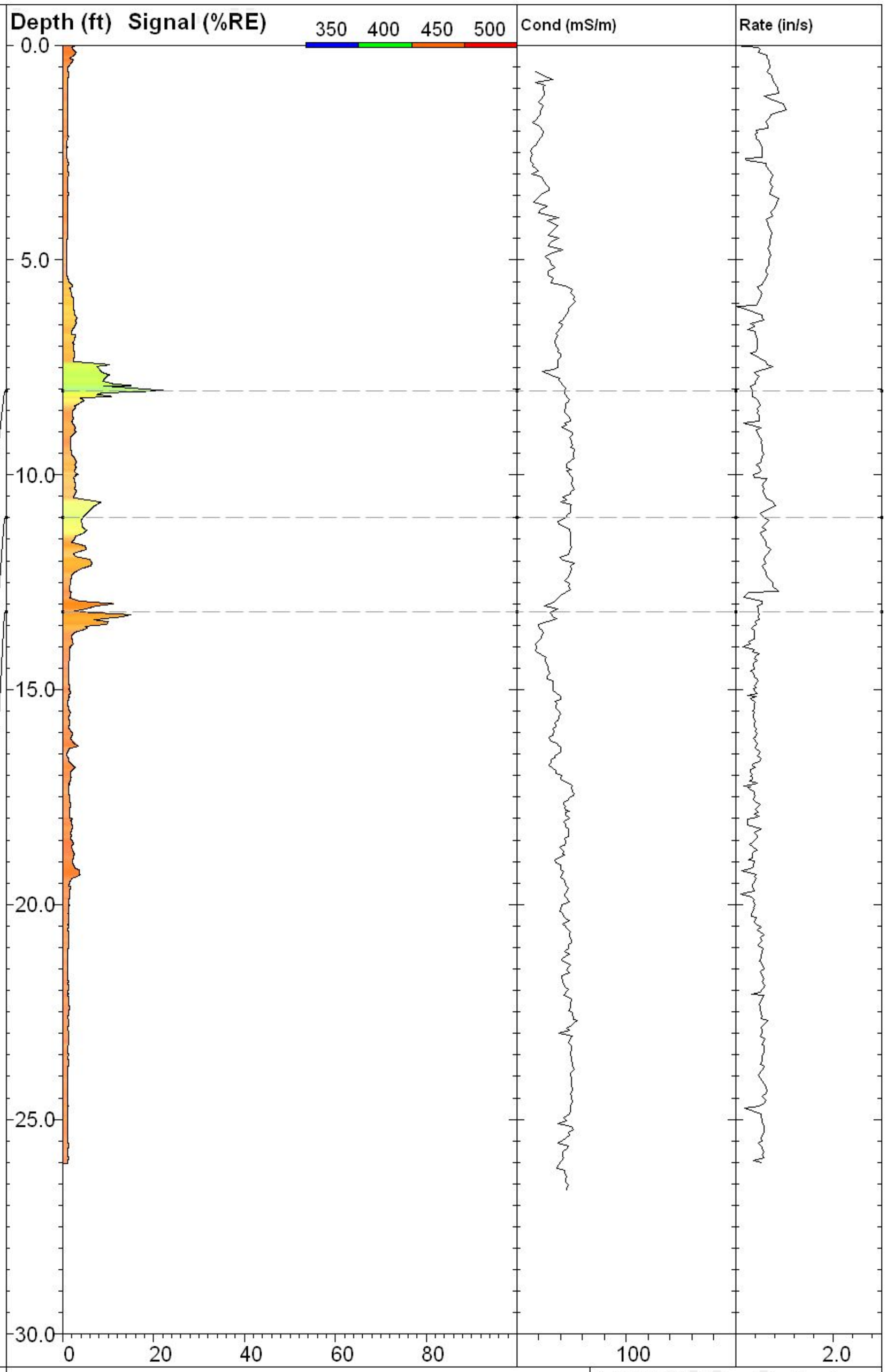
8.0 ft
22.8 %RE



11.0 ft
4.4 %RE



13.2 ft
2.2 %RE



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LIF-09-004

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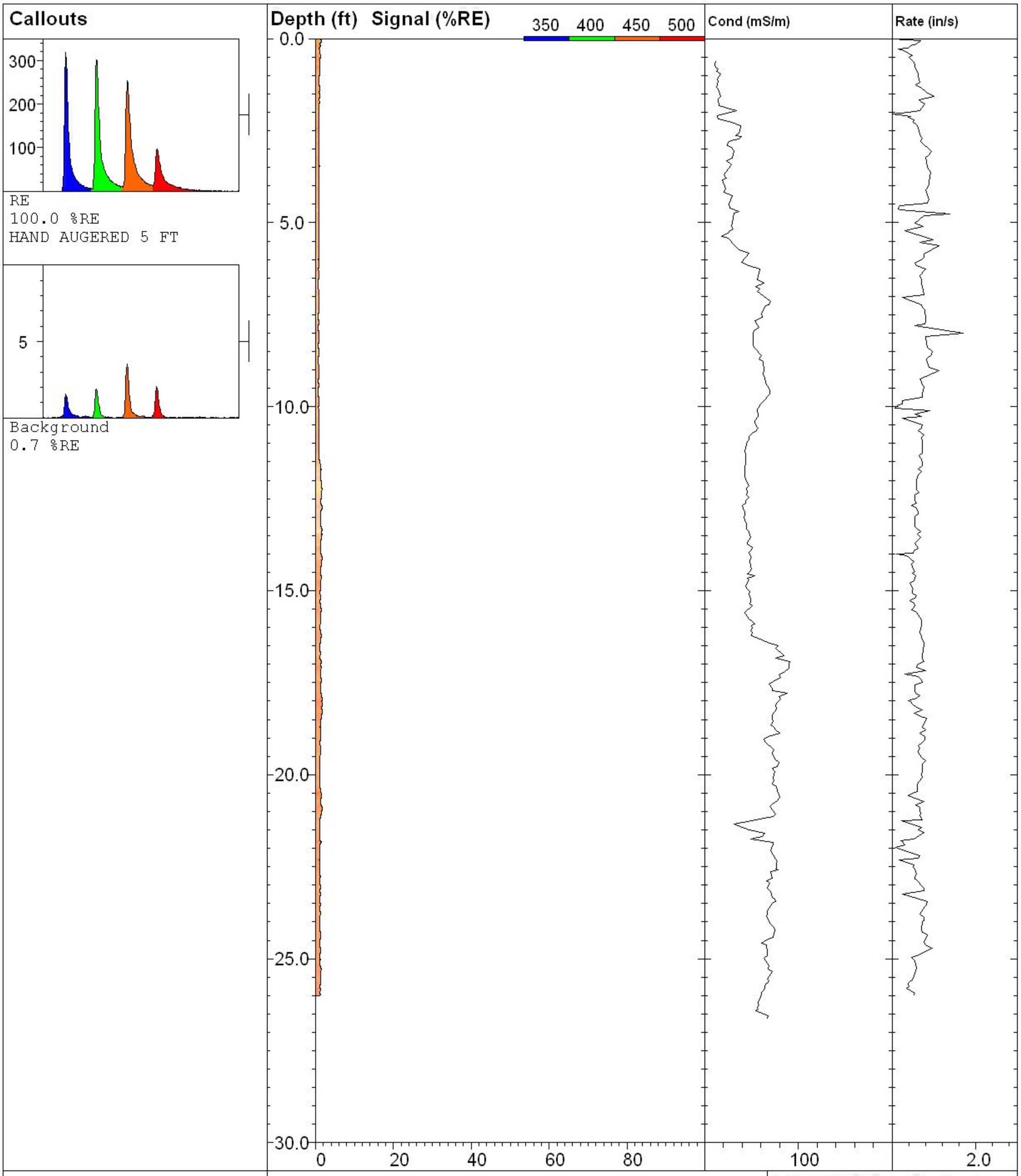
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.02 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **22.8 % @ 8.04 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-03 13:36 CDT**



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LIF-09-005

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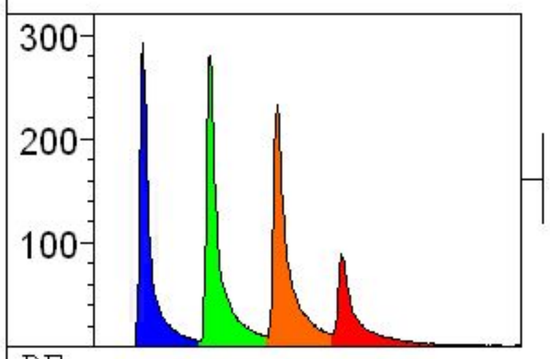
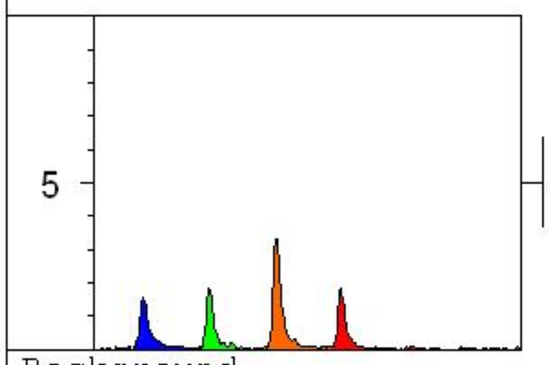
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **1.7 % @ 20.88 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-03 14:14 CDT**

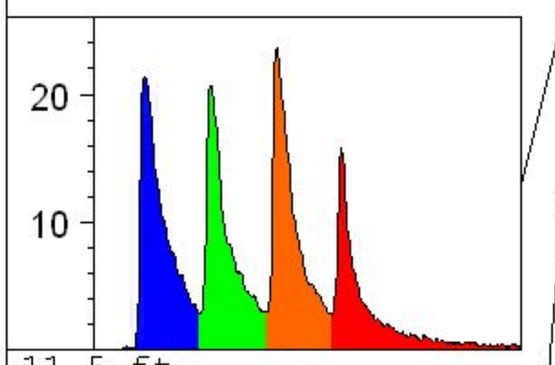
Callouts



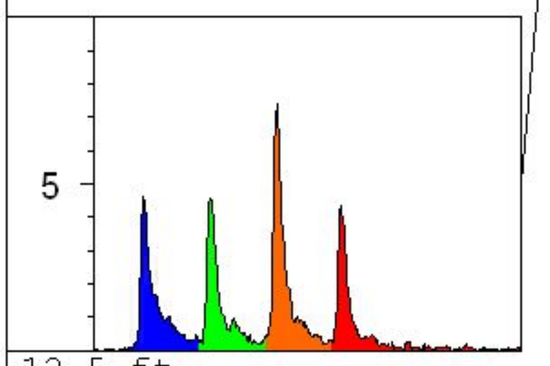
RE
100.0 %RE
HAND AUGERED 5 FT



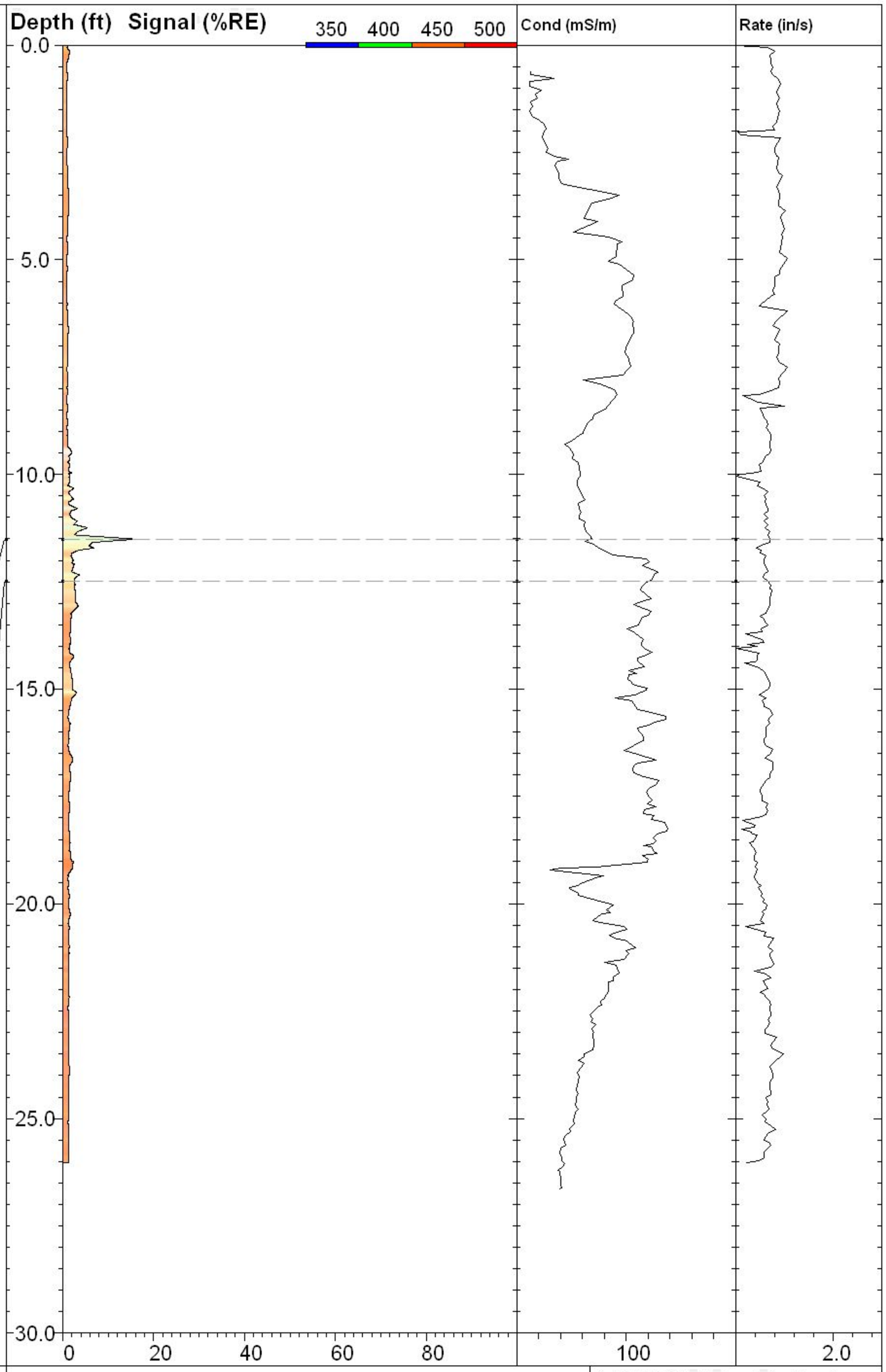
Background
0.7 %RE



11.5 ft
16.1 %RE



12.5 ft
2.5 %RE



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LIF-09-006

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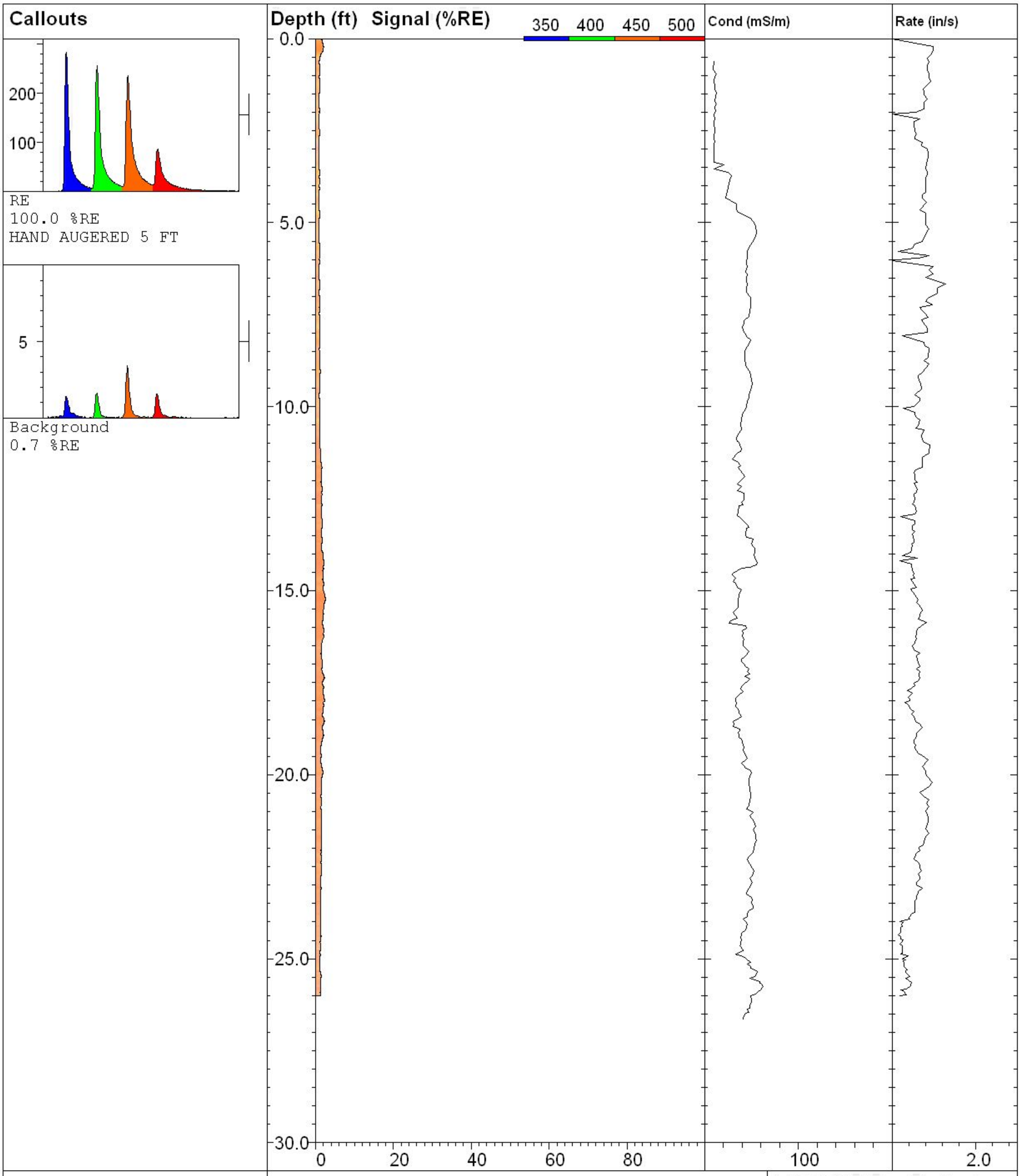
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.02 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **16.1 % @ 11.51 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-03 14:42 CDT**



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LIF-09-007

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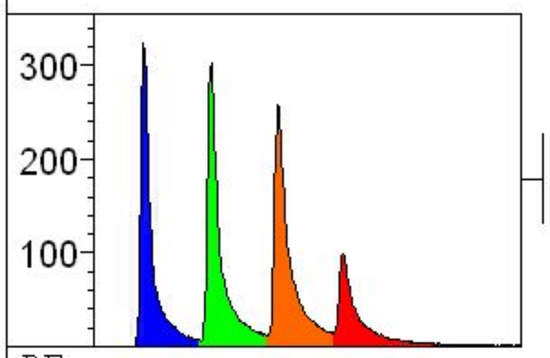
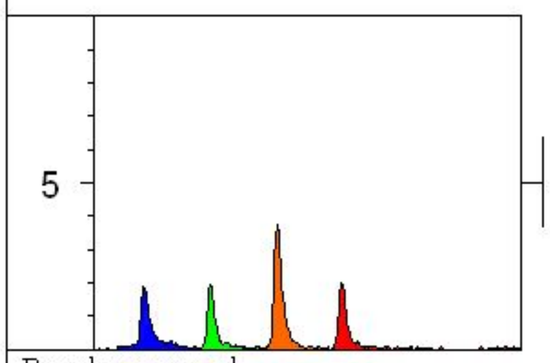
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **2.5 % @ 15.25 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-04 07:41 CDT**

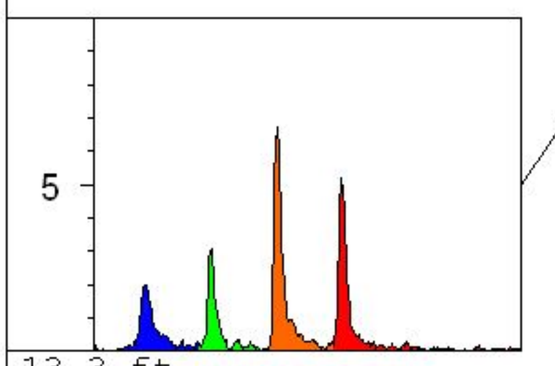
Callouts



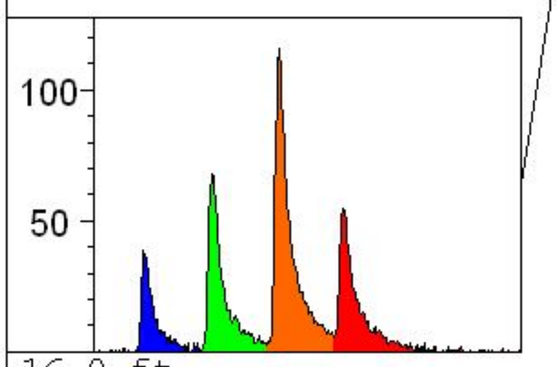
RE
100.0 %RE
HAND AUGERED 5 FT



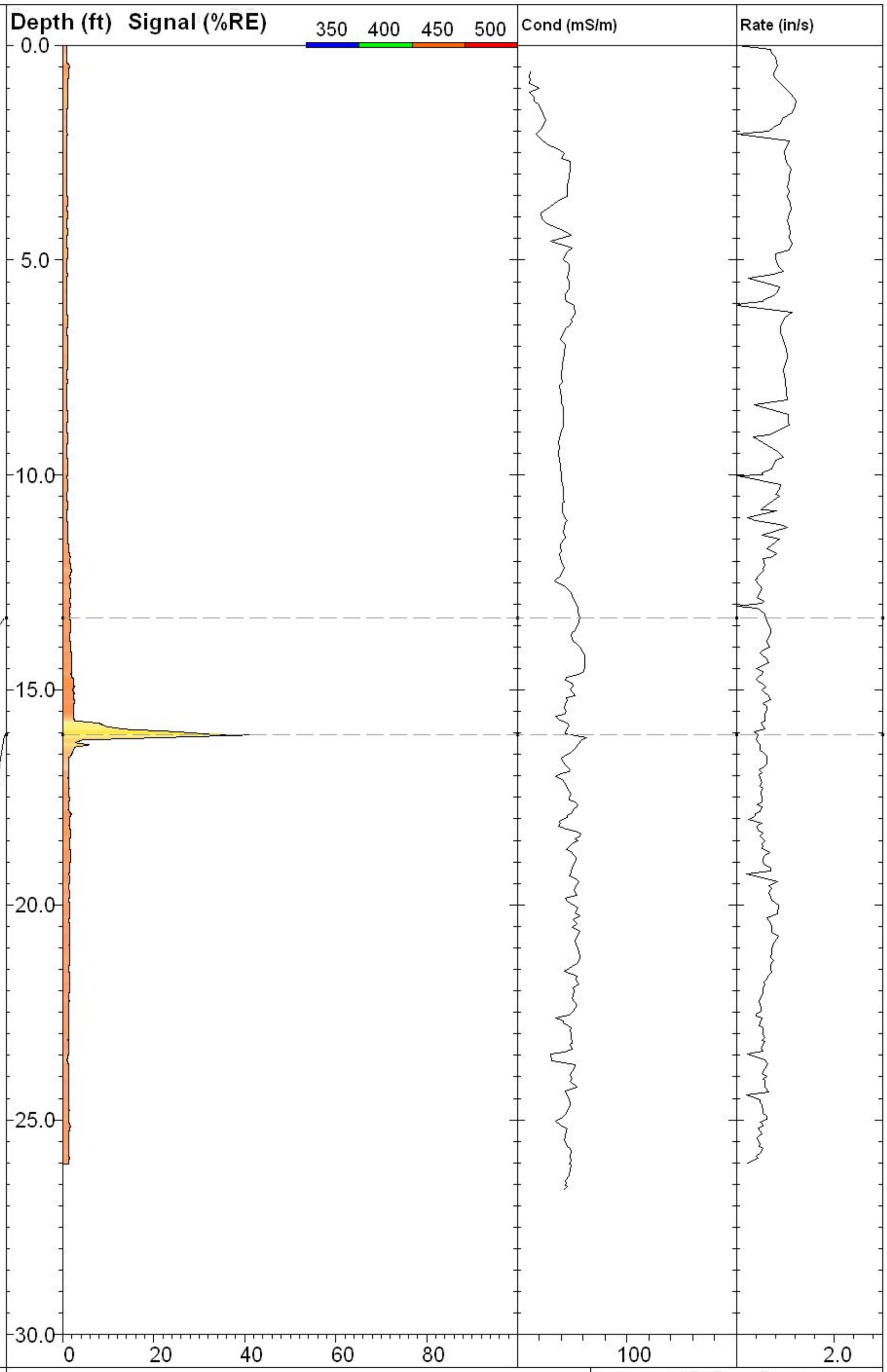
Background
0.7 %RE



13.3 ft
1.4 %RE



16.0 ft
32.4 %RE



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LIF-09-008

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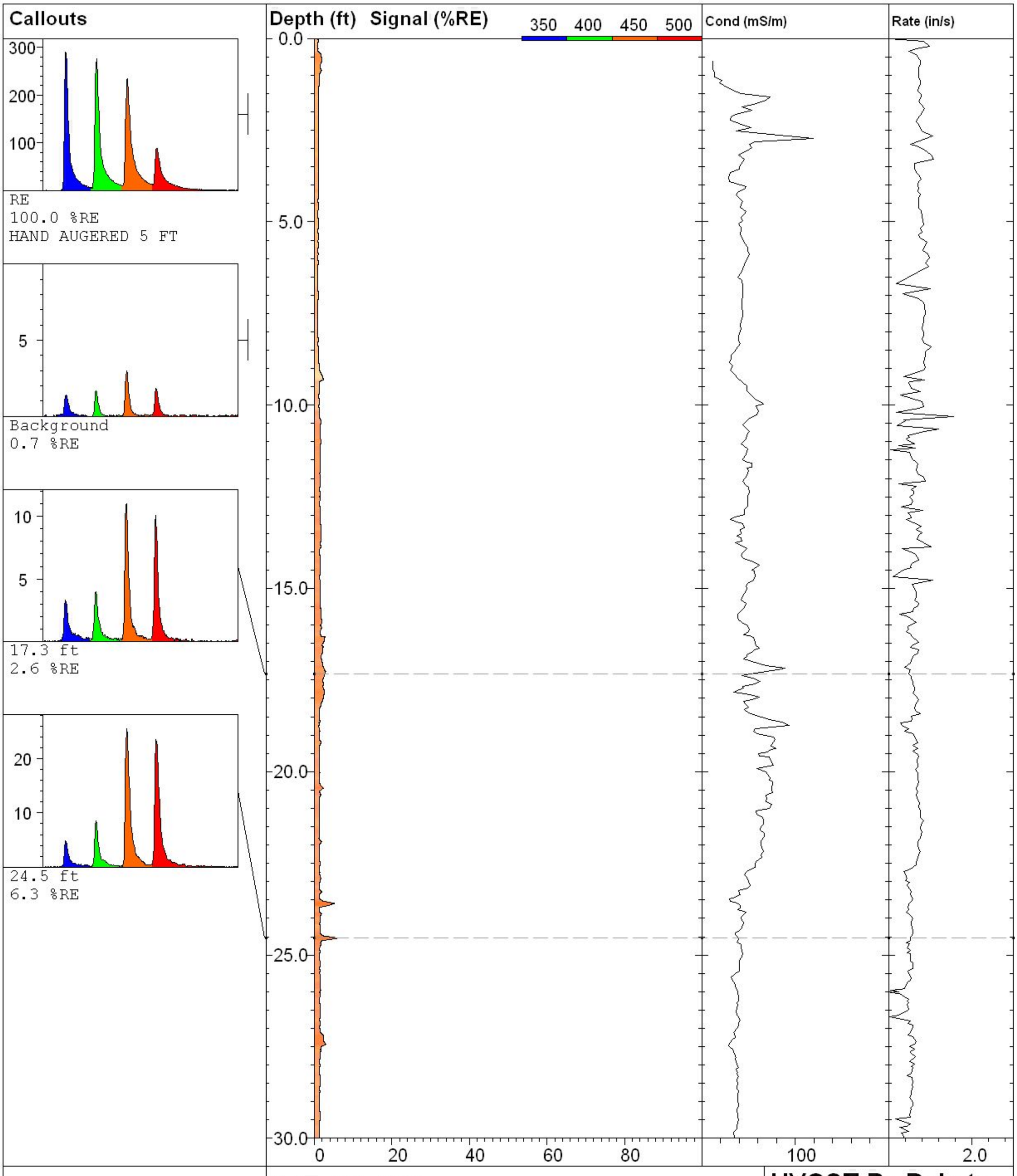
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.02 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **42.0 % @ 16.04 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-04 08:39 CDT**



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LIF-09-009

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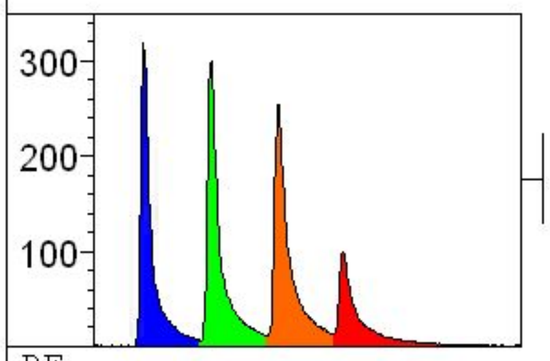
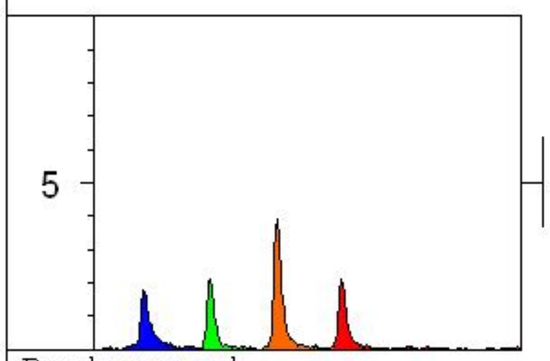
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **30.68 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **6.3 % @ 24.54 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-04 09:14 CDT**

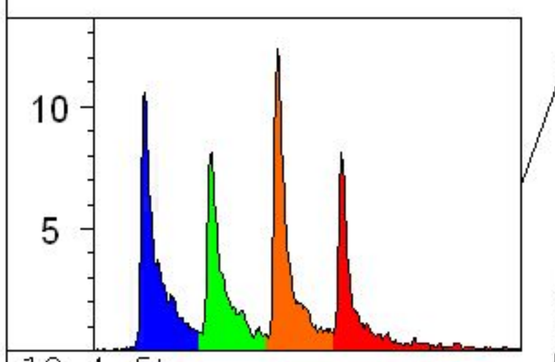
Callouts



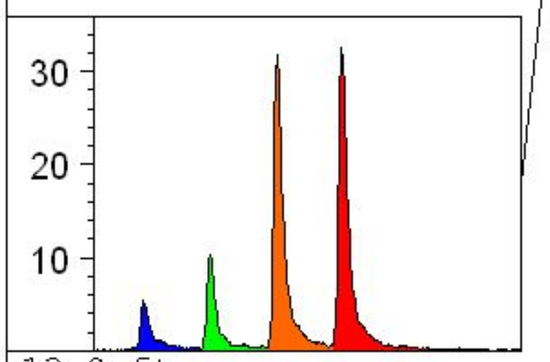
RE
100.0 %RE
HAND AUGERED 5 FT



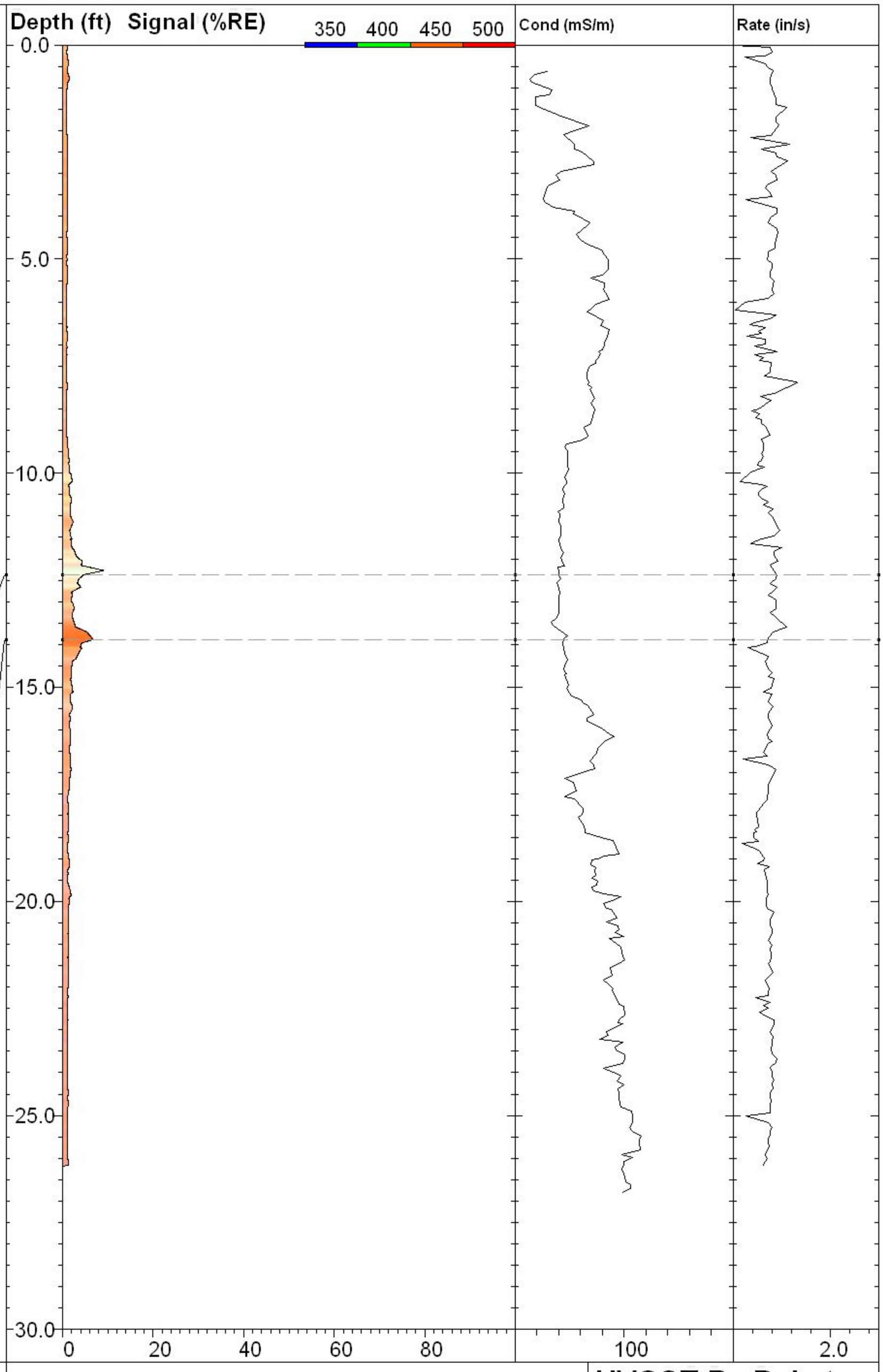
Background
0.7 %RE



12.4 ft
4.5 %RE



13.9 ft
6.7 %RE



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LIF-09-010

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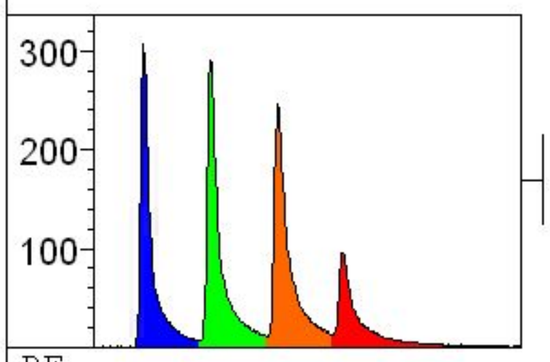
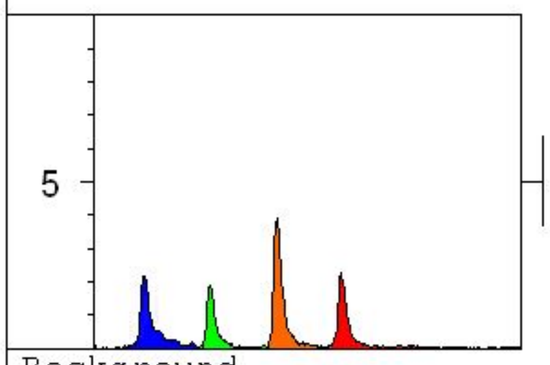
Site: `	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.18 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **9.1 % @ 12.27 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-04 09:57 CDT**

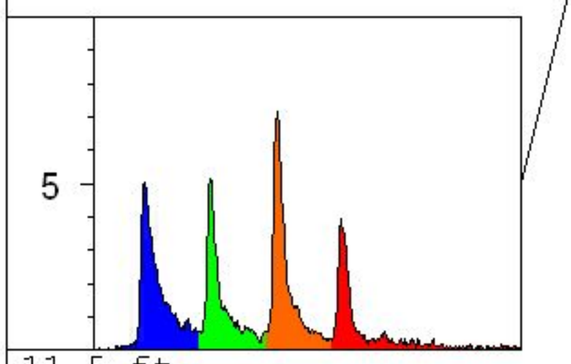
Callouts



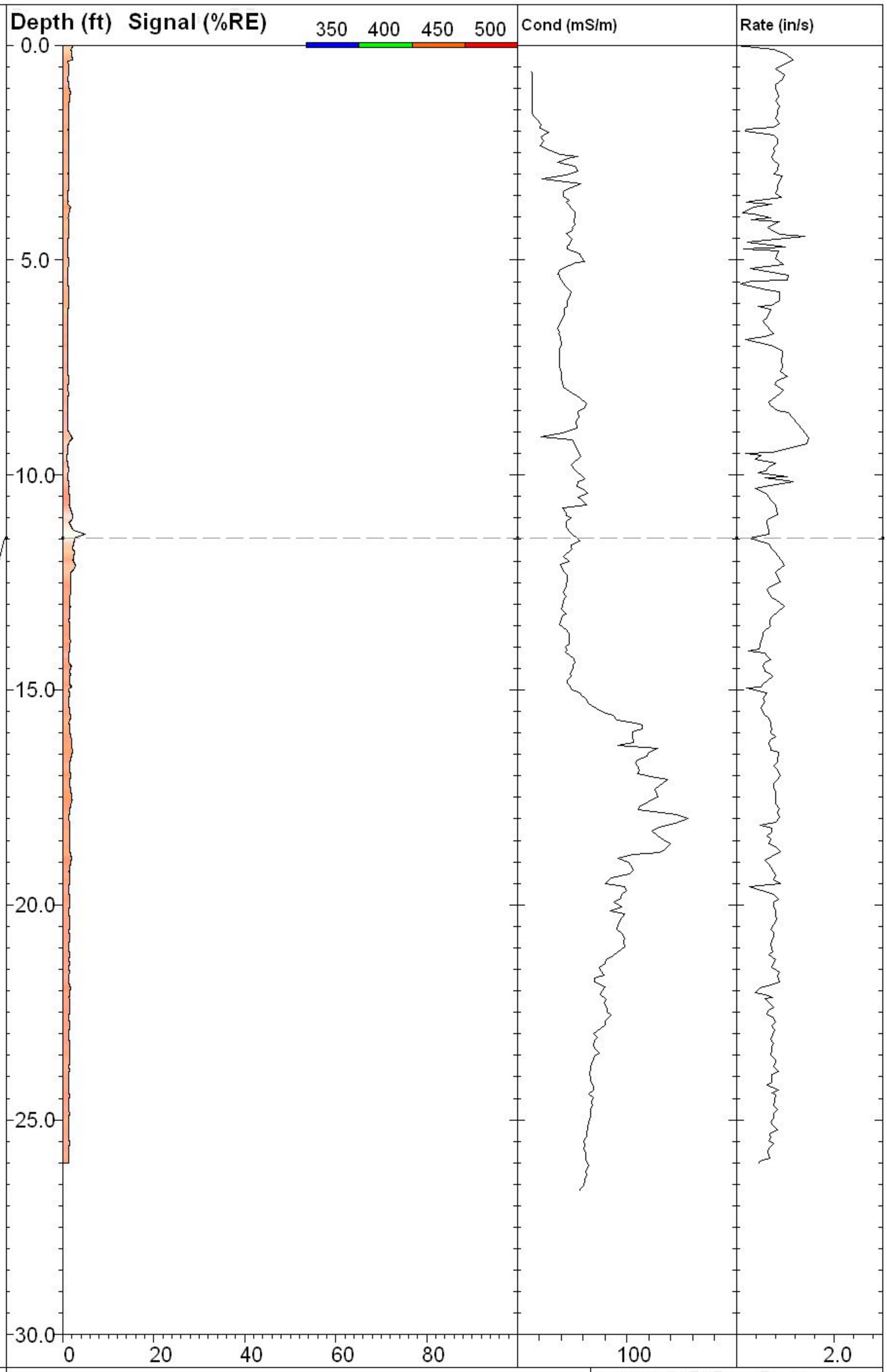
RE
100.0 %RE
HAND AUGERED 5 FT



Background
0.9 %RE



11.5 ft
2.6 %RE



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LIF-09-011

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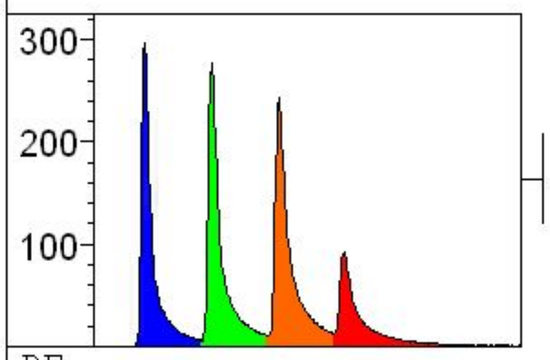
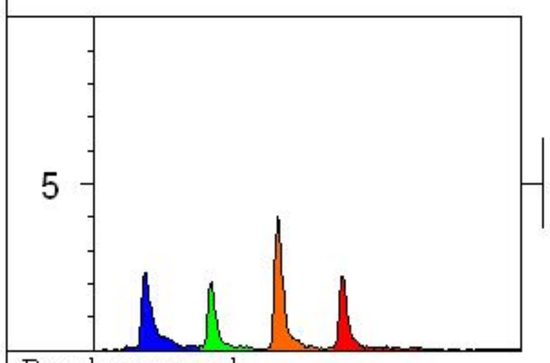
Site: `	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **4.9 % @ 11.38 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-04 10:30 CDT**

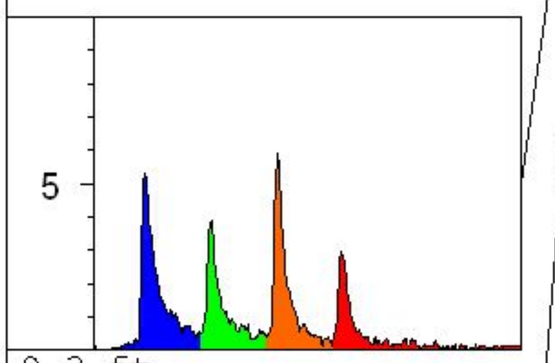
Callouts



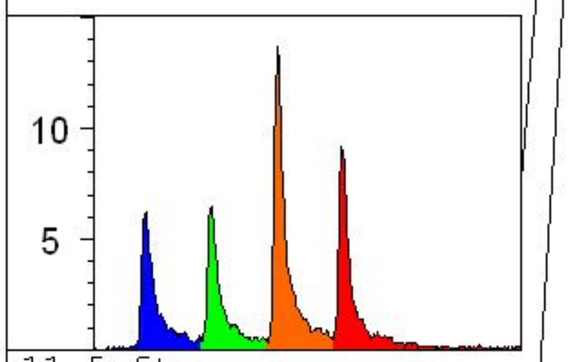
RE
100.0 %RE
HAND AUGERED 5 FT



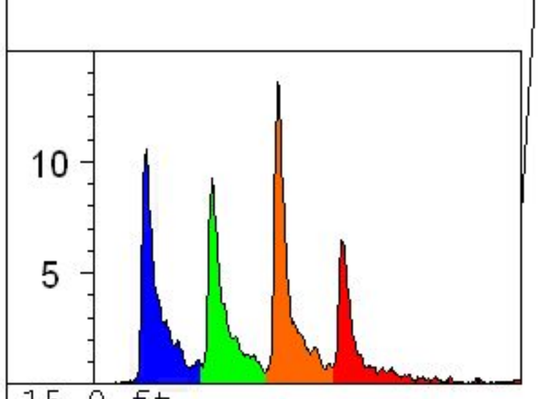
Background
0.9 %RE



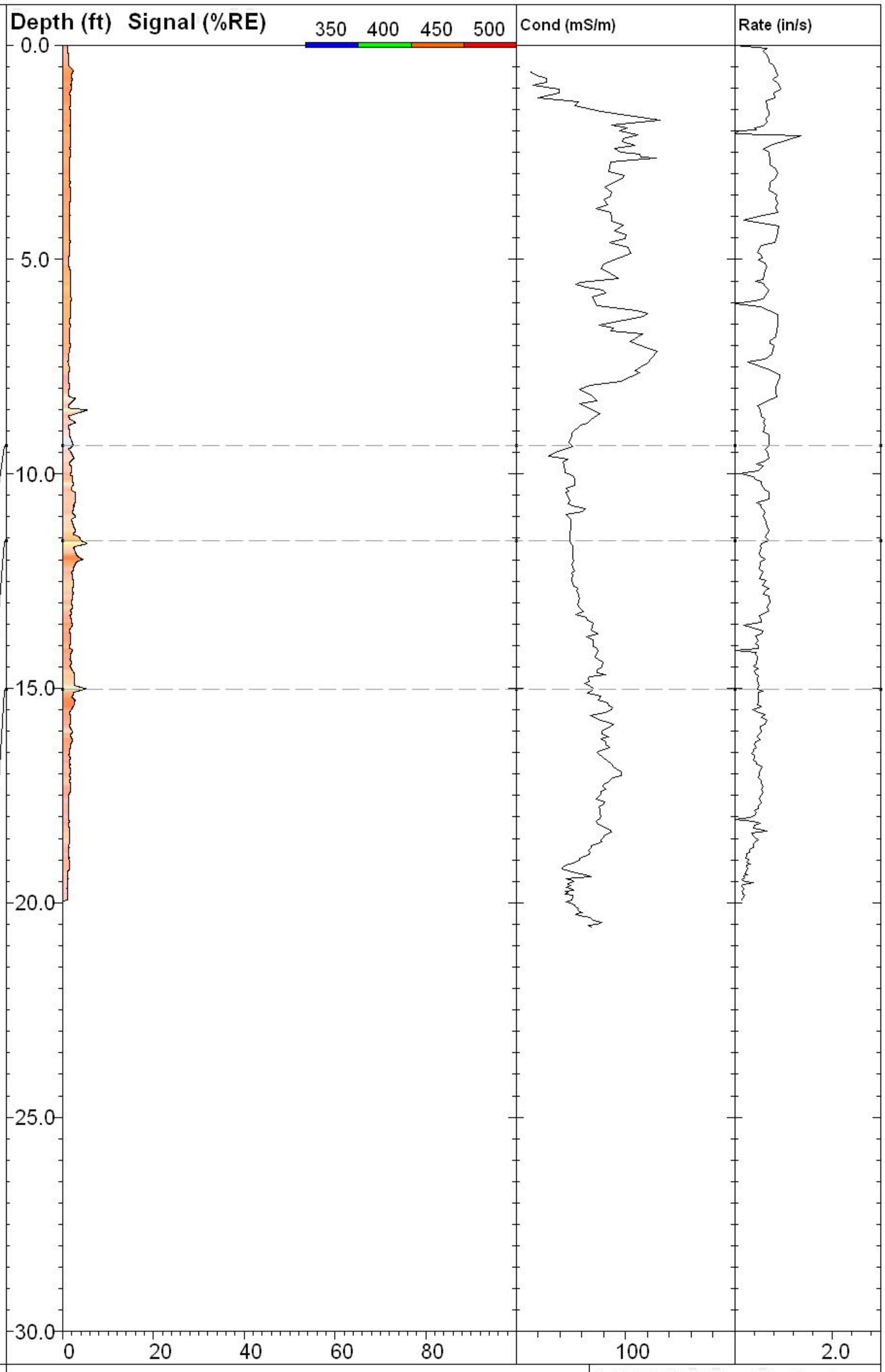
9.3 ft
2.3 %RE



11.5 ft
4.0 %RE



15.0 ft
5.2 %RE



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LIF-09-012

UVOST By Dakota
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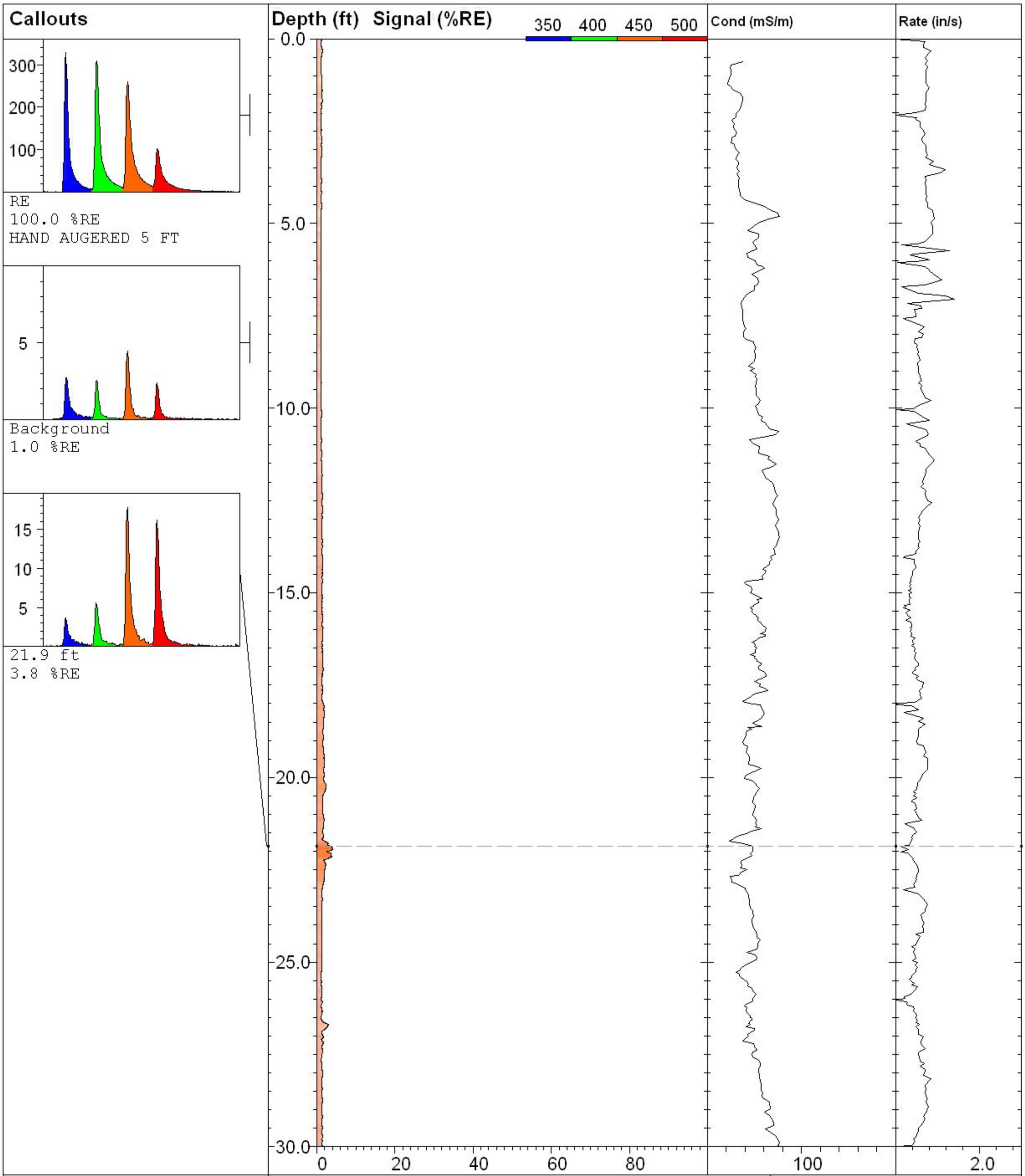
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **19.95 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **5.5 % @ 8.51 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-04 12:41 CDT**



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LIF-09-013

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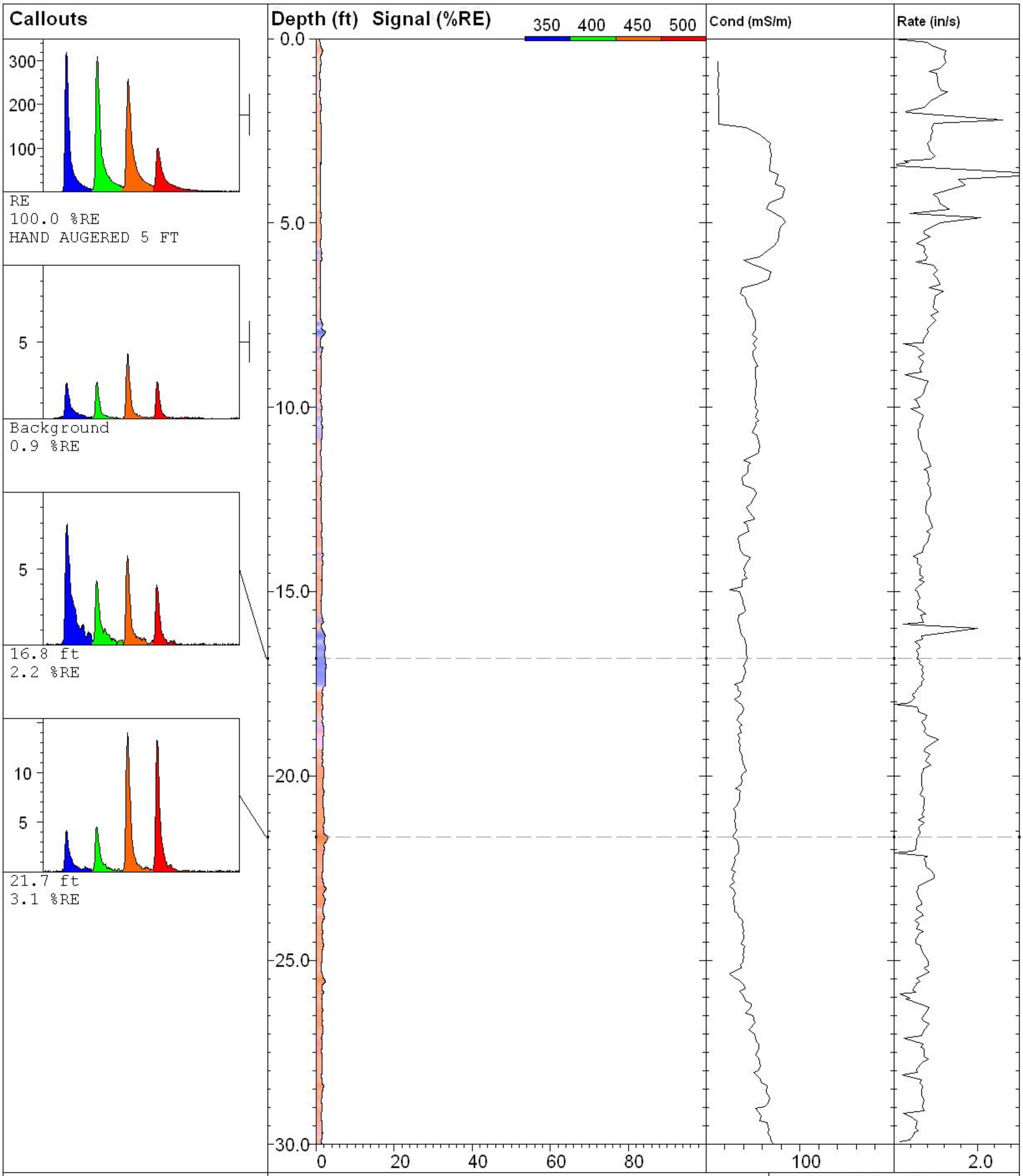
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **30.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **4.1 % @ 21.94 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-04 13:19 CDT**



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LIF-09-014

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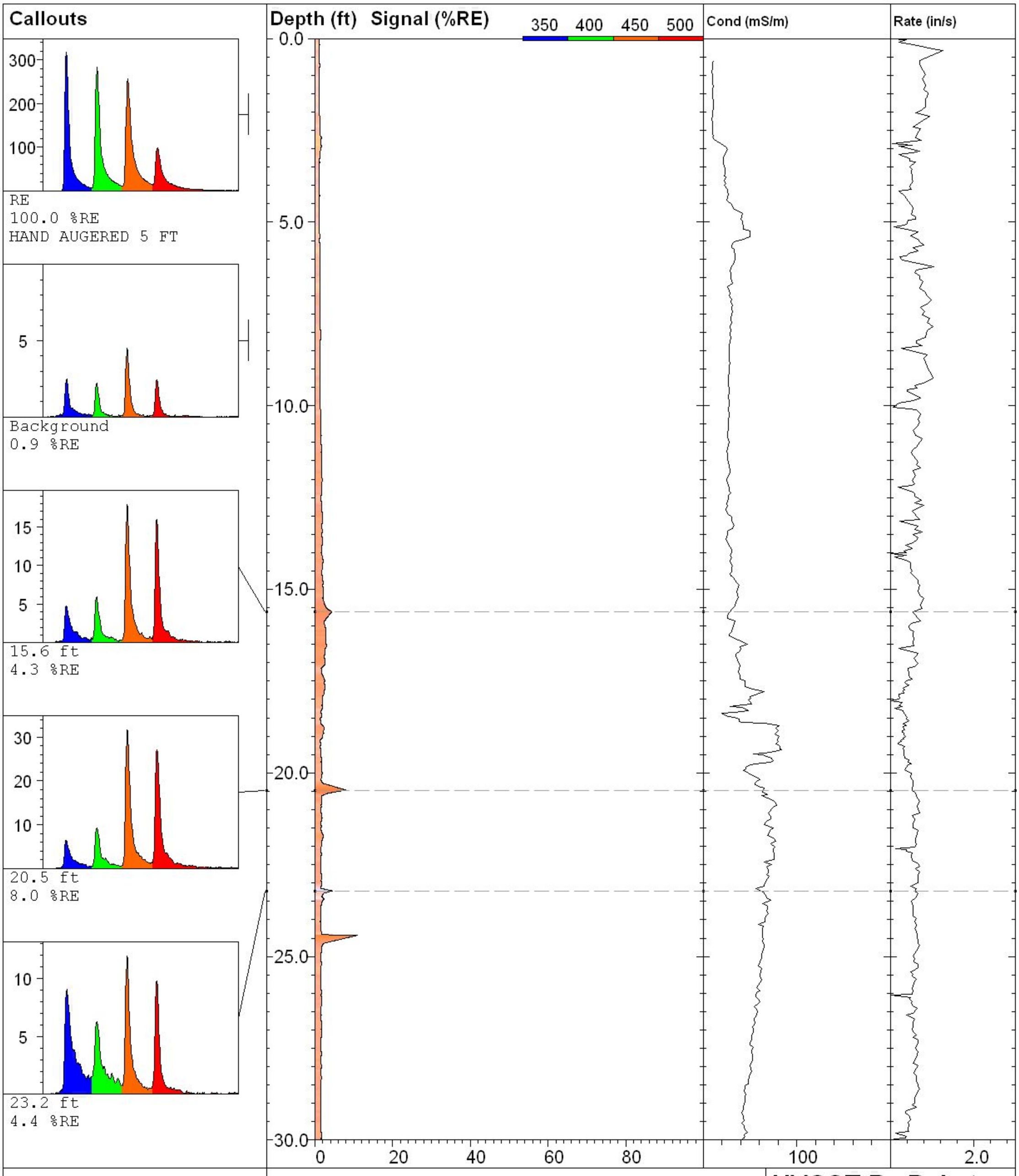
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **30.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **3.1 % @ 21.66 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-04 15:09 CDT**



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LIF-09-015

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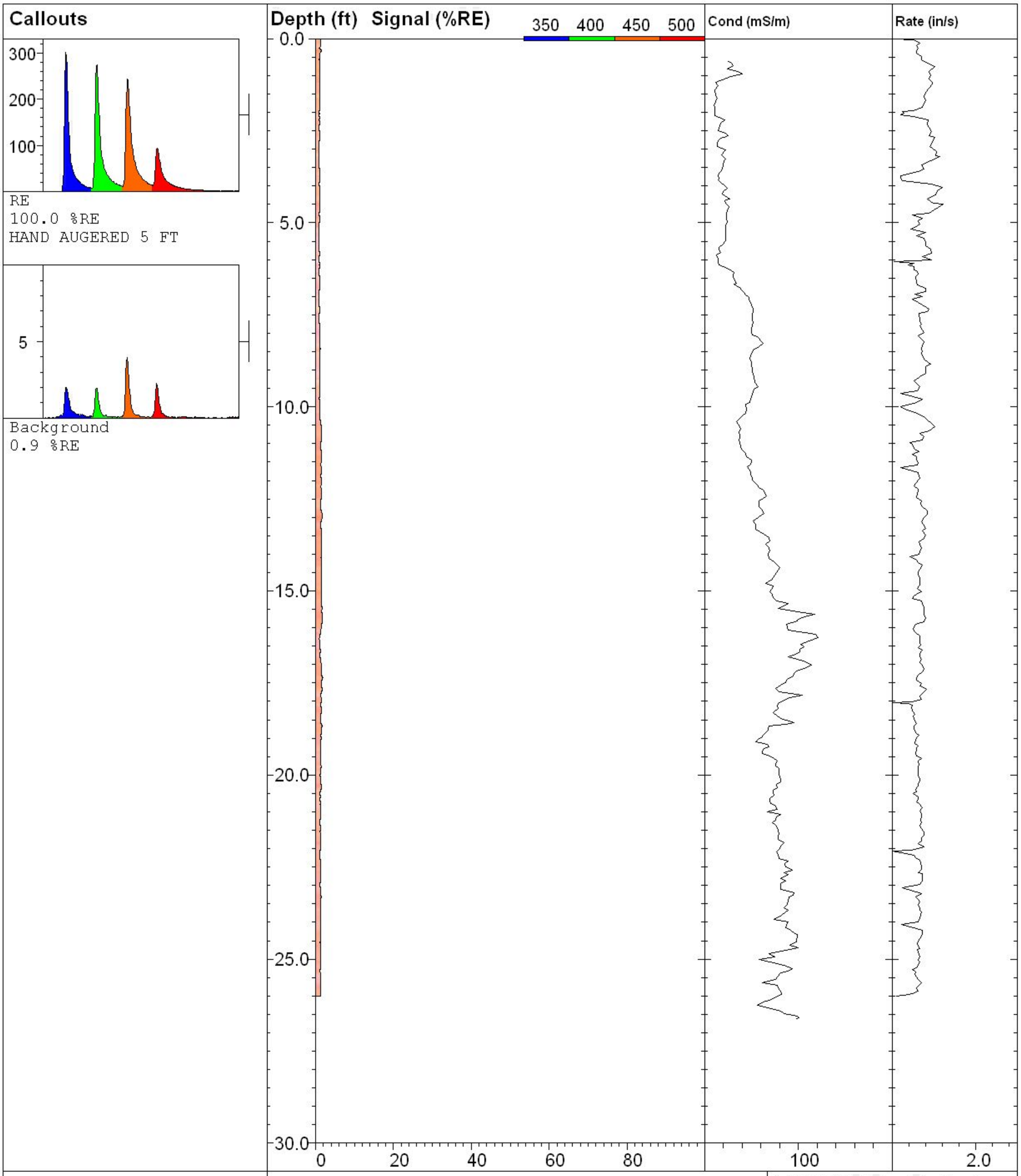
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **30.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **10.9 % @ 24.42 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-05 07:29 CDT**



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LIF-09-016

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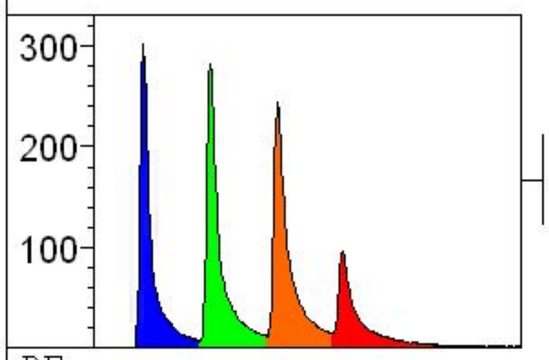
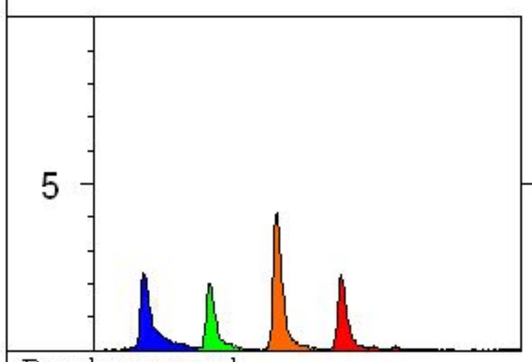
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **1.8 % @ 17.36 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-05 08:10 CDT**

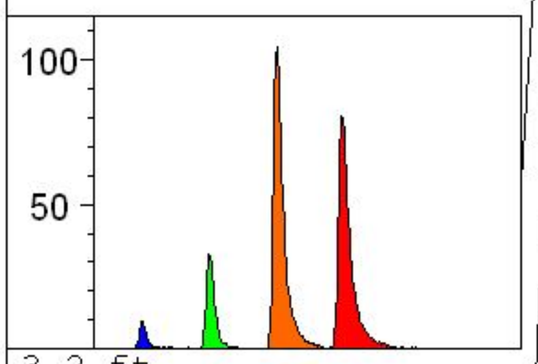
Callouts



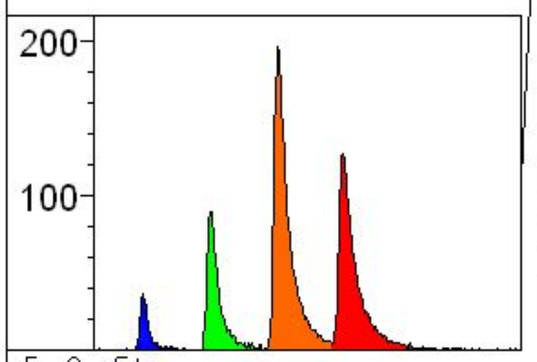
RE
100.0 %RE
HAND AUGERED 5 FT



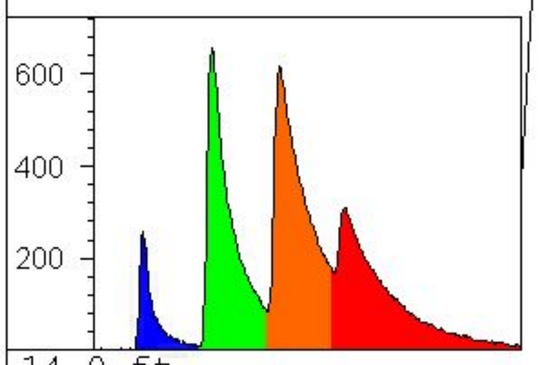
Background
0.9 %RE



3.2 ft
19.1 %RE

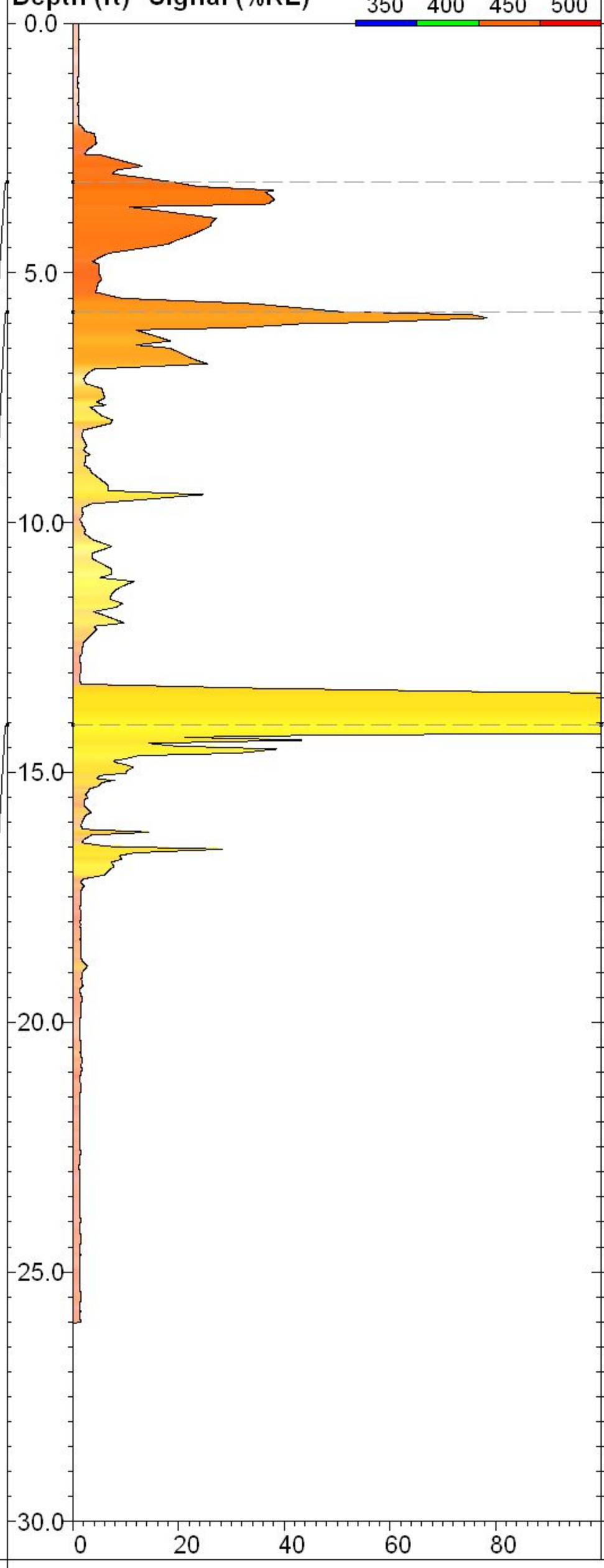


5.8 ft
50.0 %RE

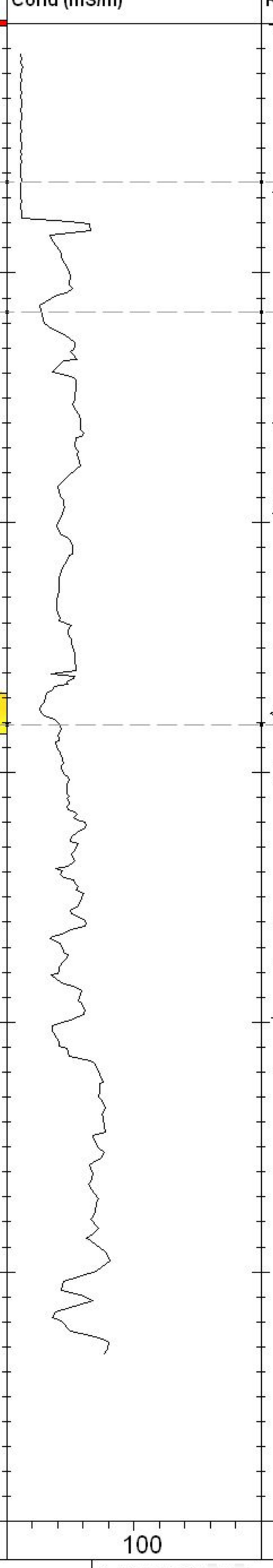


14.0 ft
413.6 %RE

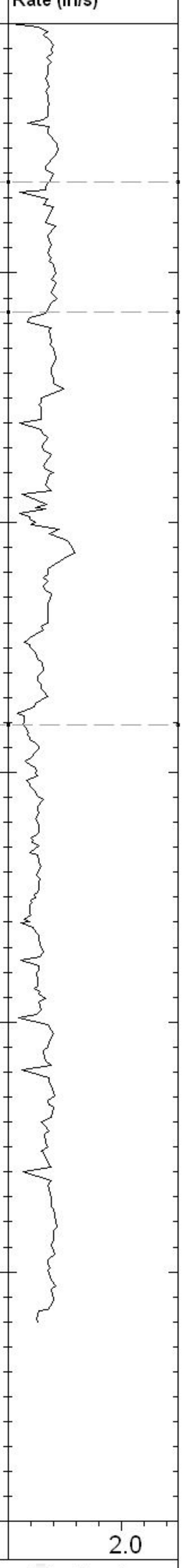
Depth (ft) Signal (%RE)



Cond (mS/m)



Rate (in/s)



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LIF-09-017

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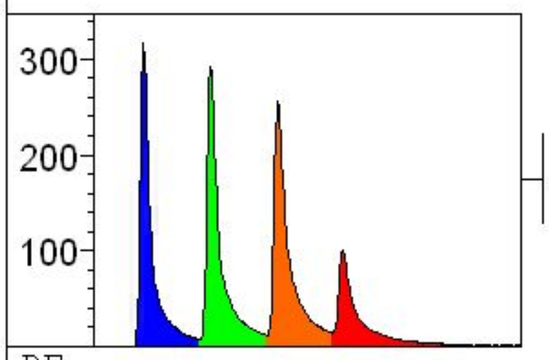
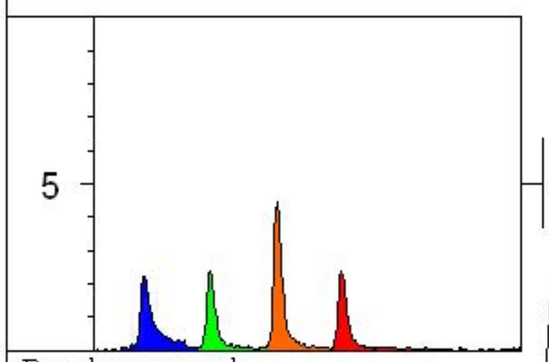
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.02 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **441.5 % @ 14.07 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-05 08:49 CDT**

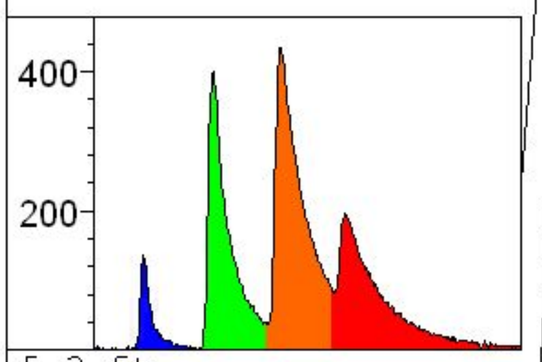
Callouts



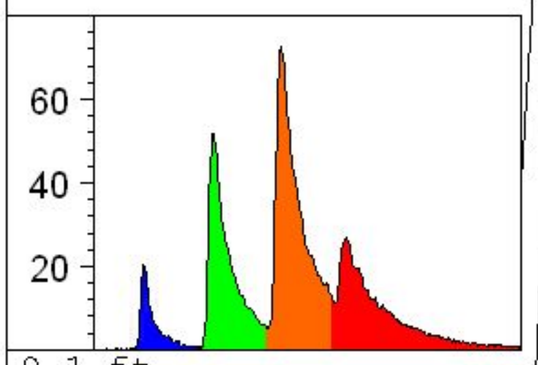
RE
100.0 %RE
HAND AUGERED 5 FT



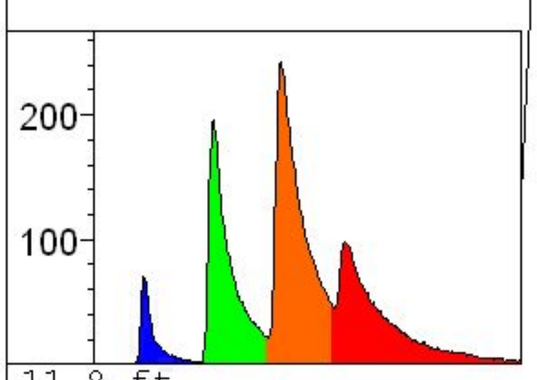
Background
1.0 %RE



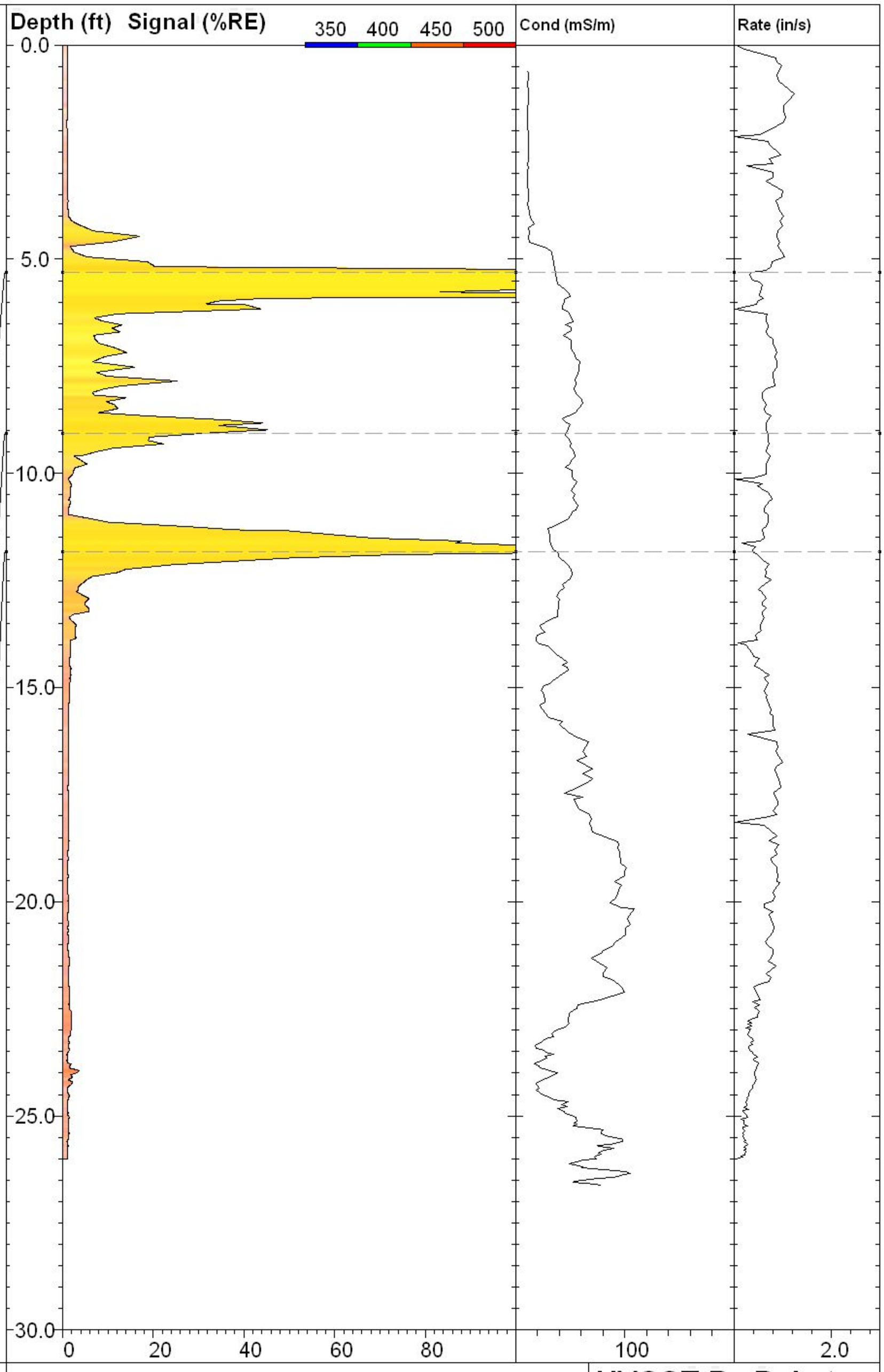
5.3 ft
222.2 %RE



9.1 ft
31.6 %RE



11.8 ft
118.2 %RE



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LIF-09-018

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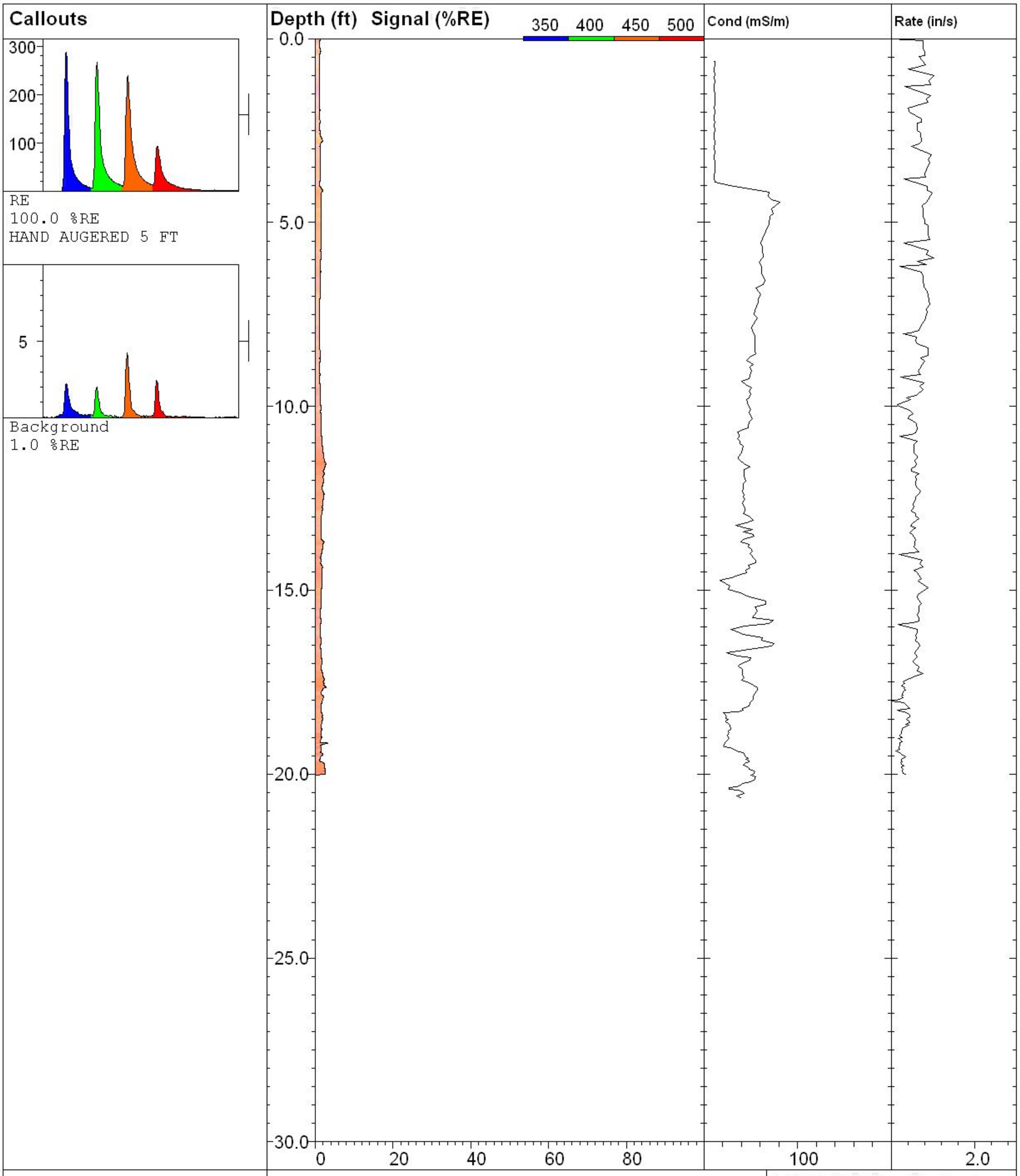
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **230.3 % @ 5.36 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-05 09:22 CDT**



LIF-09-019

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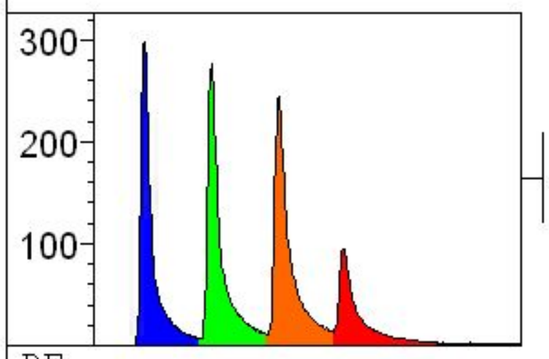
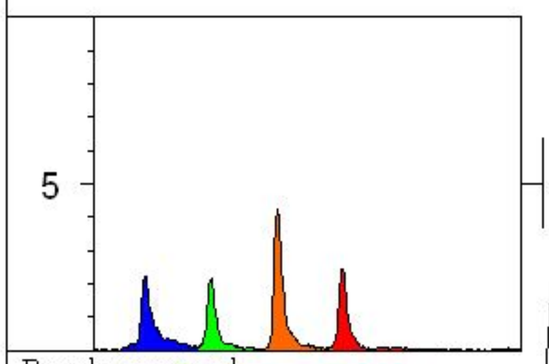
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **20.02 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **3.3 % @ 19.16 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-05 09:56 CDT**

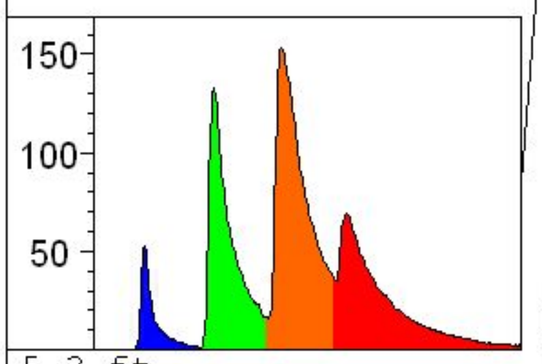
Callouts



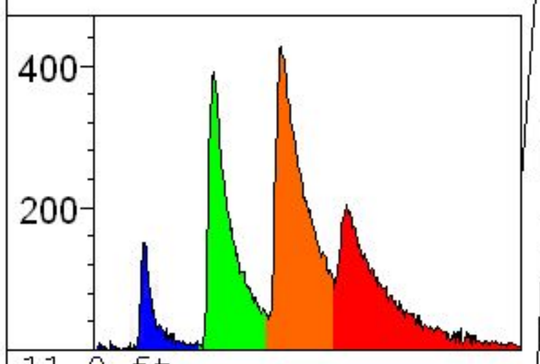
RE
100.0 %RE
HAND AUGERED 5 FT



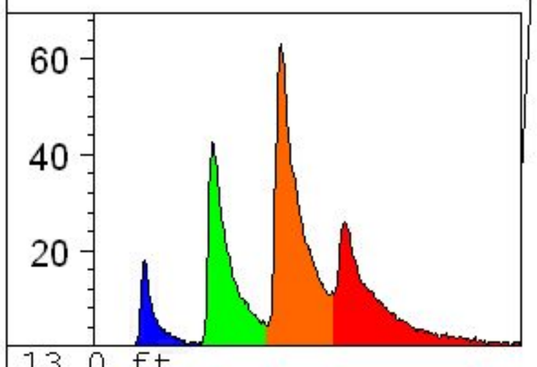
Background
1.0 %RE



5.3 ft
88.5 %RE

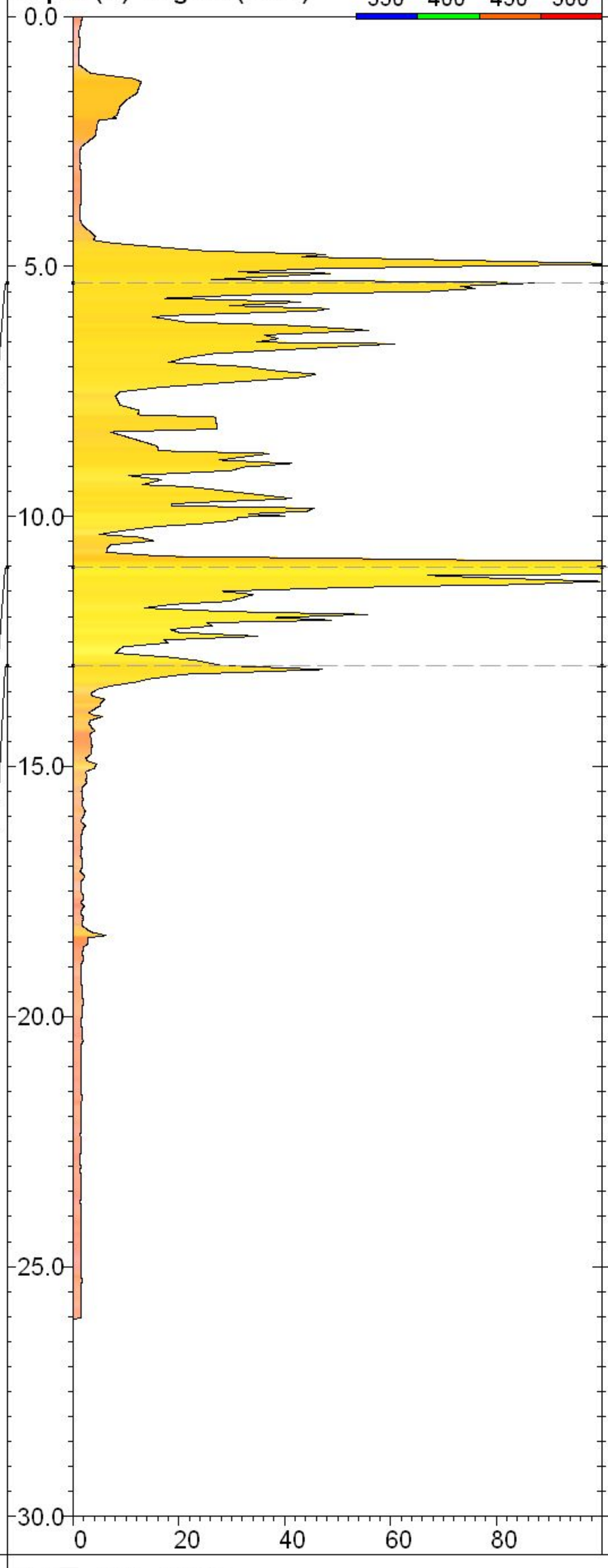


11.0 ft
250.9 %RE

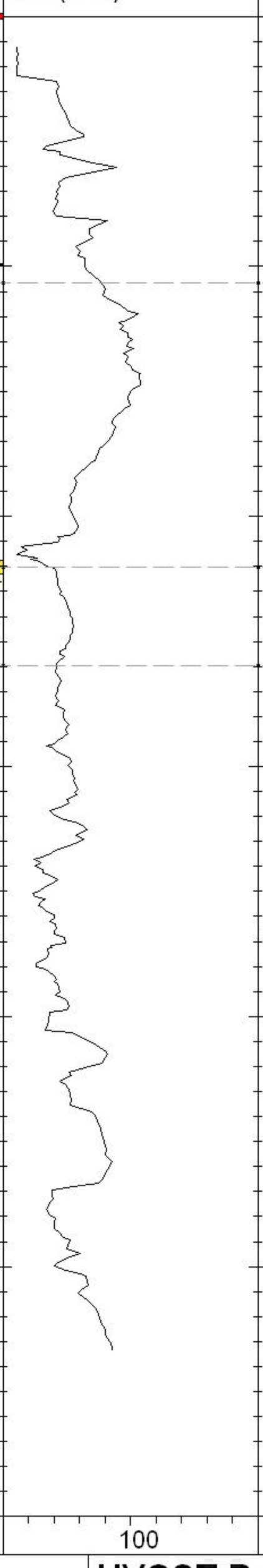


13.0 ft
28.1 %RE

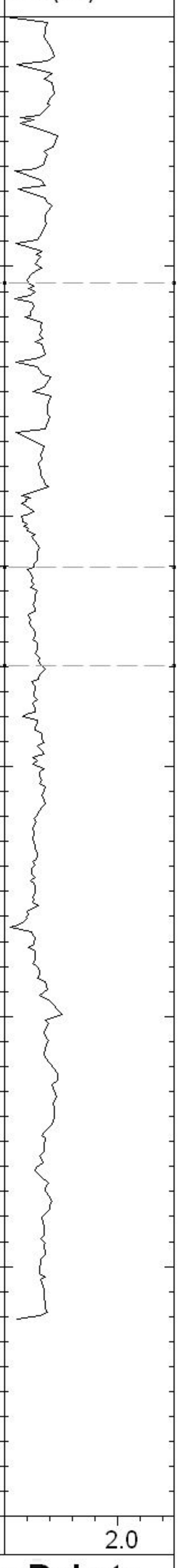
Depth (ft) Signal (%RE)



Cond (mS/m)



Rate (in/s)



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LIF-09-020

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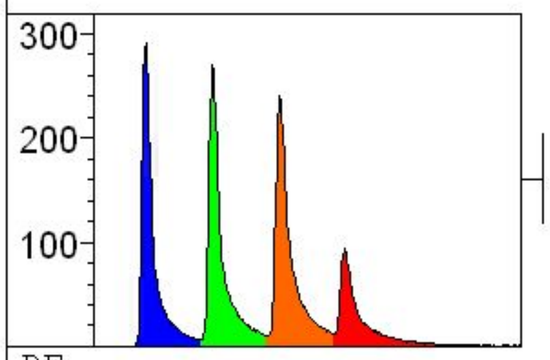
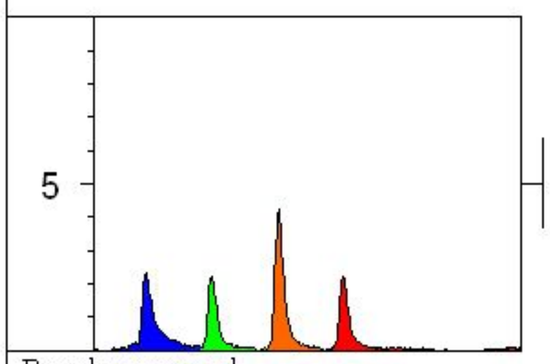
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.04 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **259.2 % @ 10.94 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-05 10:23 CDT**

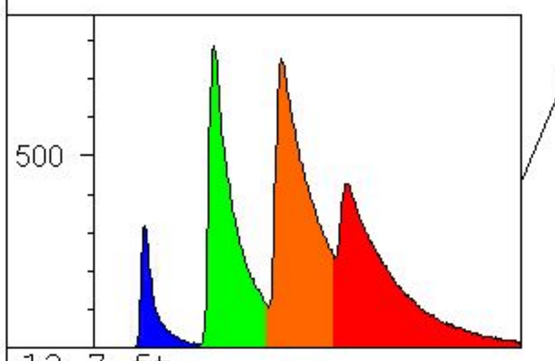
Callouts



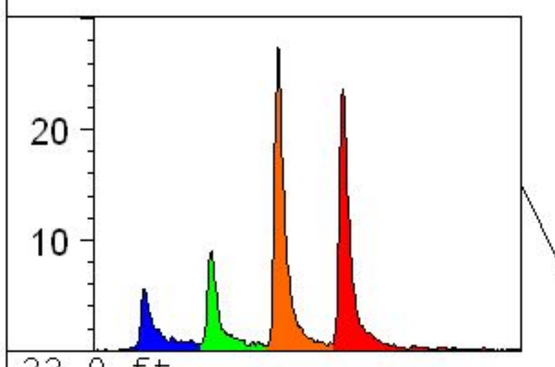
RE
100.0 %RE
HAND AUGERED 5 FT



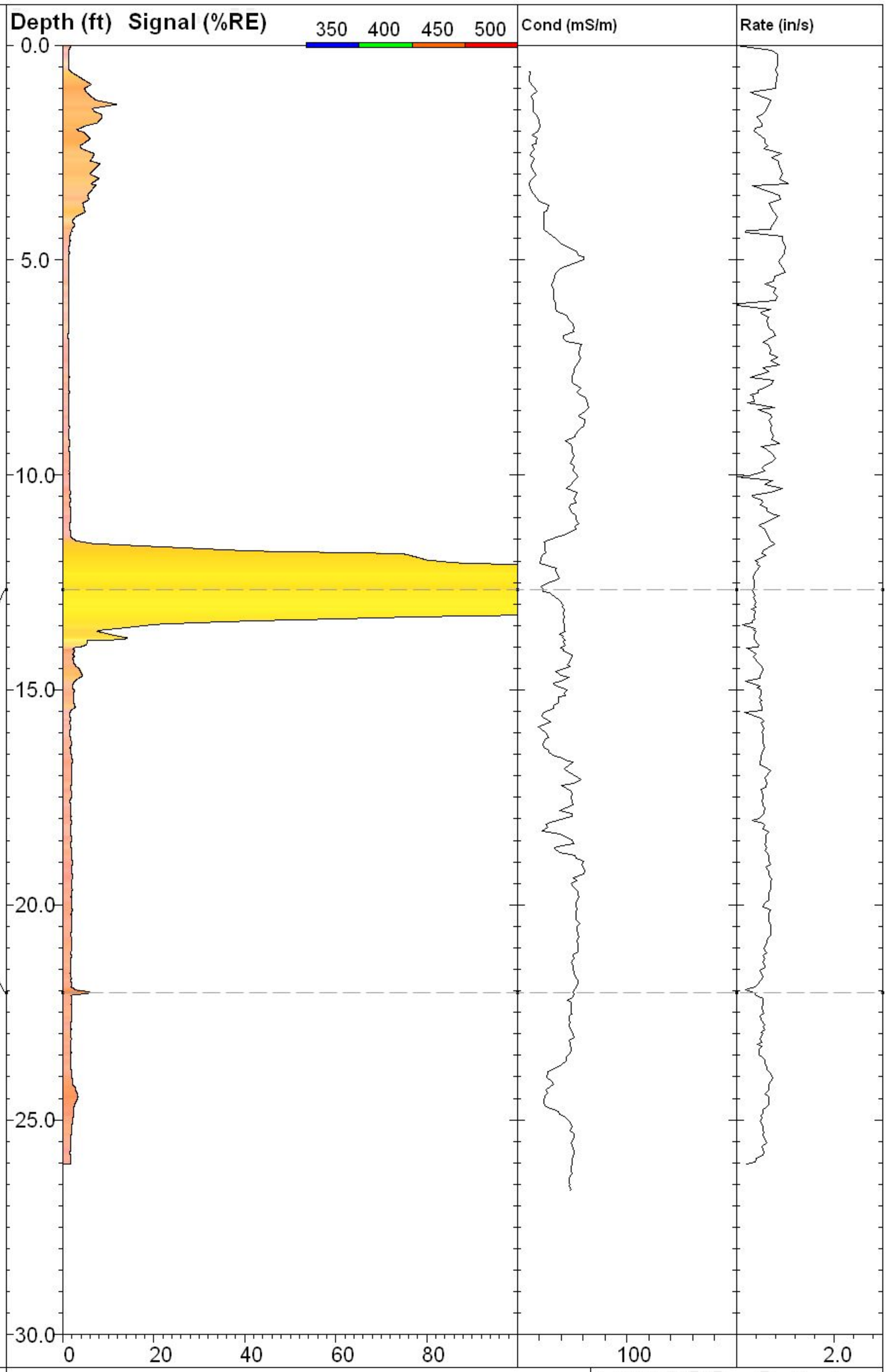
Background
1.0 %RE



12.7 ft
565.3 %RE



22.0 ft
6.5 %RE



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LIF-09-021

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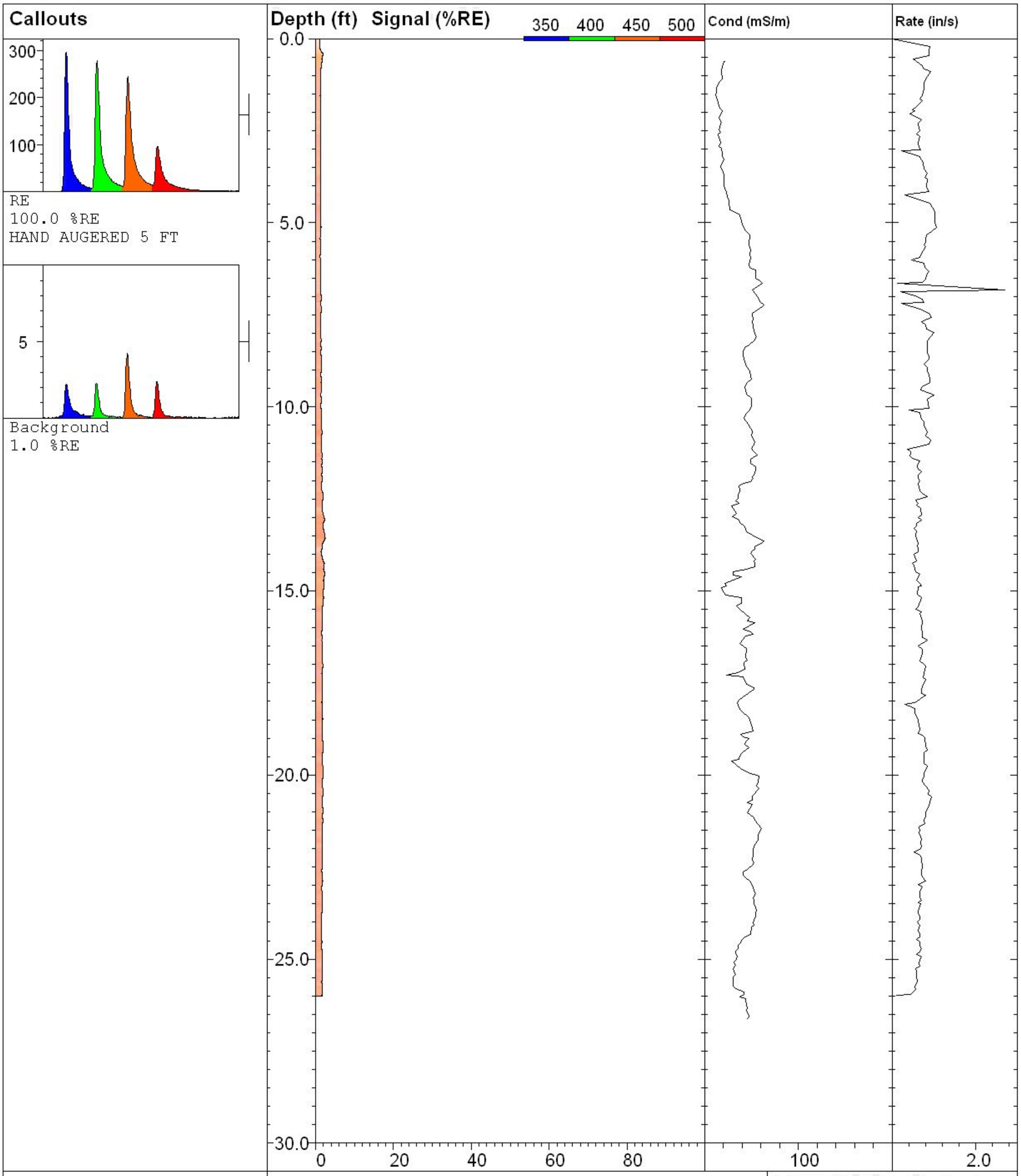
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.02 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **565.3 % @ 12.66 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-05 12:59 CDT**



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LIF-09-022

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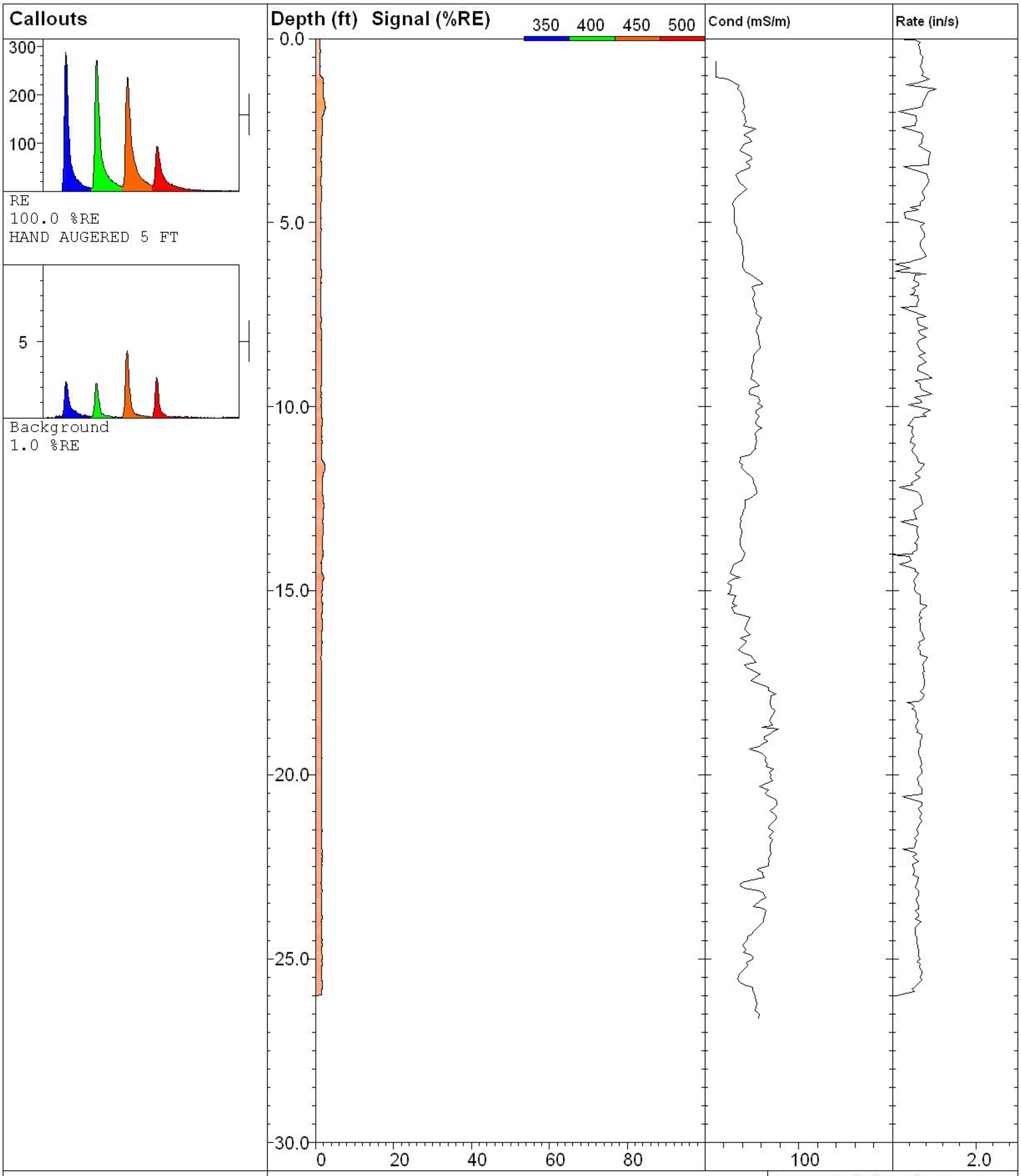
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **2.4 % @ 13.57 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-05 13:35 CDT**



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LIF-09-023

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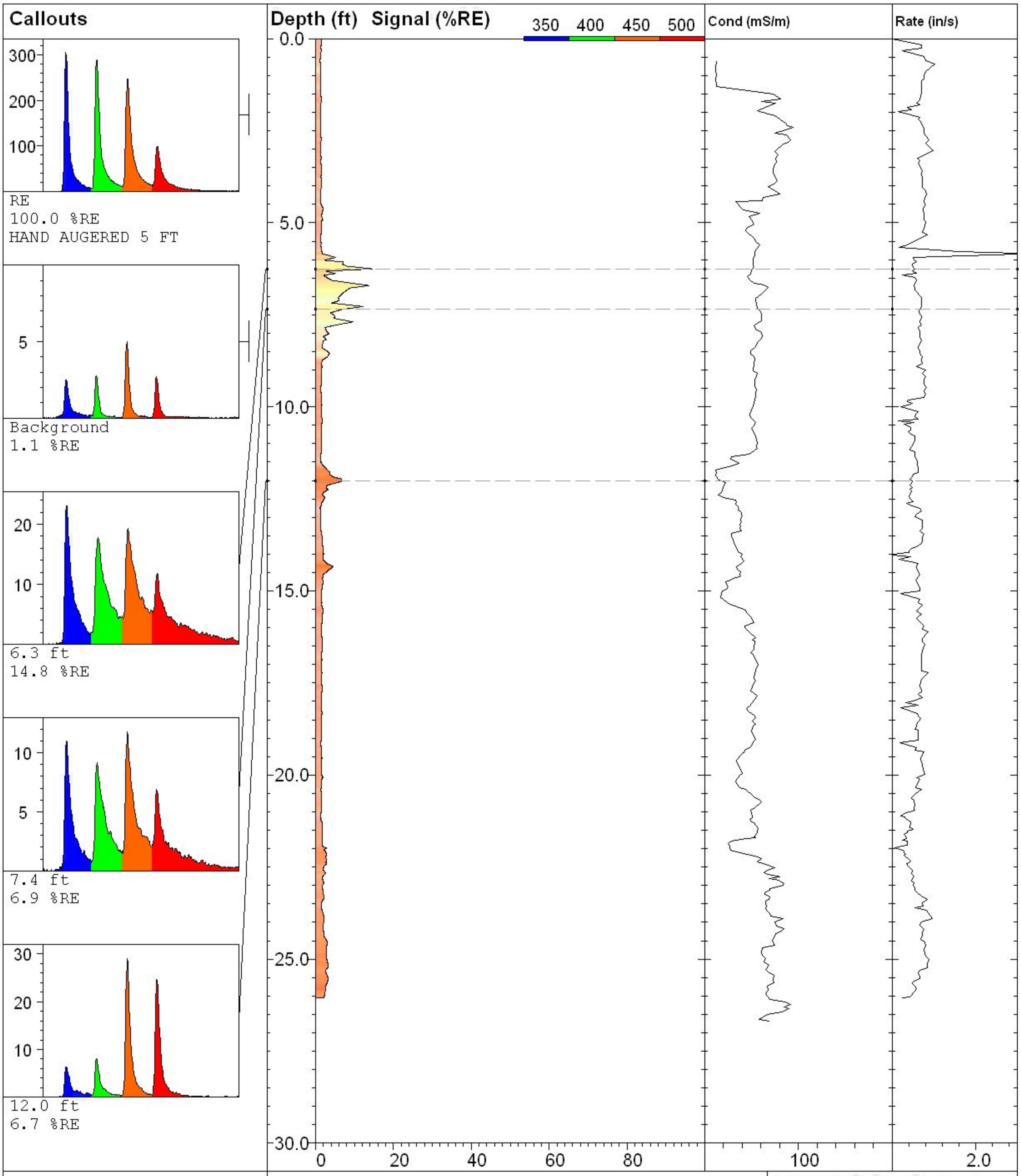
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **2.5 % @ 1.86 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-05 14:04 CDT**



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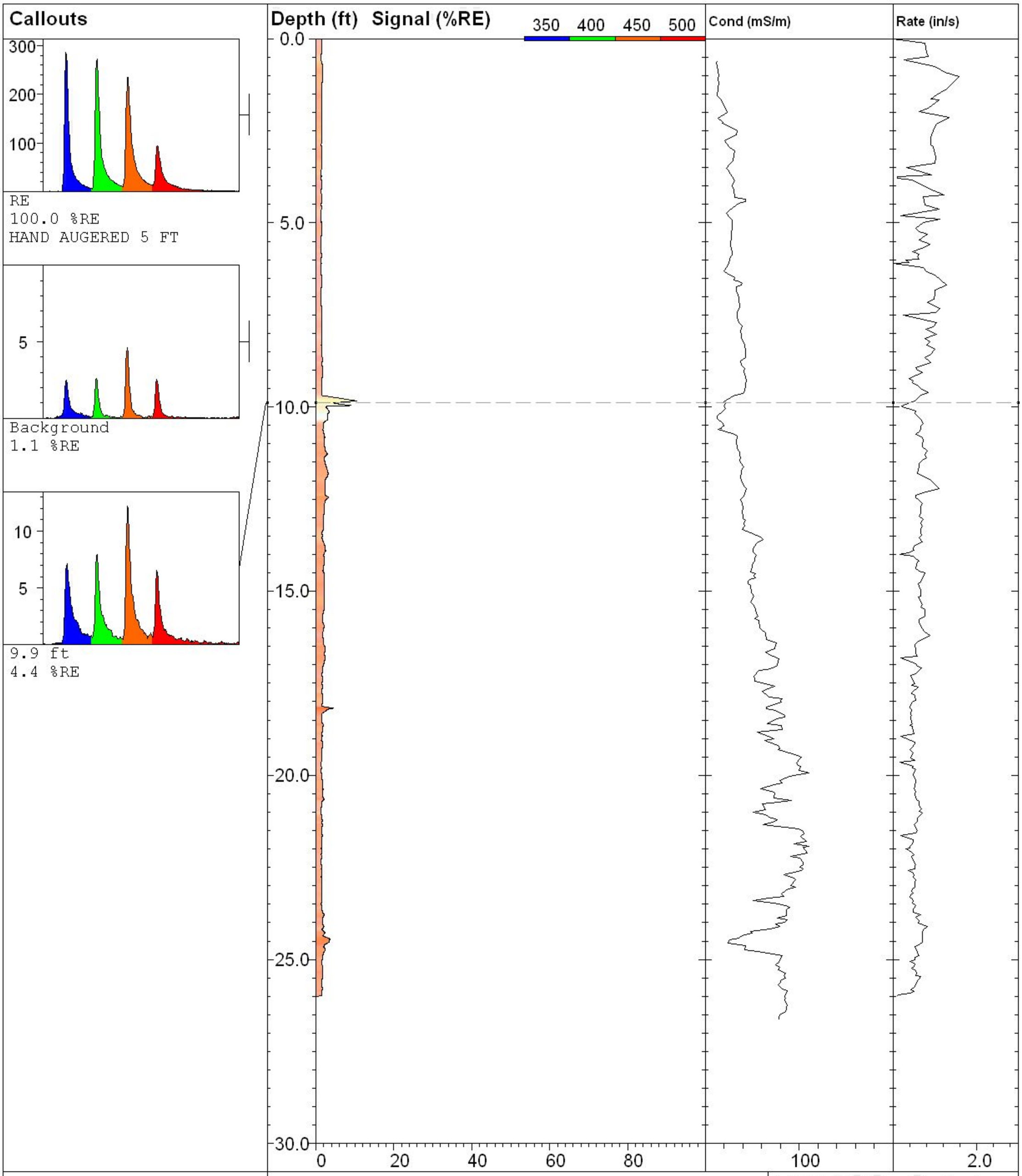
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.06 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **14.8 % @ 6.26 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-05 14:39 CDT**



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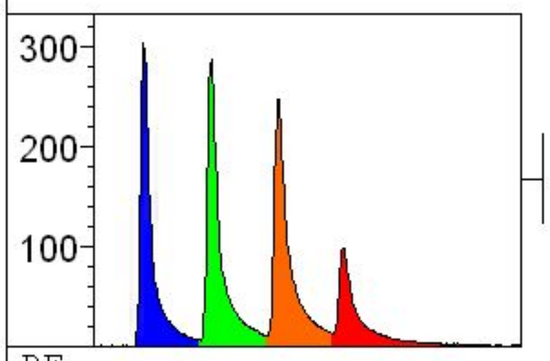
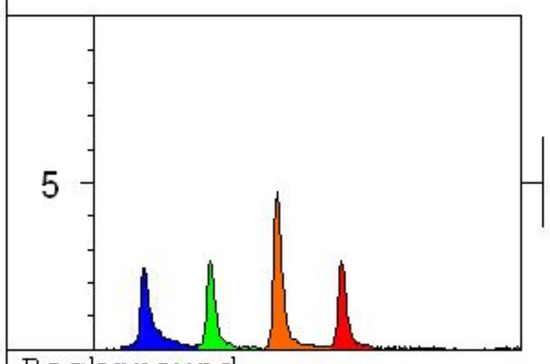
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **10.5 % @ 9.83 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-05 15:25 CDT**

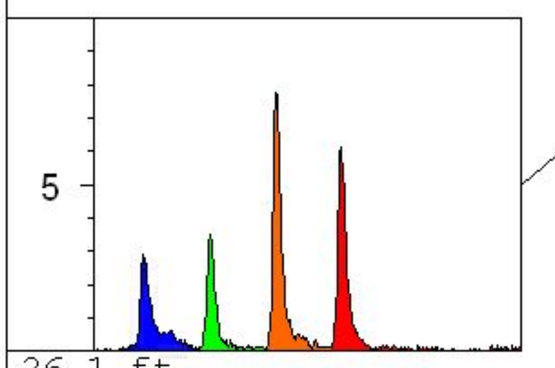
Callouts



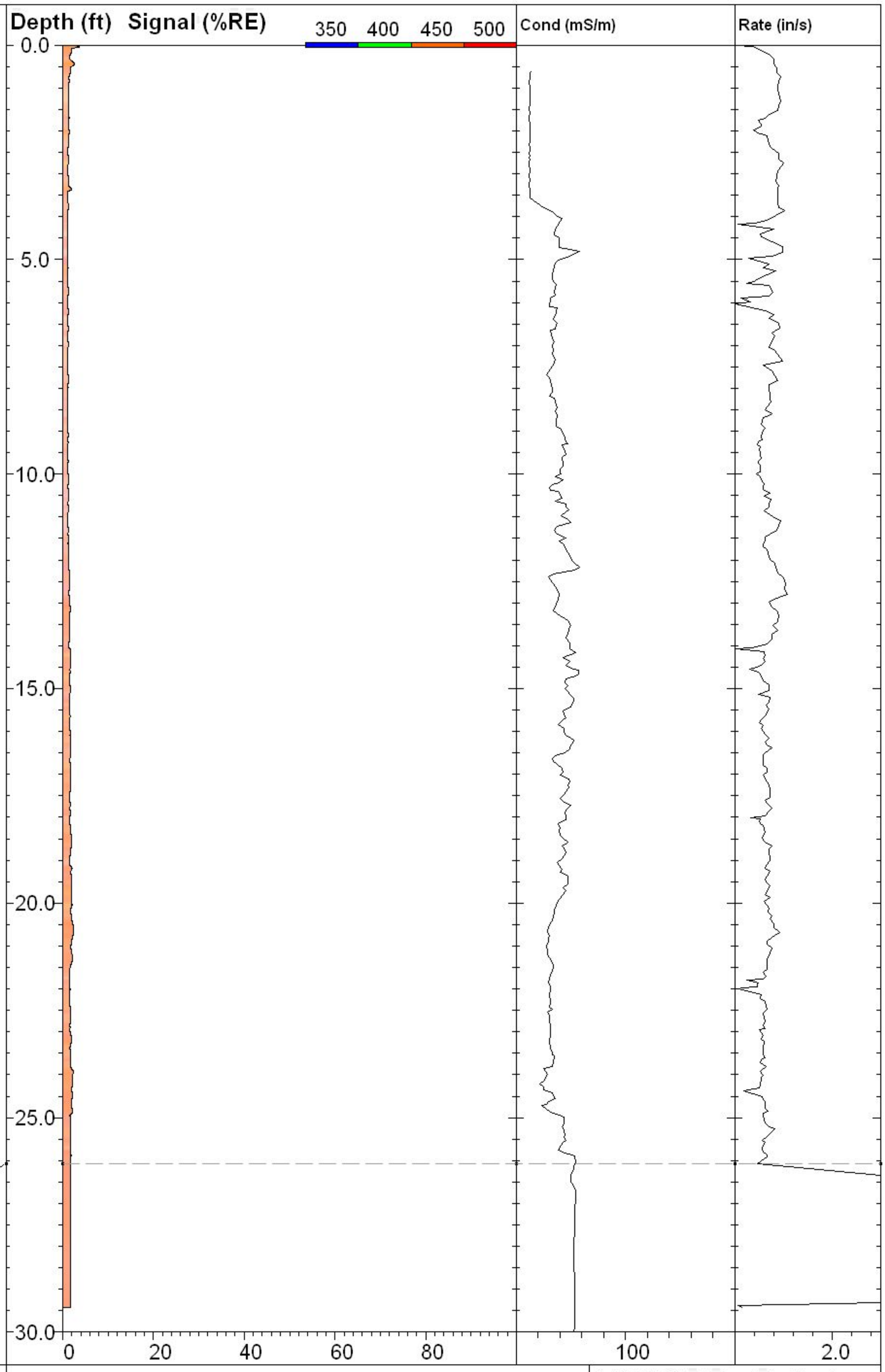
RE
100.0 %RE
HAND AUGERED 5 FT



Background
1.0 %RE



26.1 ft
1.6 %RE
end of run.



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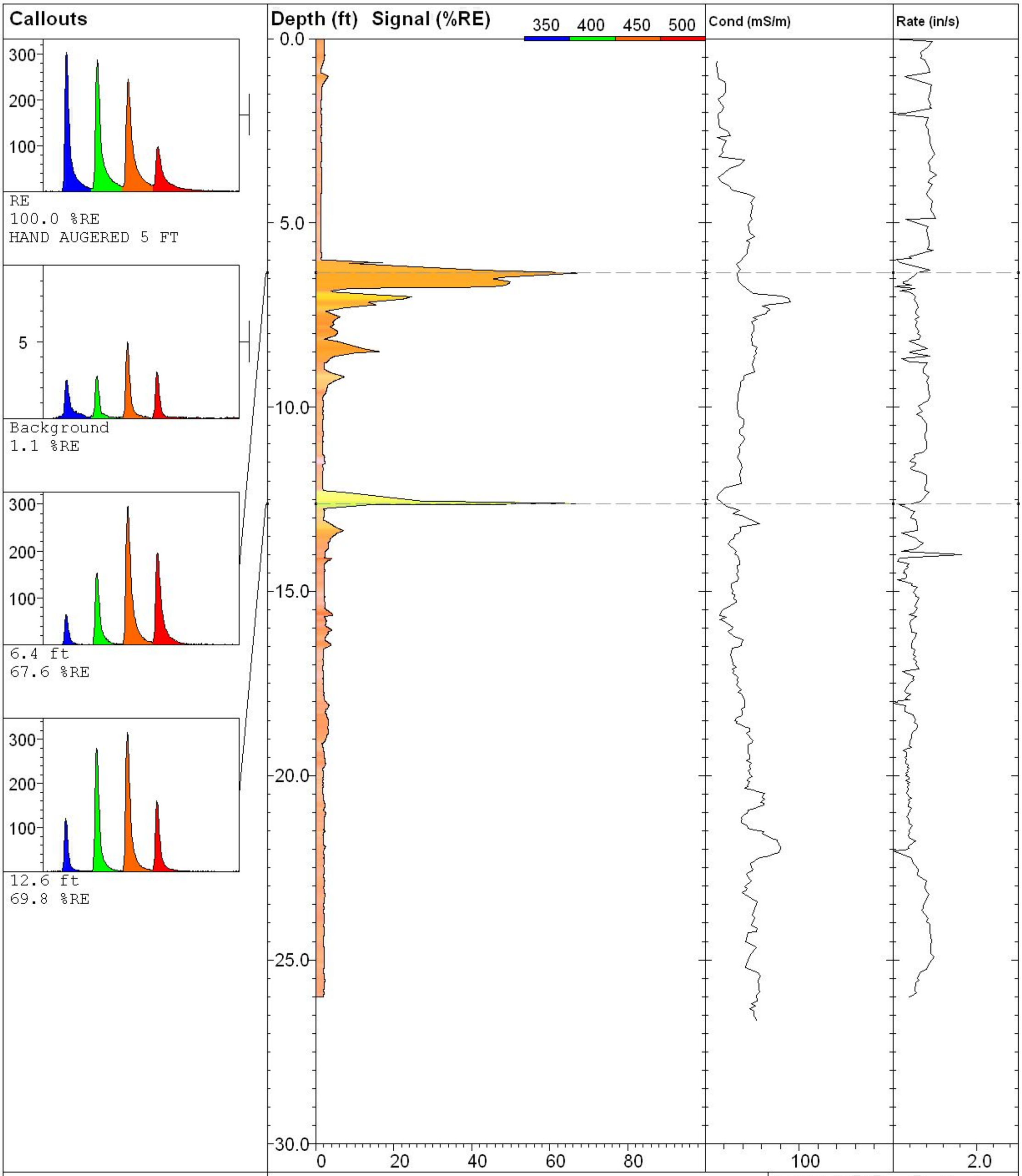
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **29.43 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **3.7 % @ 0.04 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-05 16:18 CDT**



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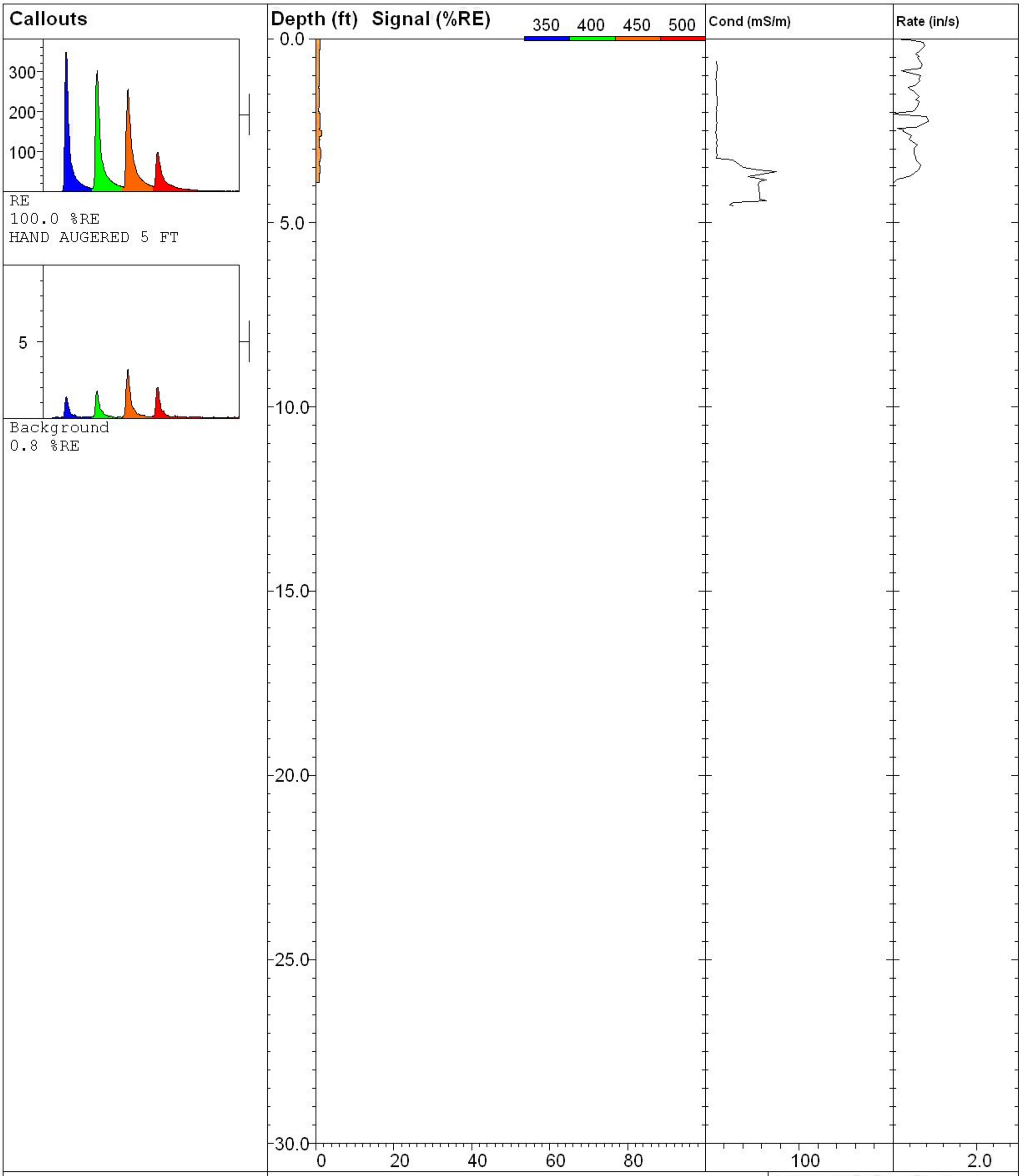
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **69.8 % @ 12.62 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-05 16:59 CDT**



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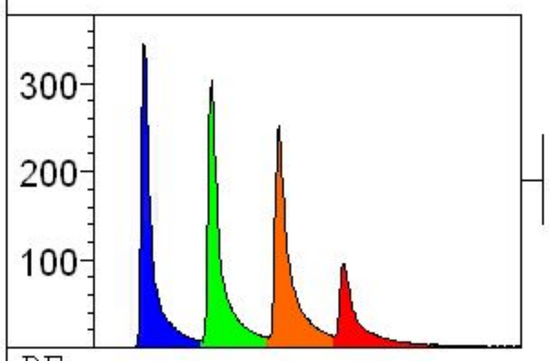
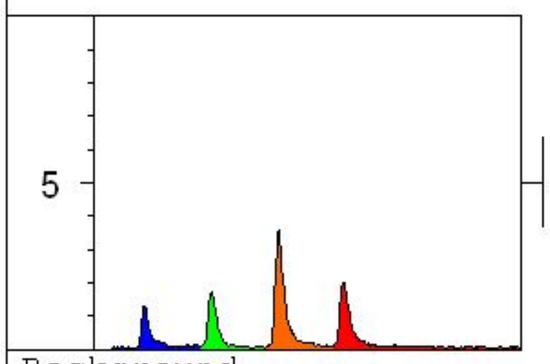
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **3.91 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **1.6 % @ 2.62 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-21 08:46 CDT**

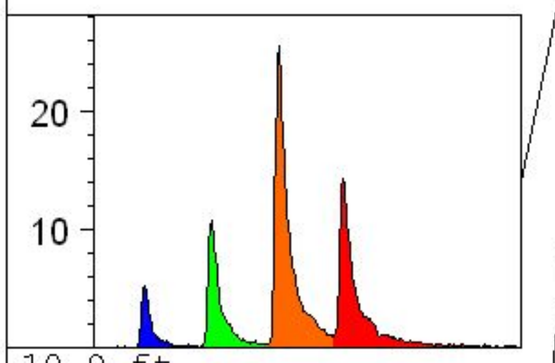
Callouts



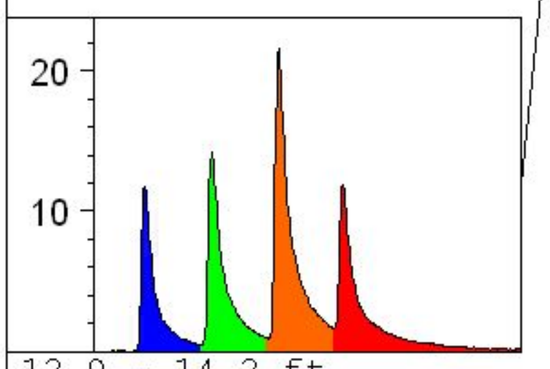
RE
100.0 %RE
HAND AUGERED 5 FT



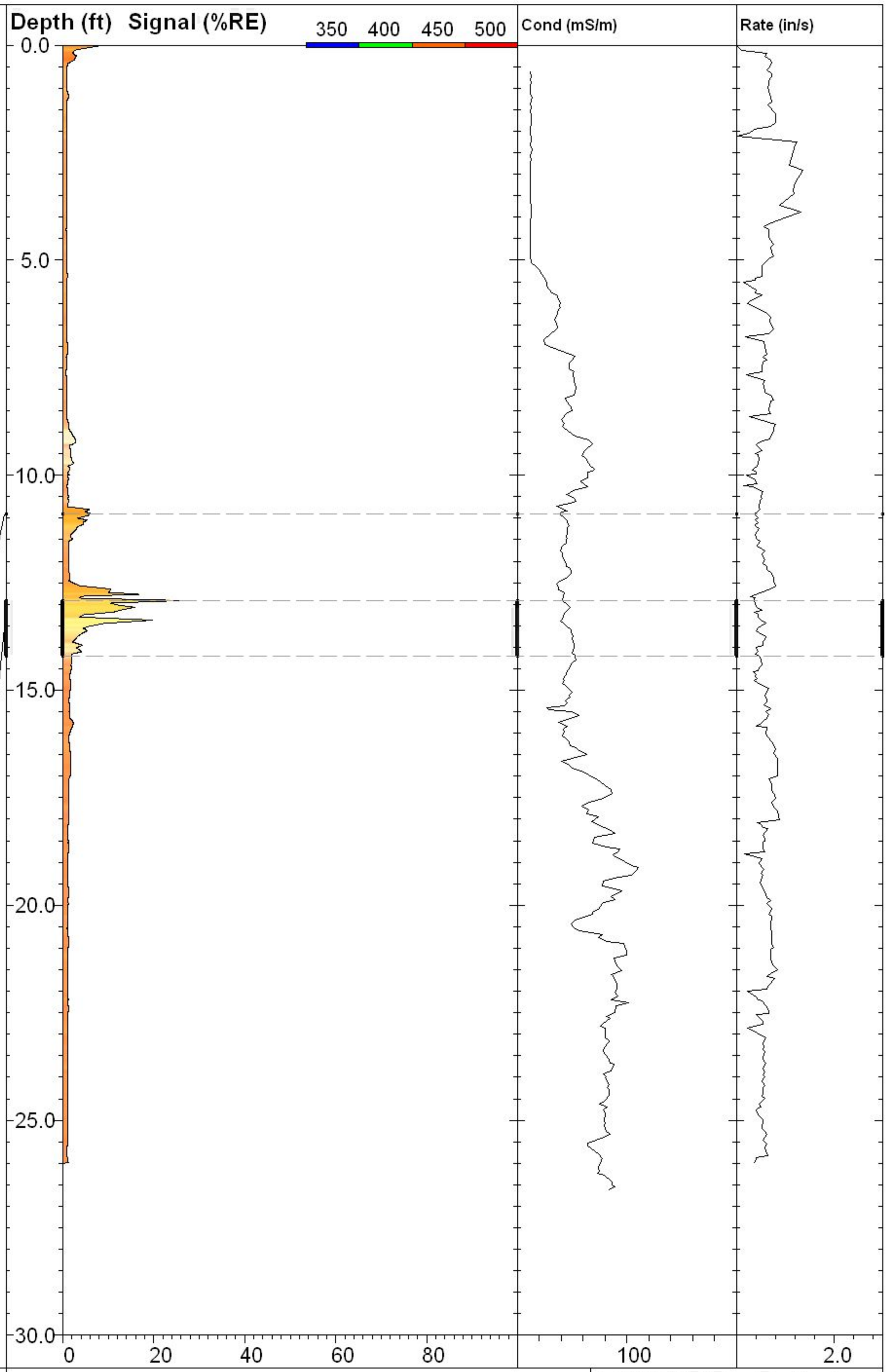
Background
0.8 %RE



10.9 ft
6.0 %RE



12.9 - 14.2 ft
7.7 %RE (s 6.4)



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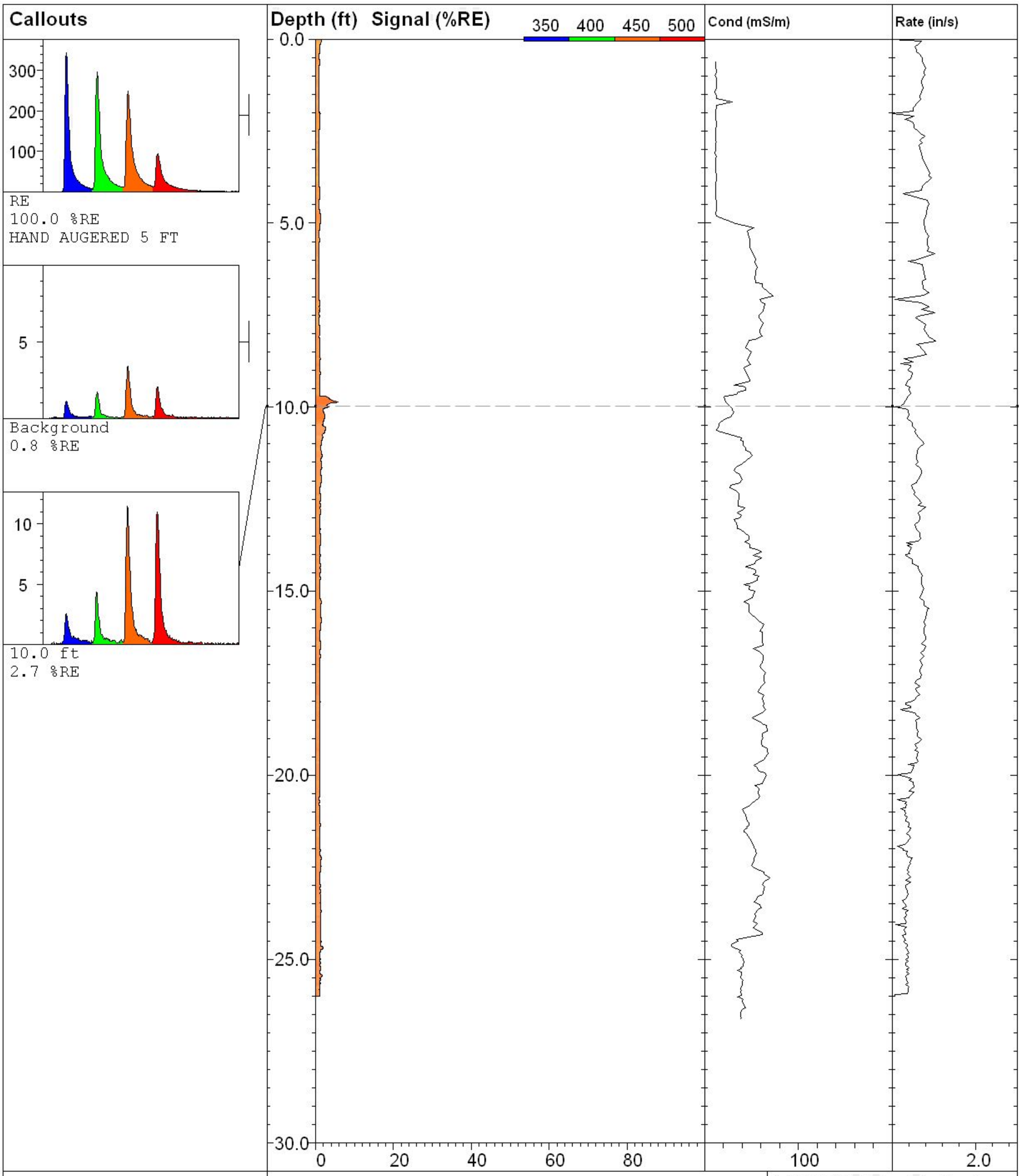
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **26.4 % @ 12.91 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-21 09:21 CDT**



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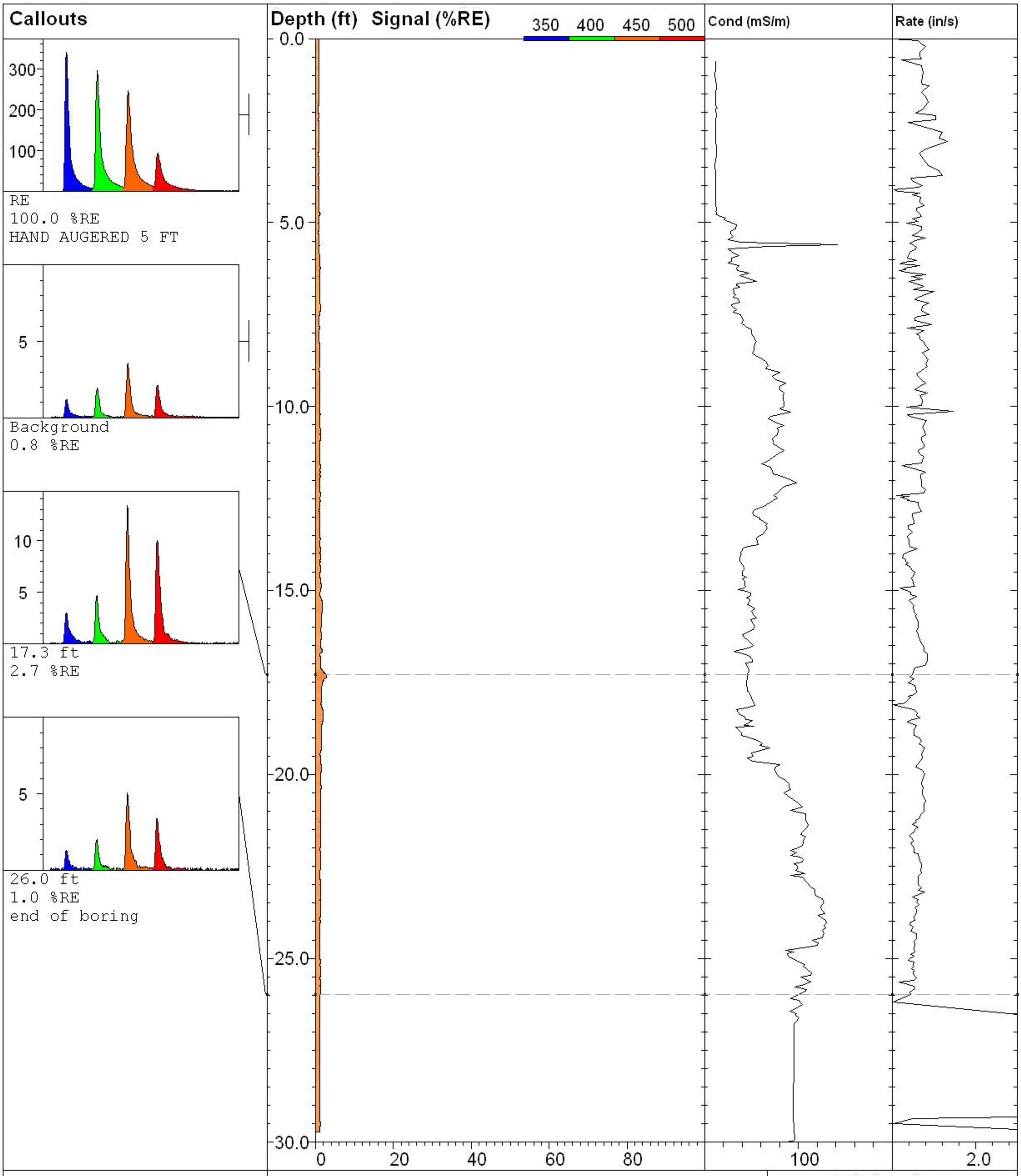
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **5.8 % @ 9.87 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-21 09:57 CDT**



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LIF-09-031

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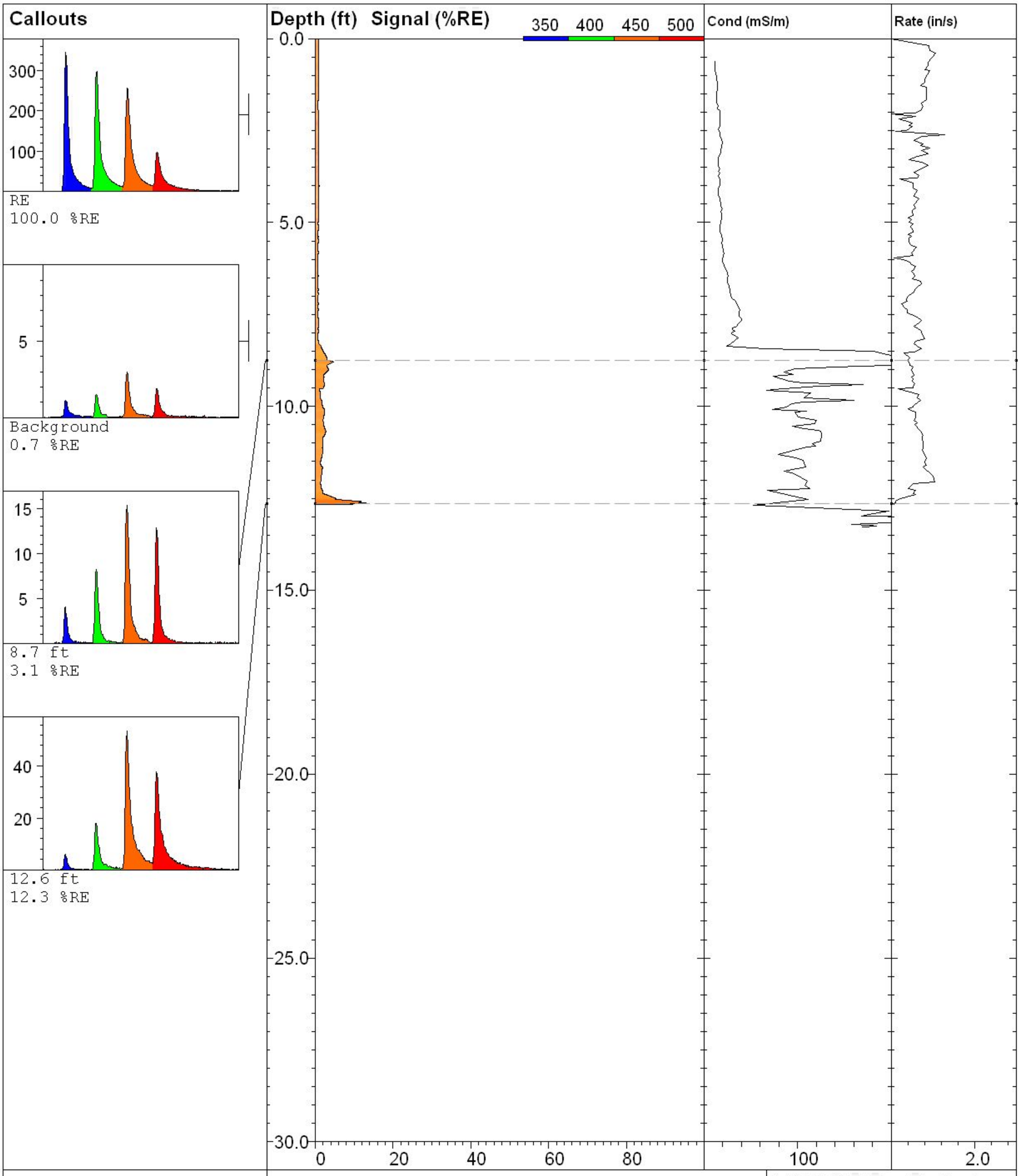
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **29.72 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **2.9 % @ 17.37 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-21 10:38 CDT**



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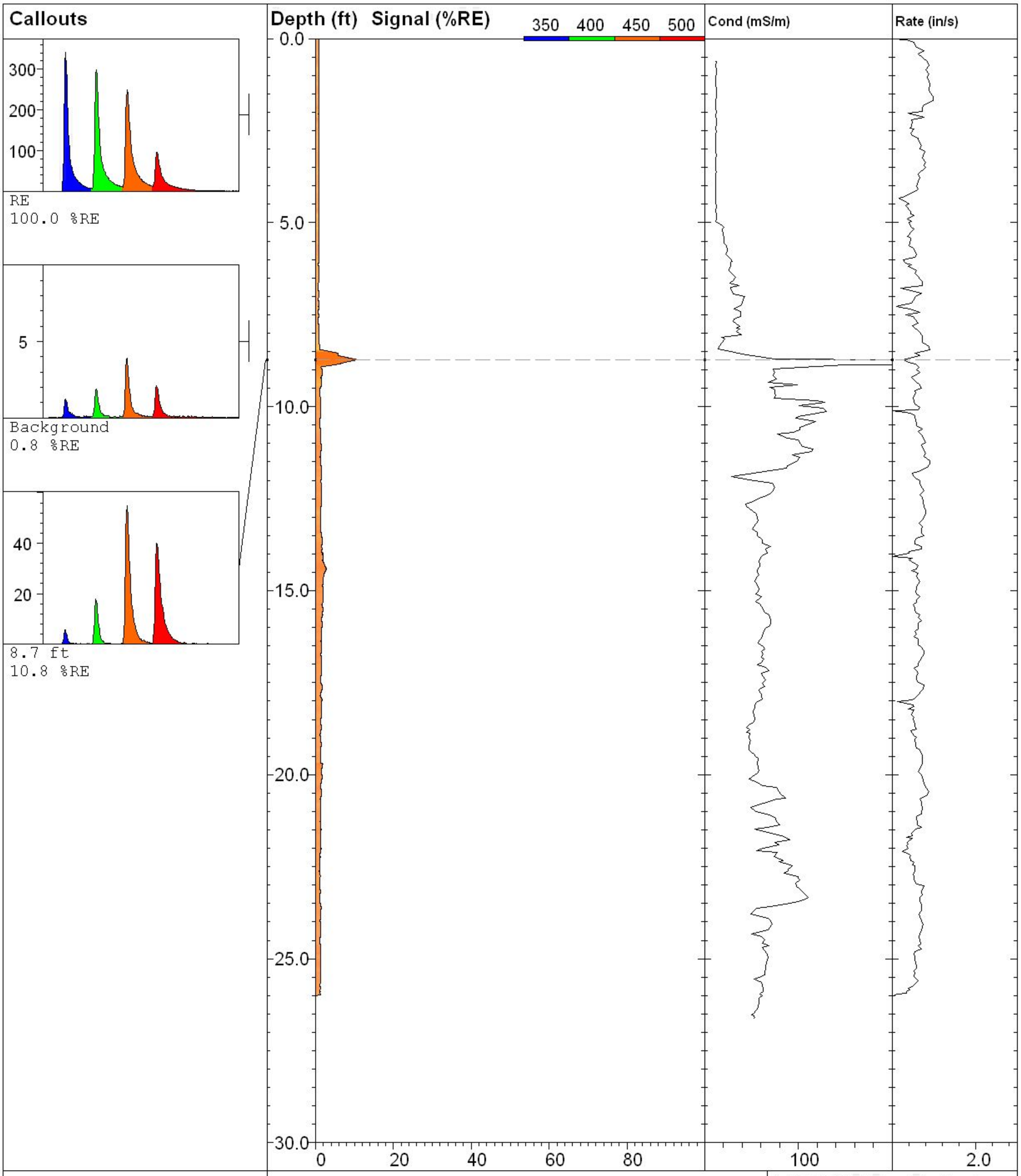
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **12.66 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **13.1 % @ 12.63 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-21 13:13 CDT**



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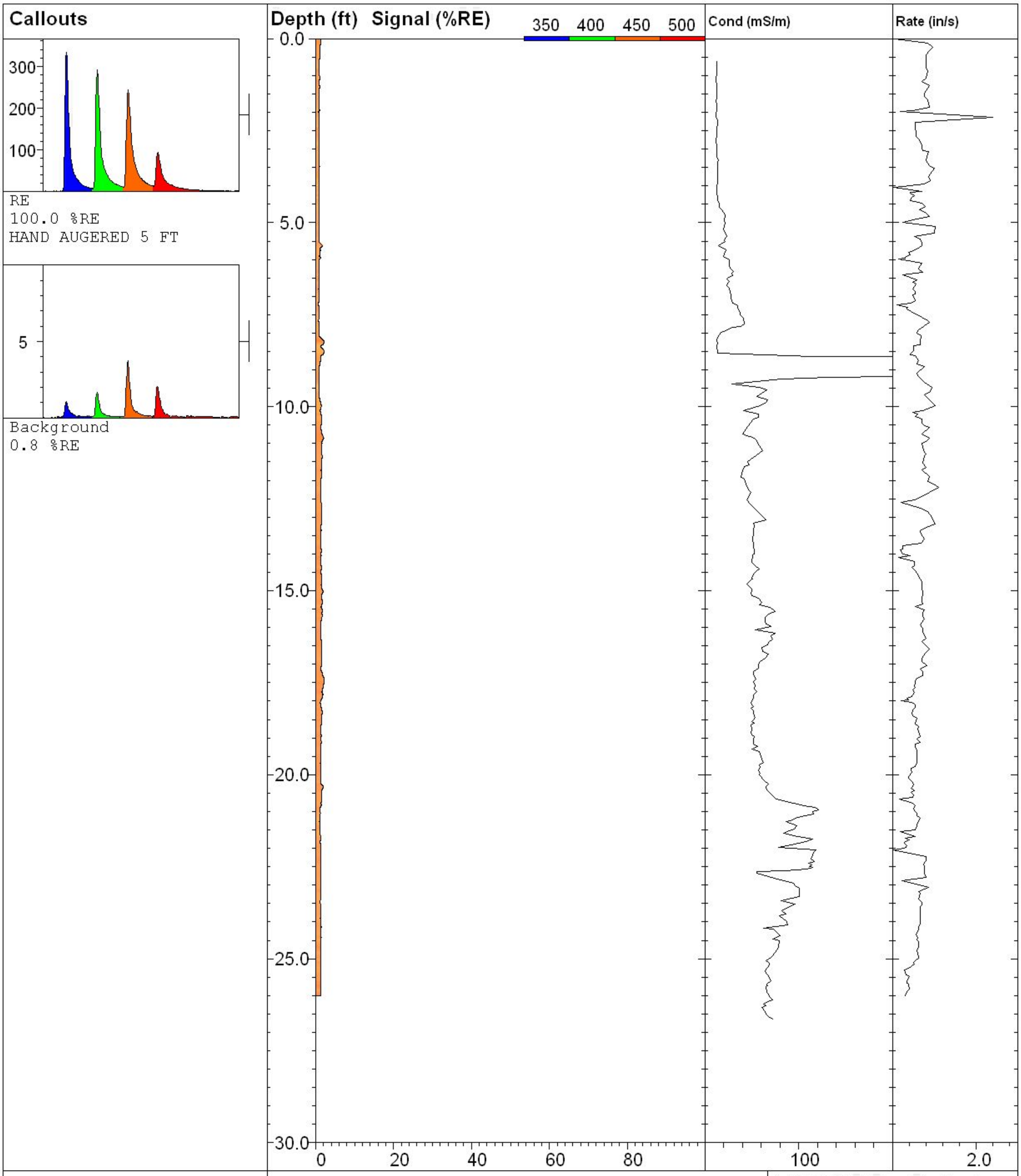
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **10.8 % @ 8.72 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-21 13:56 CDT**



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LIF-09-034

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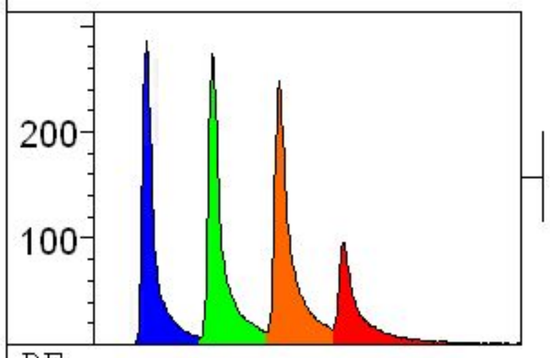
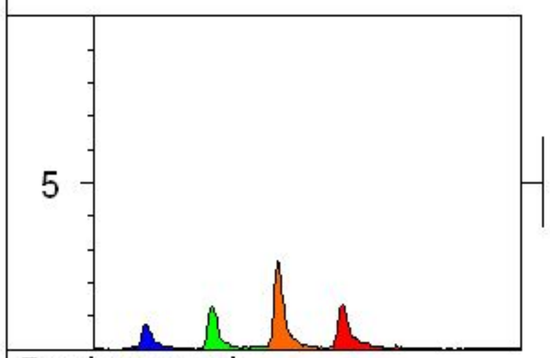
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **2.2 % @ 8.22 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-21 14:30 CDT**

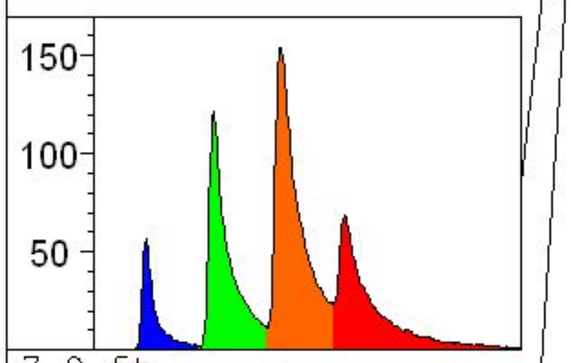
Callouts



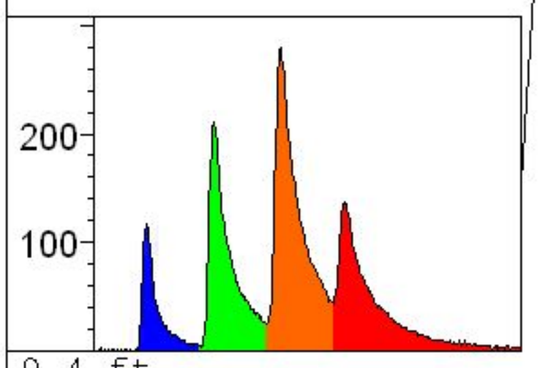
RE
100.0 %RE
HAND AUGERED 5 FT



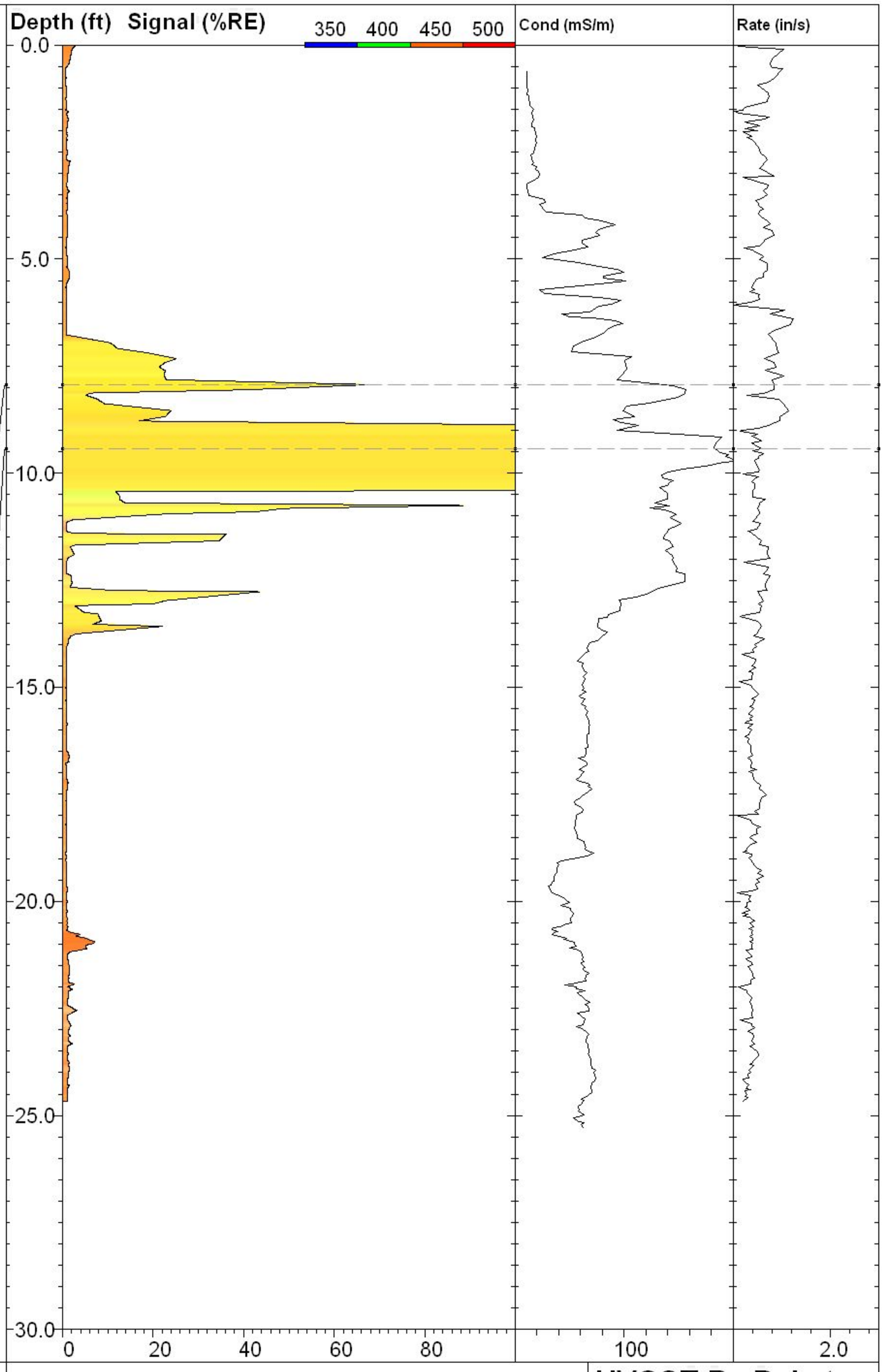
Background
0.6 %RE



7.9 ft
68.1 %RE



9.4 ft
132.3 %RE



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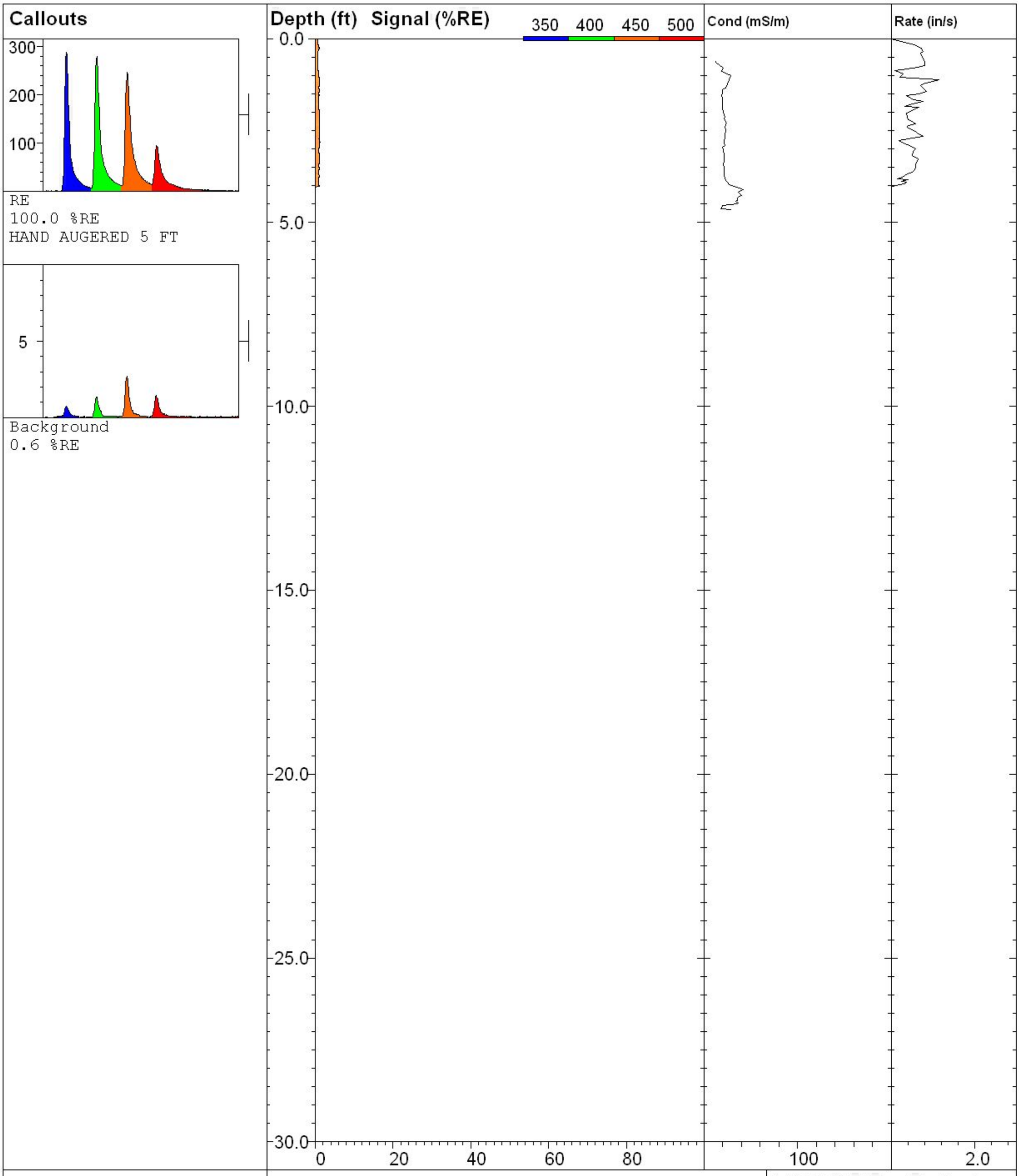
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **24.68 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **140.7 % @ 8.94 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-10 12:57 CDT**



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LIF-12-002

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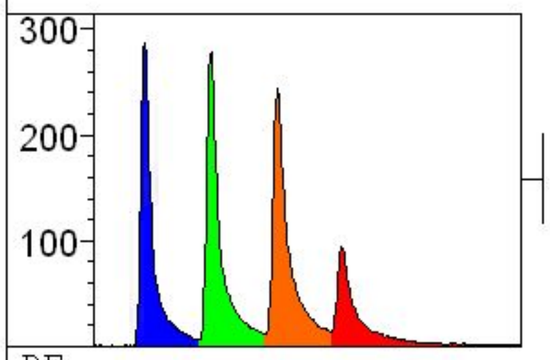
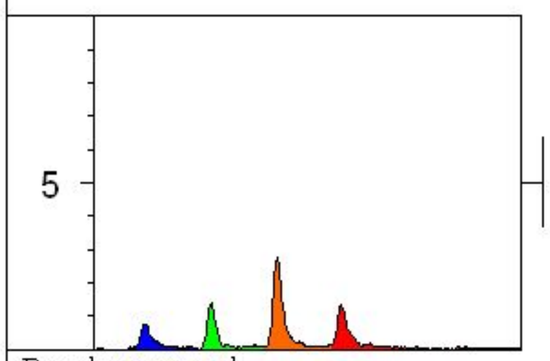
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **4.03 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **1.2 % @ 2.81 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-10 13:33 CDT**

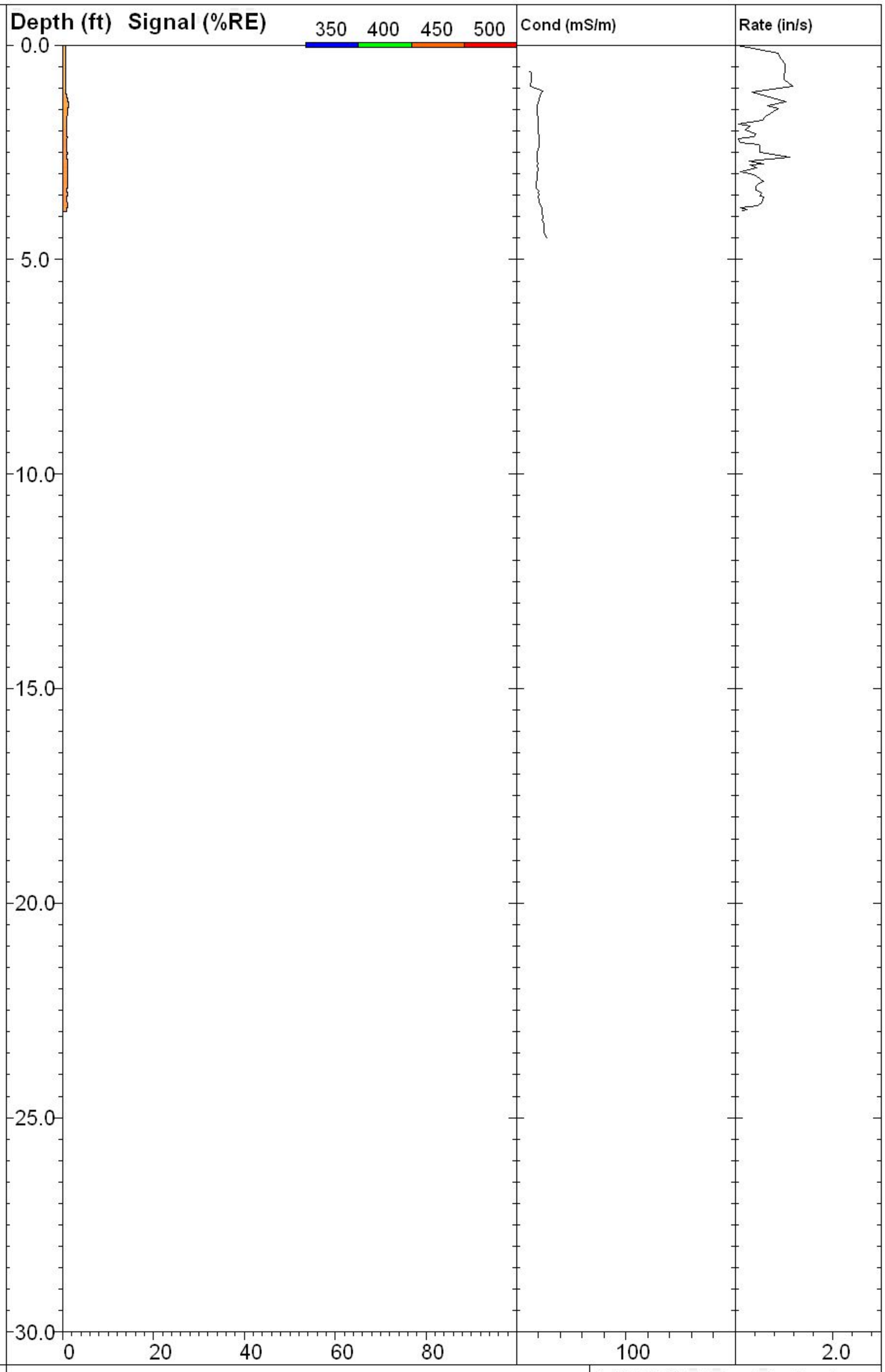
Callouts



RE
100.0 %RE
HAND AUGERED 5 FT



Background
0.6 %RE



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LIF-12-003

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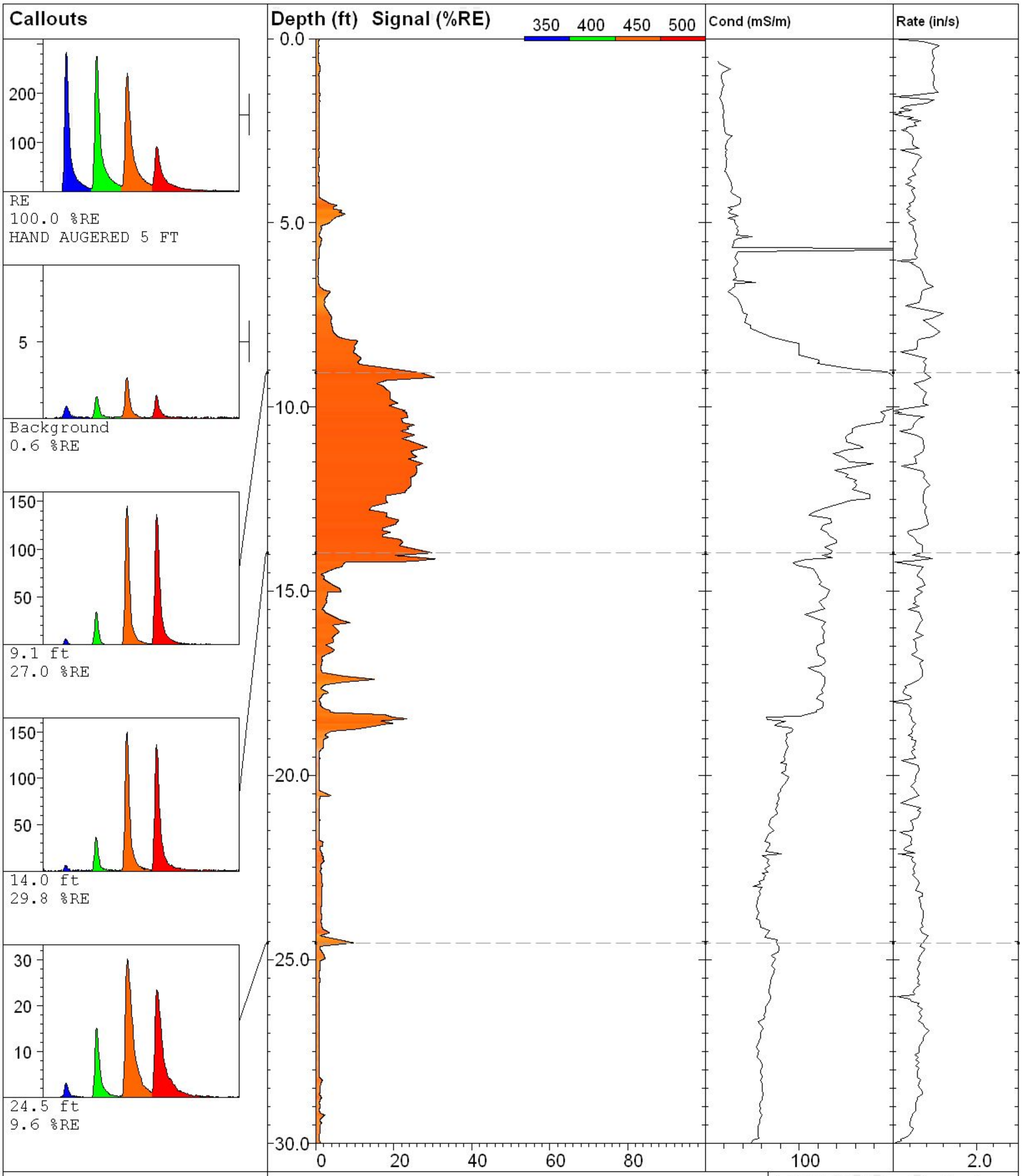
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **3.88 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **1.2 % @ 1.42 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-10 13:51 CDT**



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LIF-12-004

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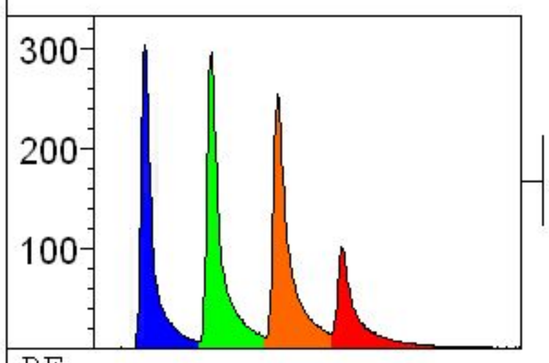
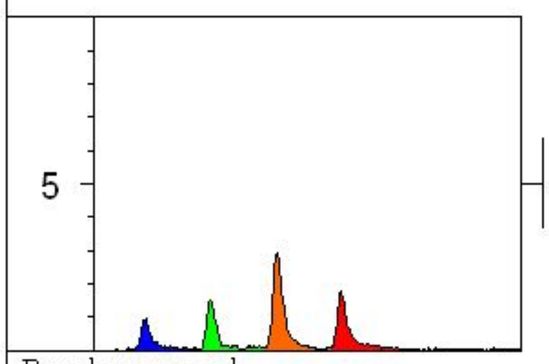
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **30.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **30.6 % @ 14.13 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-10 14:04 CDT**

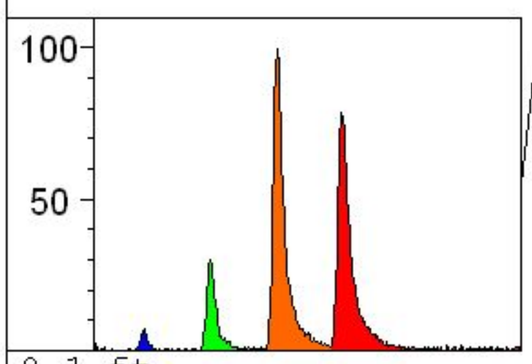
Callouts



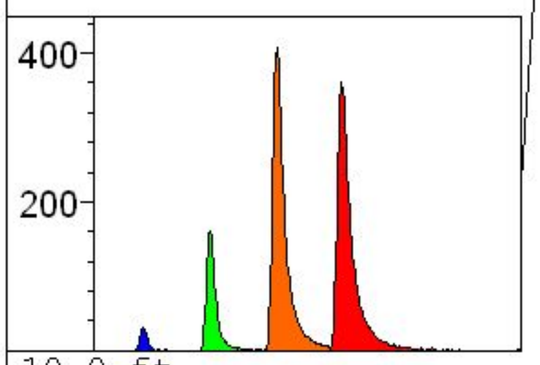
RE
100.0 %RE
HAND AUGERED 5 FT



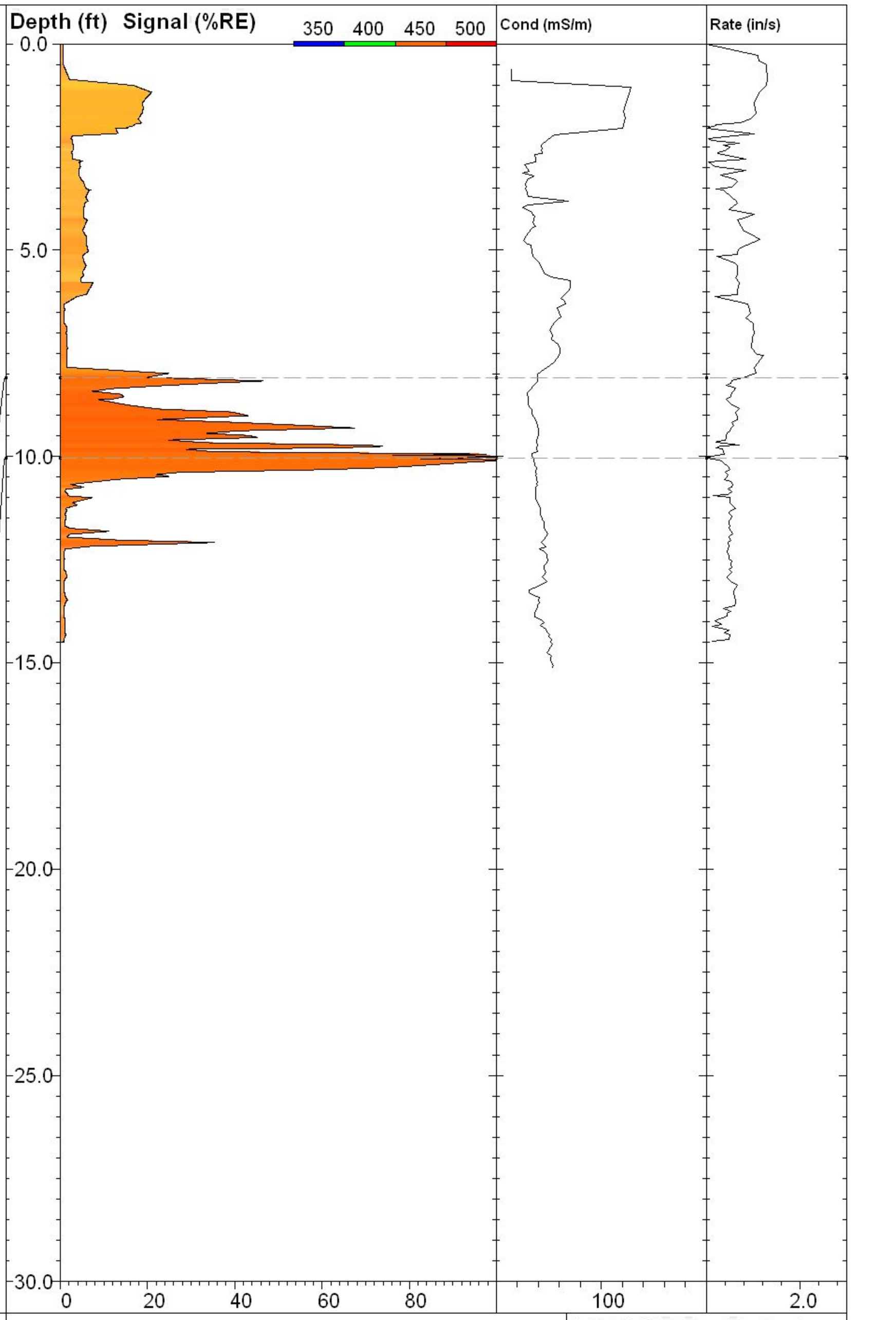
Background
0.6 %RE



8.1 ft
19.8 %RE



10.0 ft
87.6 %RE



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LIF-12-005

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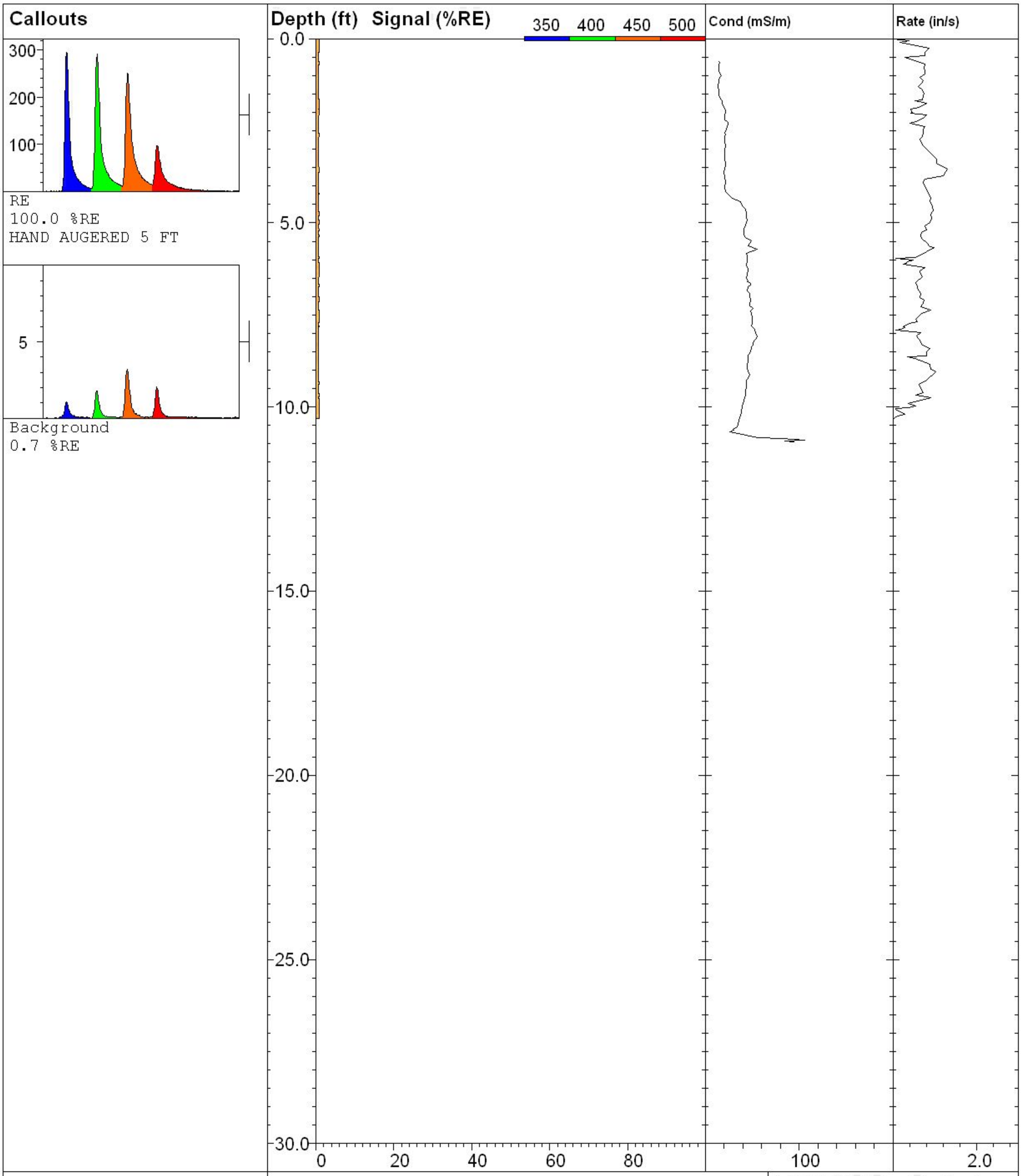
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **14.50 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **111.3 % @ 10.08 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-10 15:04 CDT**



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LIF-12-006

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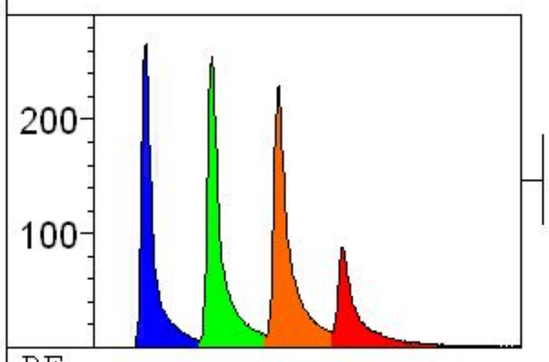
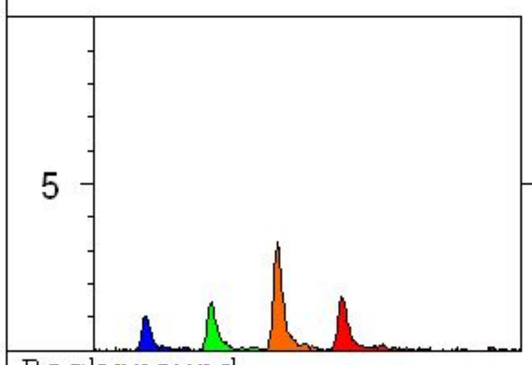
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **10.31 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **0.9 % @ 0.09 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-10 15:45 CDT**

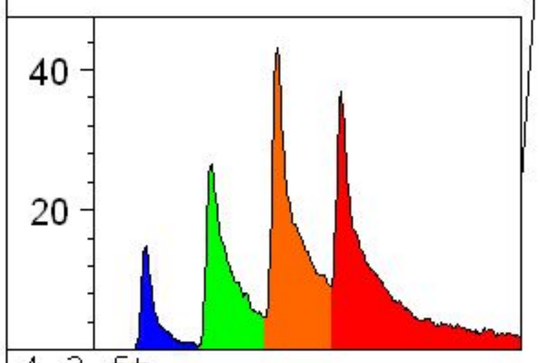
Callouts



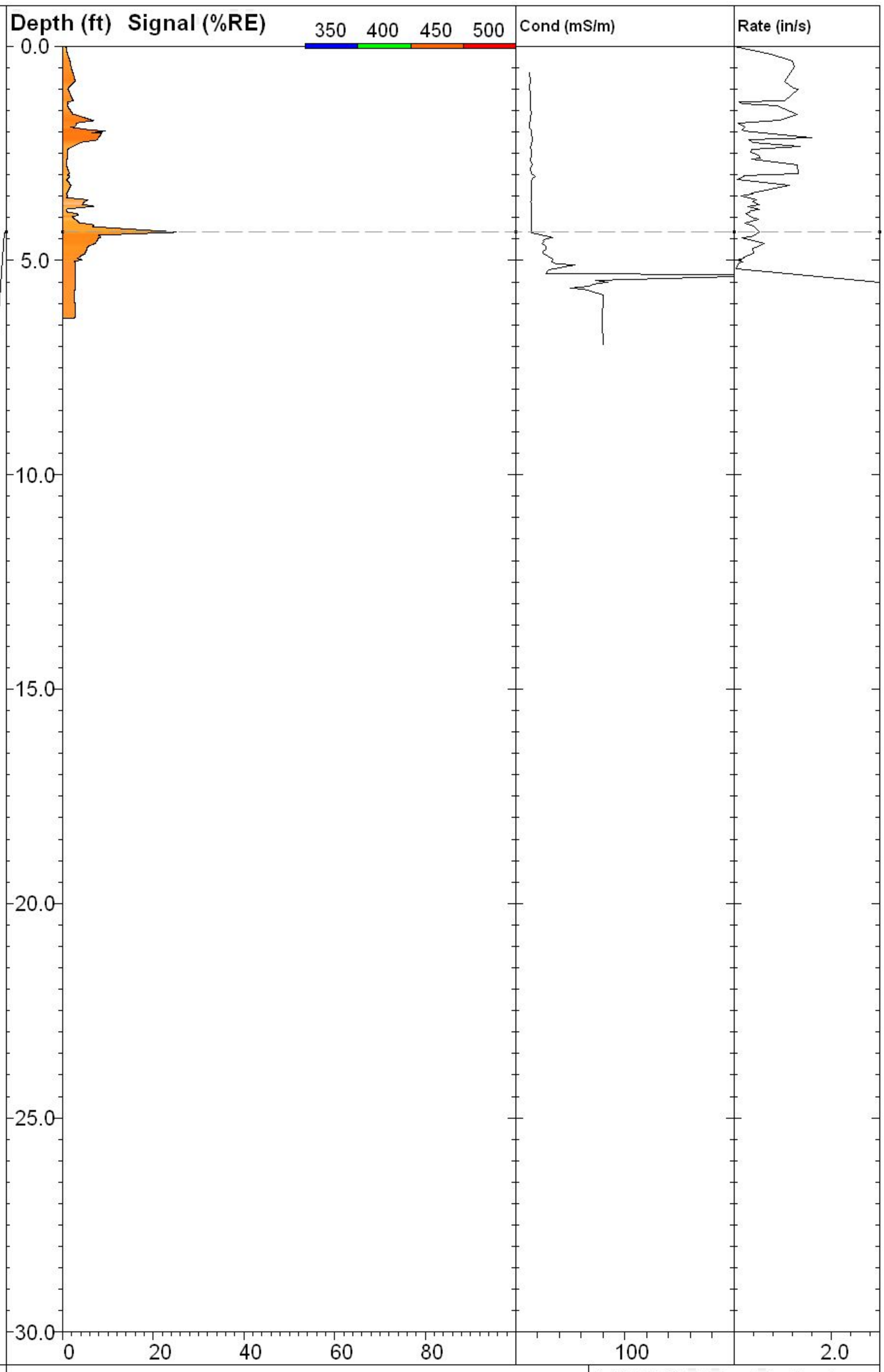
RE
100.0 %RE
HAND AUGERED 5 FT



Background
0.7 %RE



4.3 ft
25.5 %RE
END RUN AT 5.05 FT



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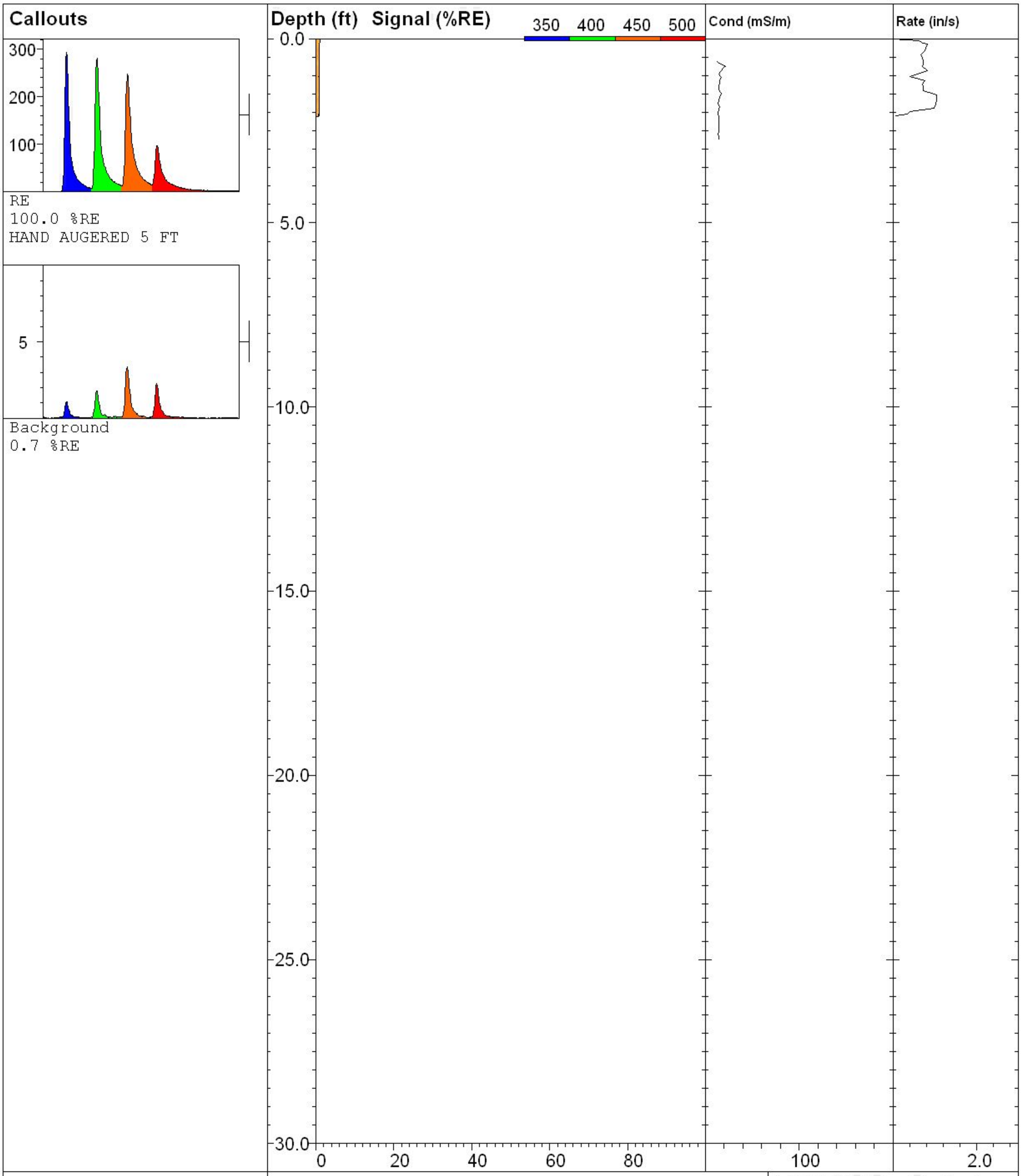
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **6.34 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **25.5 % @ 4.34 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-10 16:23 CDT**



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LIF-12-008

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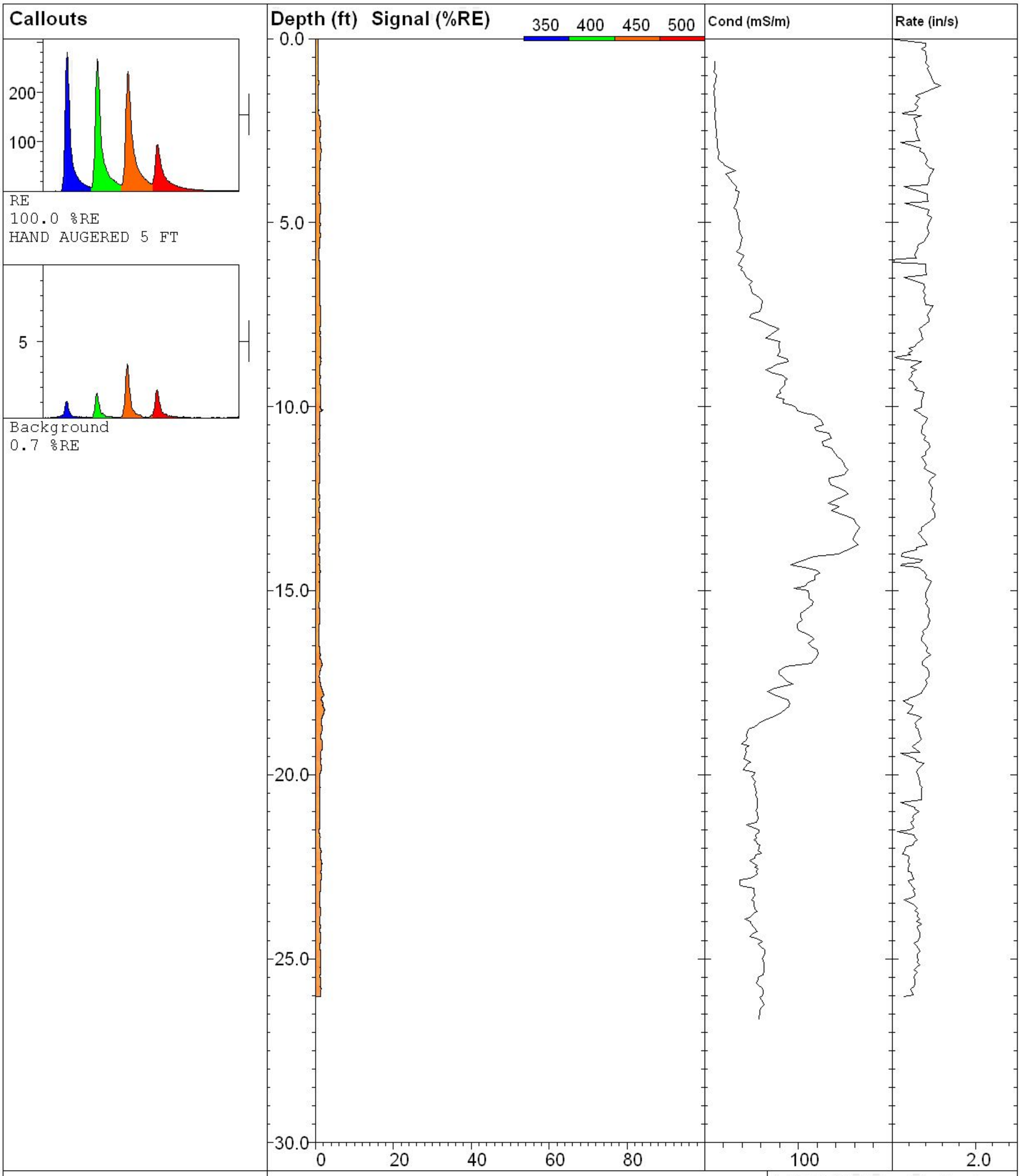
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **2.11 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **1.1 % @ 0.05 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-10 16:41 CDT**



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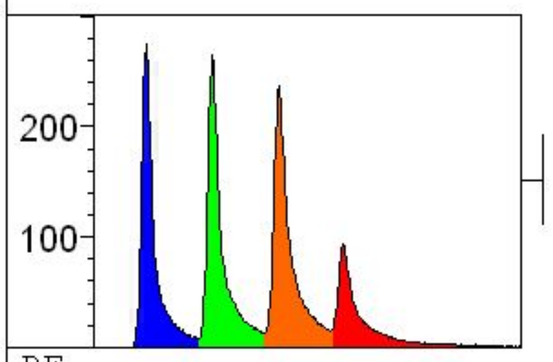
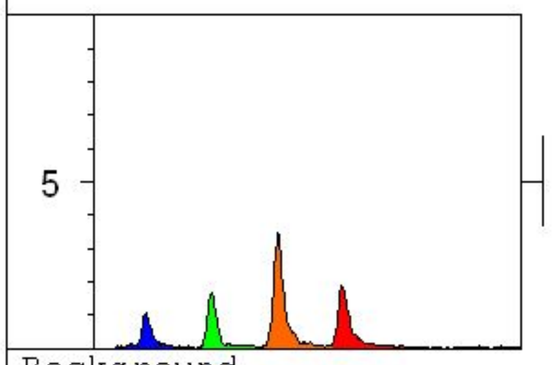
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.02 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **2.3 % @ 18.22 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-11 08:35 CDT**

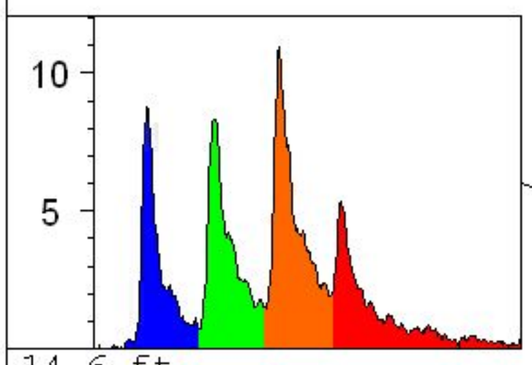
Callouts



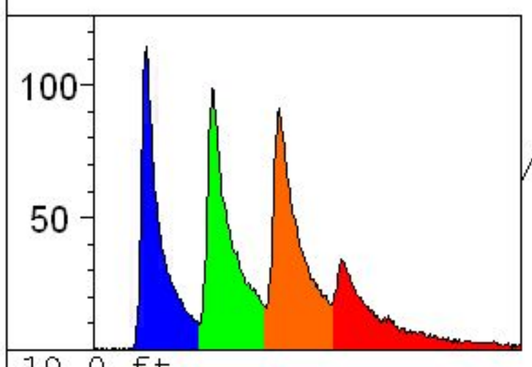
RE
100.0 %RE
HAND AUGERED 5 FT



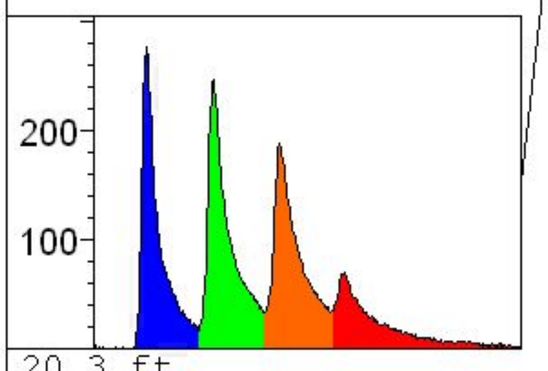
Background
0.7 %RE



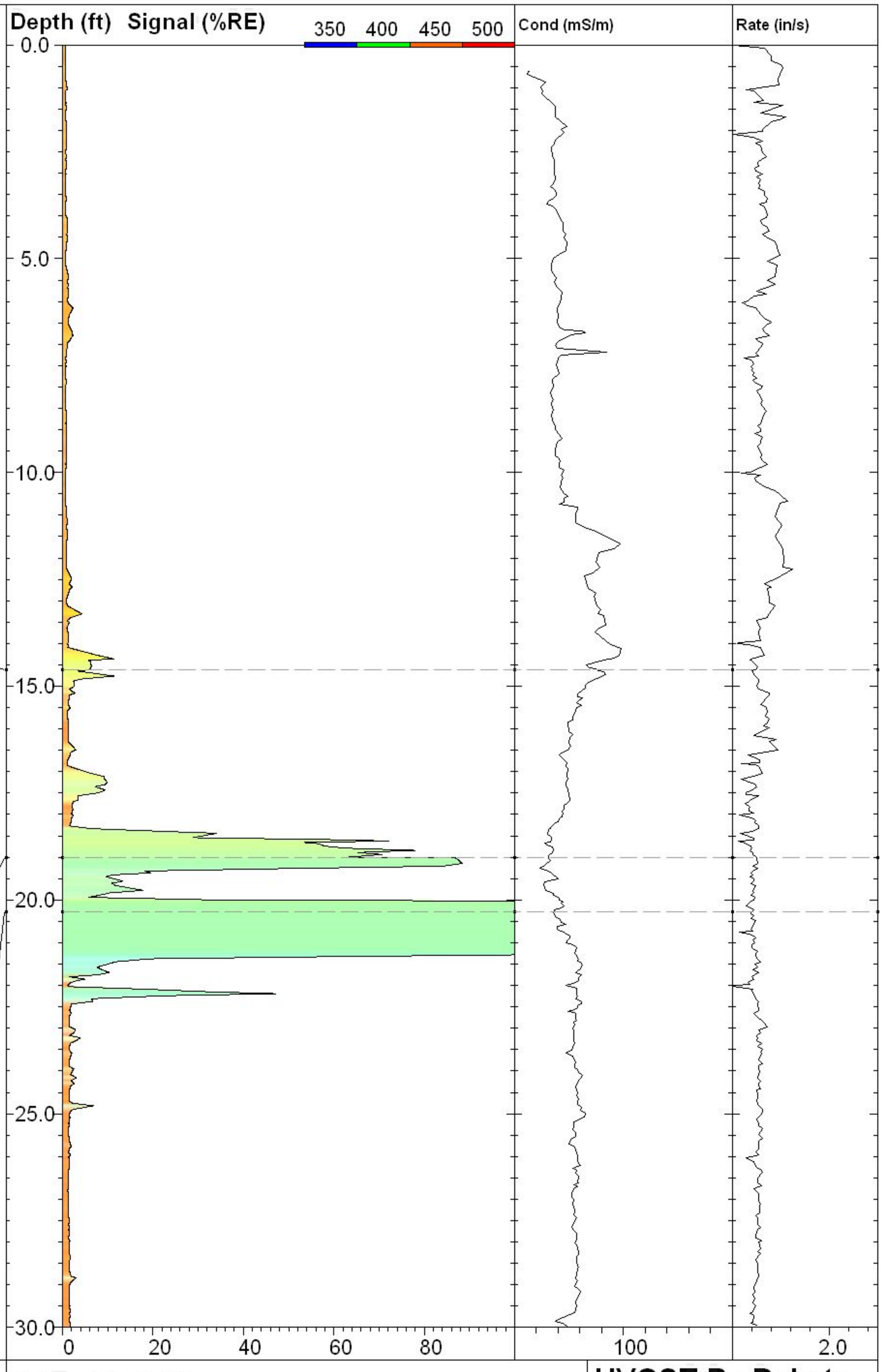
14.6 ft
6.0 %RE



19.0 ft
62.3 %RE



20.3 ft
134.9 %RE



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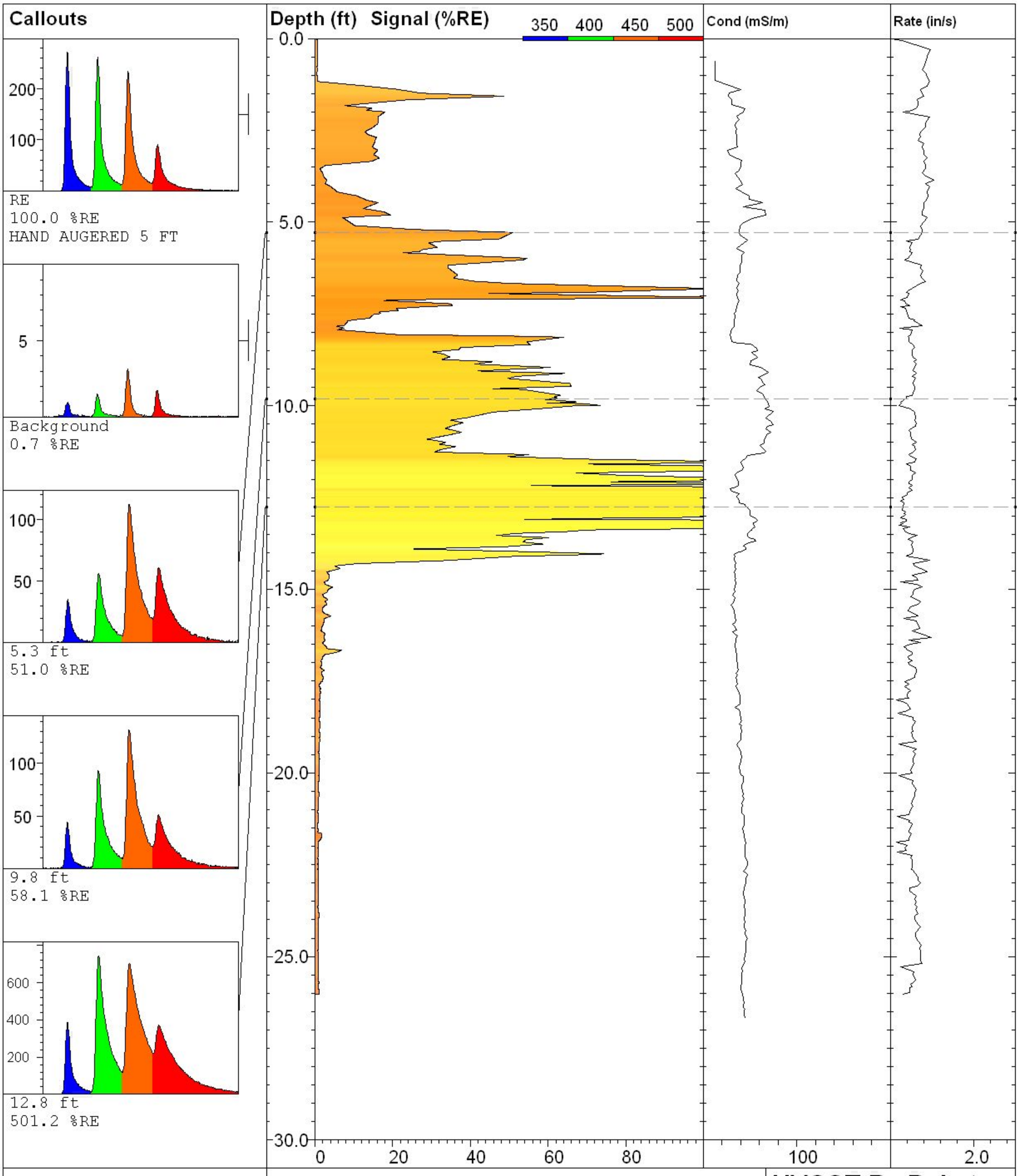
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **30.02 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **177.3 % @ 20.09 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-11 09:14 CDT**



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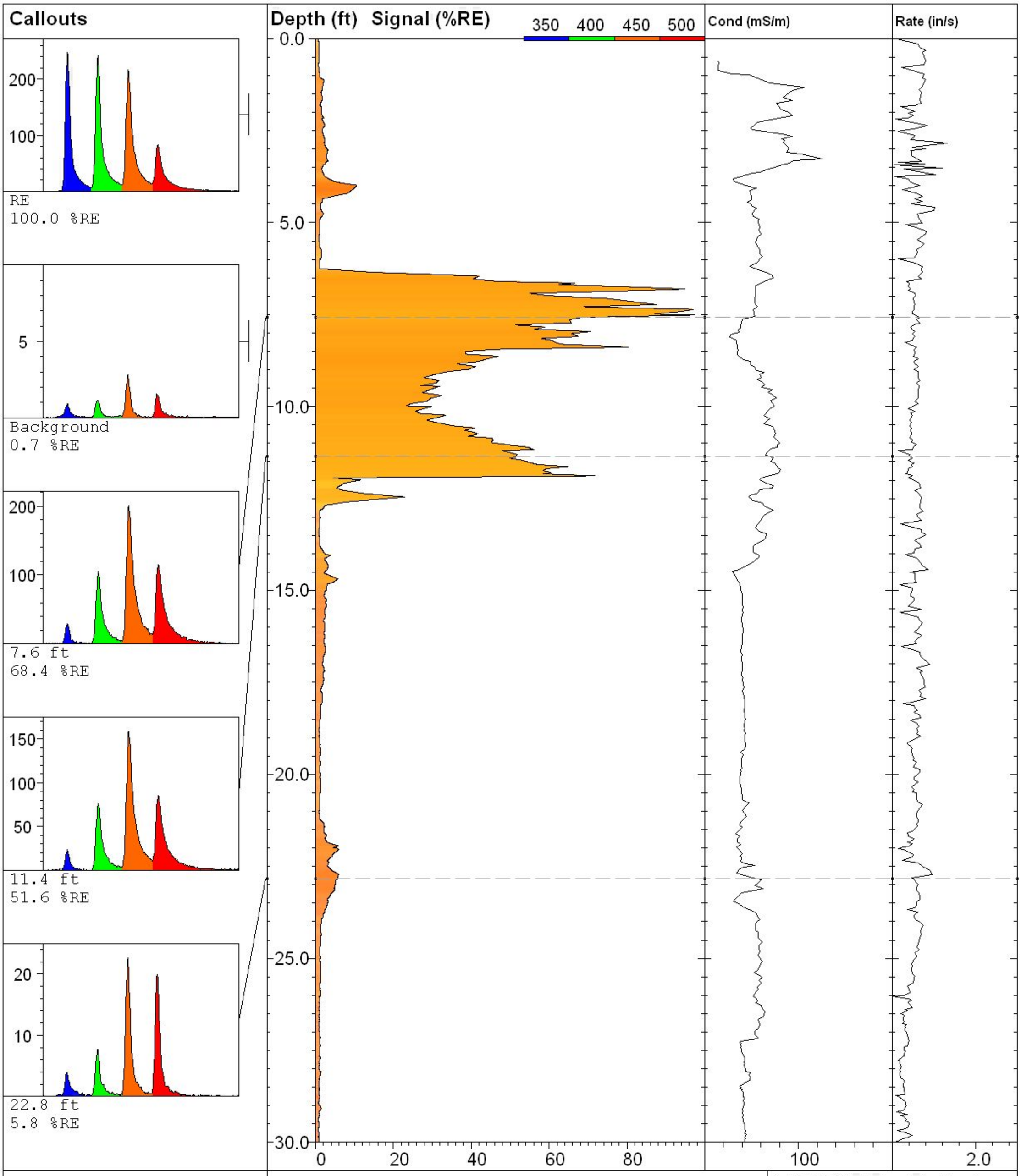
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.03 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **511.2 % @ 12.73 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-11 09:56 CDT**



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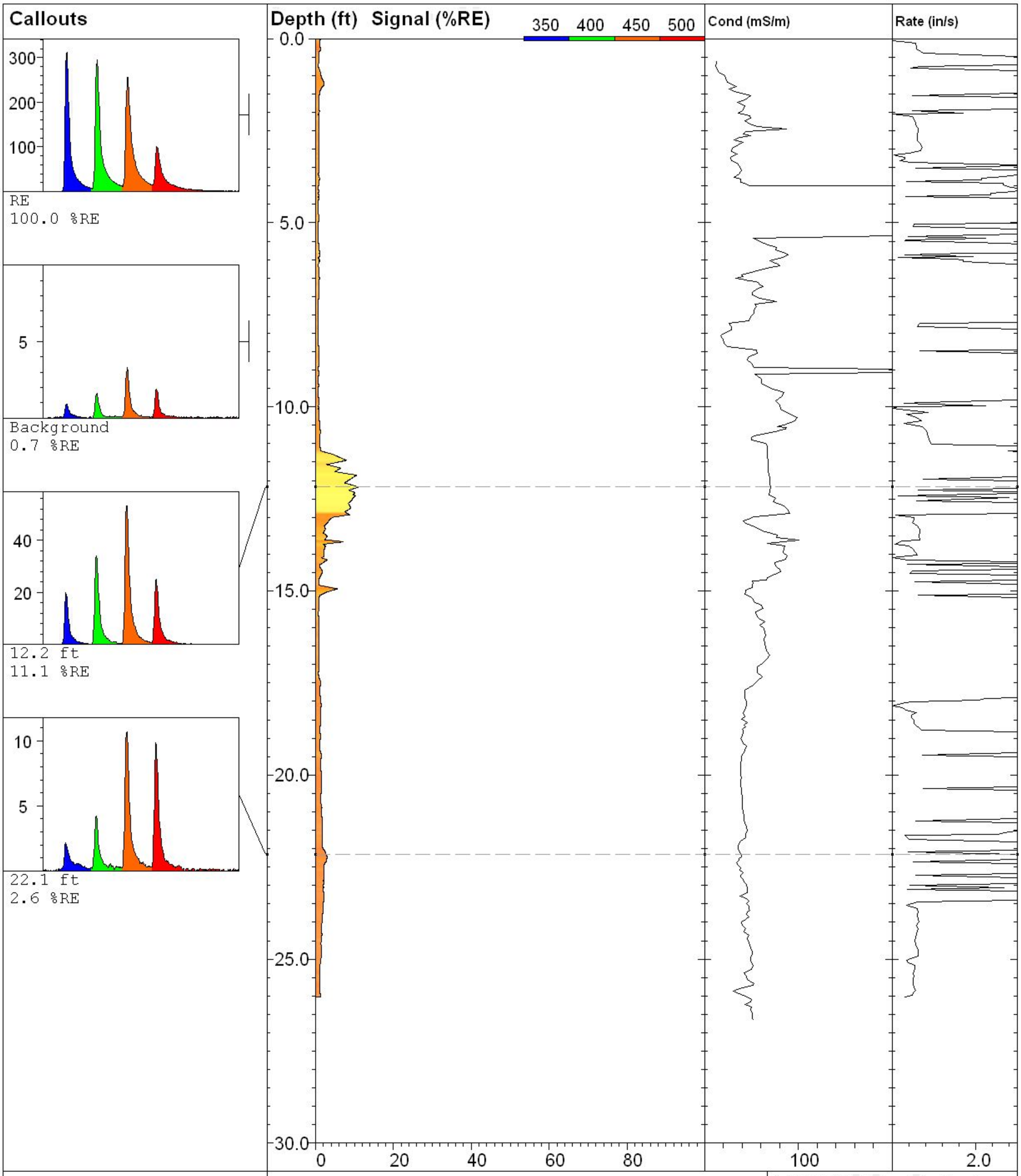
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **30.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **98.2 % @ 7.51 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-11 10:54 CDT**



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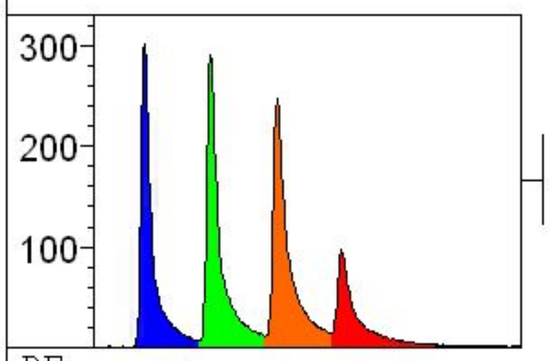
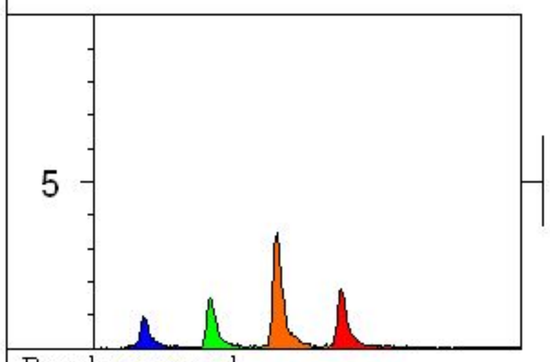
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.03 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **11.1 % @ 12.18 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-11 13:58 CDT**

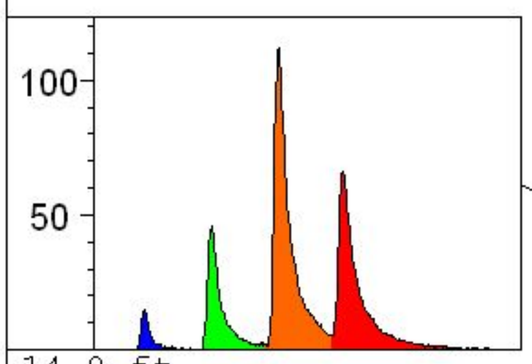
Callouts



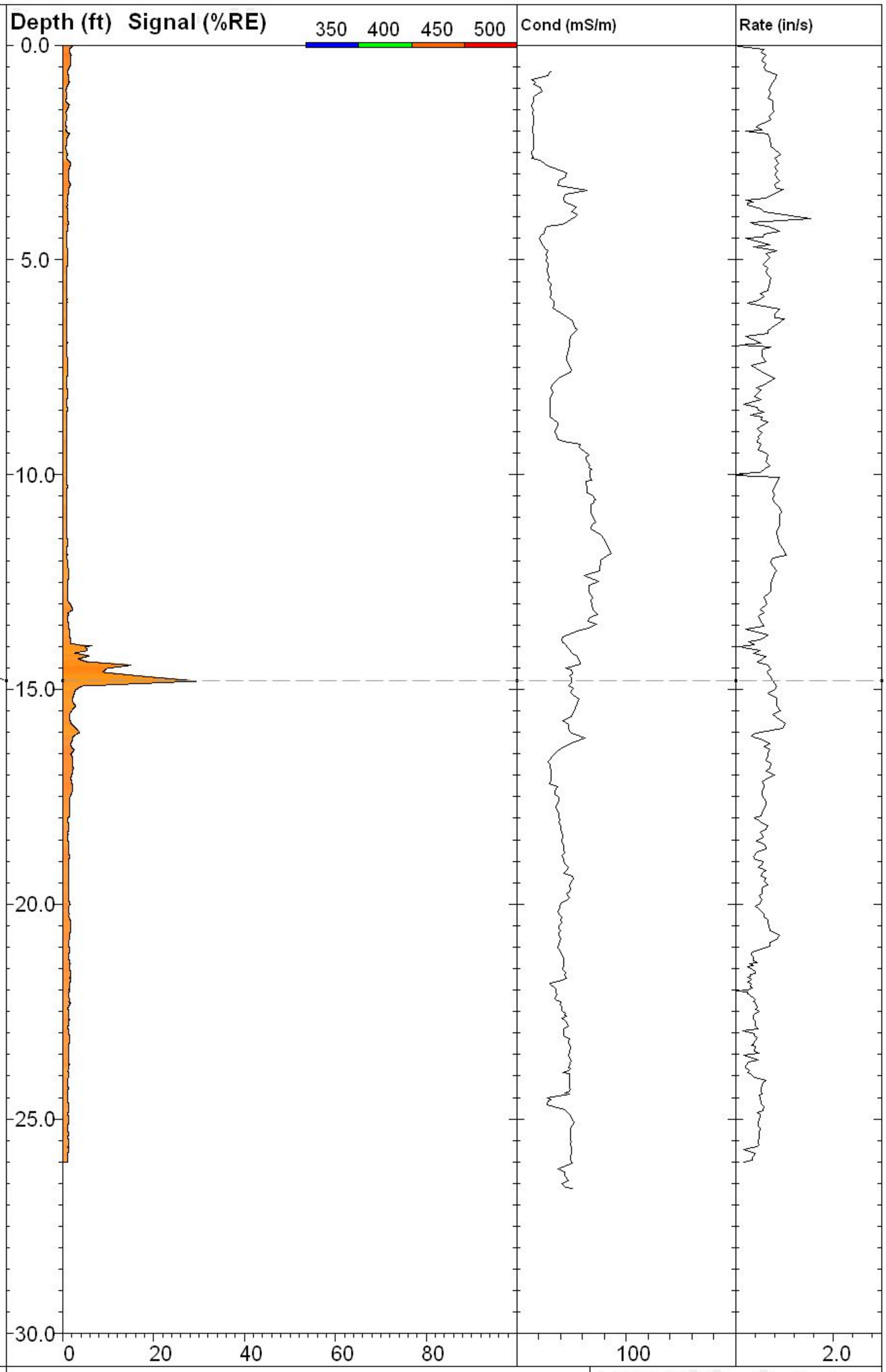
RE
100.0 %RE



Background
0.7 %RE



14.8 ft
29.7 %RE



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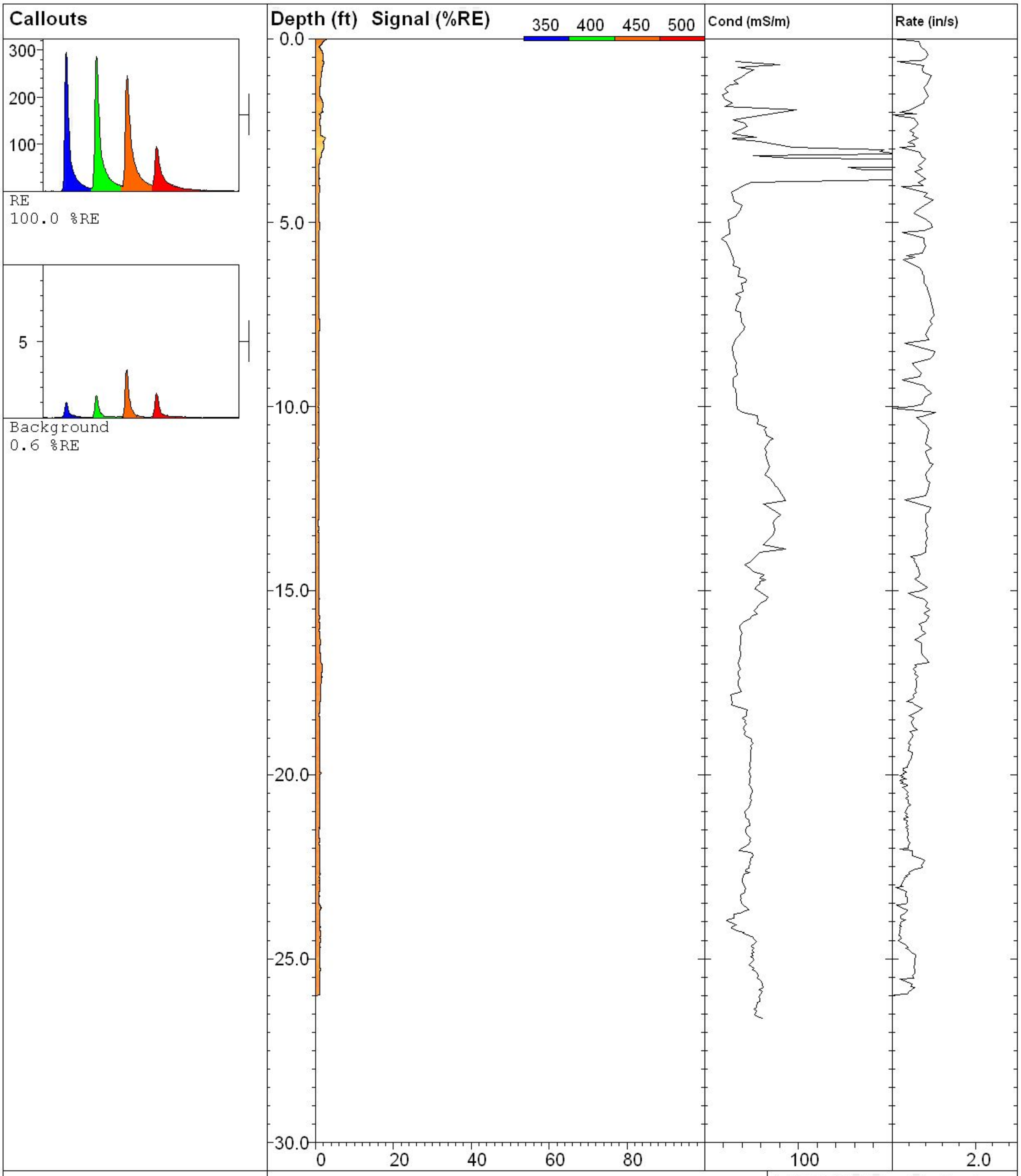
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **29.7 % @ 14.81 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-11 14:58 CDT**



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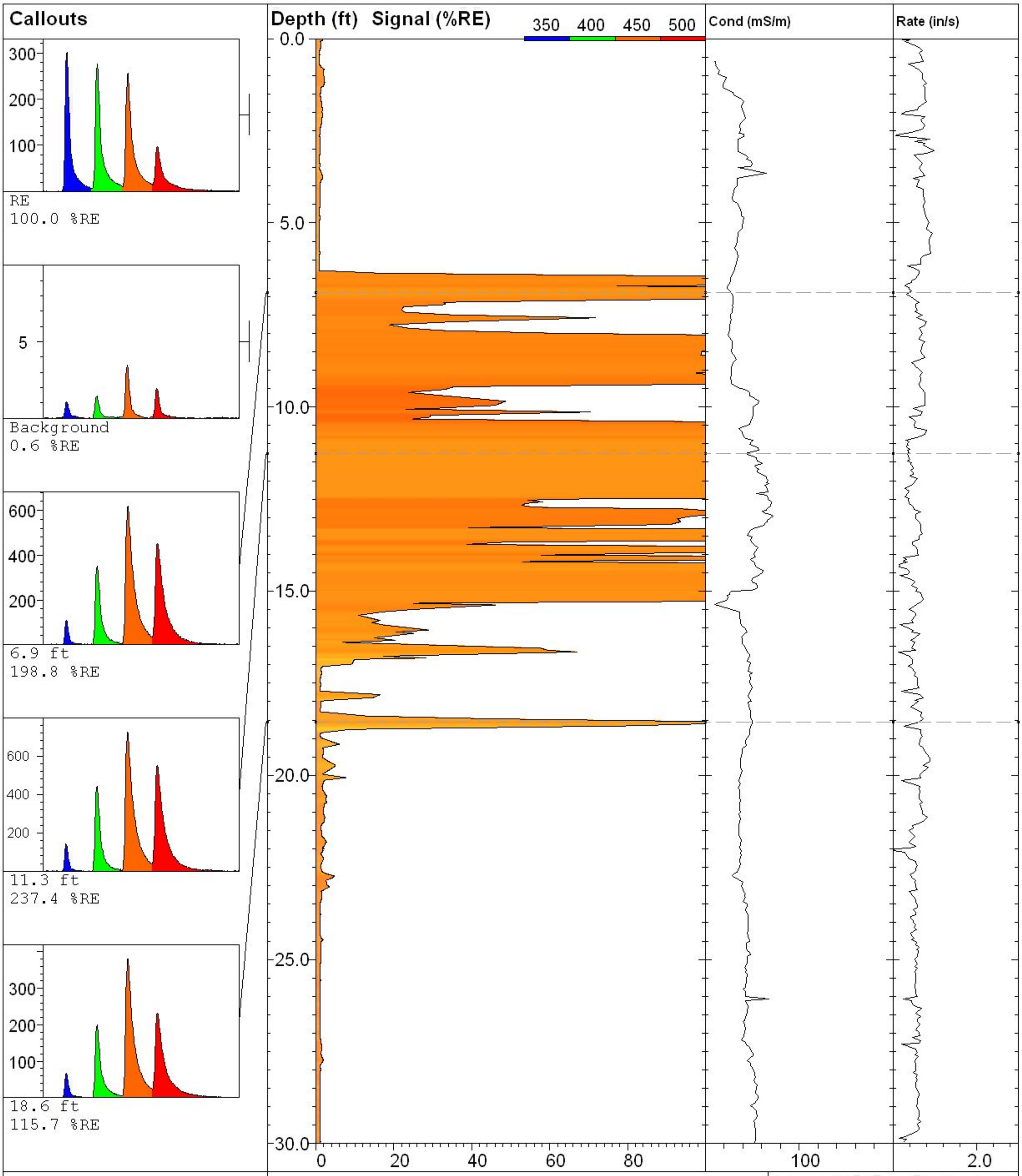
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **3.0 % @ 0.00 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-11 15:35 CDT**



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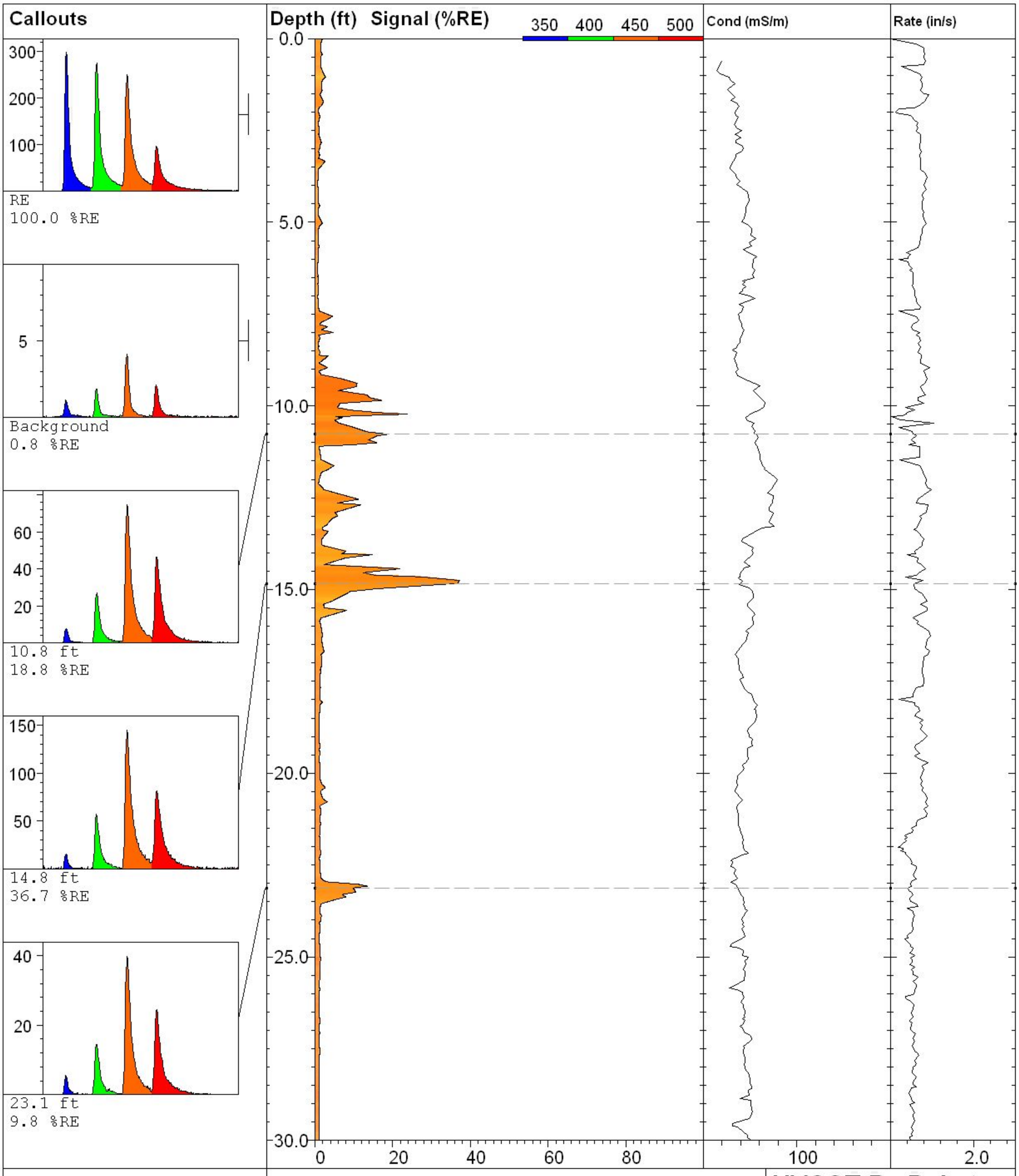
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **30.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **241.6 % @ 14.28 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-12 07:34 CDT**



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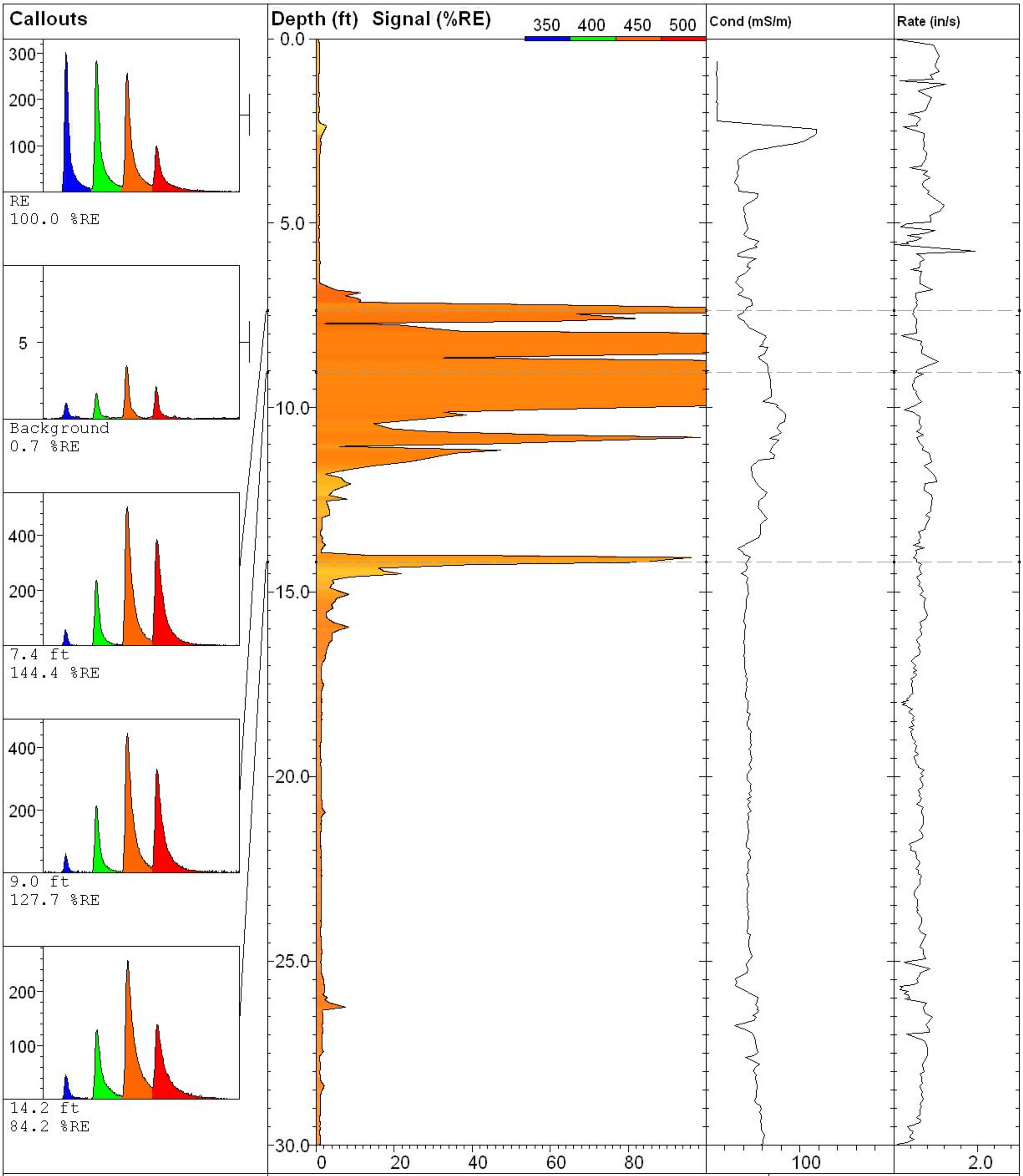
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **30.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **37.2 % @ 14.75 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-12 08:15 CDT**



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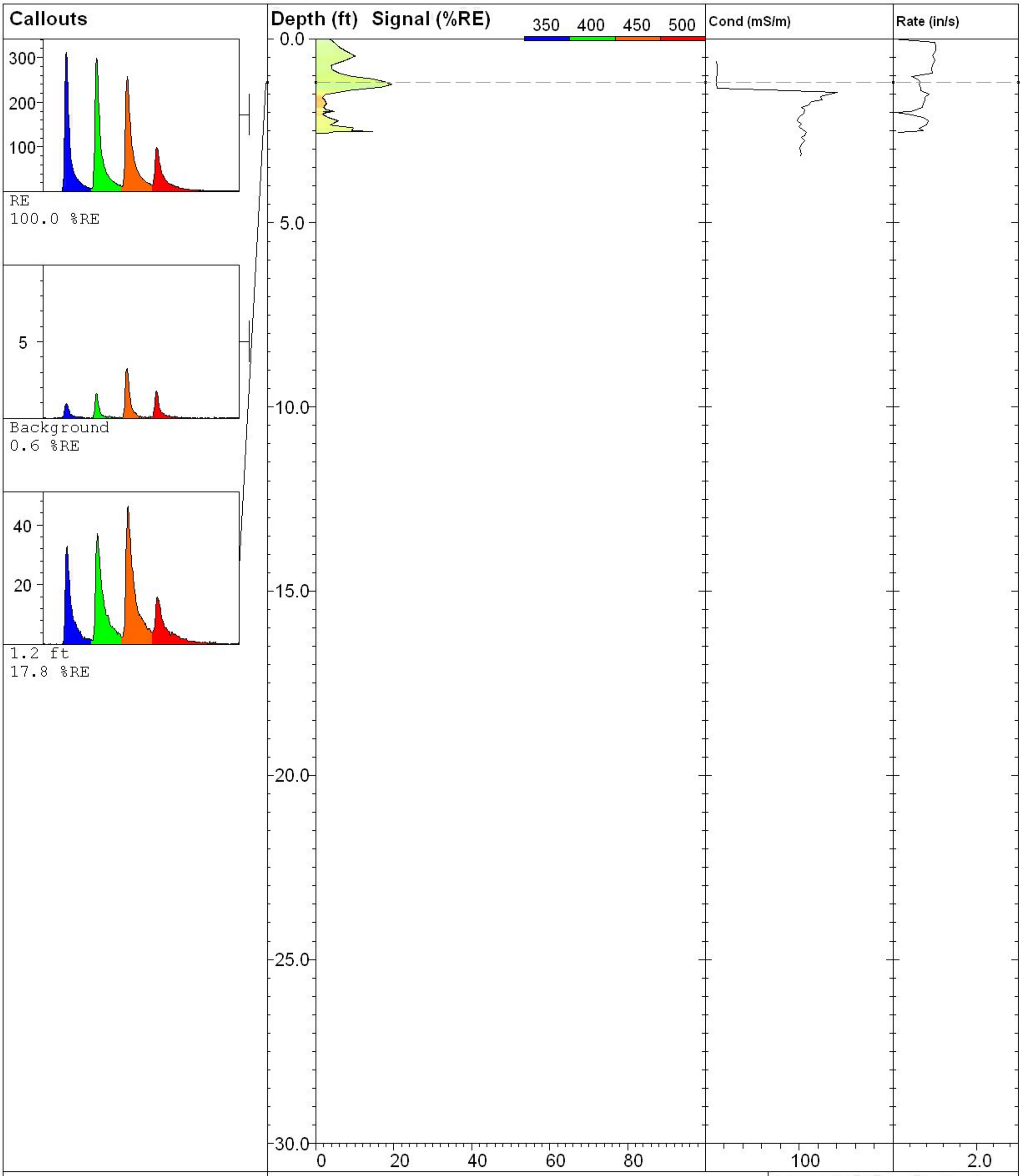
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **30.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **157.1 % @ 8.05 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-12 08:53 CDT**



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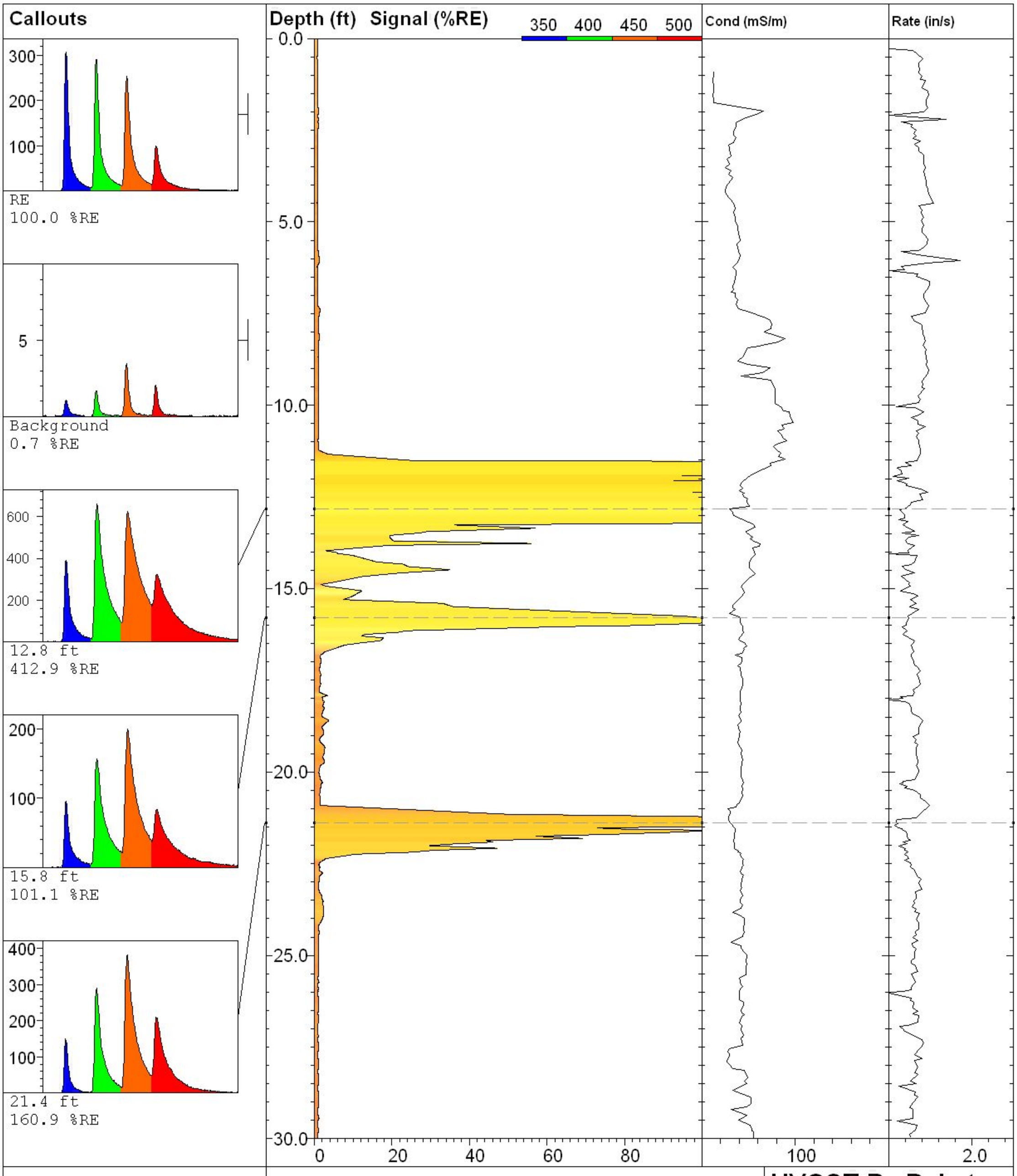
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **2.56 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **19.4 % @ 1.24 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-12 09:39 CDT**



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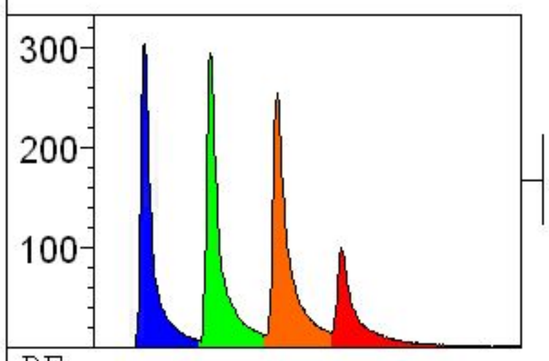
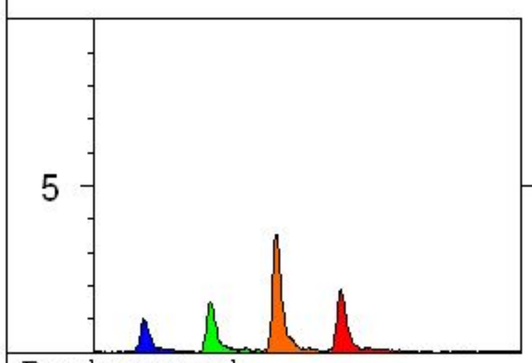
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **30.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **440.4 % @ 12.70 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-12 09:55 CDT**

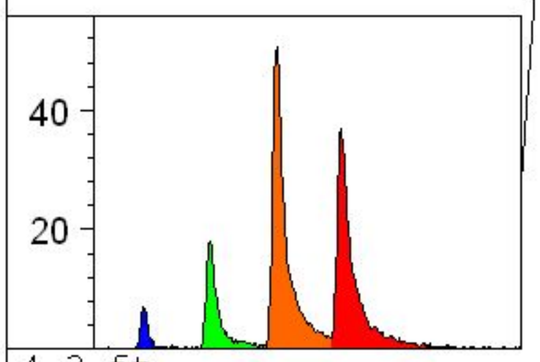
Callouts



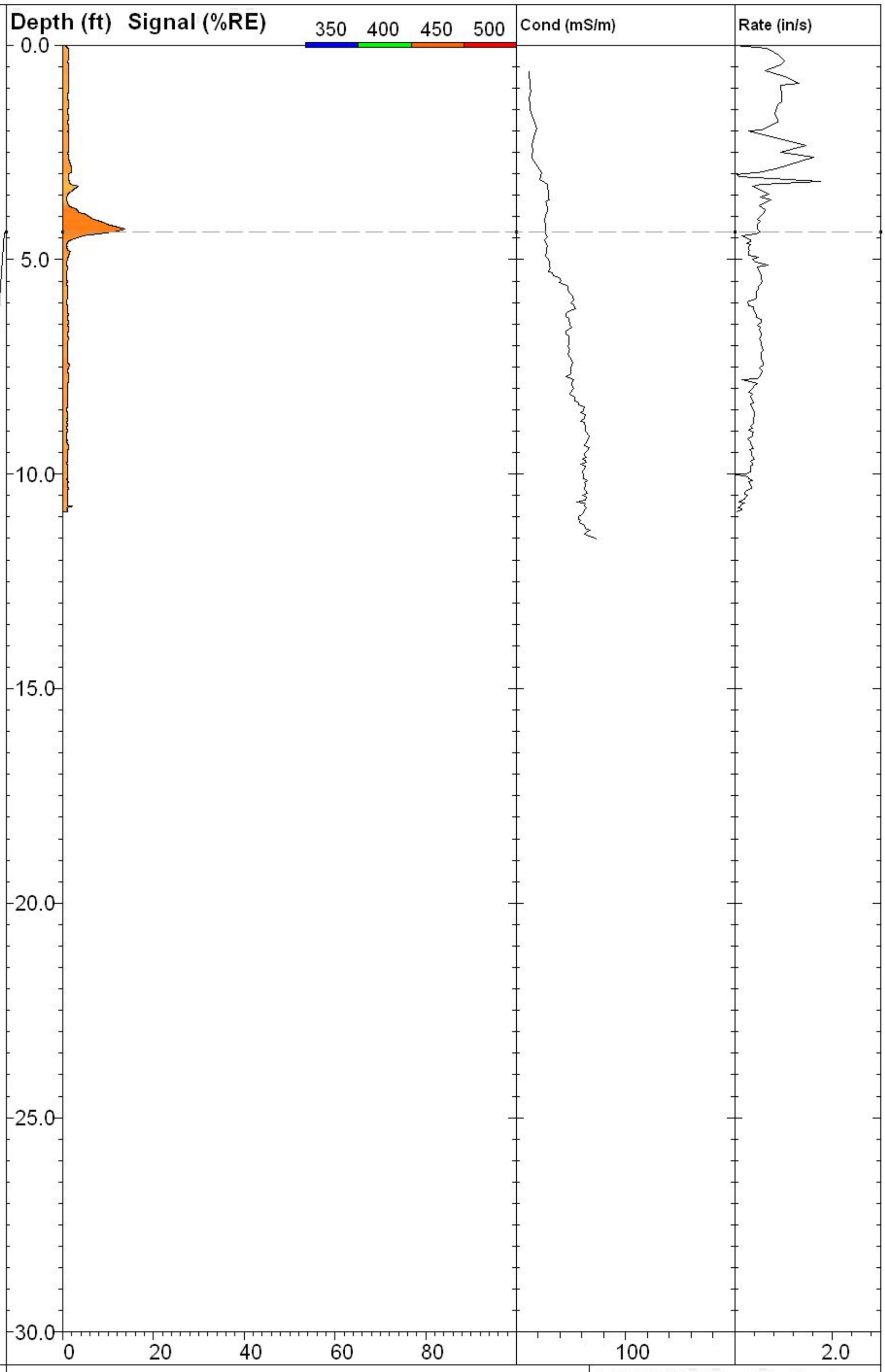
RE
100.0 %RE



Background
0.7 %RE



4.3 ft
11.7 %RE



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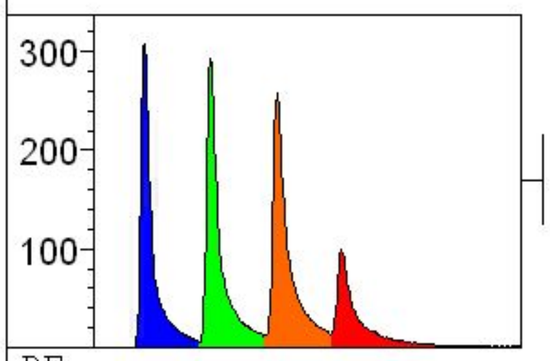
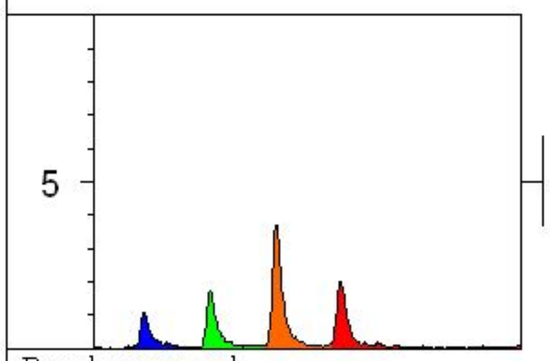
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **10.88 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **13.8 % @ 4.29 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-12 10:30 CDT**

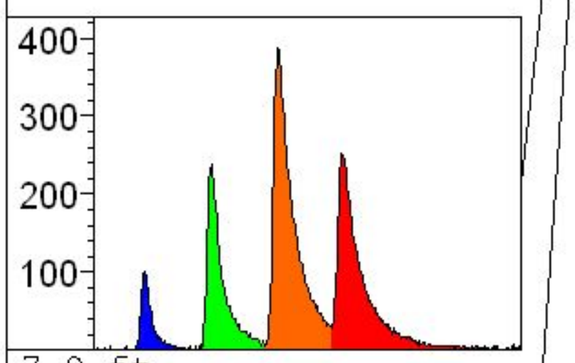
Callouts



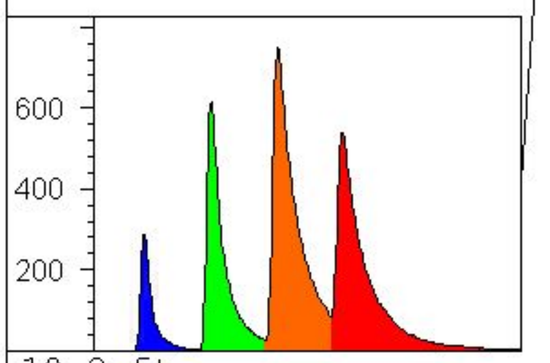
RE
100.0 %RE



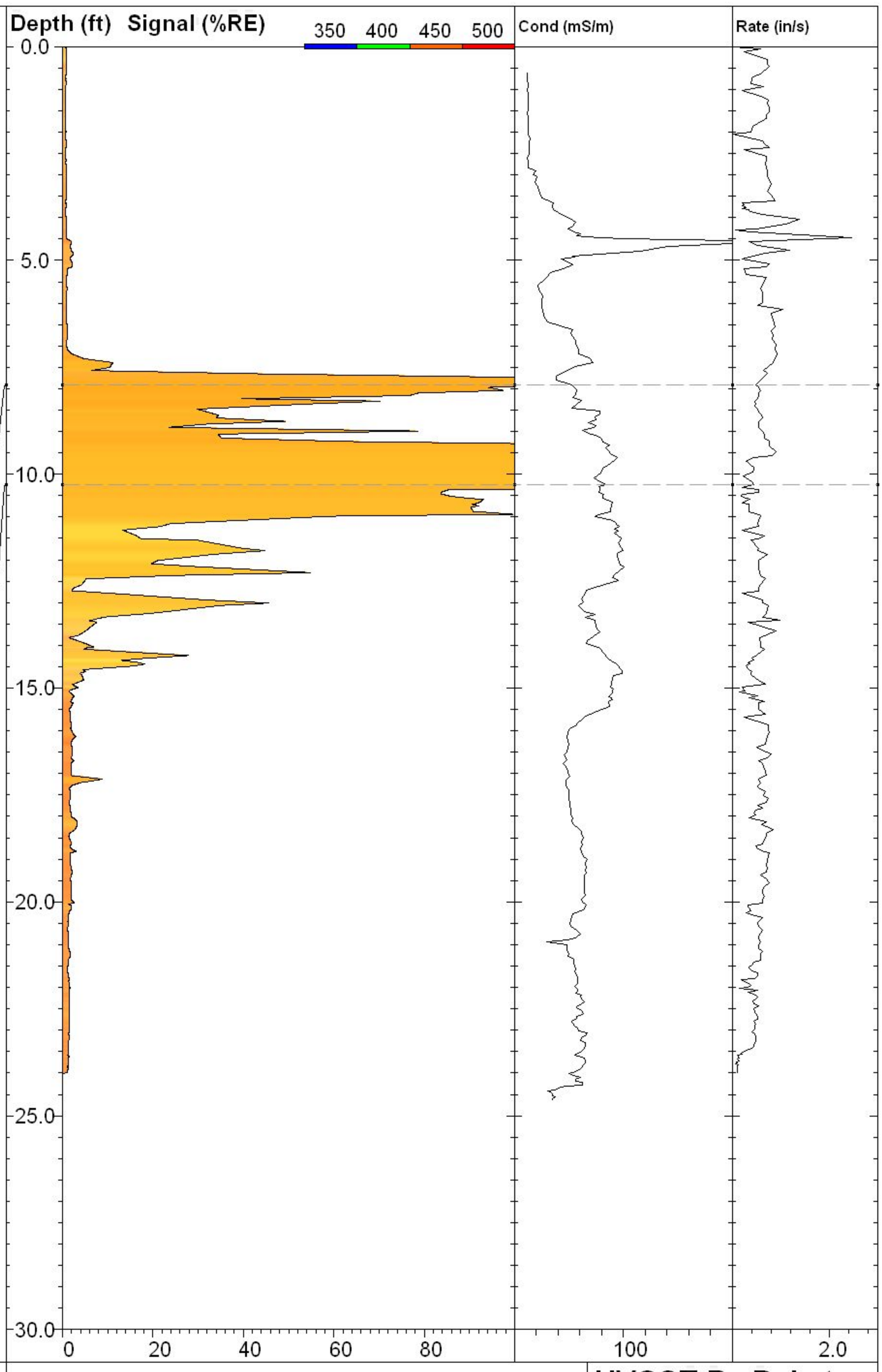
Background
0.7 %RE



7.9 ft
136.5 %RE



10.2 ft
336.3 %RE



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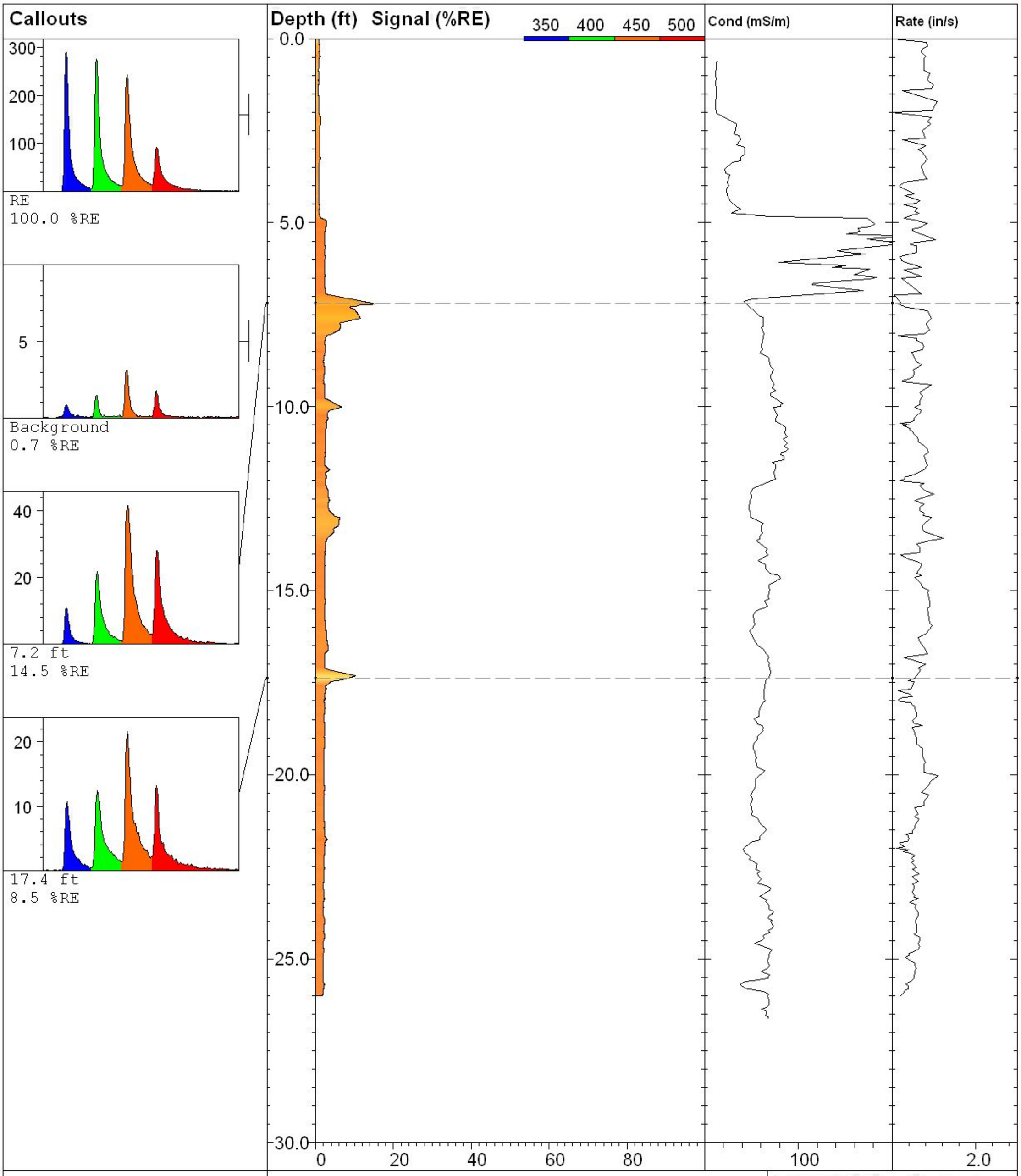
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **24.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **336.3 % @ 10.25 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-12 12:58 CDT**



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LIF-12-023

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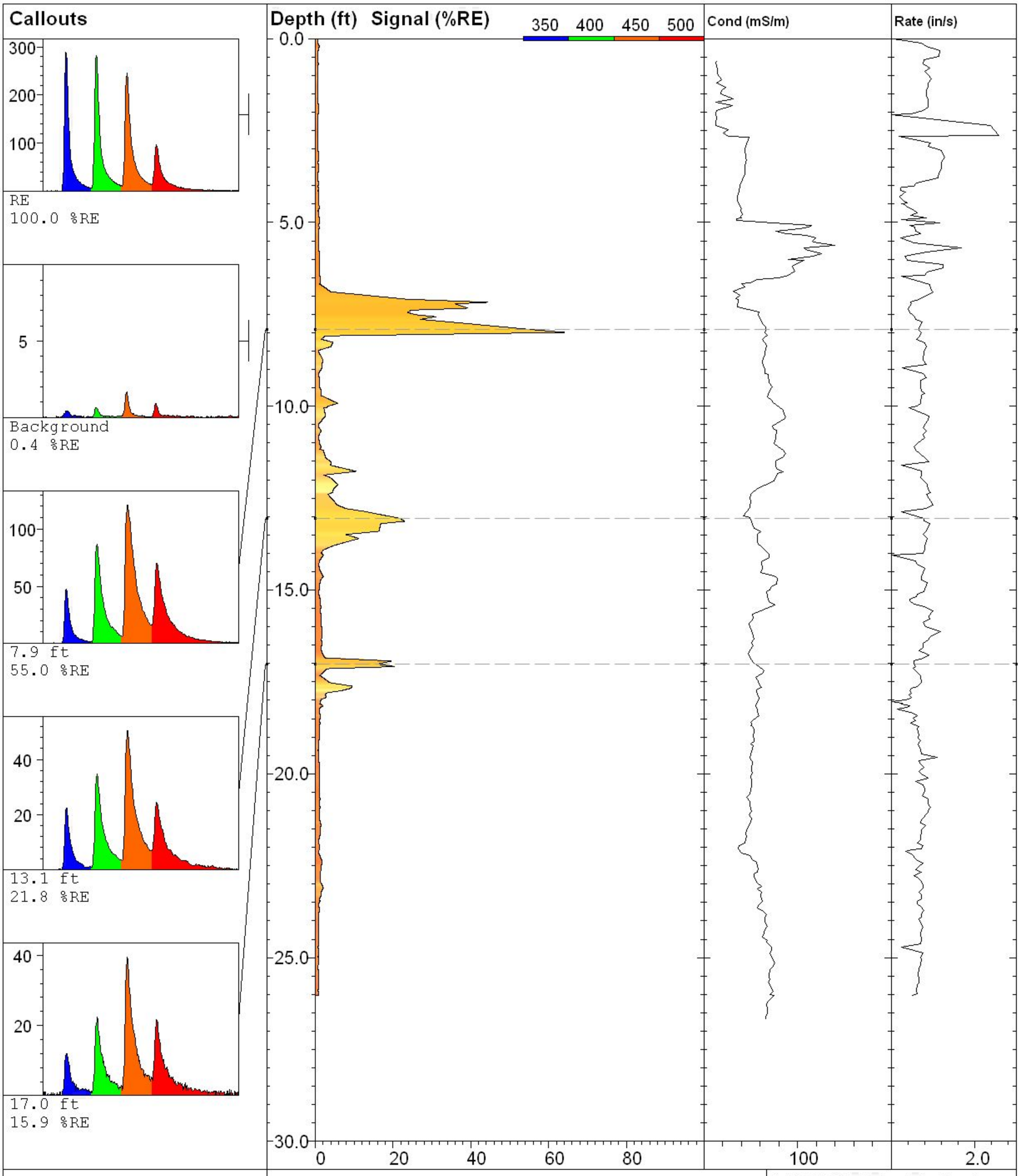
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **15.1 % @ 7.22 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-12 13:31 CDT**



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LIF-12-023A

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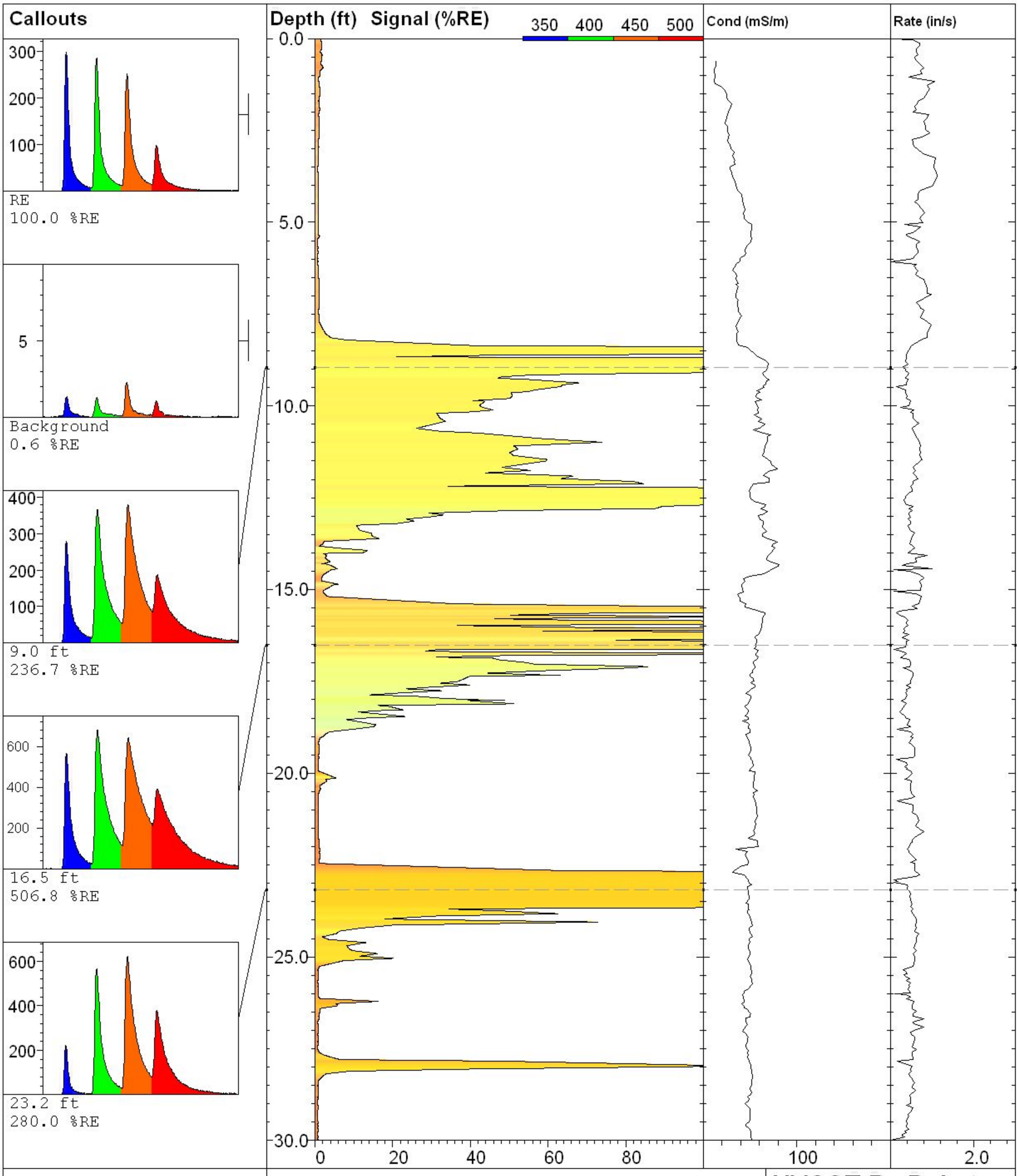
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.03 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **64.3 % @ 7.99 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-12 16:23 CDT**



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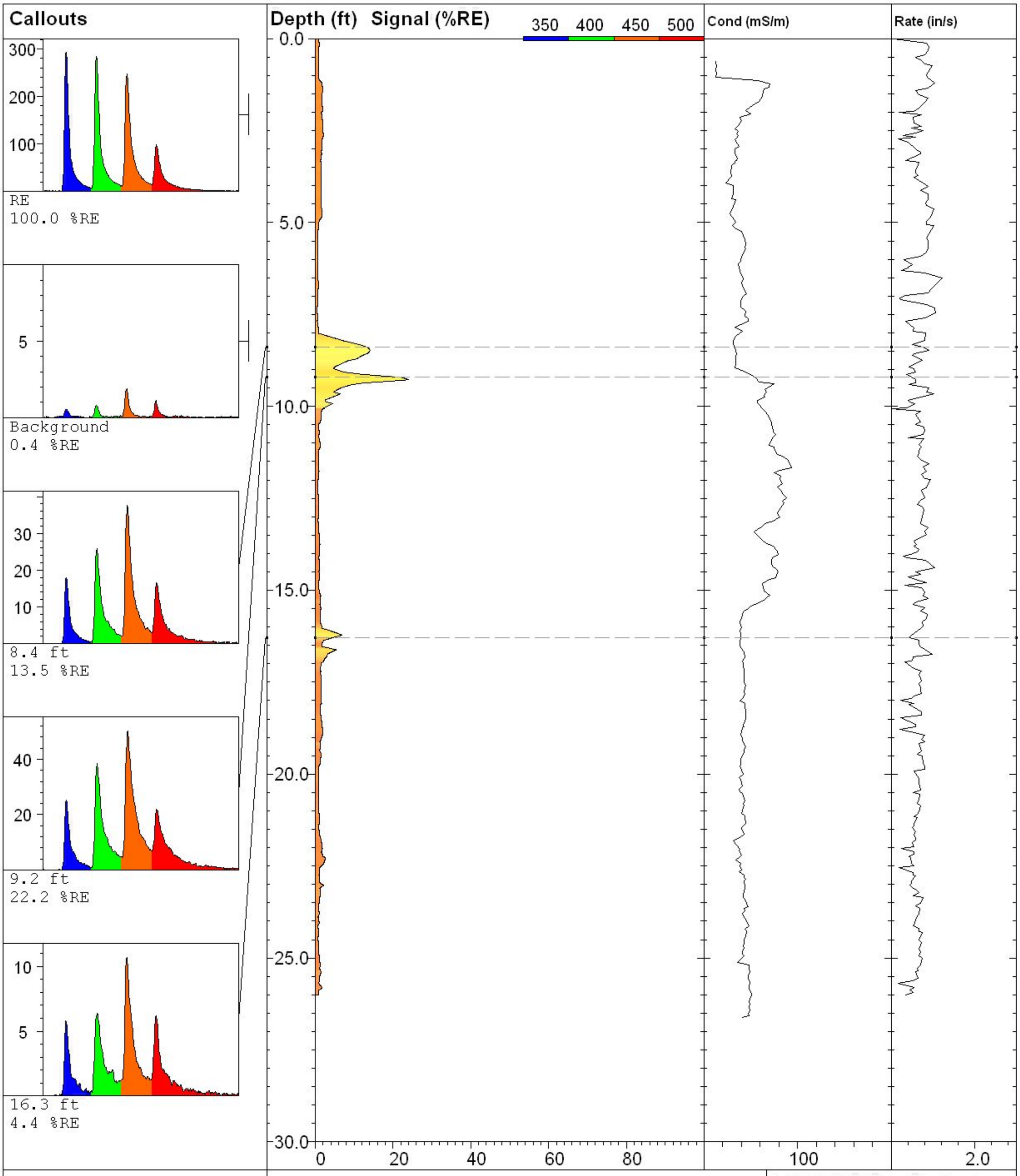
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **34.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **513.9 % @ 16.56 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-12 14:14 CDT**



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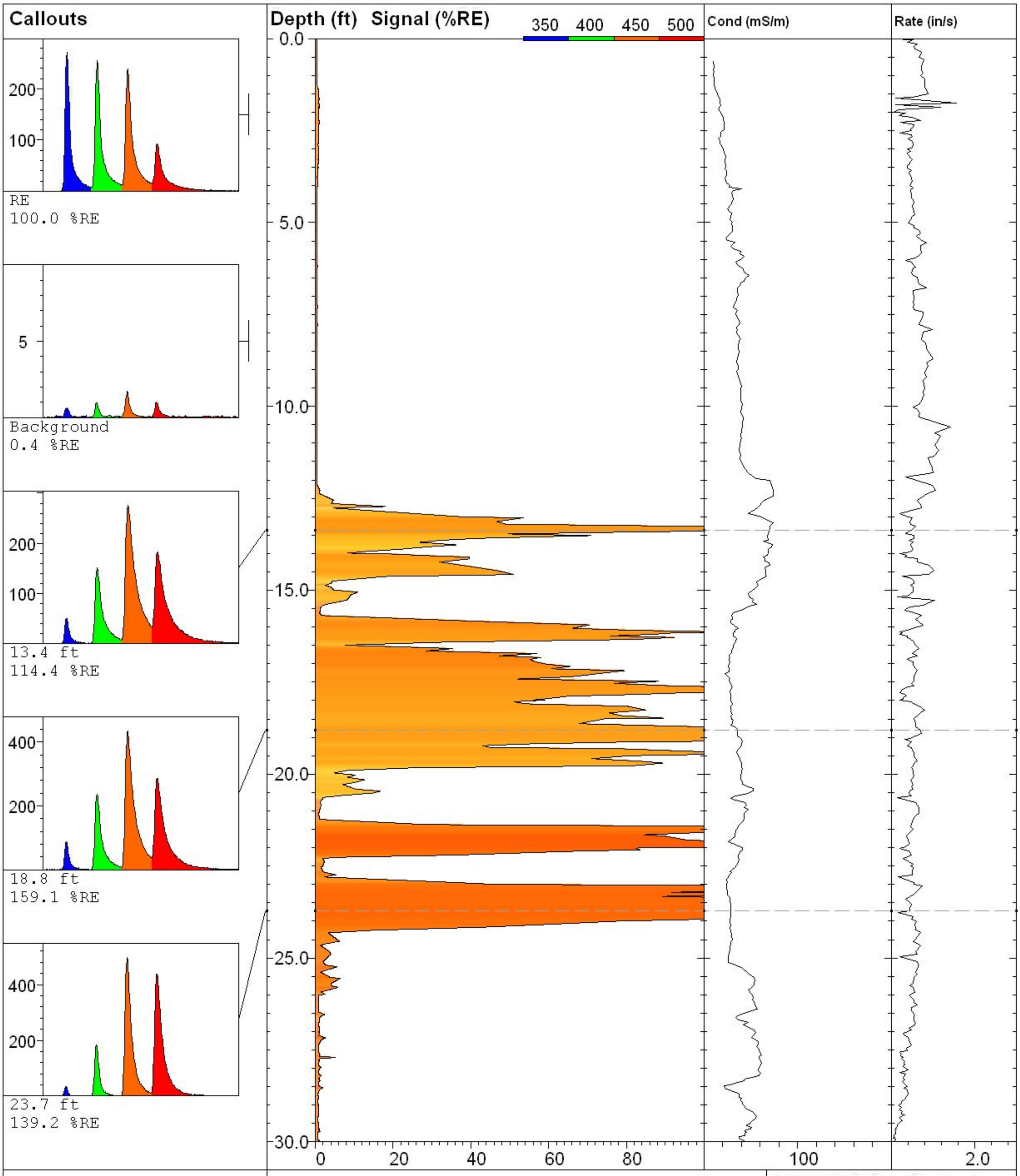
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **24.0 % @ 9.28 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-12 17:03 CDT**



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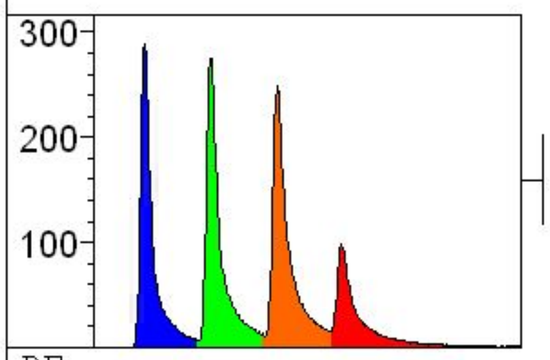
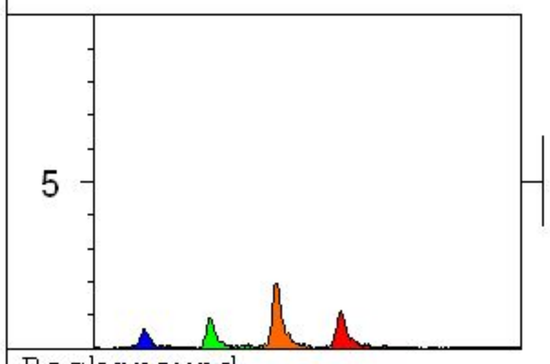
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **30.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **165.8 % @ 23.05 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-13 08:12 CDT**

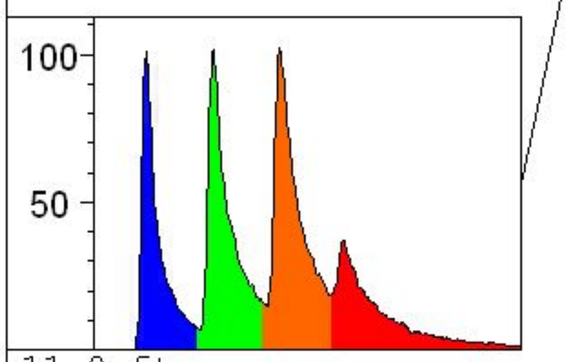
Callouts



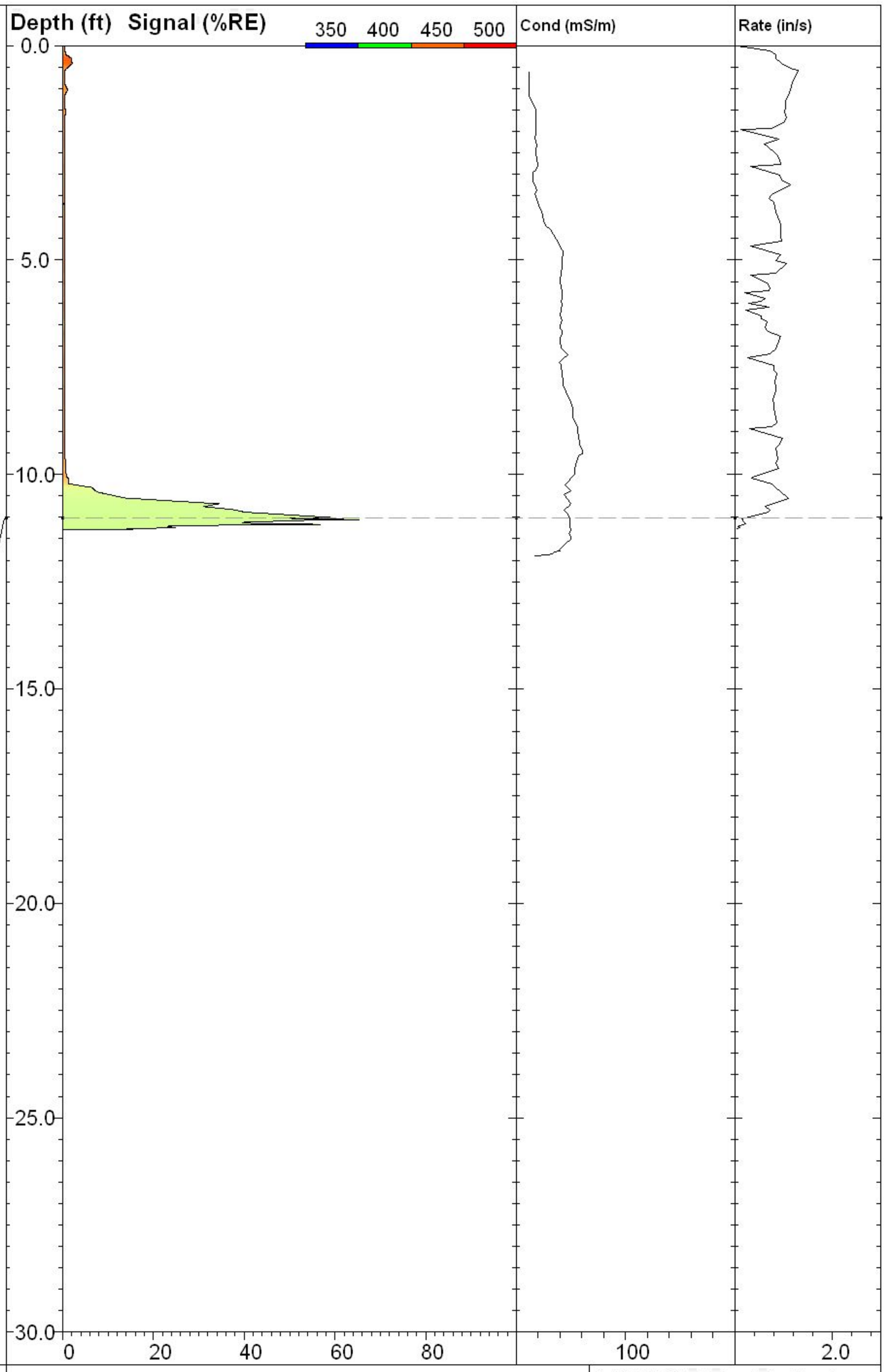
RE
100.0 %RE



Background
0.4 %RE



11.0 ft
60.1 %RE



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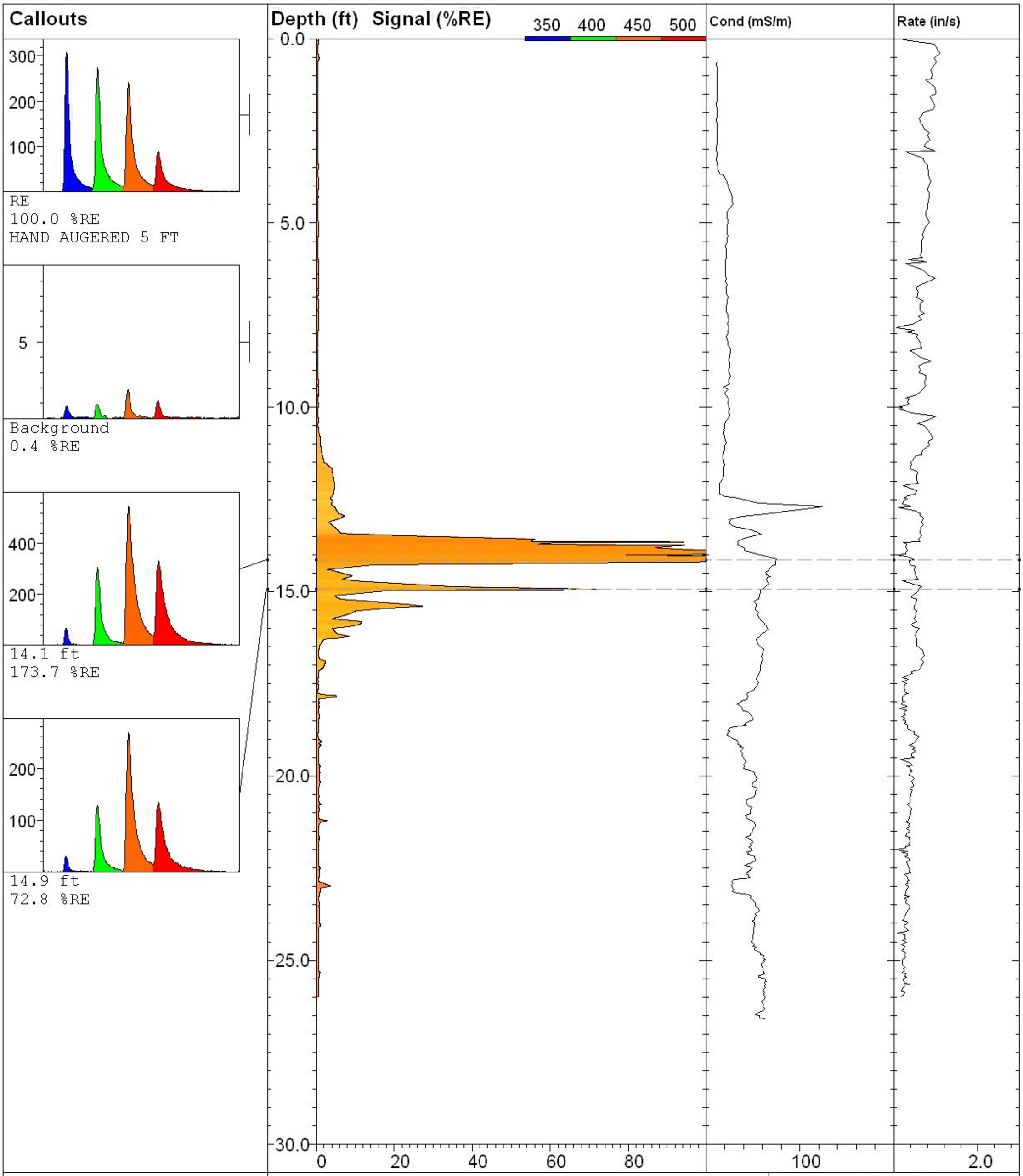
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **11.29 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **70.3 % @ 11.05 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-13 08:59 CDT**



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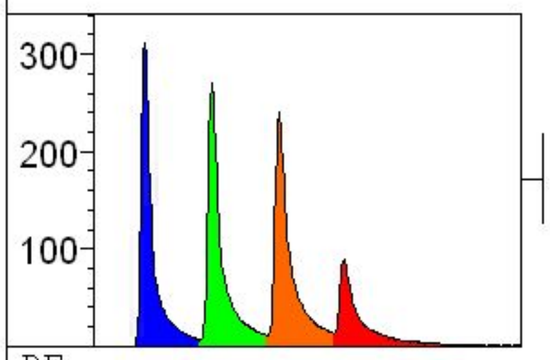
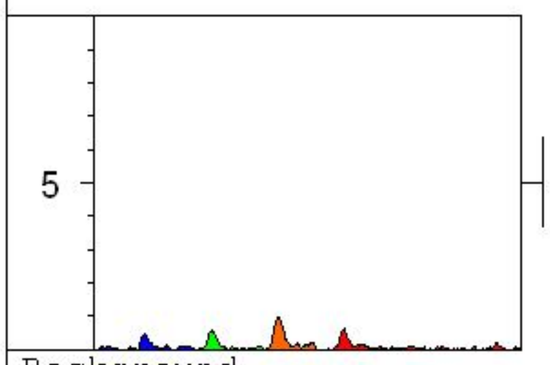
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **173.7 % @ 14.13 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-16 14:11 CDT**

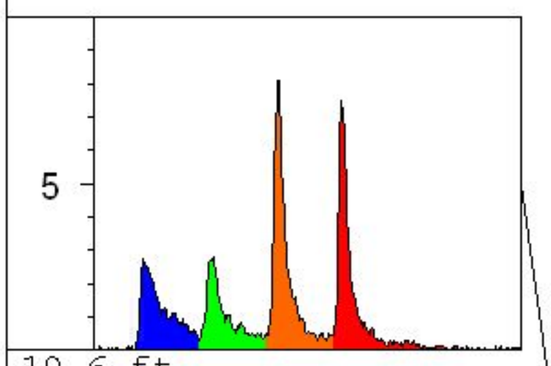
Callouts



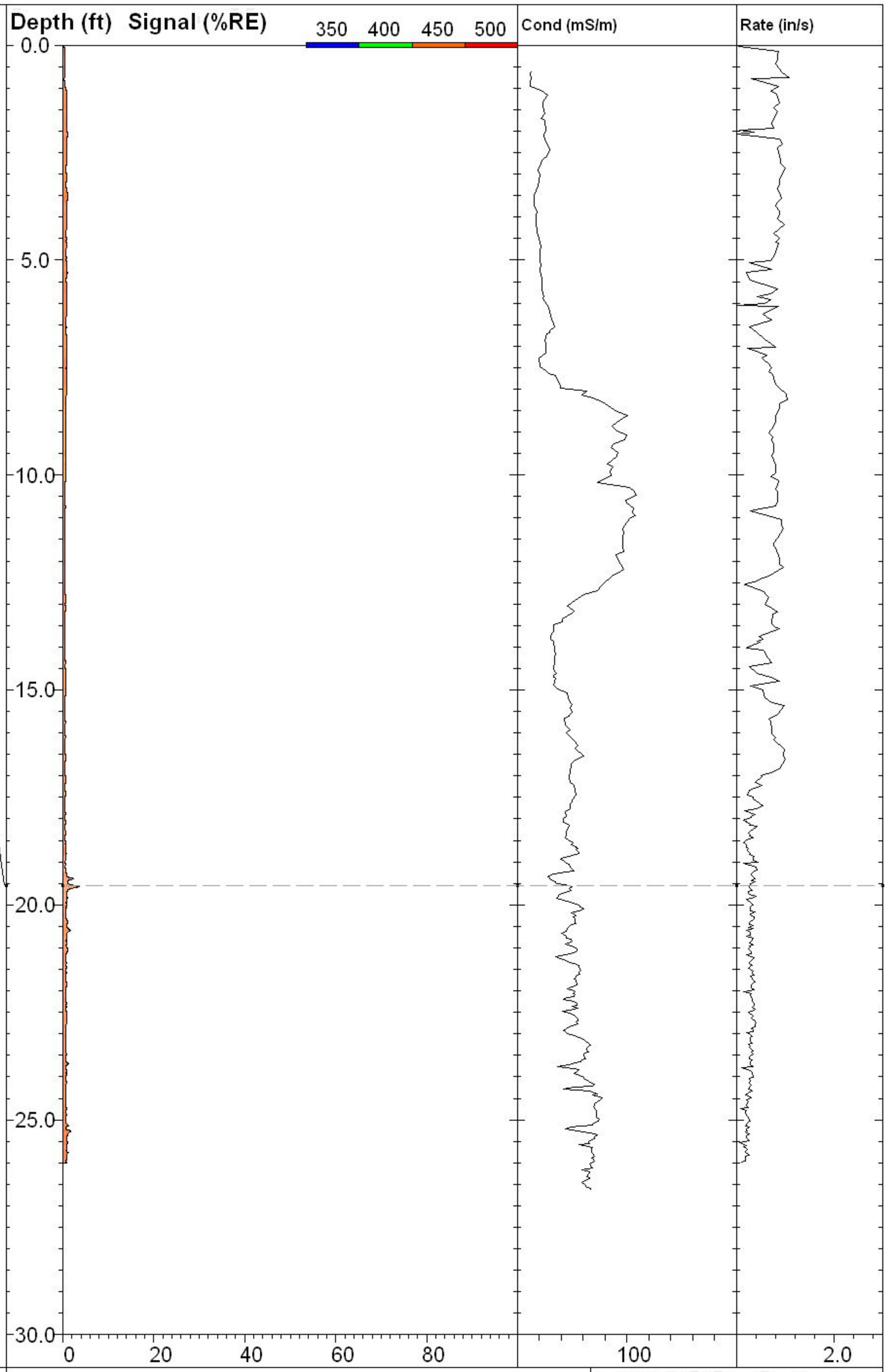
RE
100.0 %RE
HAND AUGERED 5 FT



Background
0.3 %RE



19.6 ft
2.5 %RE



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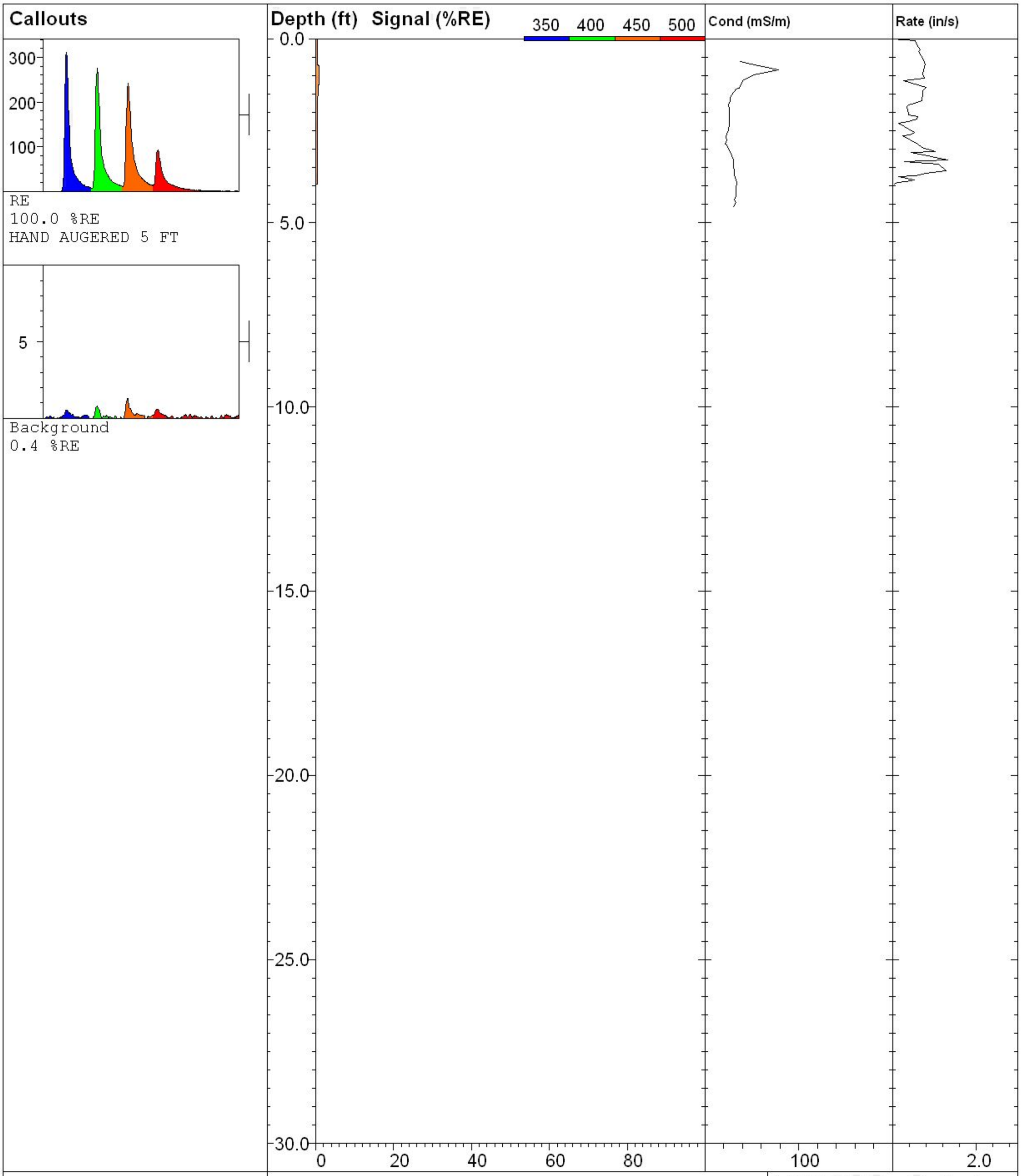
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **3.6 % @ 19.58 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-16 14:49 CDT**



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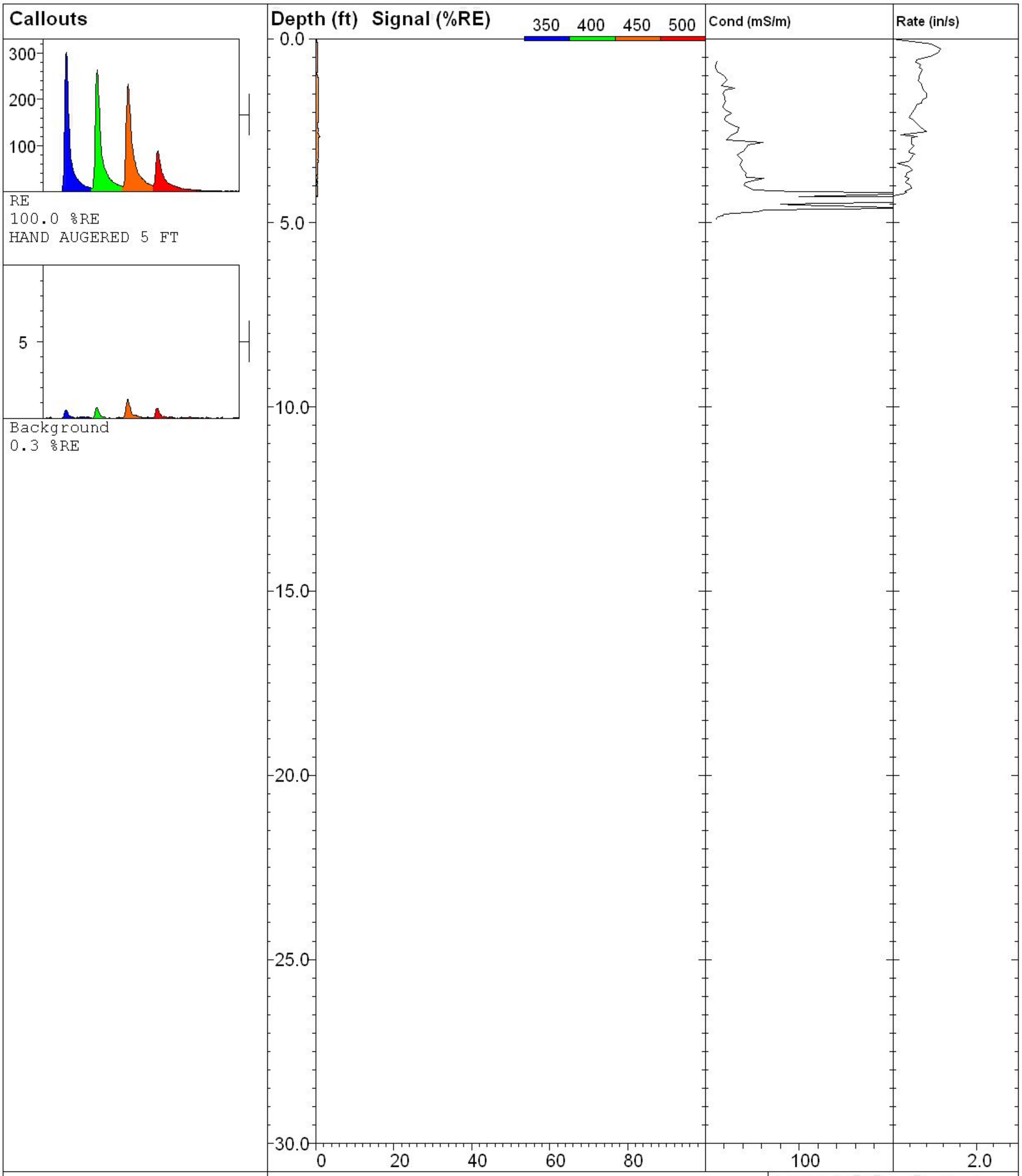
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **3.95 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **0.9 % @ 0.75 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-16 15:24 CDT**



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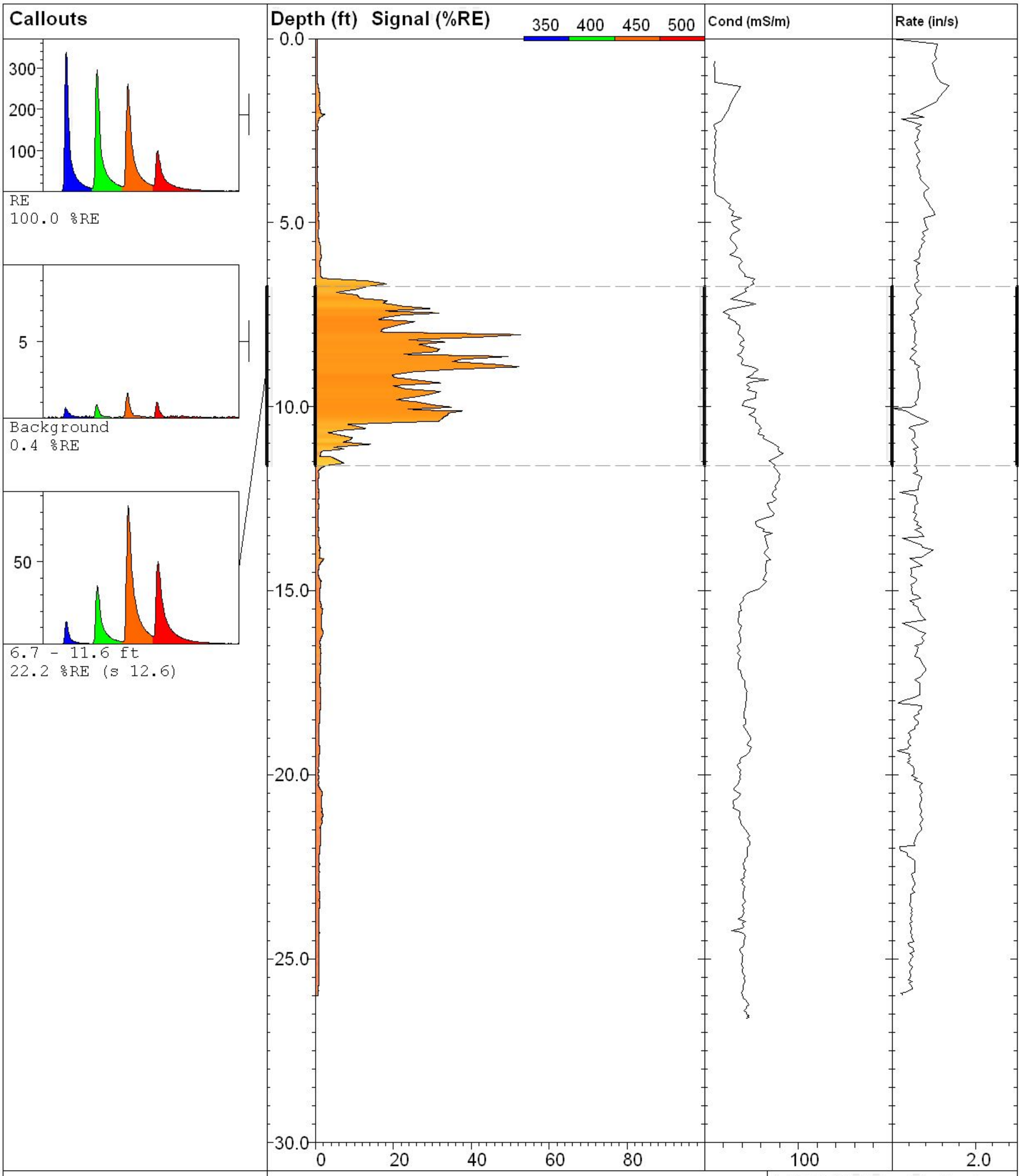
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **4.29 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **0.9 % @ 2.66 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-16 15:39 CDT**



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LIF-12-032

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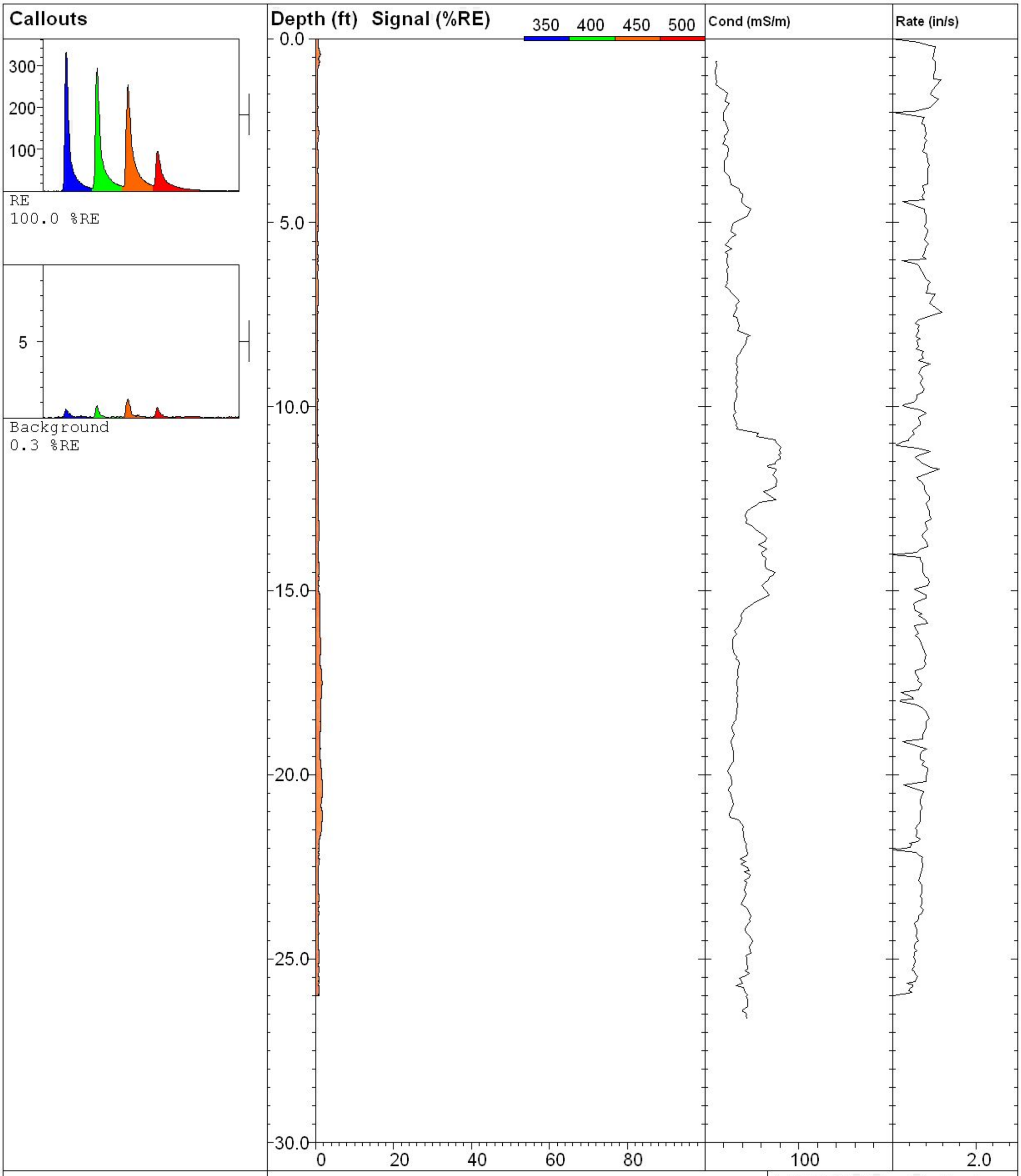
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **52.9 % @ 8.04 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-17 08:58 CDT**



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Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **1.7 % @ 21.25 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-17 10:27 CDT**



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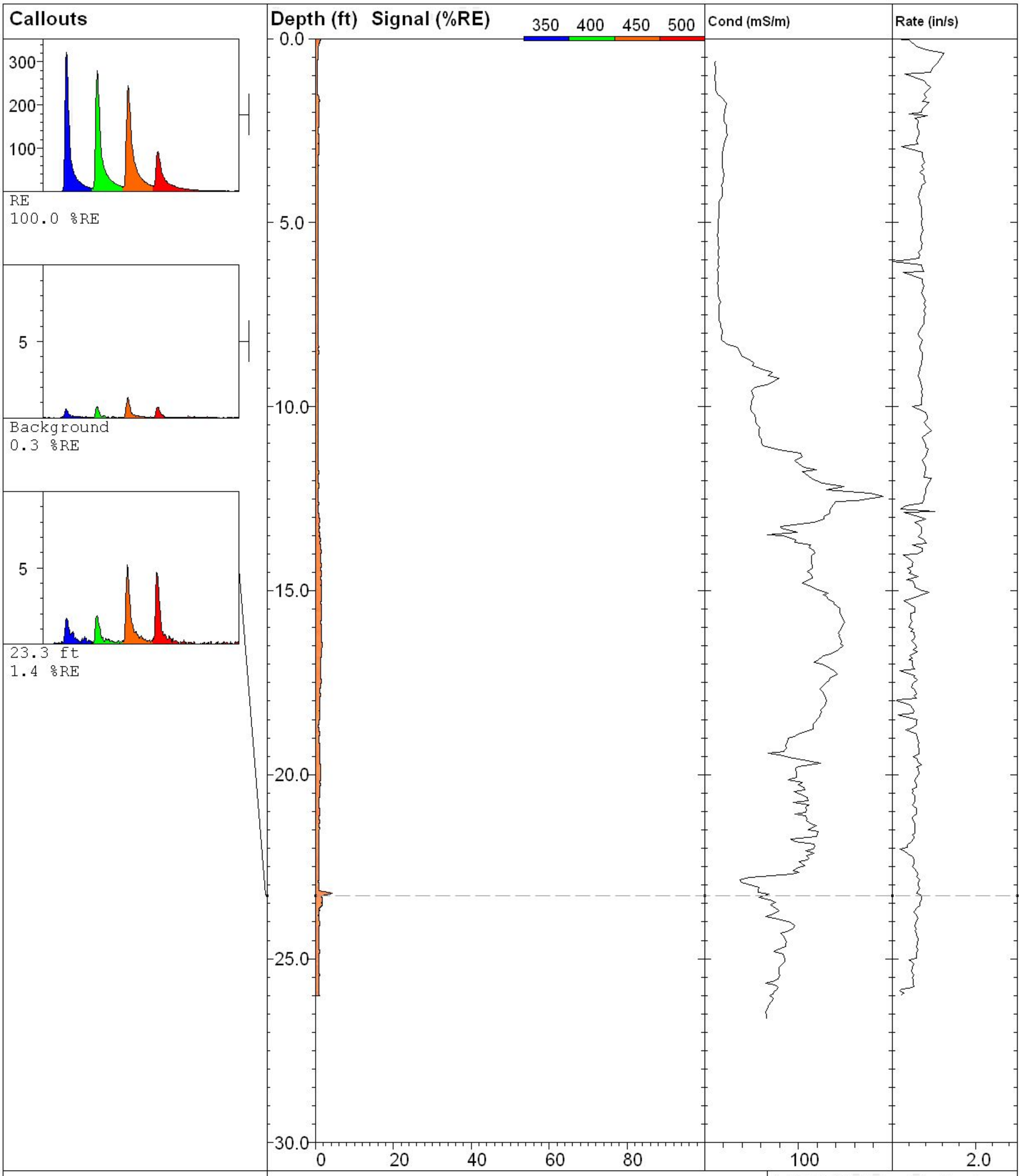
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **11.97 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **1.8 % @ 0.78 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-17 10:59 CDT**



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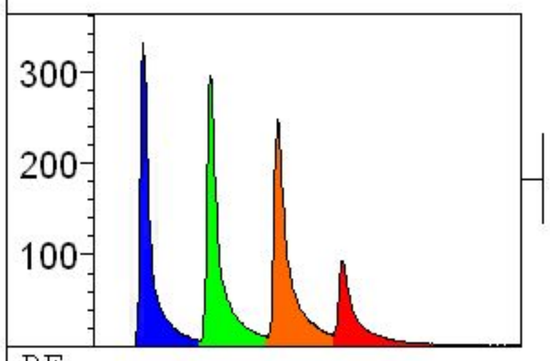
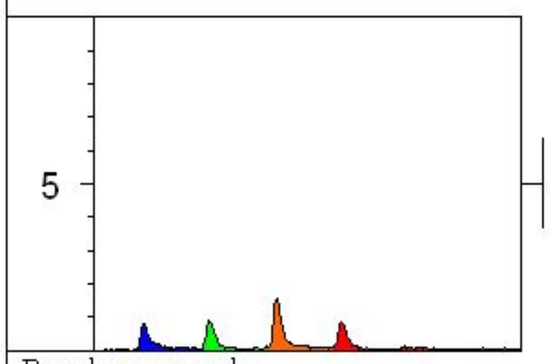
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **4.4 % @ 23.22 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-17 12:49 CDT**

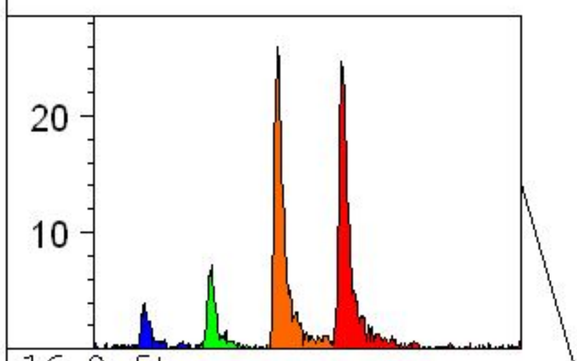
Callouts



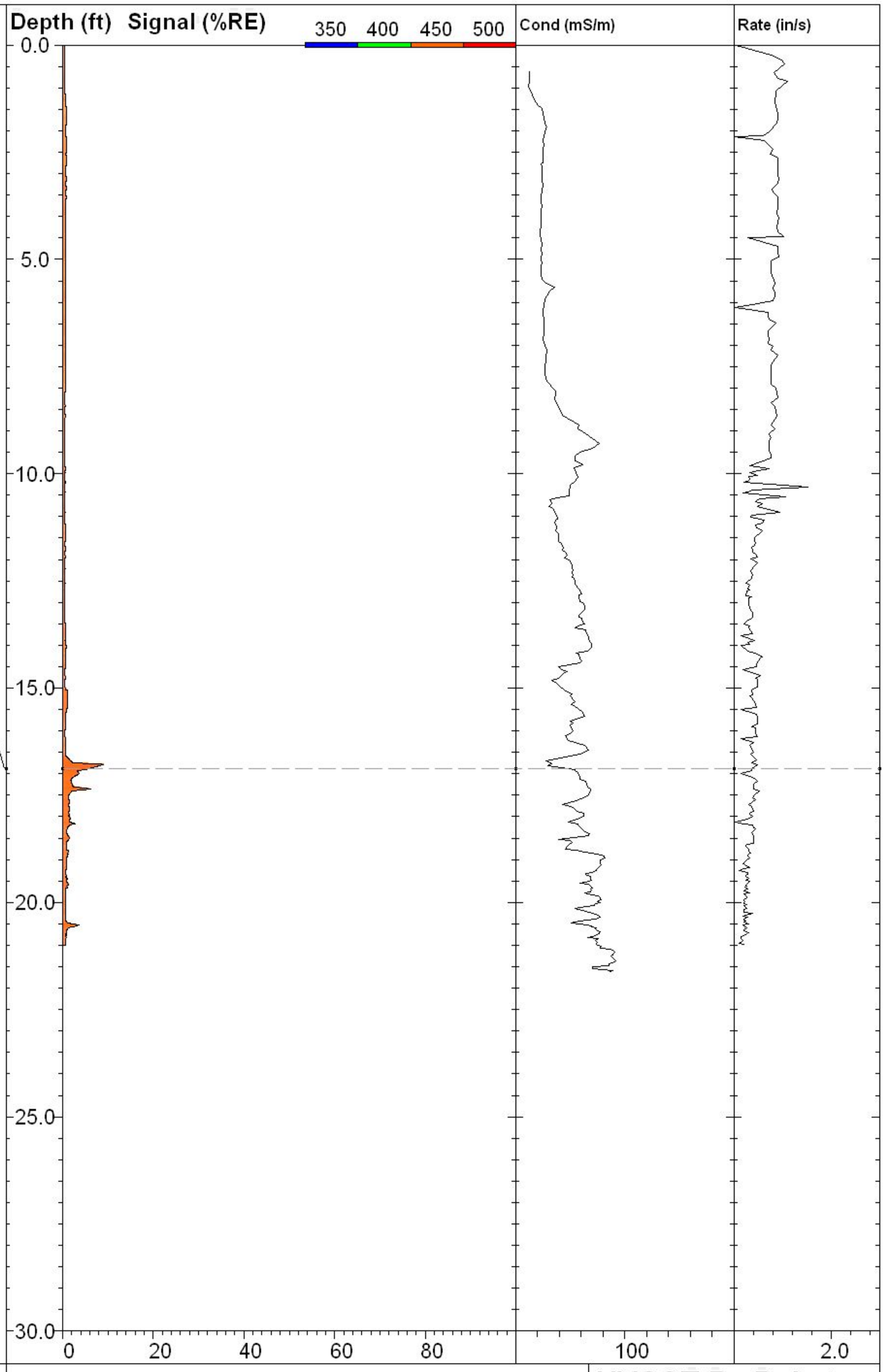
RE
100.0 %RE



Background
0.4 %RE



16.9 ft
5.3 %RE



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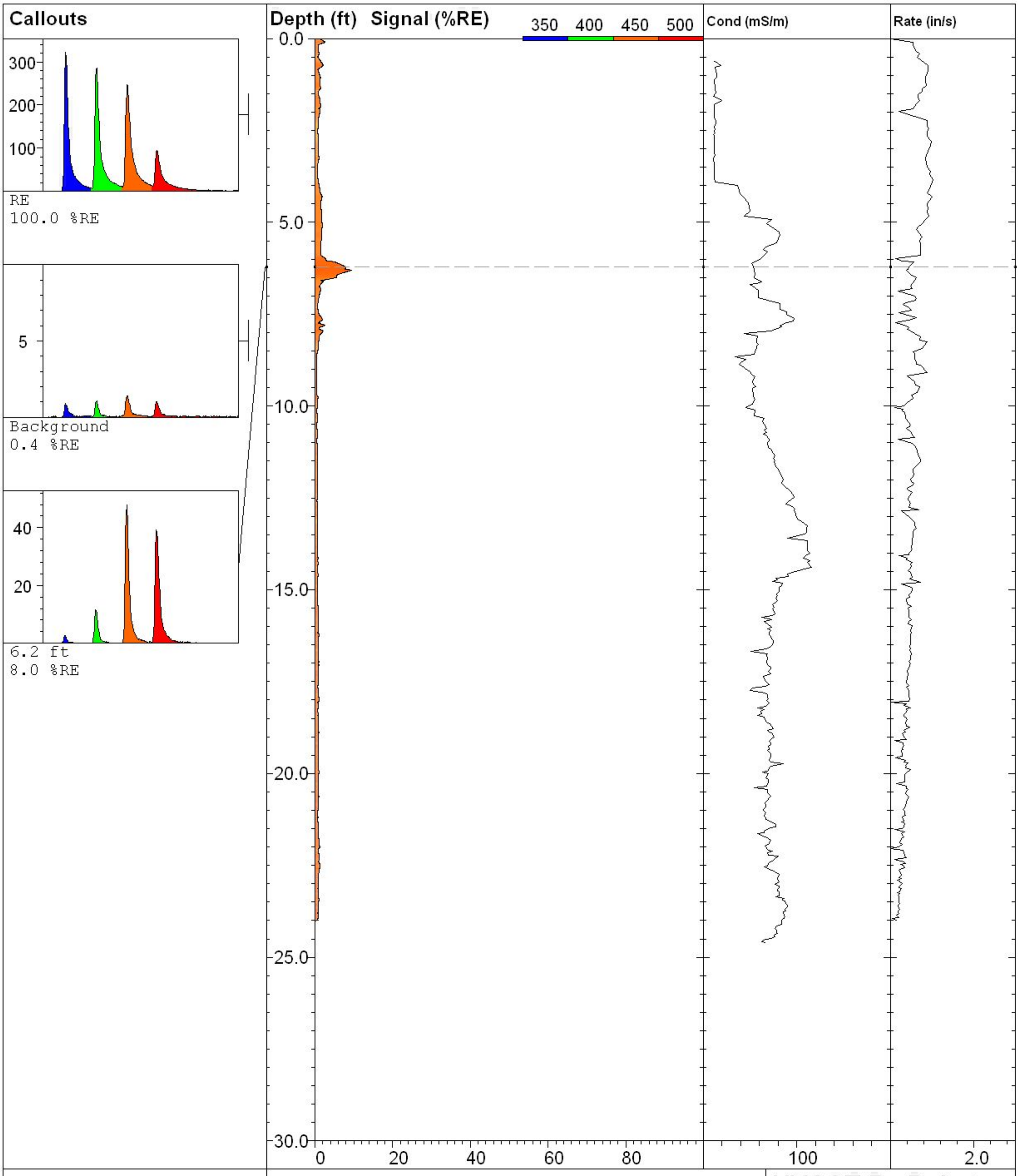
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **21.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **9.2 % @ 16.78 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-17 13:46 CDT**



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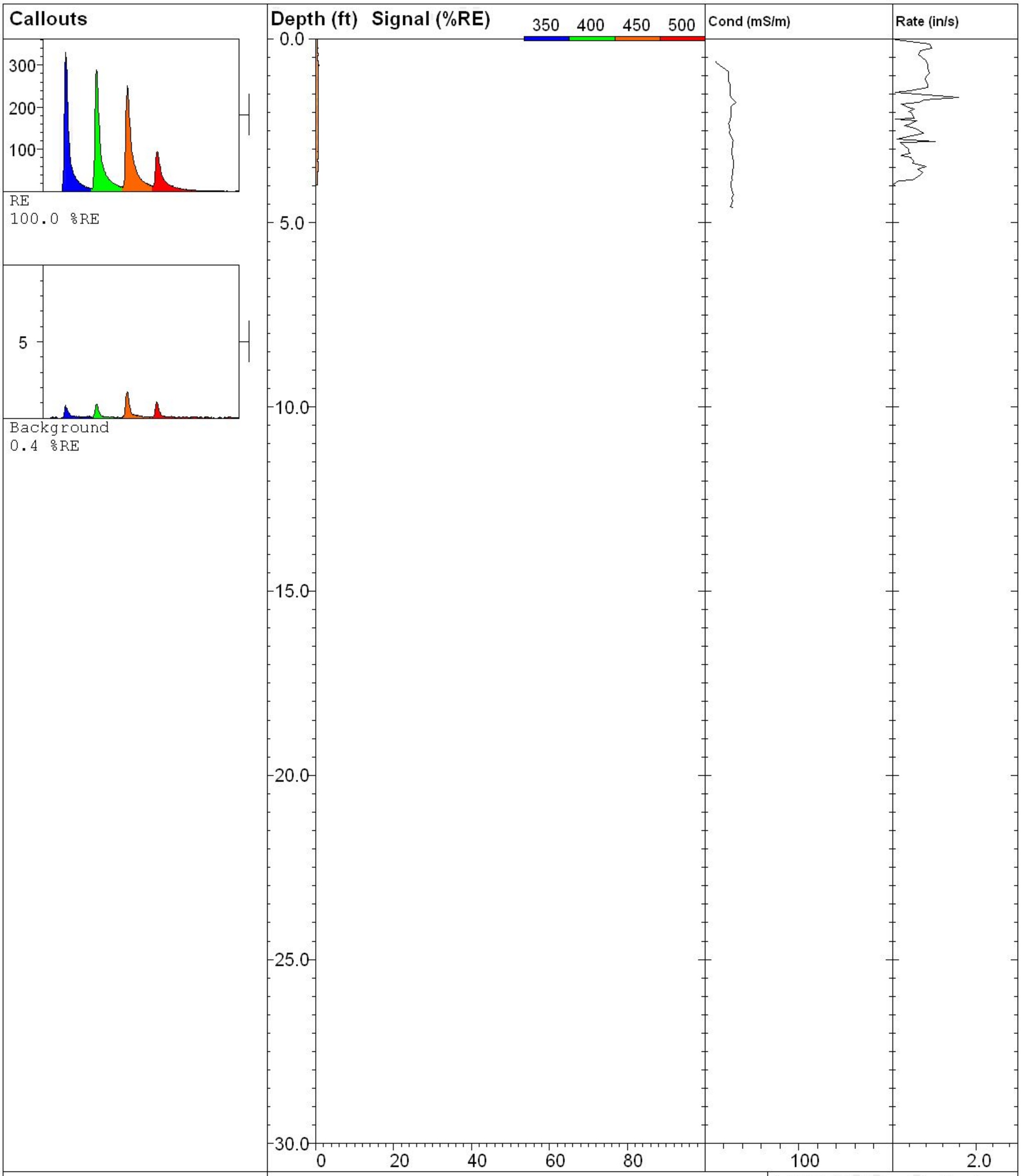
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **24.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **9.4 % @ 6.30 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-17 14:35 CDT**



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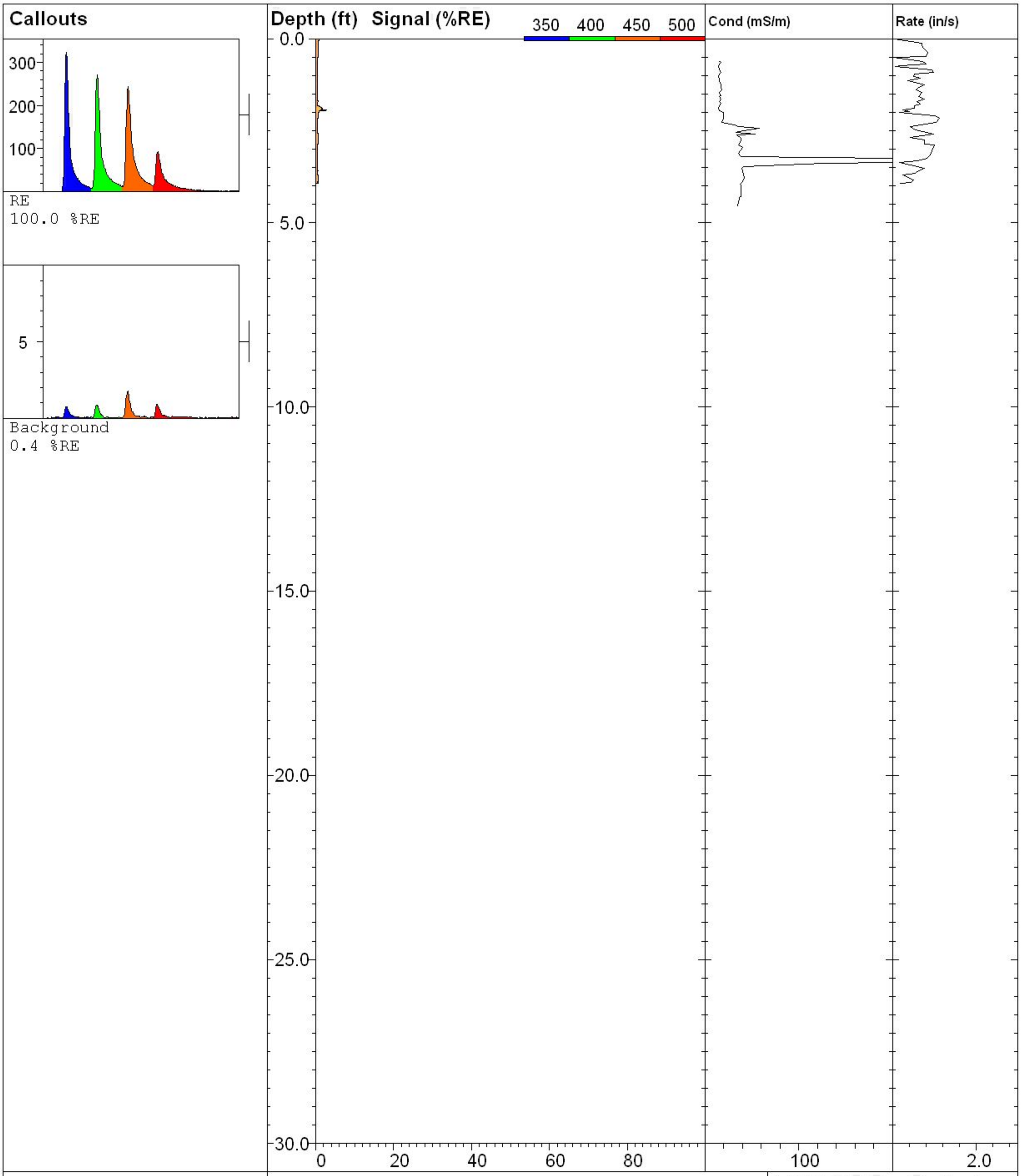
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **3.98 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **0.7 % @ 0.72 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-17 15:29 CDT**



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LIF-12-039

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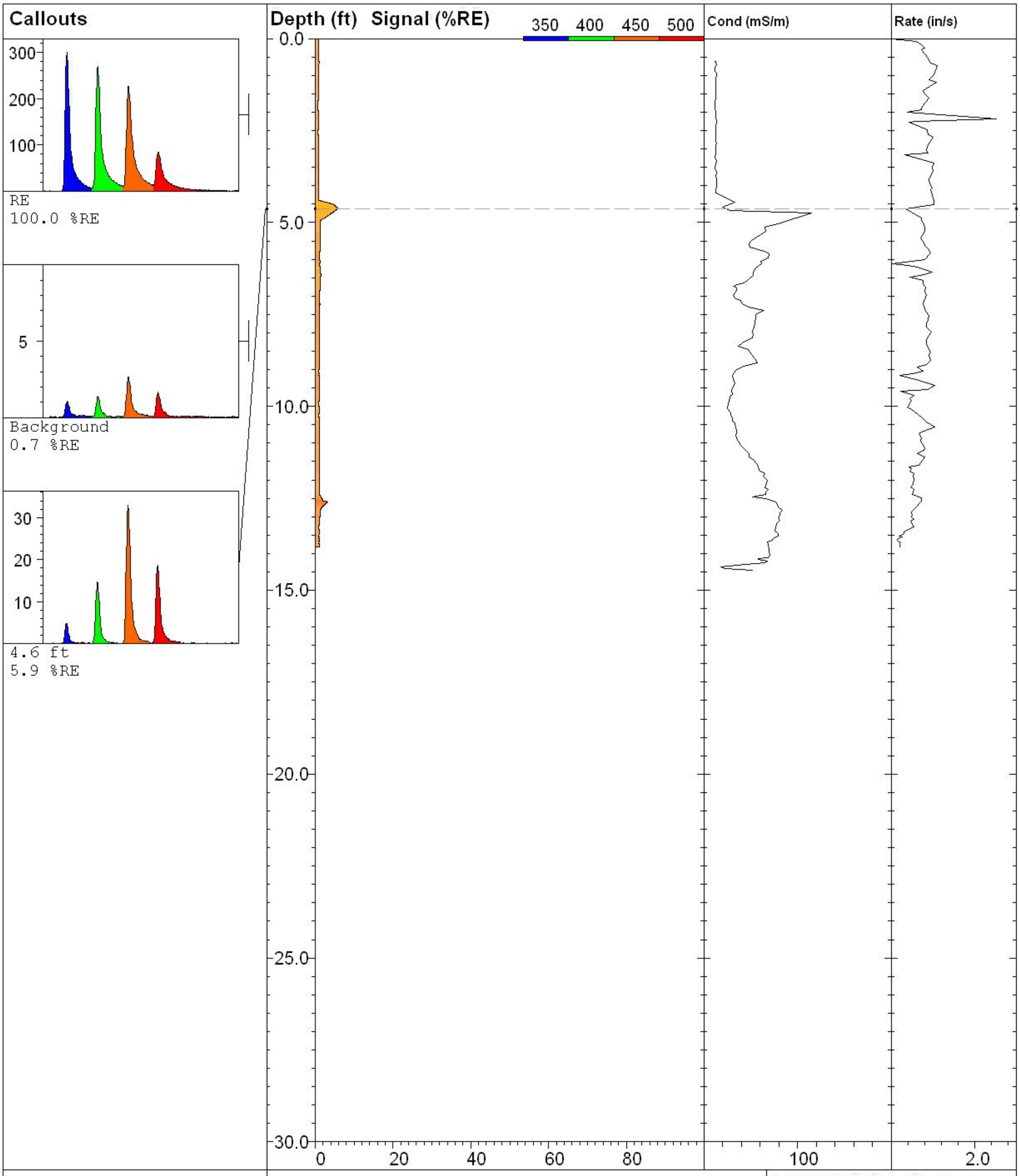
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **3.93 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **2.8 % @ 1.94 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-18 07:11 CDT**



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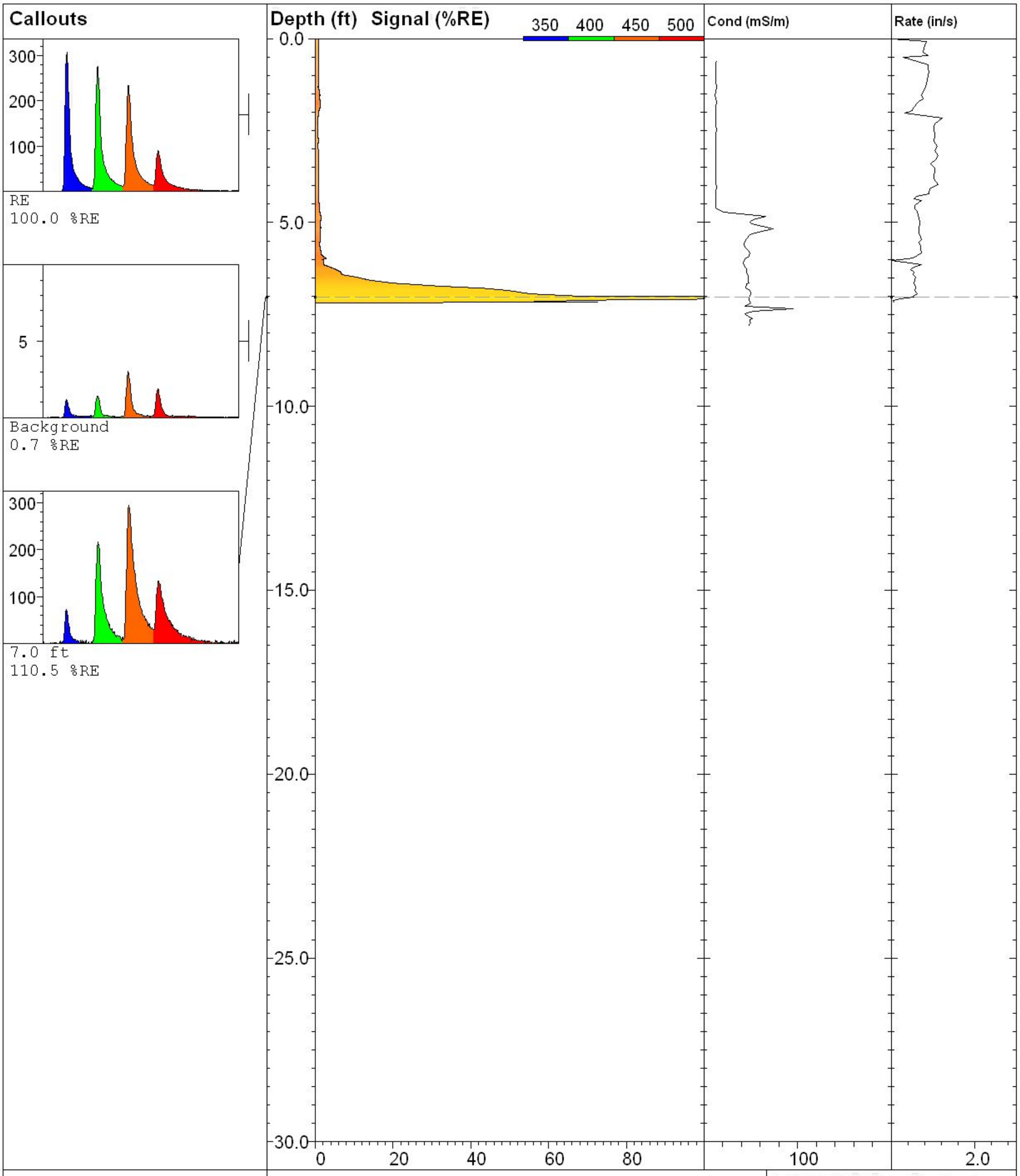
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **13.82 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **5.9 % @ 4.62 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-20 10:42 CDT**



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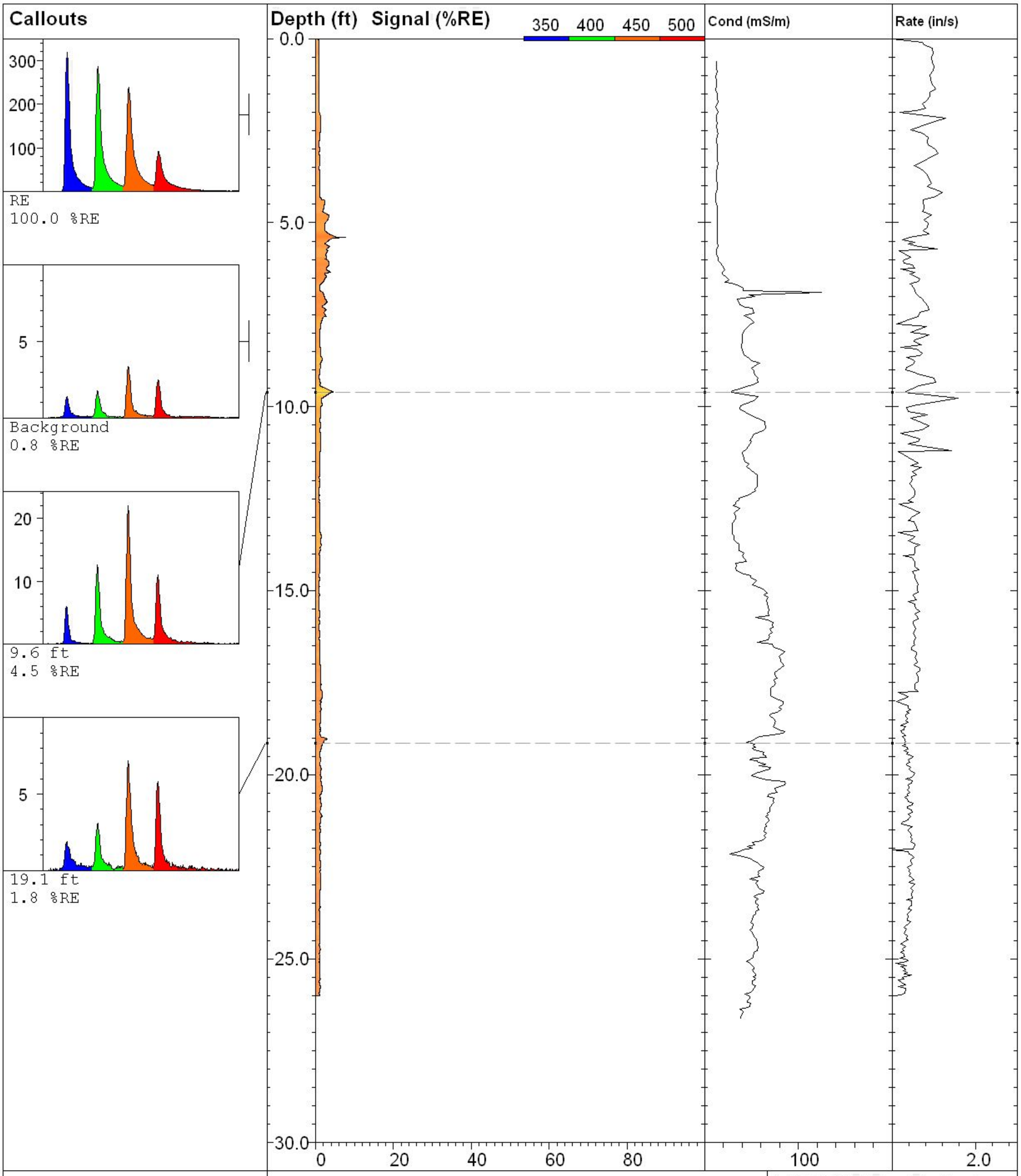
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **7.18 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **127.3 % @ 7.02 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-20 13:29 CDT**



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LIF-12-042

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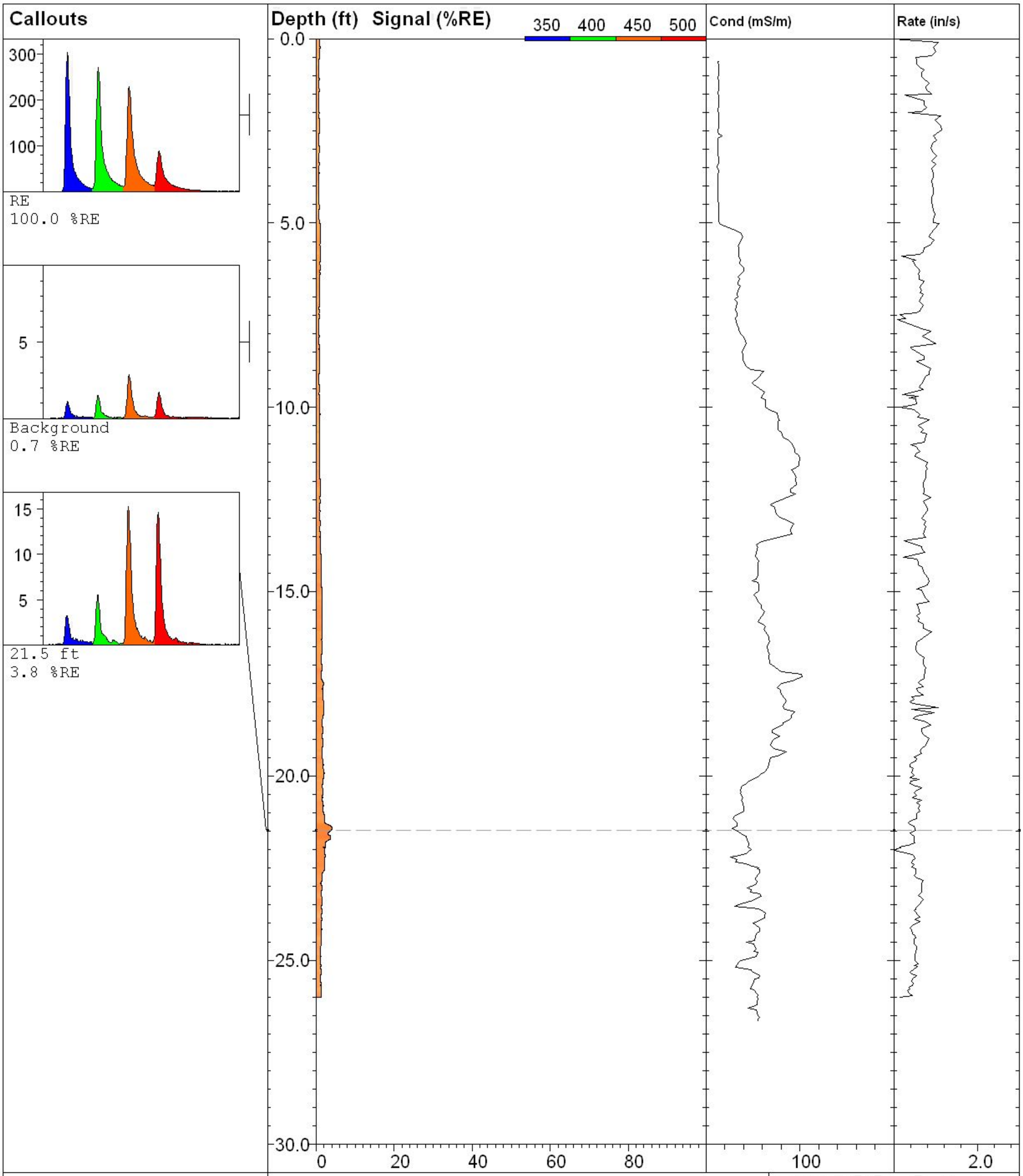
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **7.8 % @ 5.41 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-20 15:14 CDT**



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LIF-12-043

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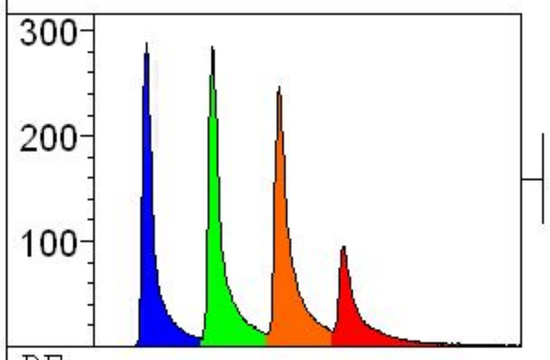
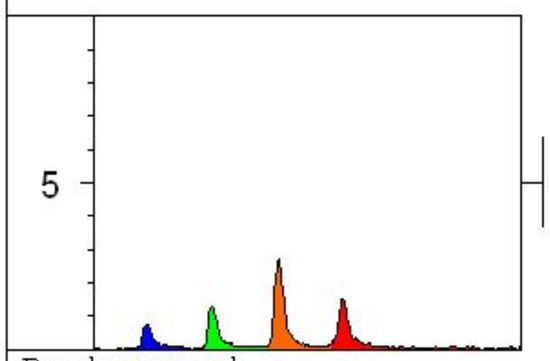
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **4.1 % @ 21.42 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-20 16:01 CDT**

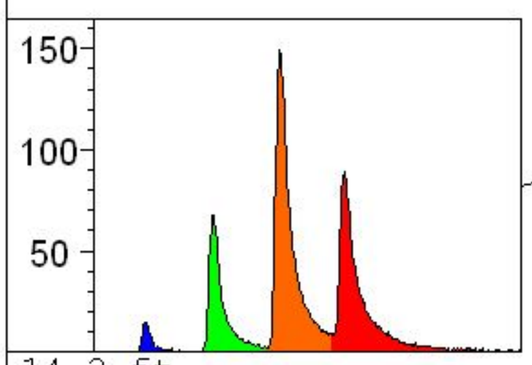
Callouts



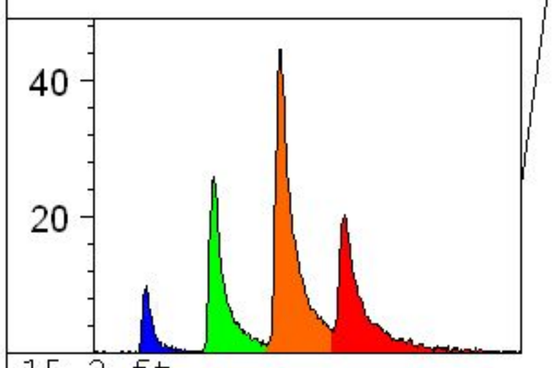
RE
100.0 %RE
HAND AUGERED 5 FT



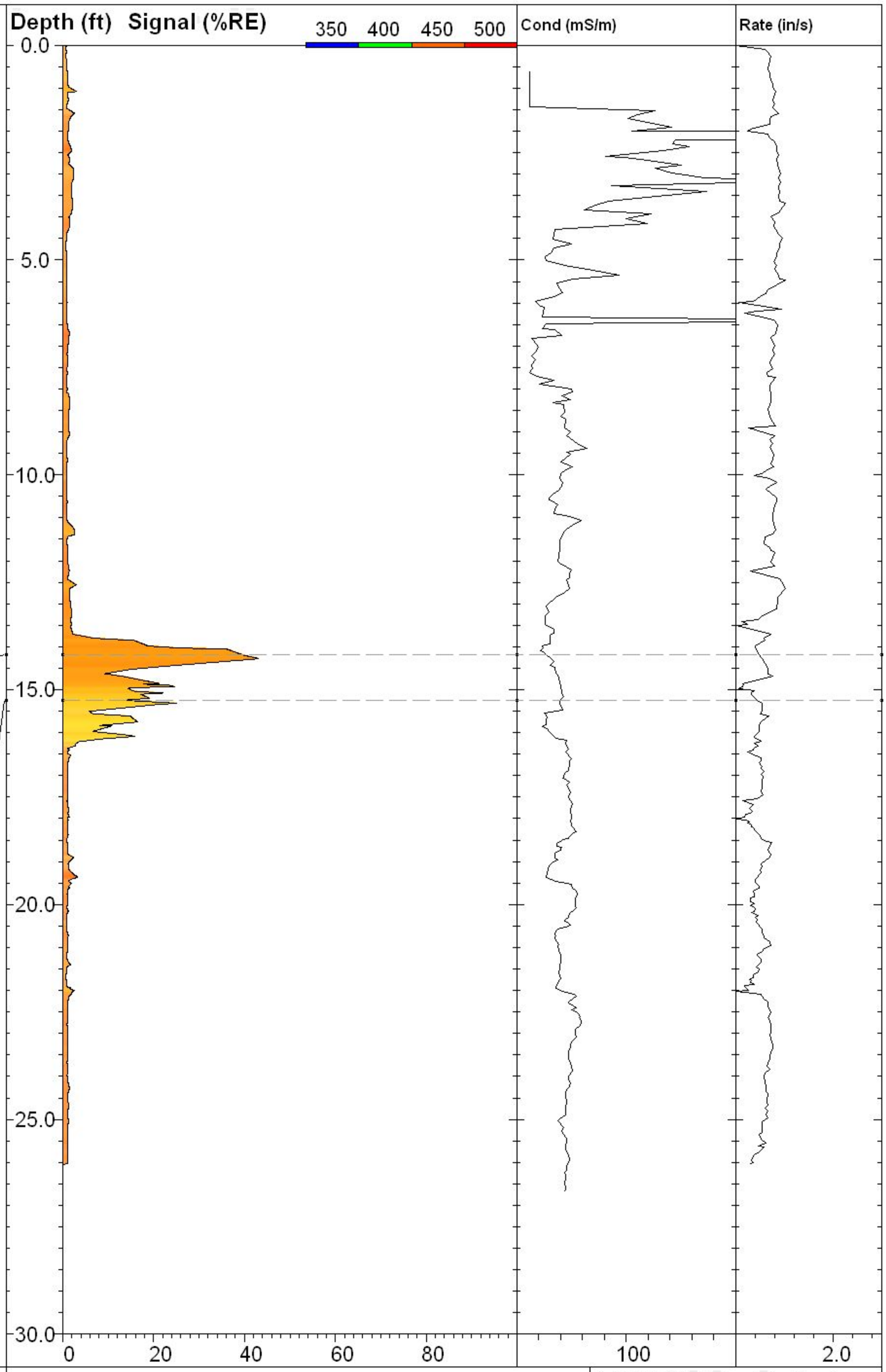
Background
0.6 %RE



14.2 ft
39.7 %RE



15.2 ft
13.3 %RE



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LIF-16-001

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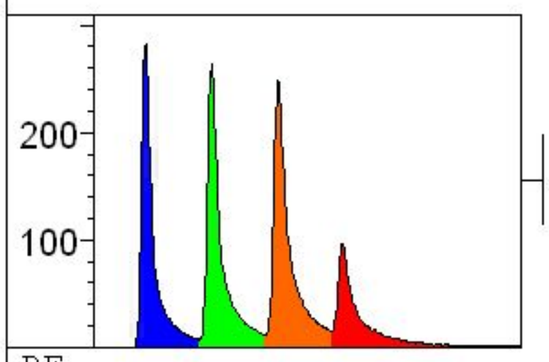
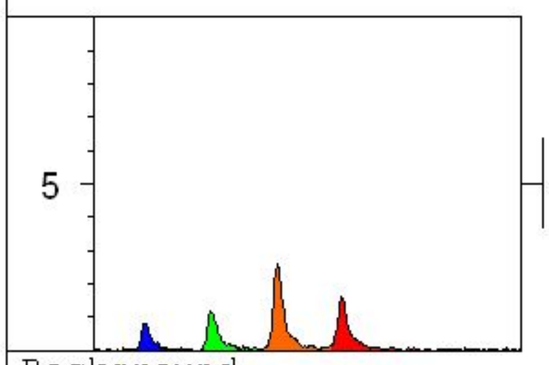
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.04 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **43.2 % @ 14.28 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-09 16:46 CDT**

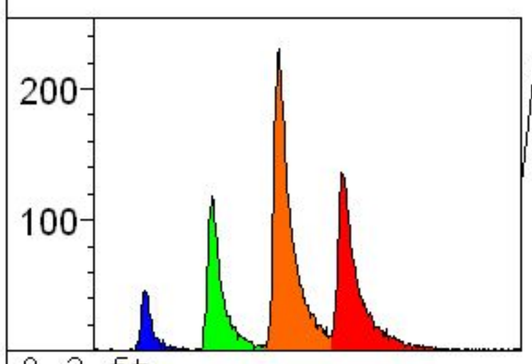
Callouts



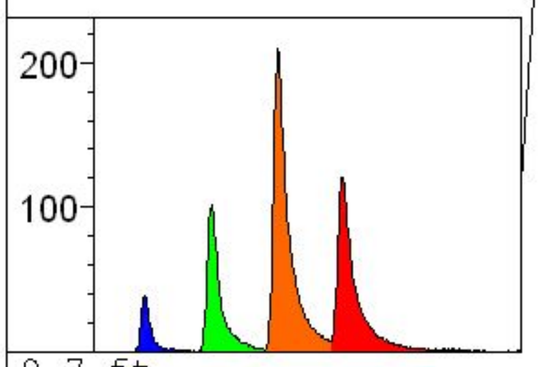
RE
100.0 %RE
HAND AUGERED 5 FT



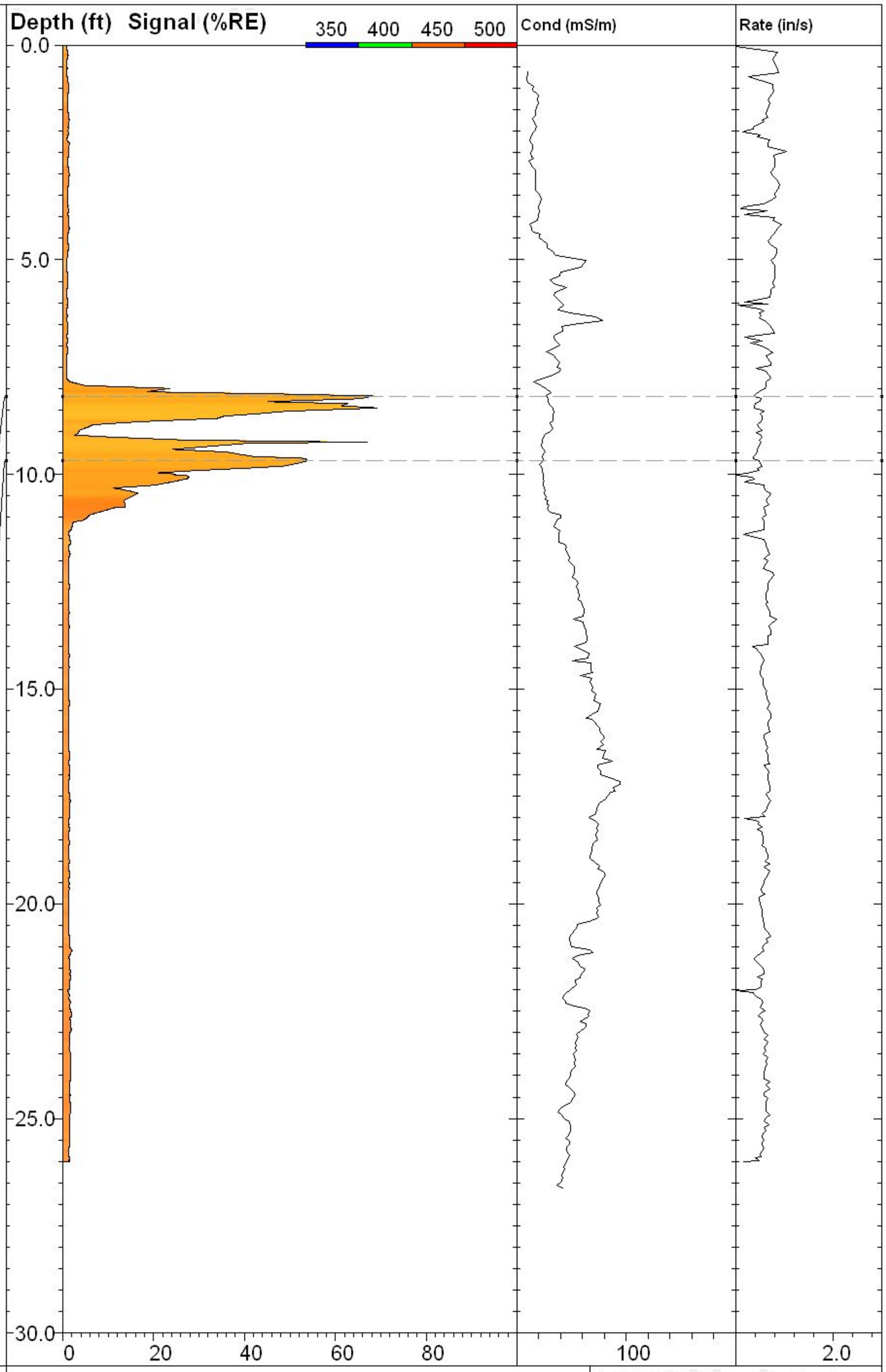
Background
0.6 %RE



8.2 ft
68.6 %RE



9.7 ft
54.0 %RE



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LIF-16-002

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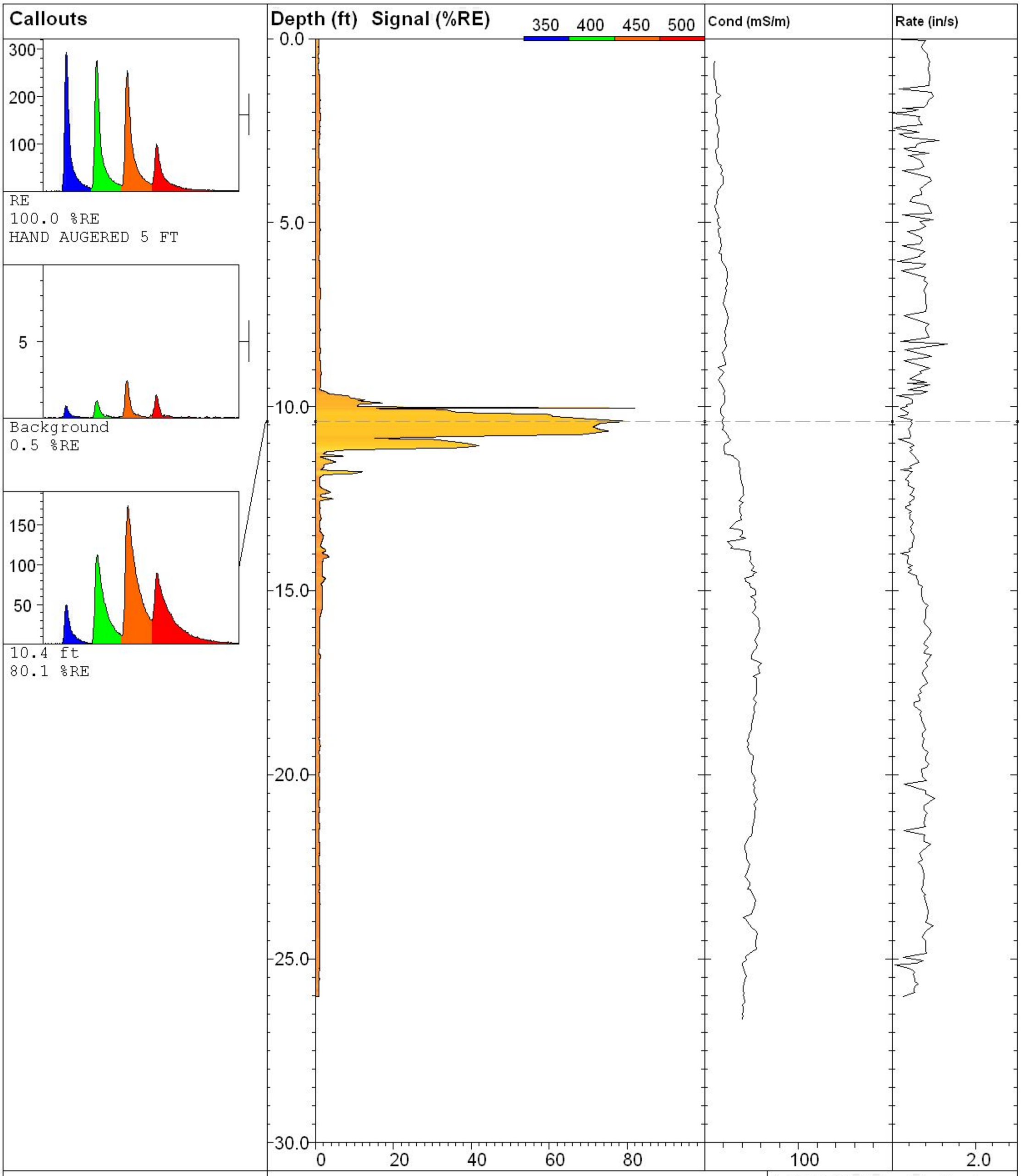
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **69.5 % @ 8.45 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-10 07:14 CDT**



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LIF-16-003

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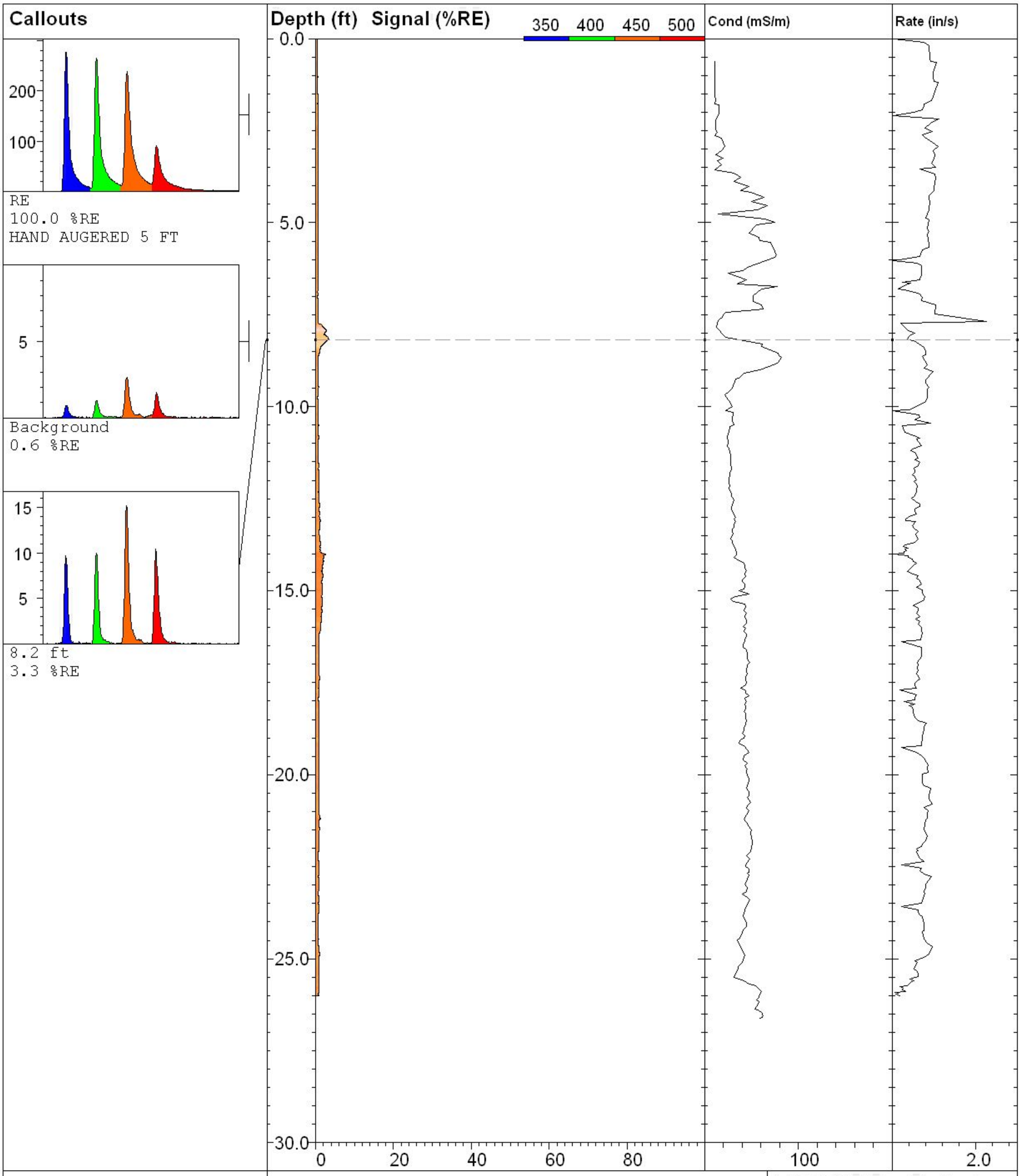
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.02 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **98.6 % @ 10.03 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-10 07:46 CDT**



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LIF-16-004

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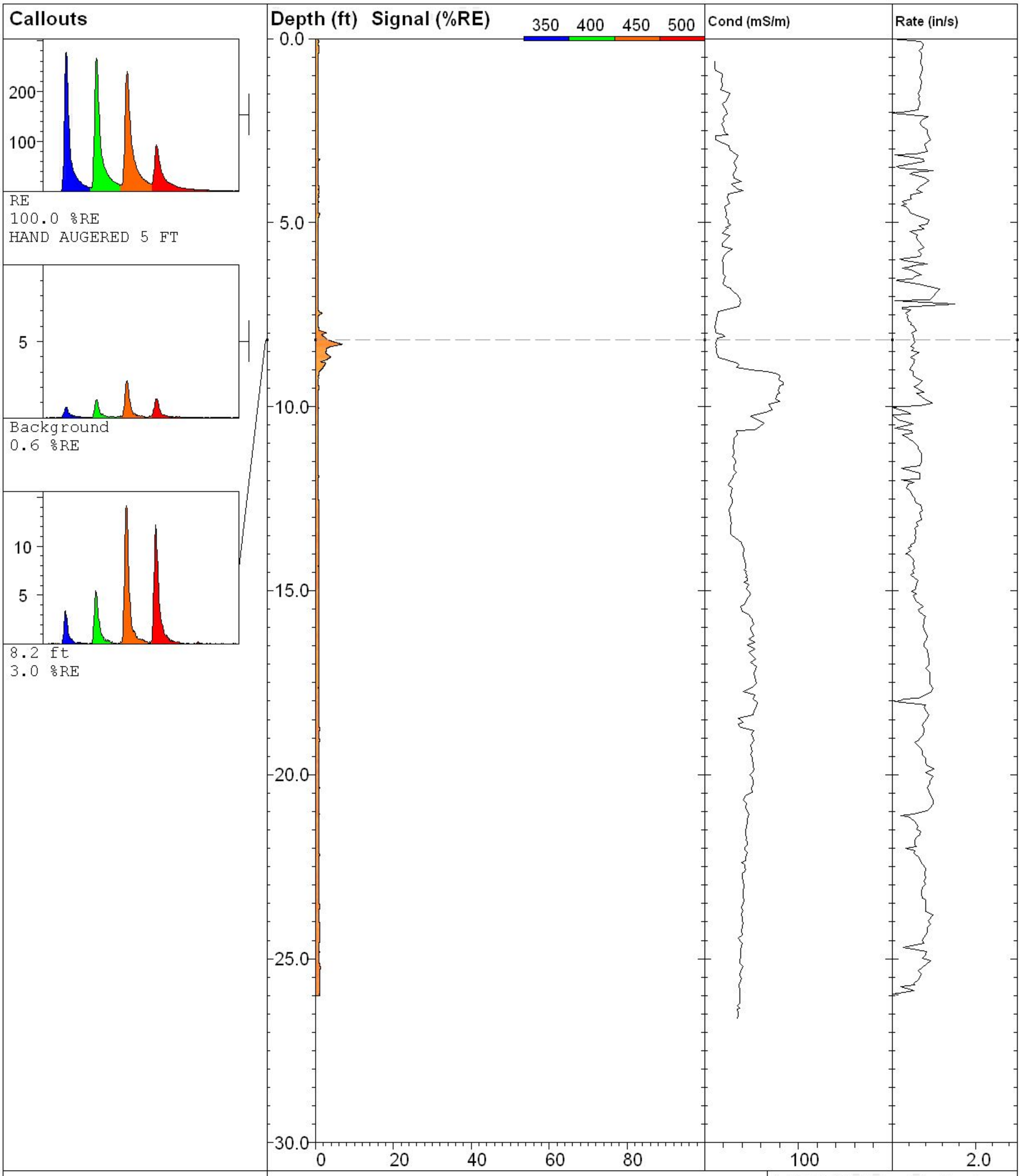
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **3.3 % @ 8.17 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-10 08:32 CDT**



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LIF-16-005

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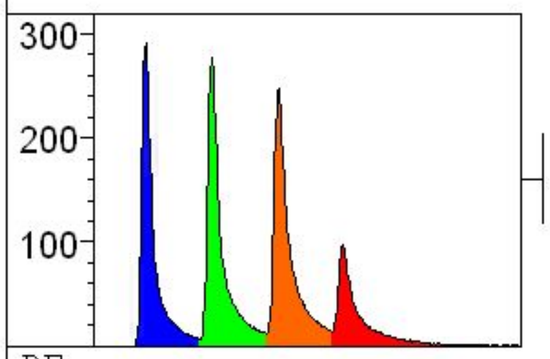
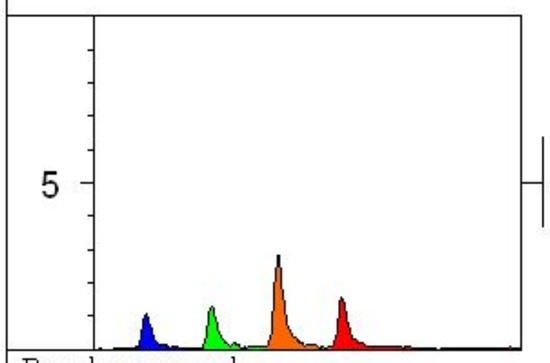
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **6.9 % @ 8.31 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-10 09:06 CDT**

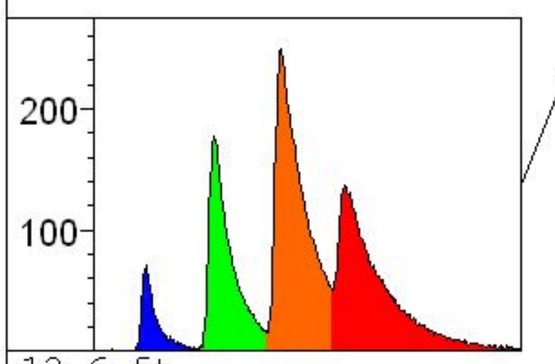
Callouts



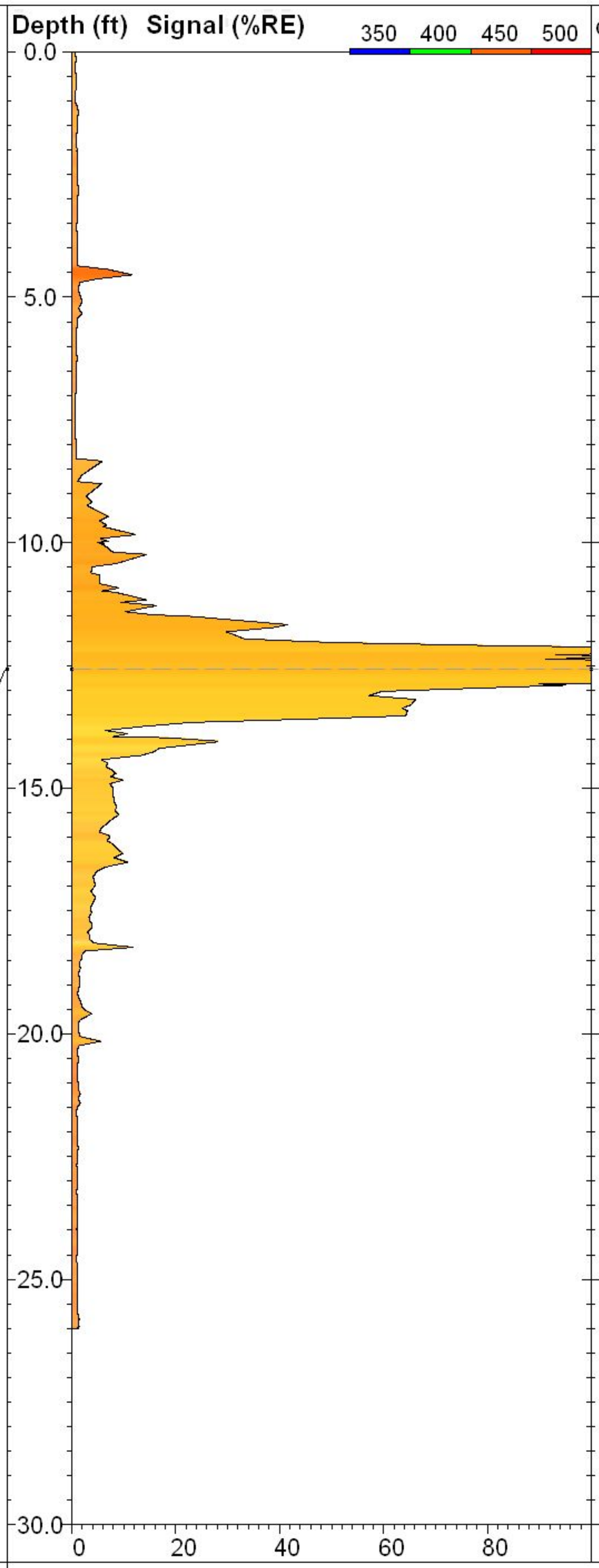
RE
100.0 %RE
HAND AUGERED 5 FT

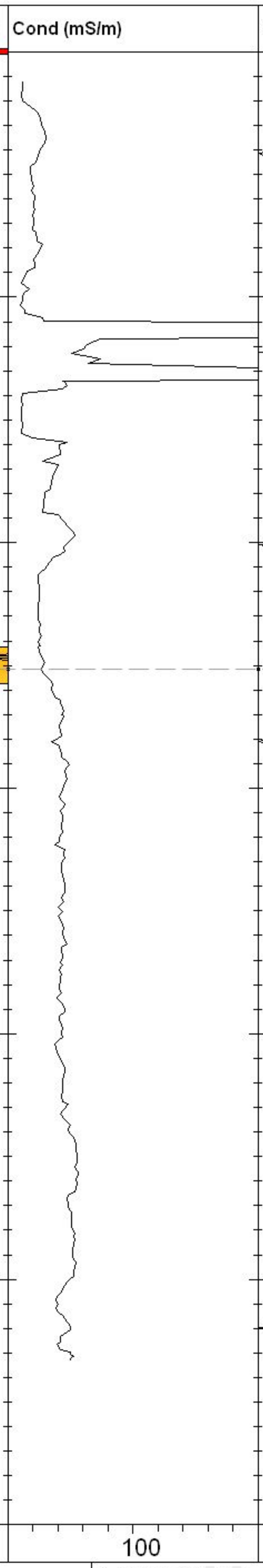


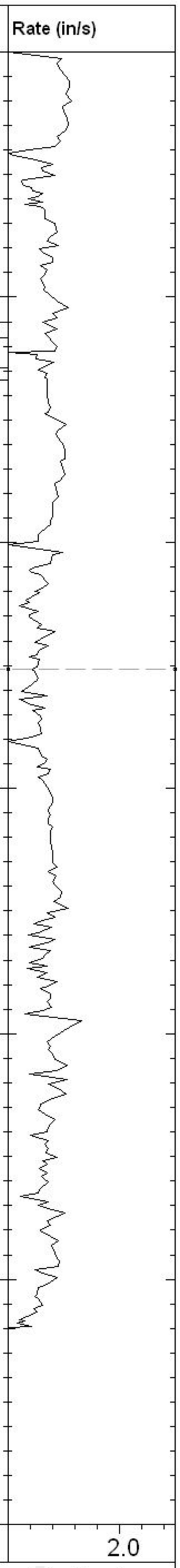
Background
0.6 %RE



12.6 ft
131.6 %RE







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LIF-16-006

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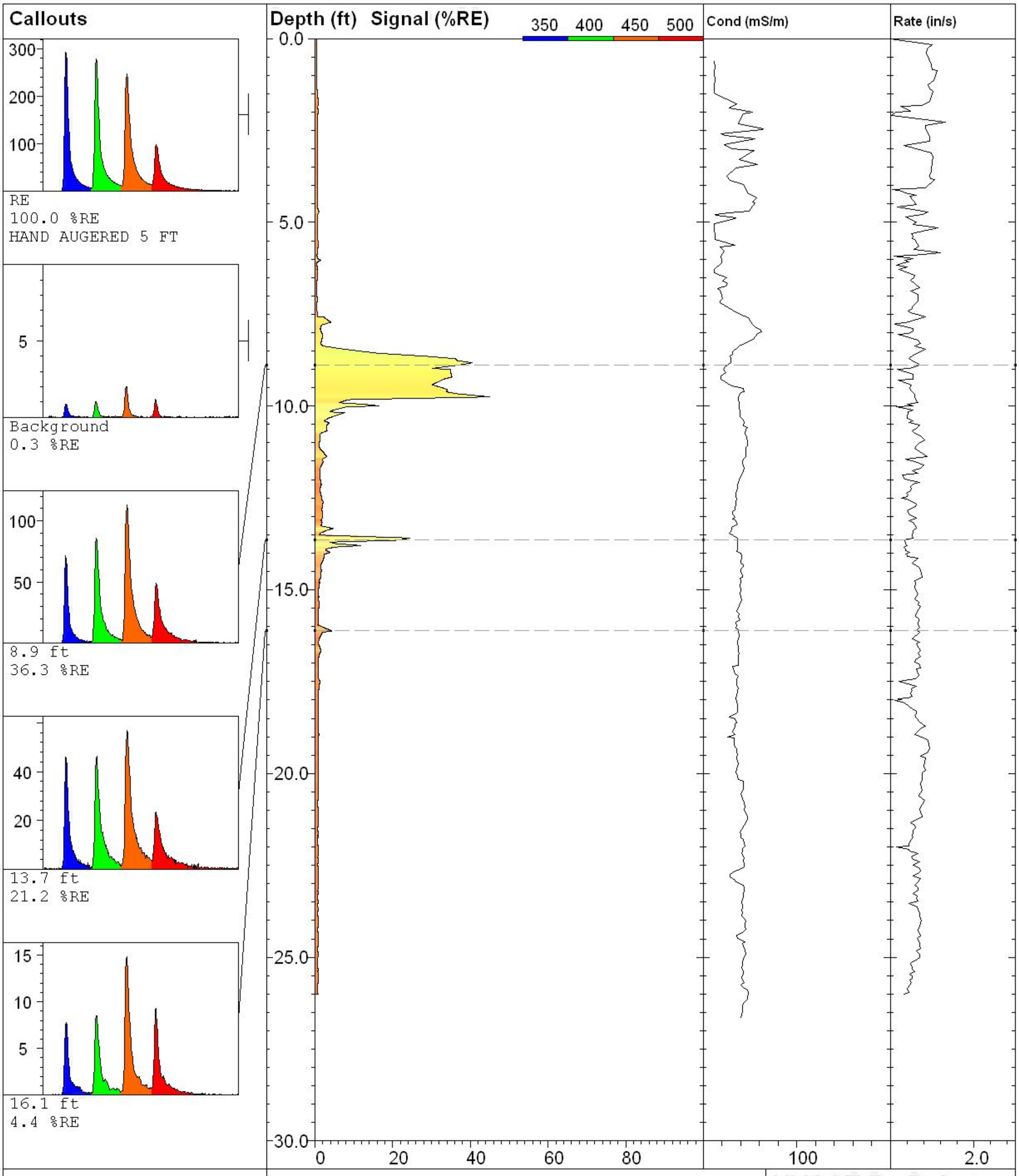
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **196.3 % @ 12.53 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-10 09:51 CDT**



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LIF-16-007

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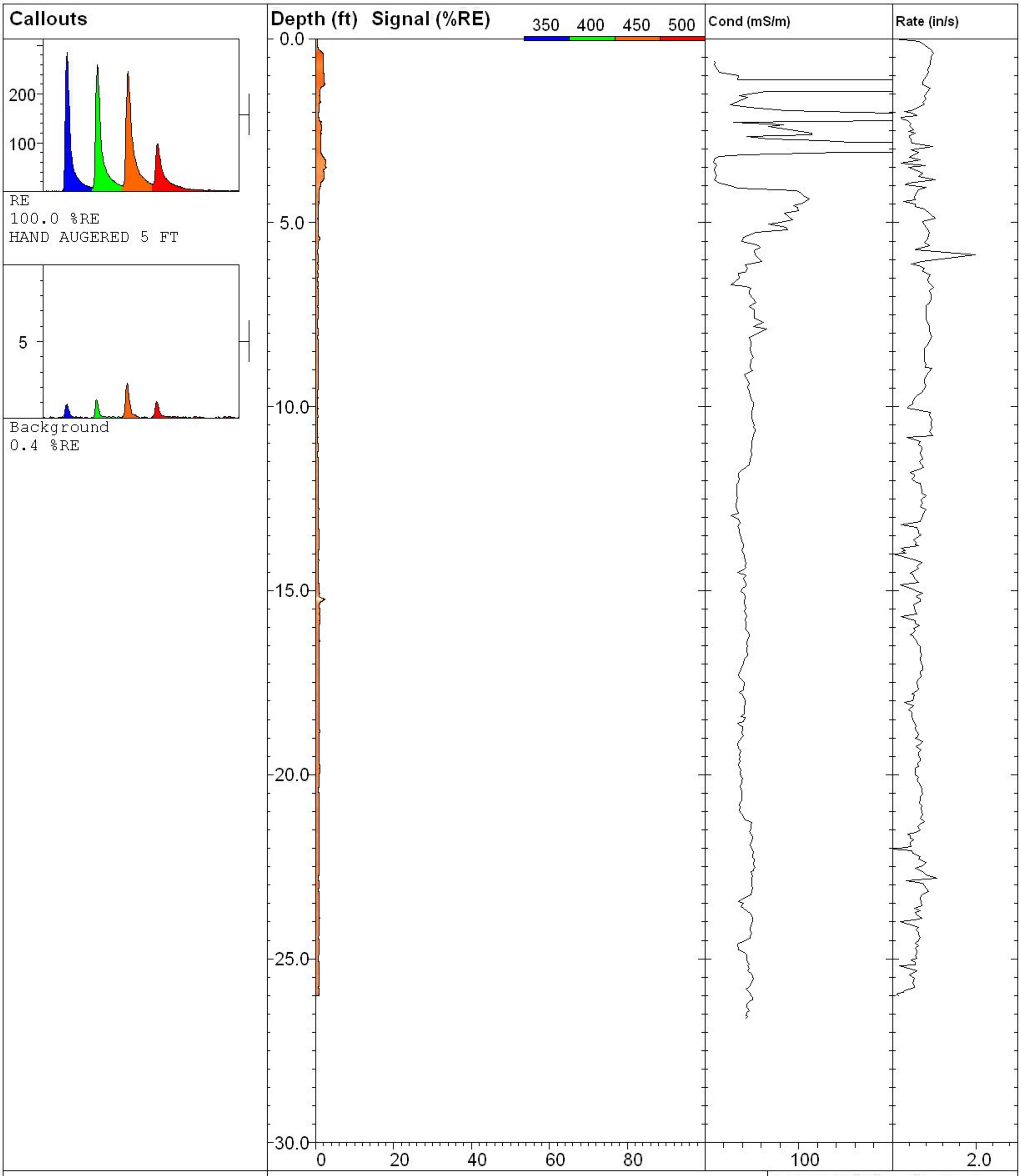
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **45.2 % @ 9.75 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-14 15:05 CDT**



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LIF-16-008

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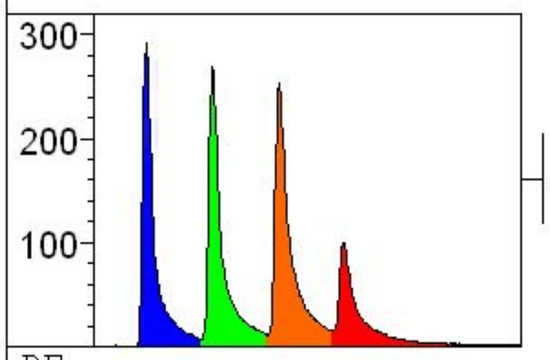
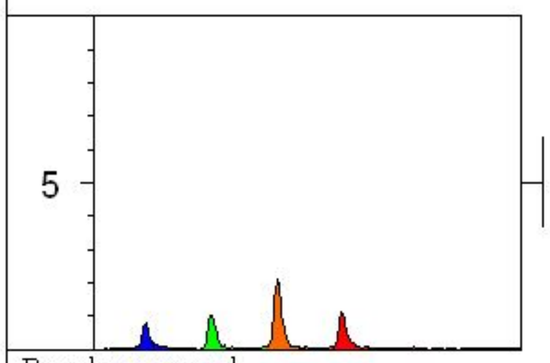
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **2.7 % @ 3.50 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-16 07:18 CDT**

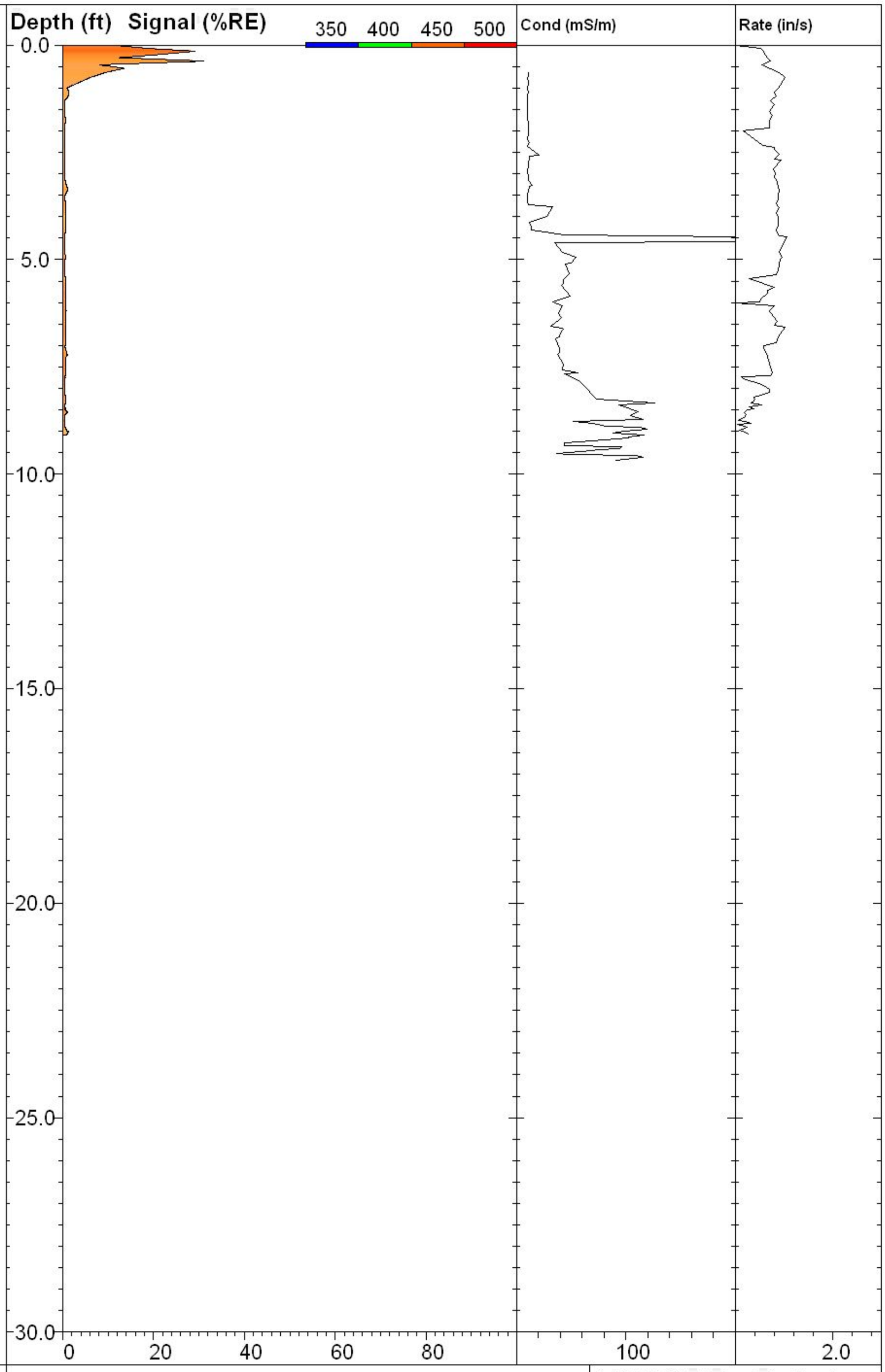
Callouts



RE
100.0 %RE
HAND AUGERED 5 FT



Background
0.4 %RE



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LIF-16-009

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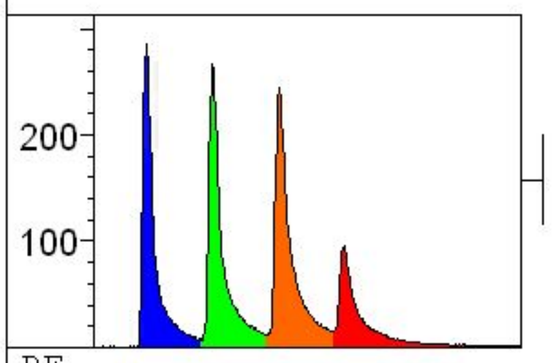
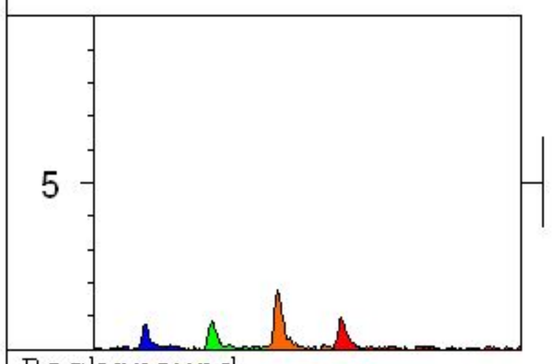
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **9.09 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **31.4 % @ 0.38 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-16 07:50 CDT**

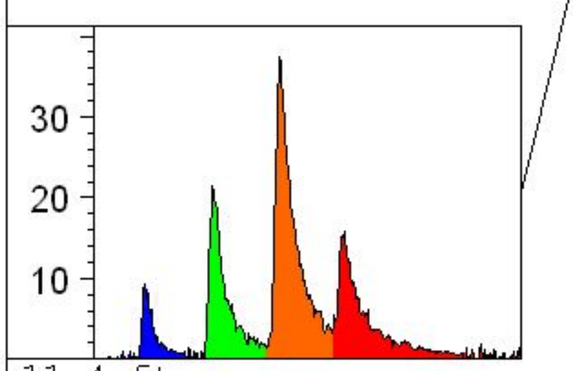
Callouts



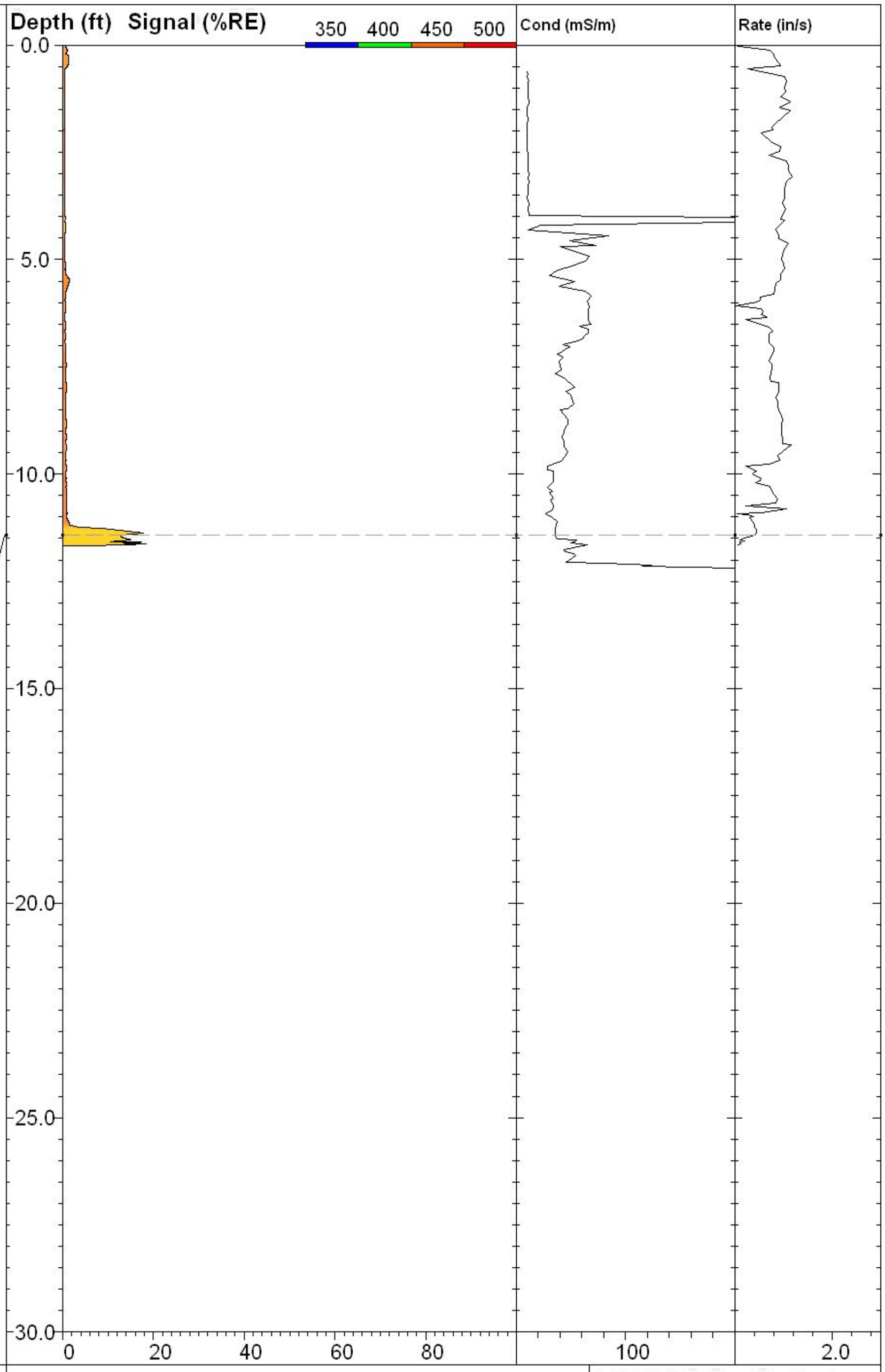
RE
100.0 %RE
HAND AUGERED 5 FT



Background
0.4 %RE



11.4 ft
12.8 %RE



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LIF-16-010

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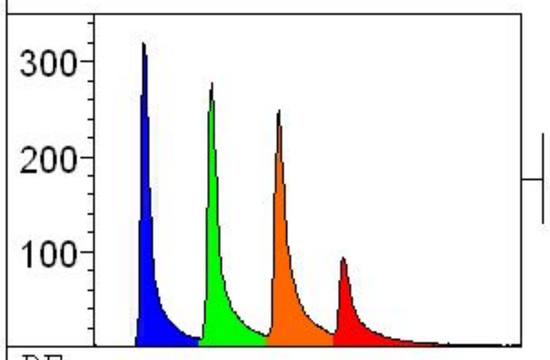
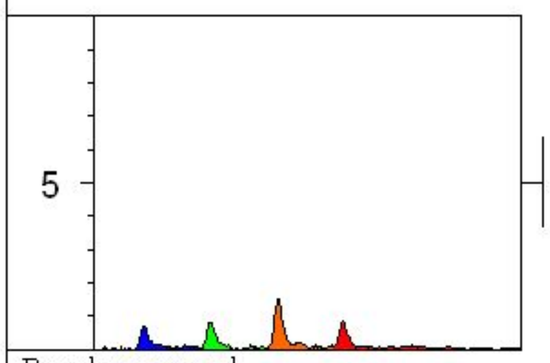
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **11.67 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **18.8 % @ 11.63 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-16 08:13 CDT**

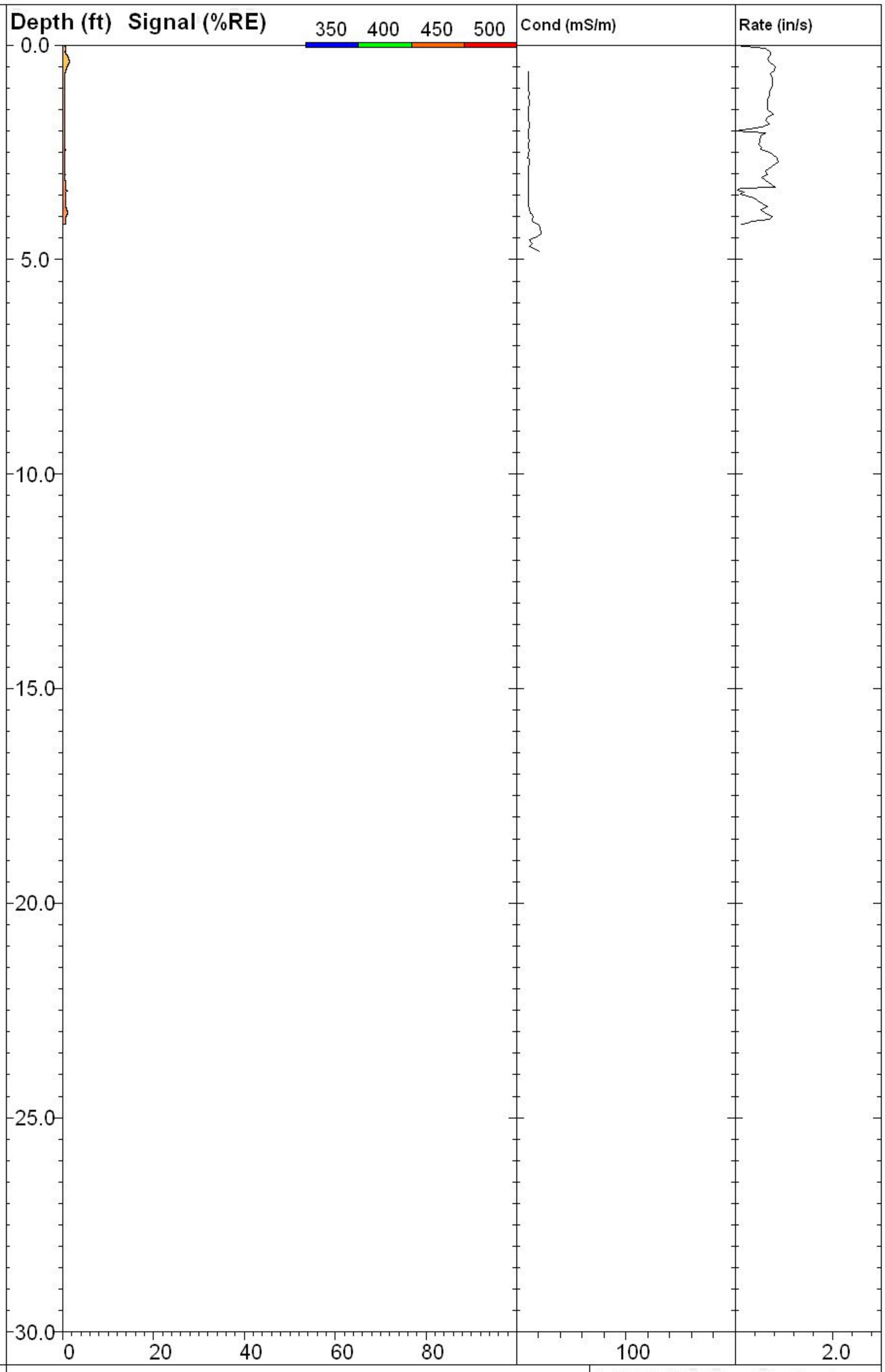
Callouts



RE
100.0 %RE
HAND AUGERED 5 FT



Background
0.4 %RE



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LIF-16-011

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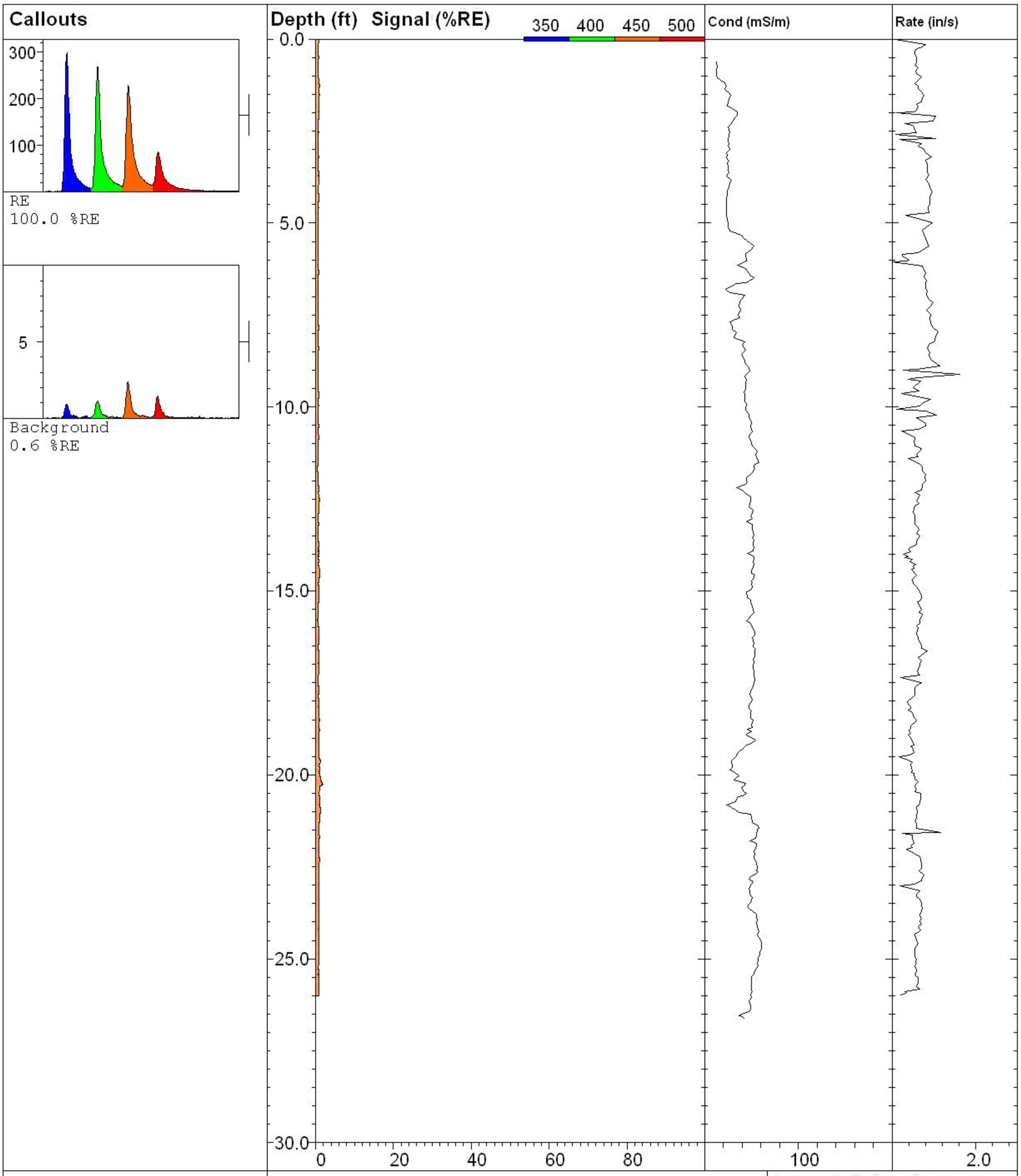
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **4.17 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **1.4 % @ 0.39 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-16 09:10 CDT**



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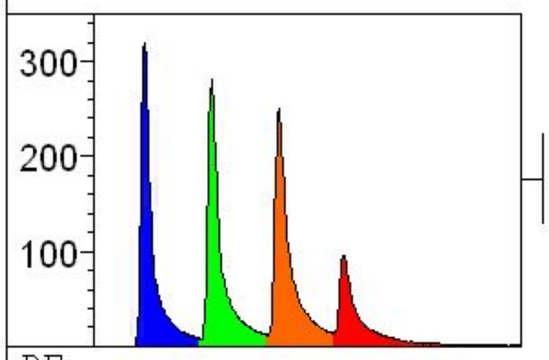
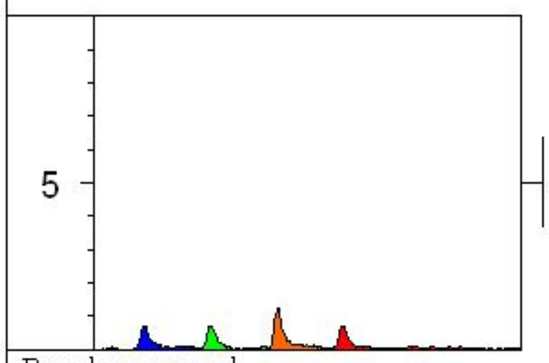
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **1.9 % @ 20.26 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-18 16:33 CDT**

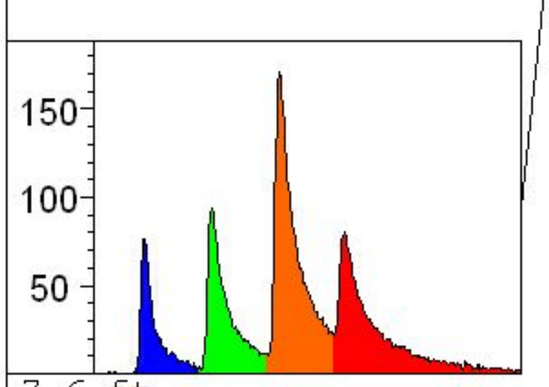
Callouts



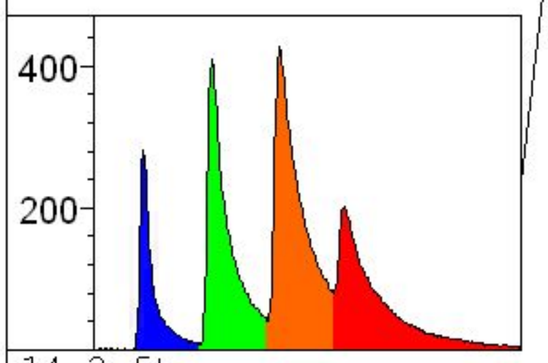
RE
100.0 %RE
HAND AUGERED 5 FT



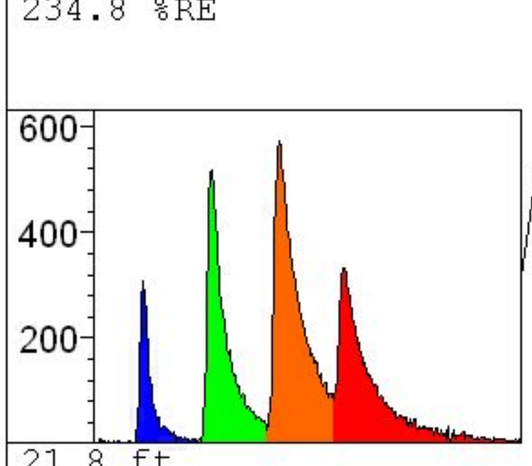
Background
0.3 %RE



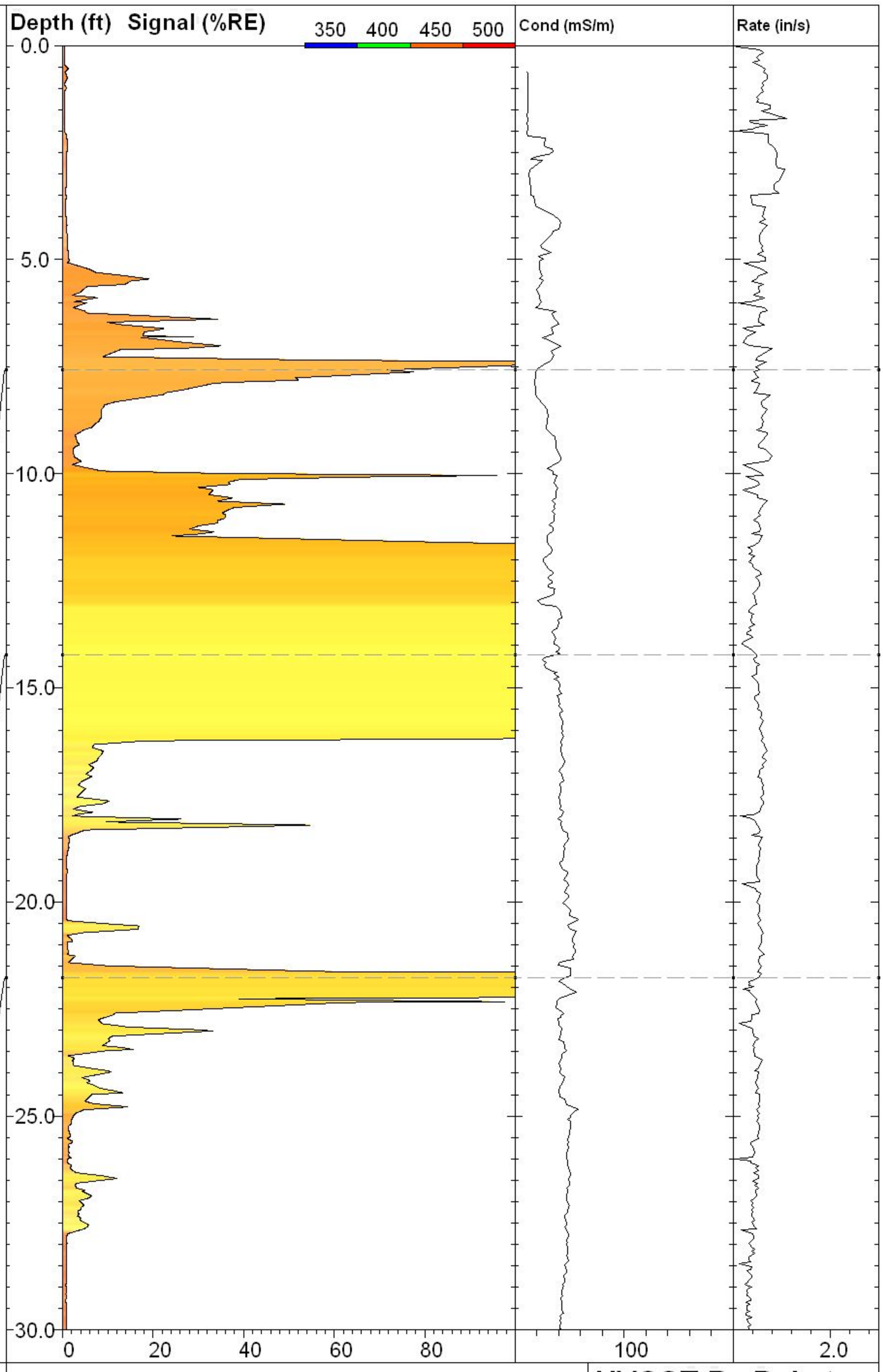
7.6 ft
71.4 %RE



14.2 ft
234.8 %RE



21.8 ft
284.1 %RE



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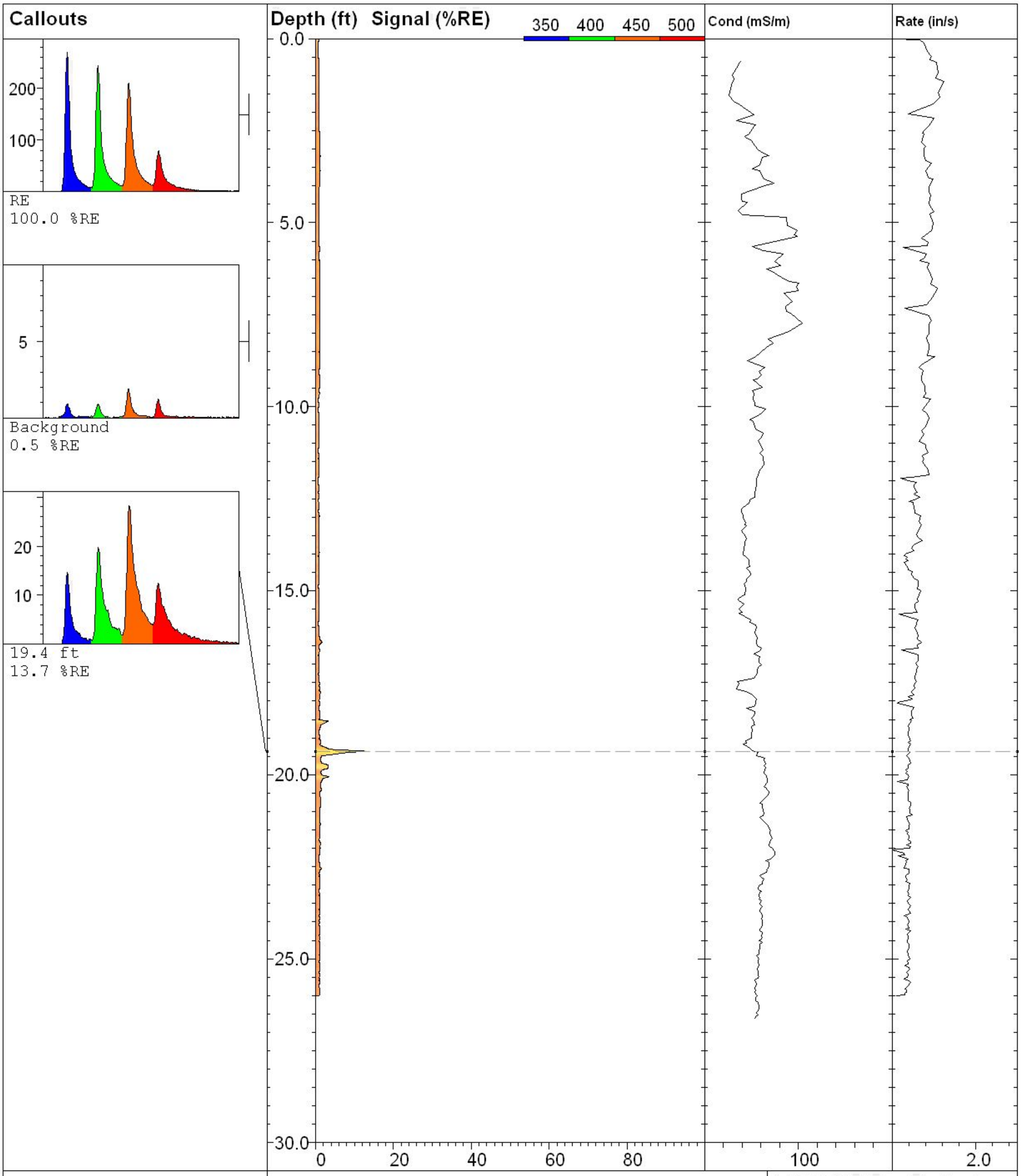
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **30.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **284.1 % @ 21.76 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-16 11:02 CDT**



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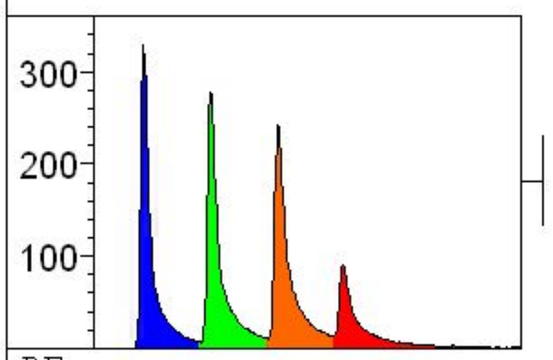
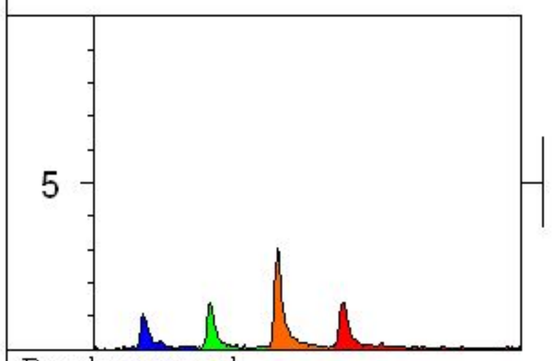
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **13.7 % @ 19.37 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-18 15:50 CDT**

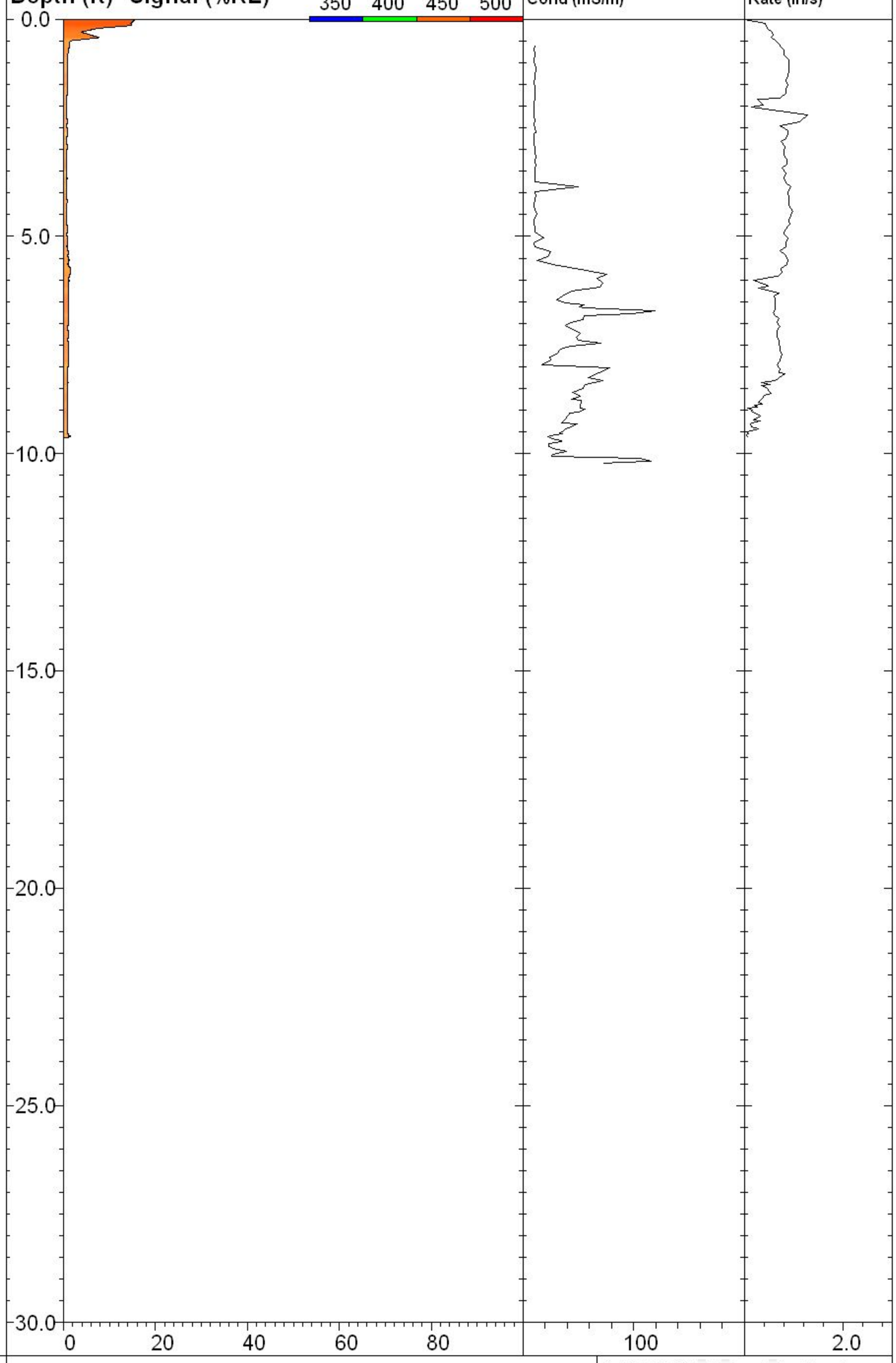
Callouts



RE
100.0 %RE



Background
0.6 %RE



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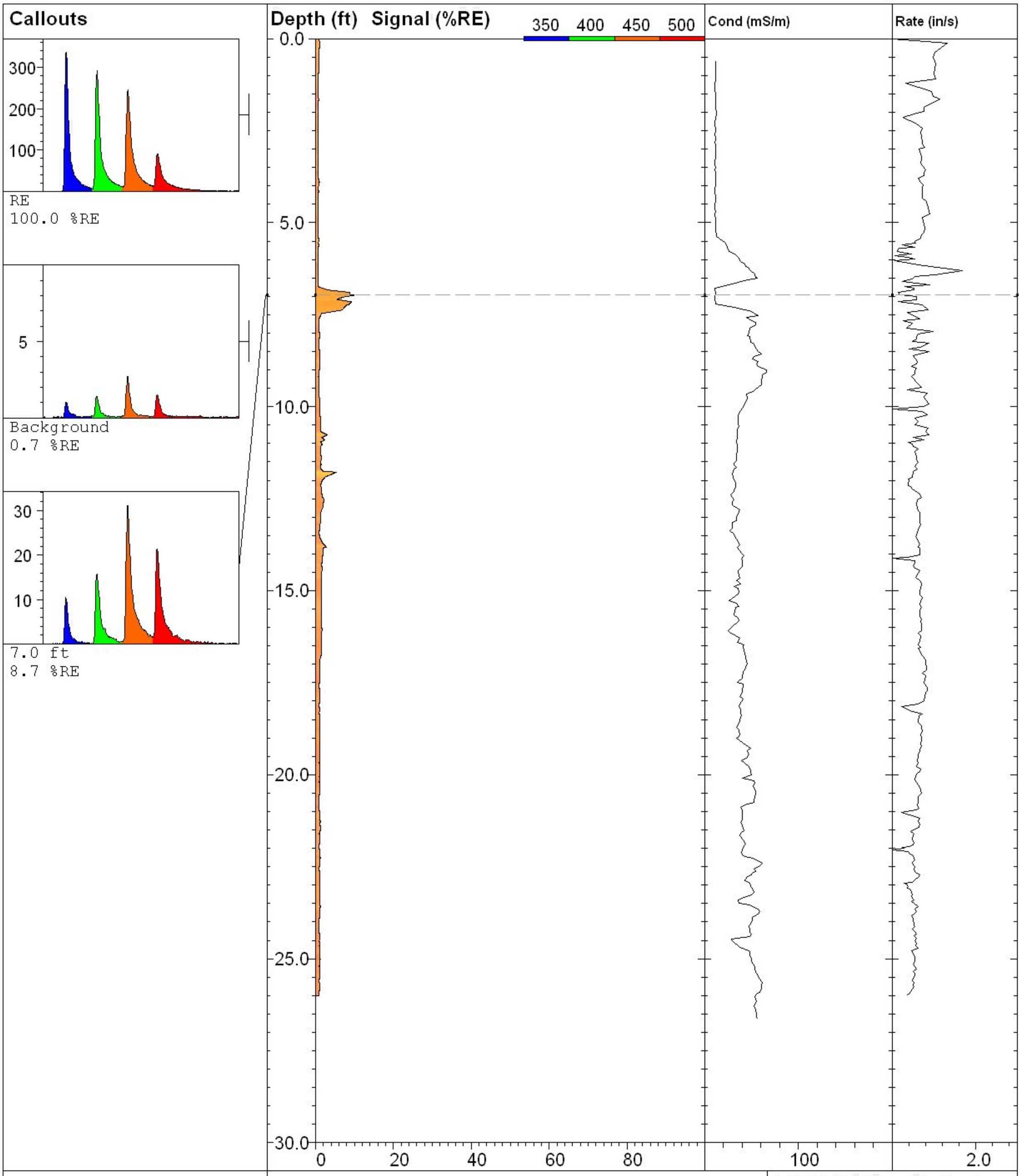
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **9.62 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **15.6 % @ 0.00 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-19 07:41 CDT**



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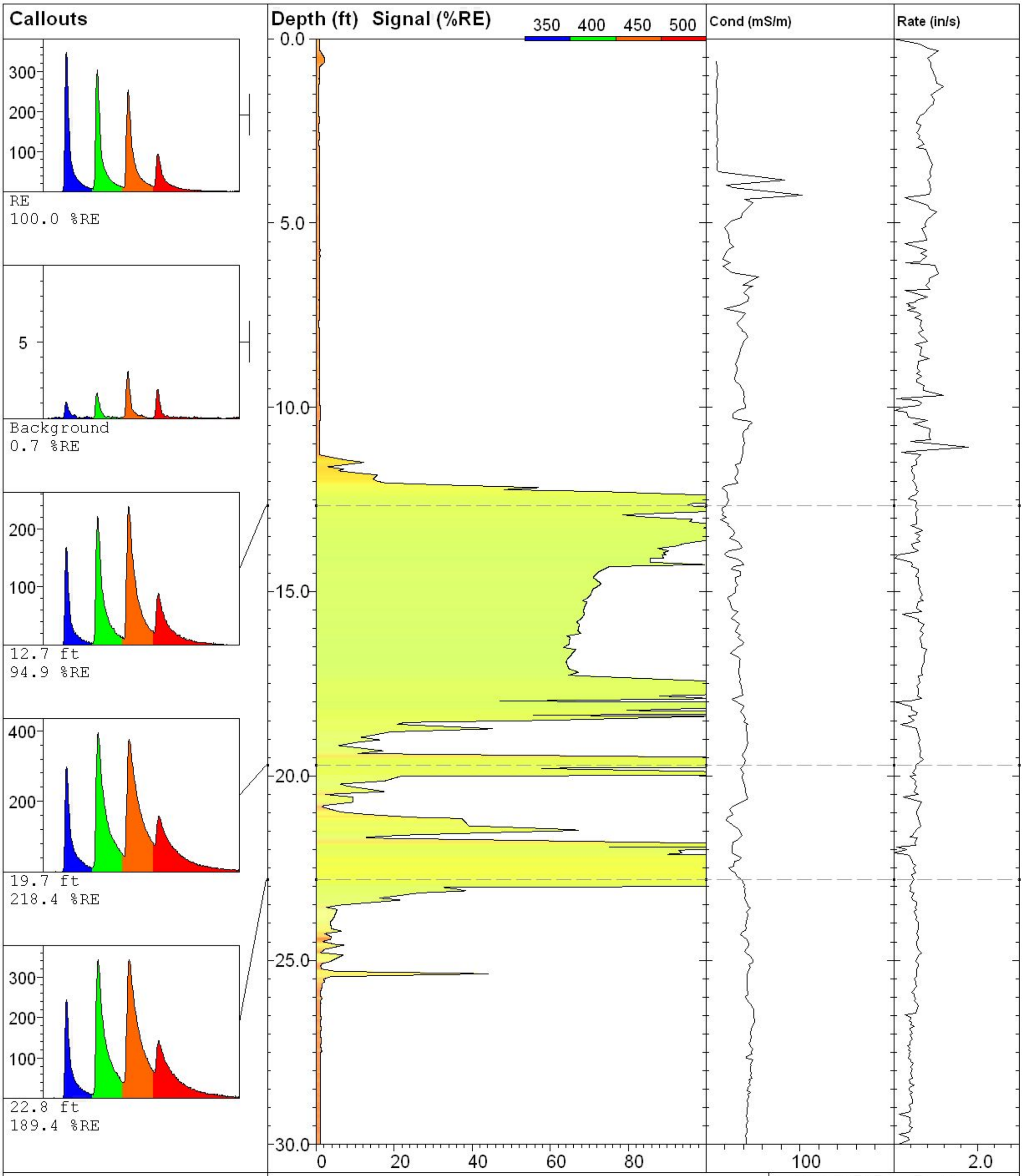
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **10.1 % @ 6.97 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-19 08:44 CDT**



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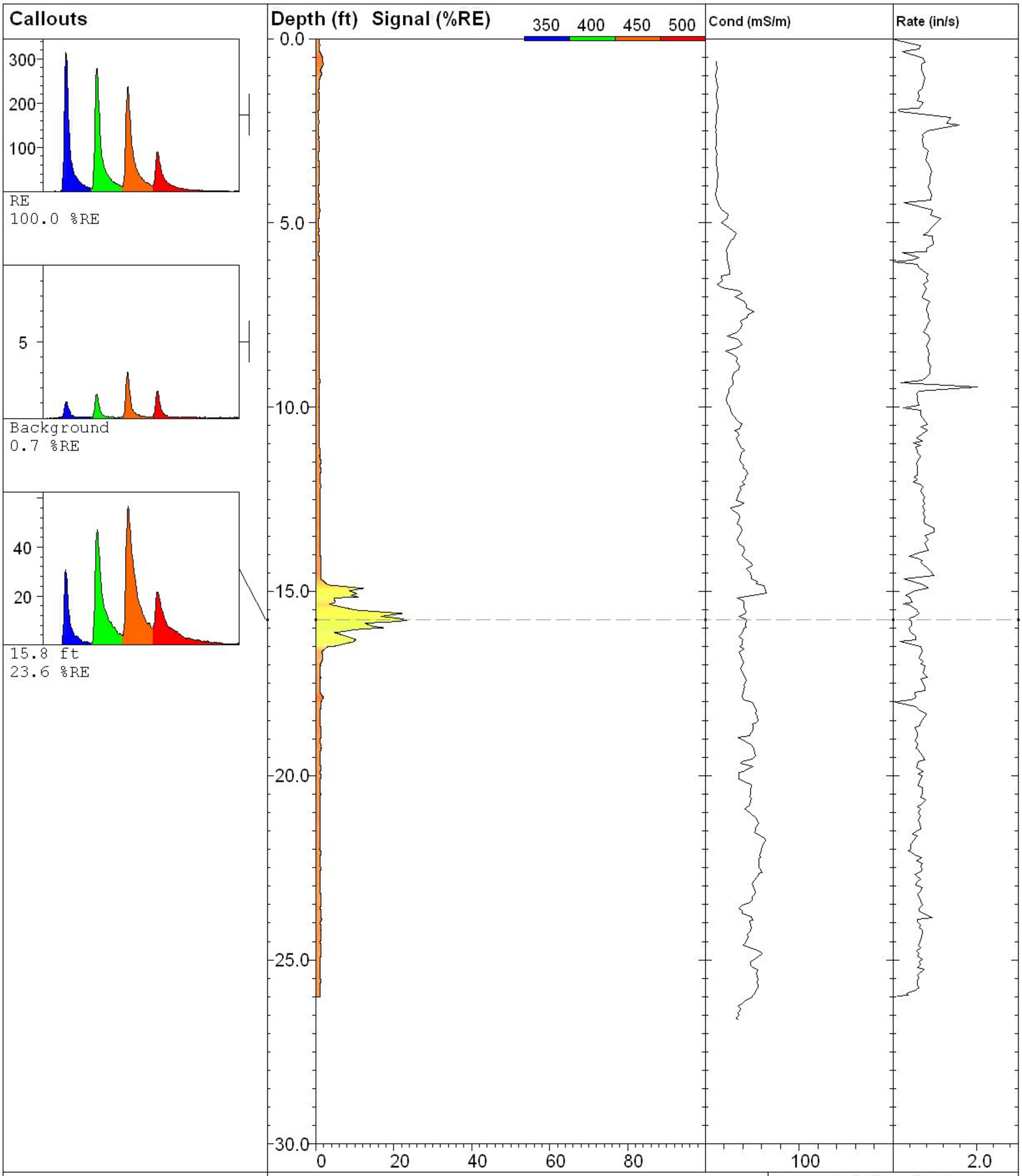
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **30.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **219.8 % @ 19.54 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-19 09:29 CDT**



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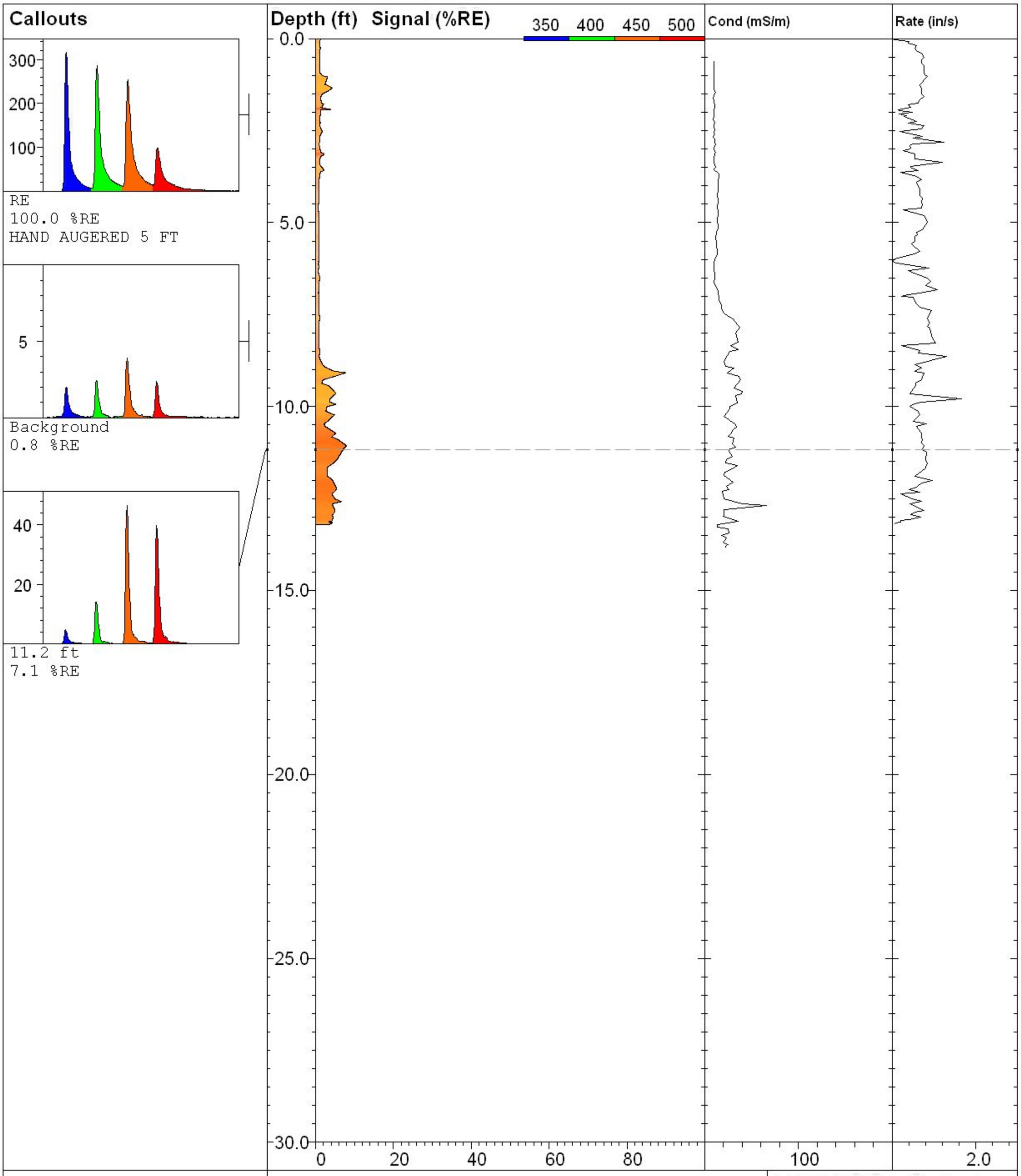
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **23.6 % @ 15.78 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-20 09:34 CDT**



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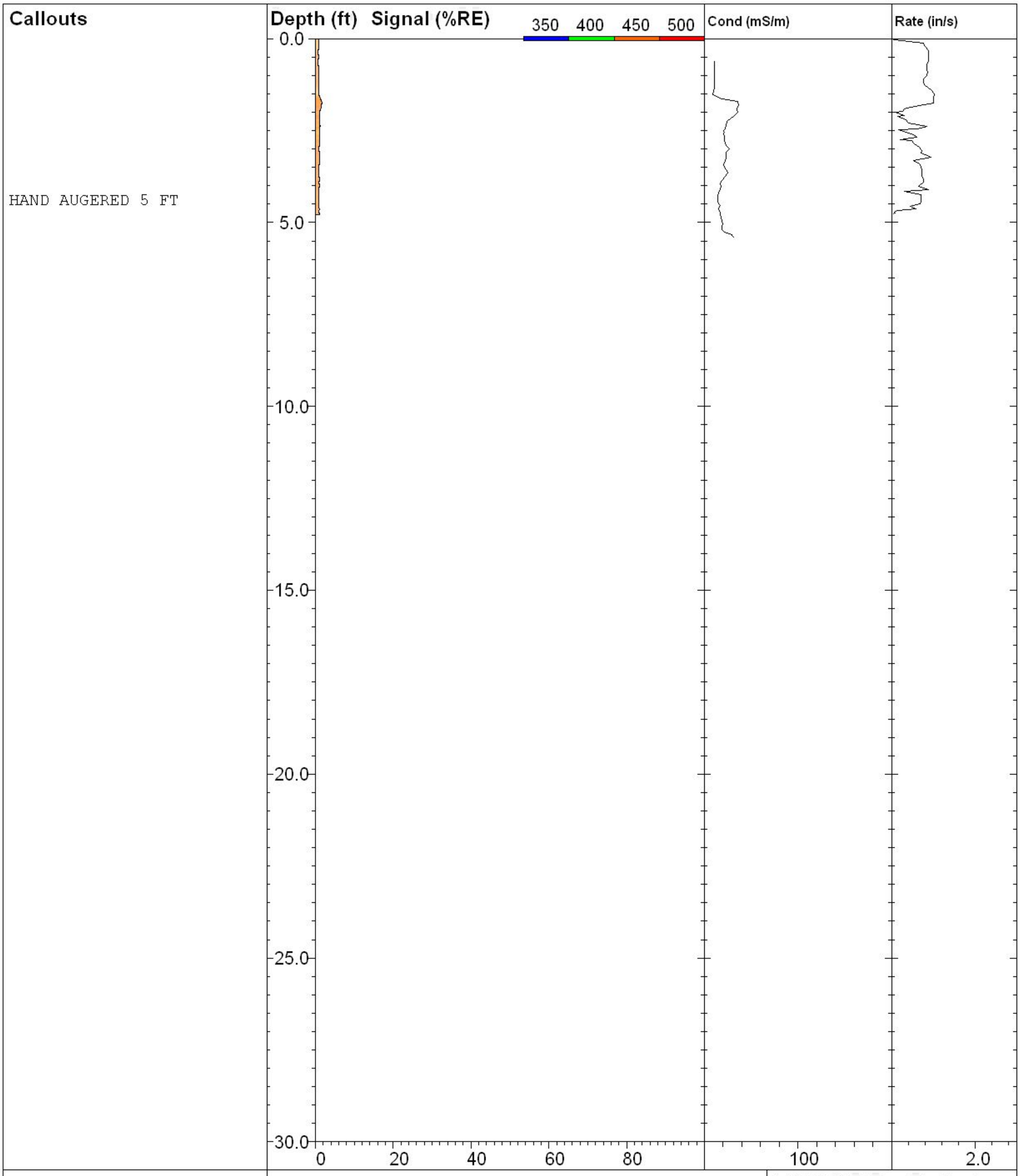
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **13.21 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **8.0 % @ 11.07 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-07 08:37 CDT**



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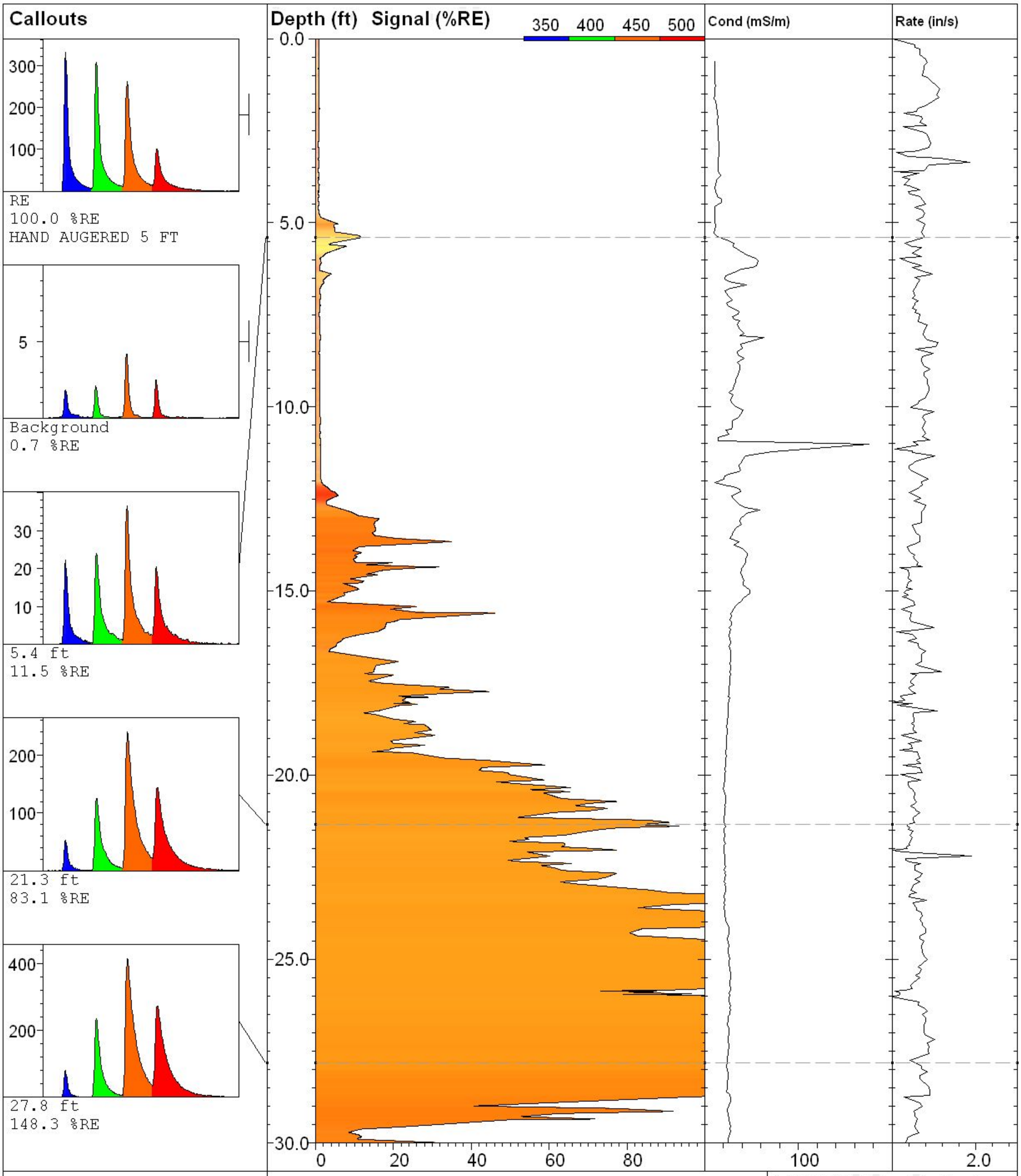
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **4.78 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **1.7 % @ 1.74 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-07 09:24 CDT**



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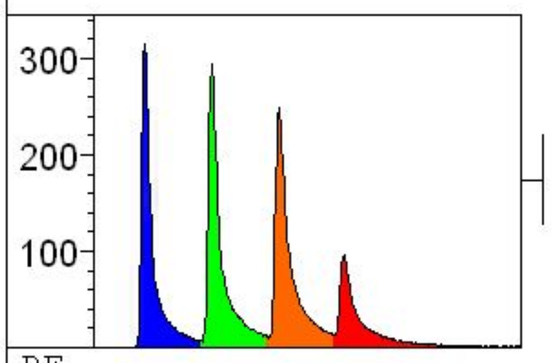
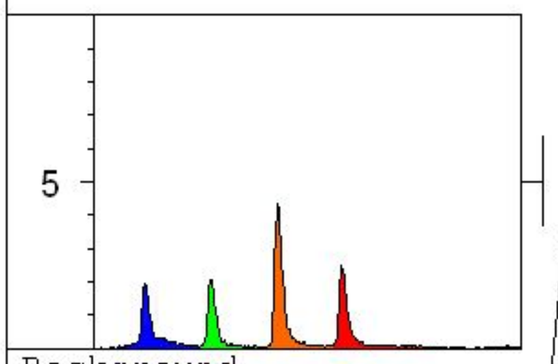
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **34.03 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **212.9 % @ 27.75 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-07 09:36 CDT**

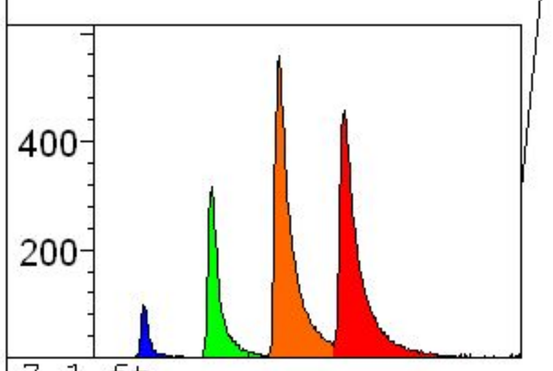
Callouts



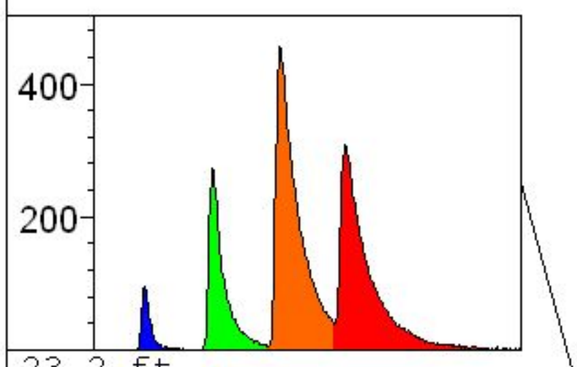
RE
100.0 %RE
HAND AUGERED 5 FT



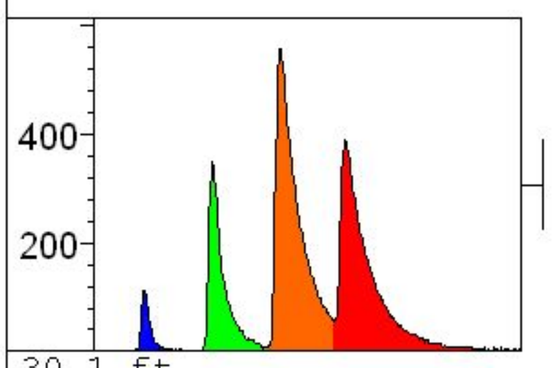
Background
0.8 %RE



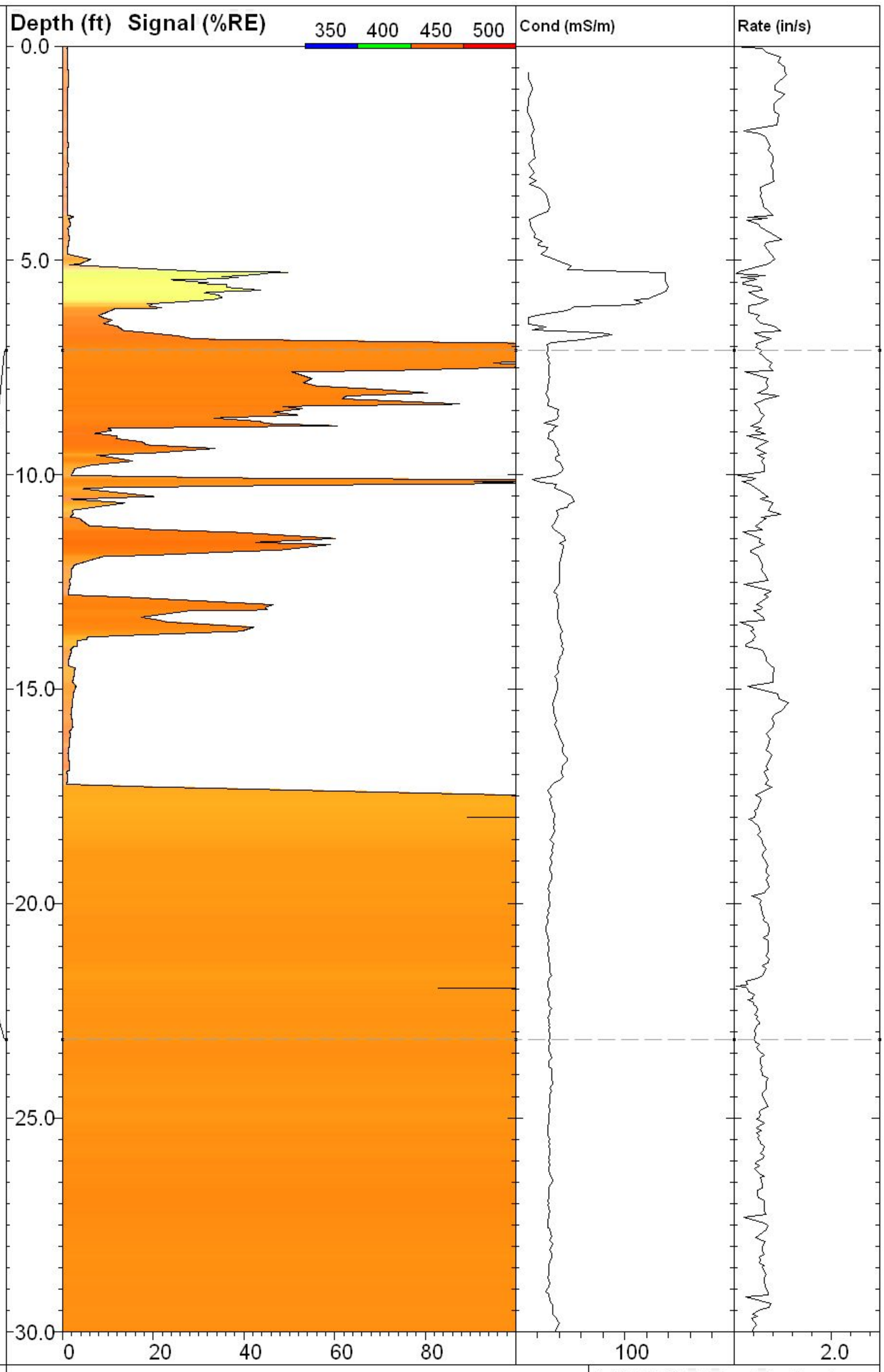
7.1 ft
175.9 %RE



23.2 ft
179.6 %RE



30.1 ft
231.8 %RE



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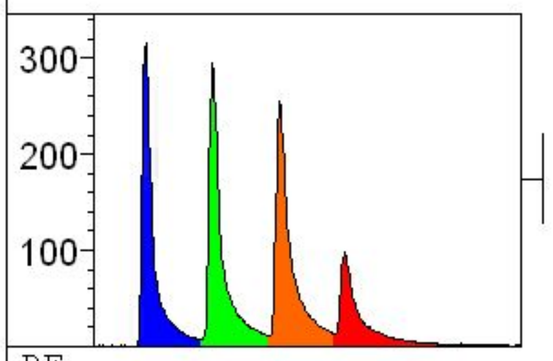
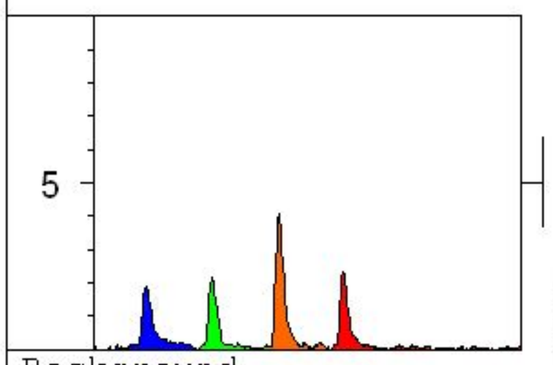
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **34.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **246.9 % @ 30.07 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-07 10:15 CDT**

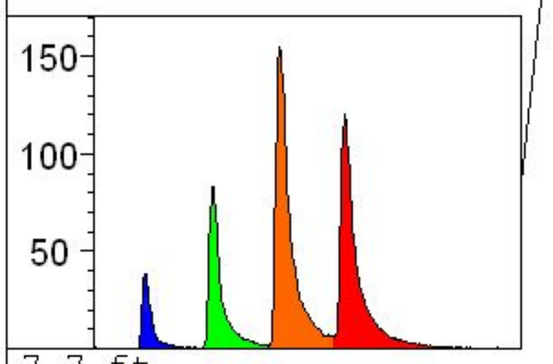
Callouts



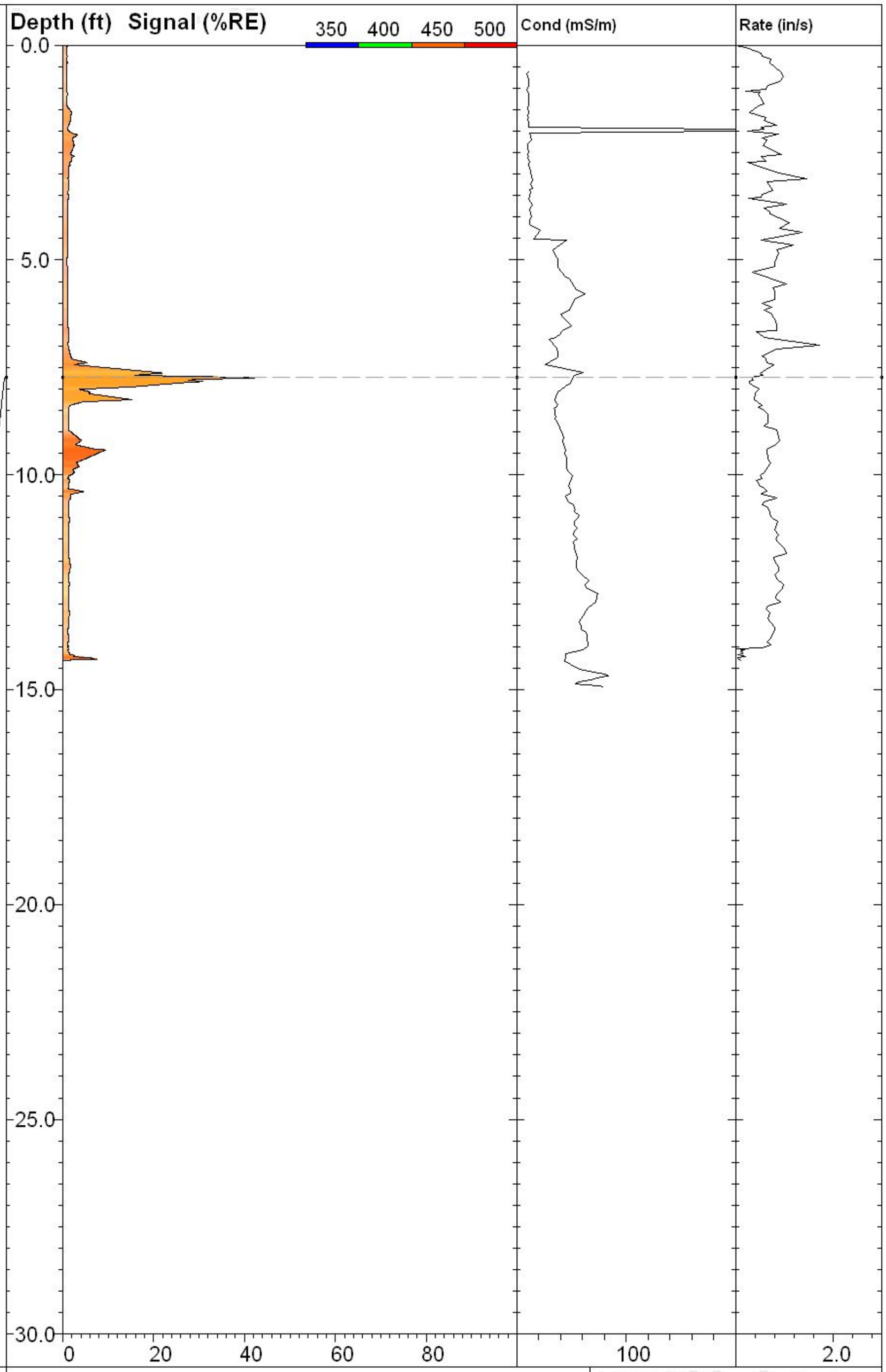
RE
100.0 %RE
HAND AUGERED 5 FT



Background
0.8 %RE



7.7 ft
43.0 %RE



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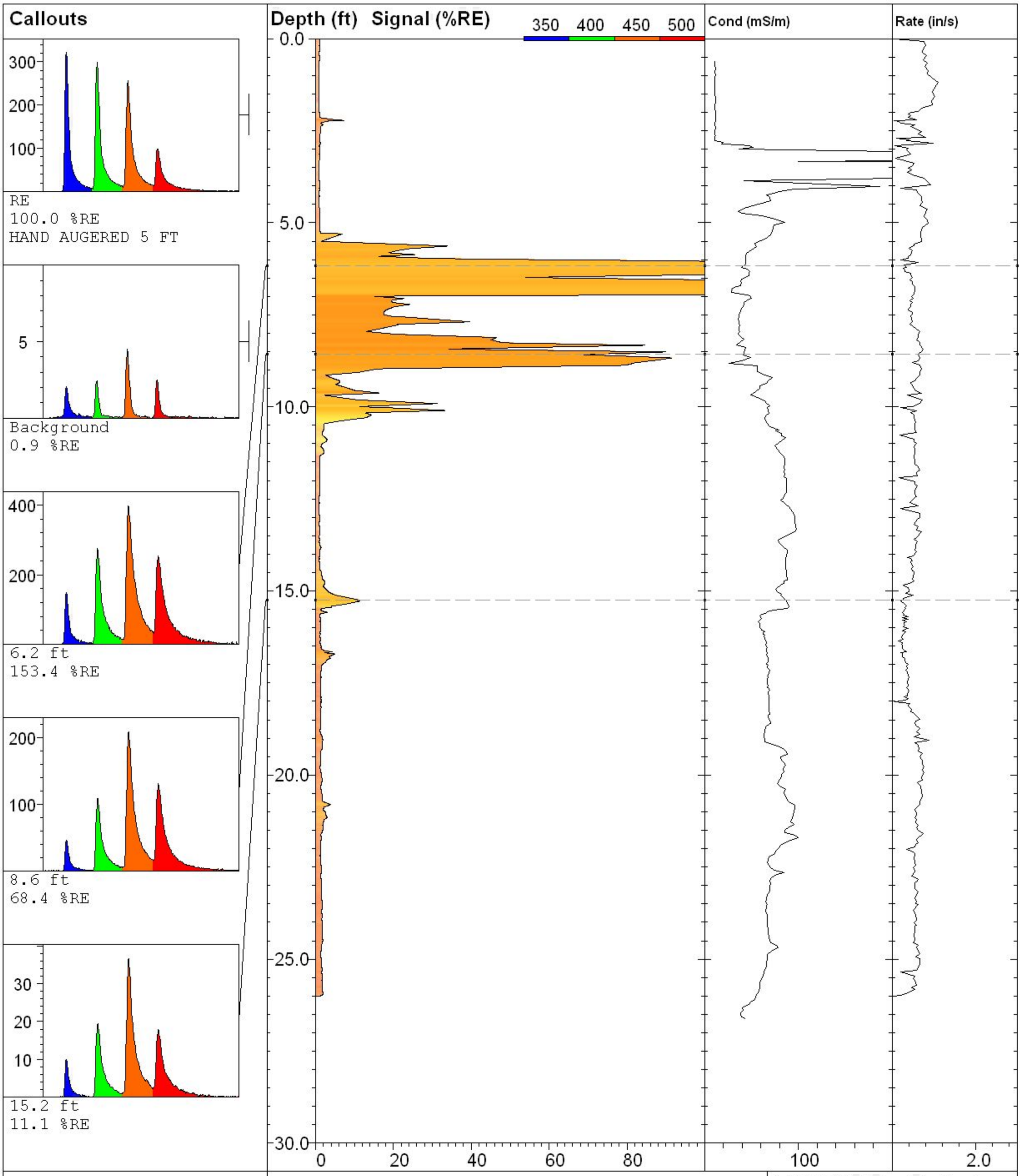
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **14.32 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **43.0 % @ 7.74 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-07 12:53 CDT**



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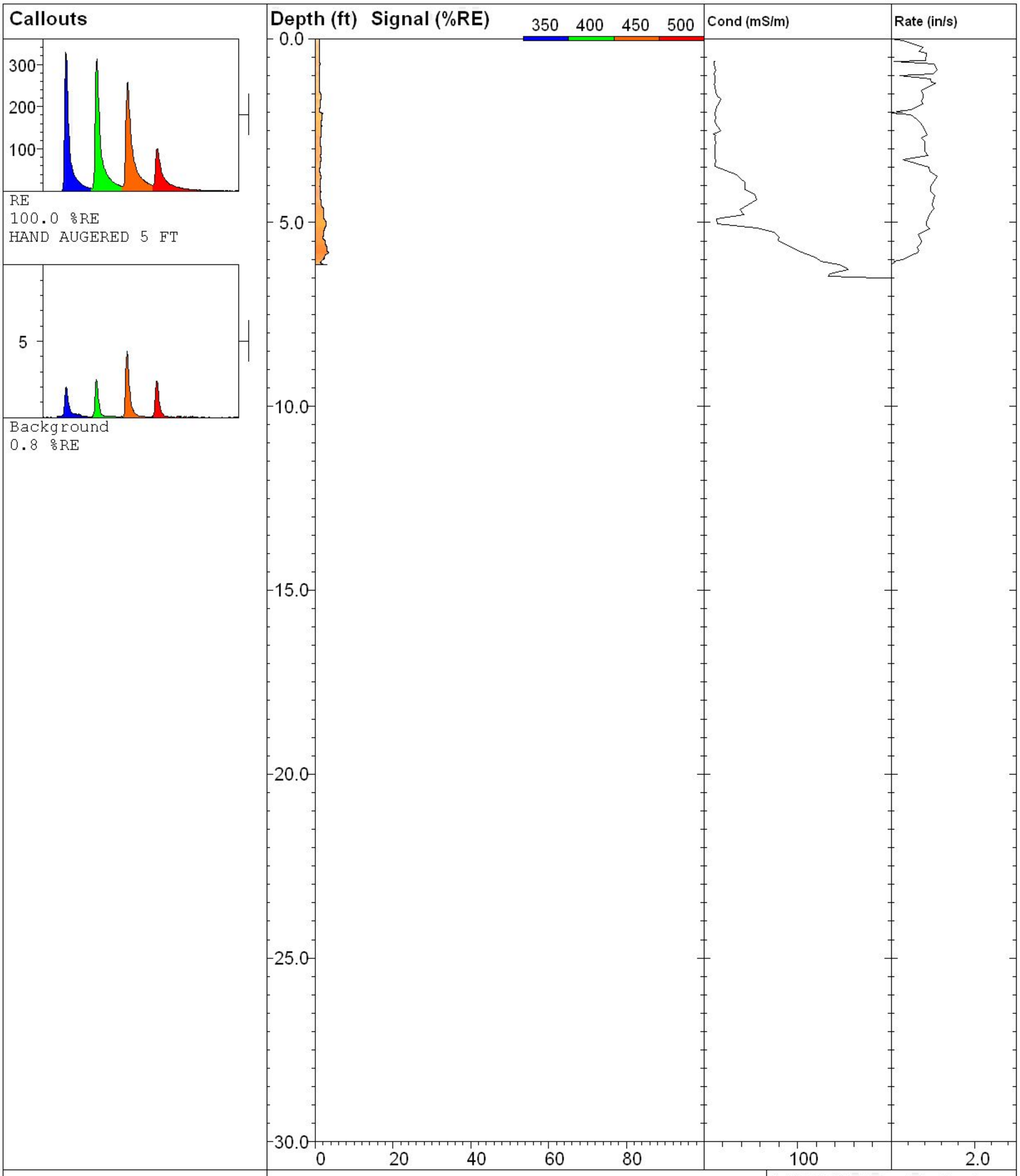
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **232.9 % @ 6.24 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-07 13:16 CDT**



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LIF-40-007

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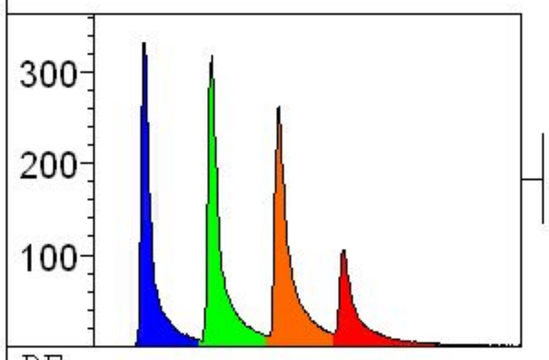
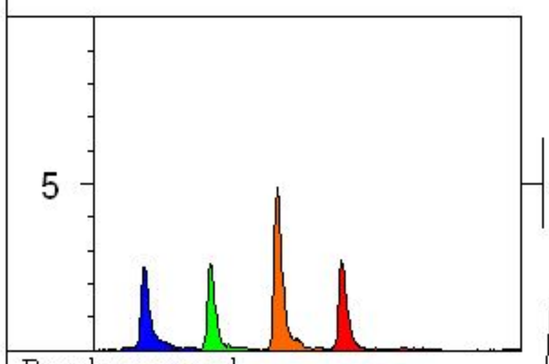
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **6.14 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **3.4 % @ 5.83 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-07 14:09 CDT**

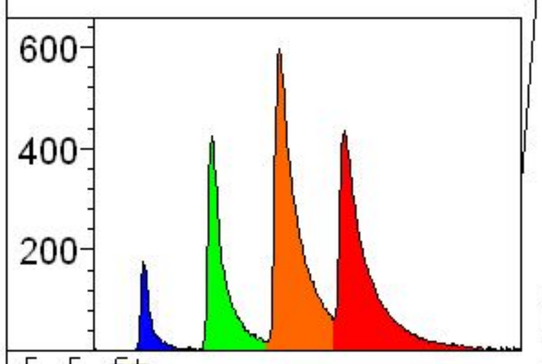
Callouts



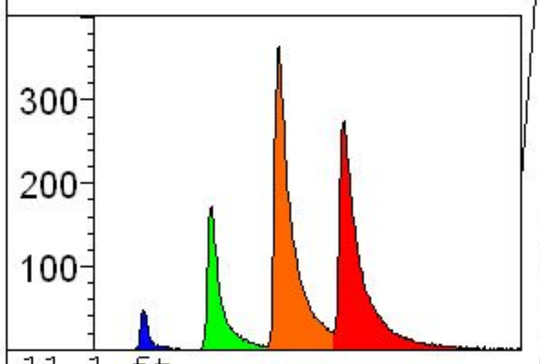
RE
100.0 %RE
HAND AUGERED 5 FT



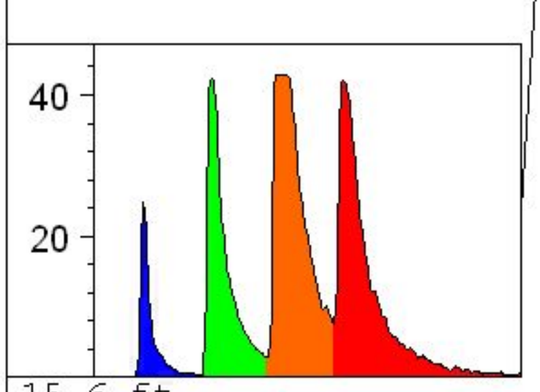
Background
0.9 %RE



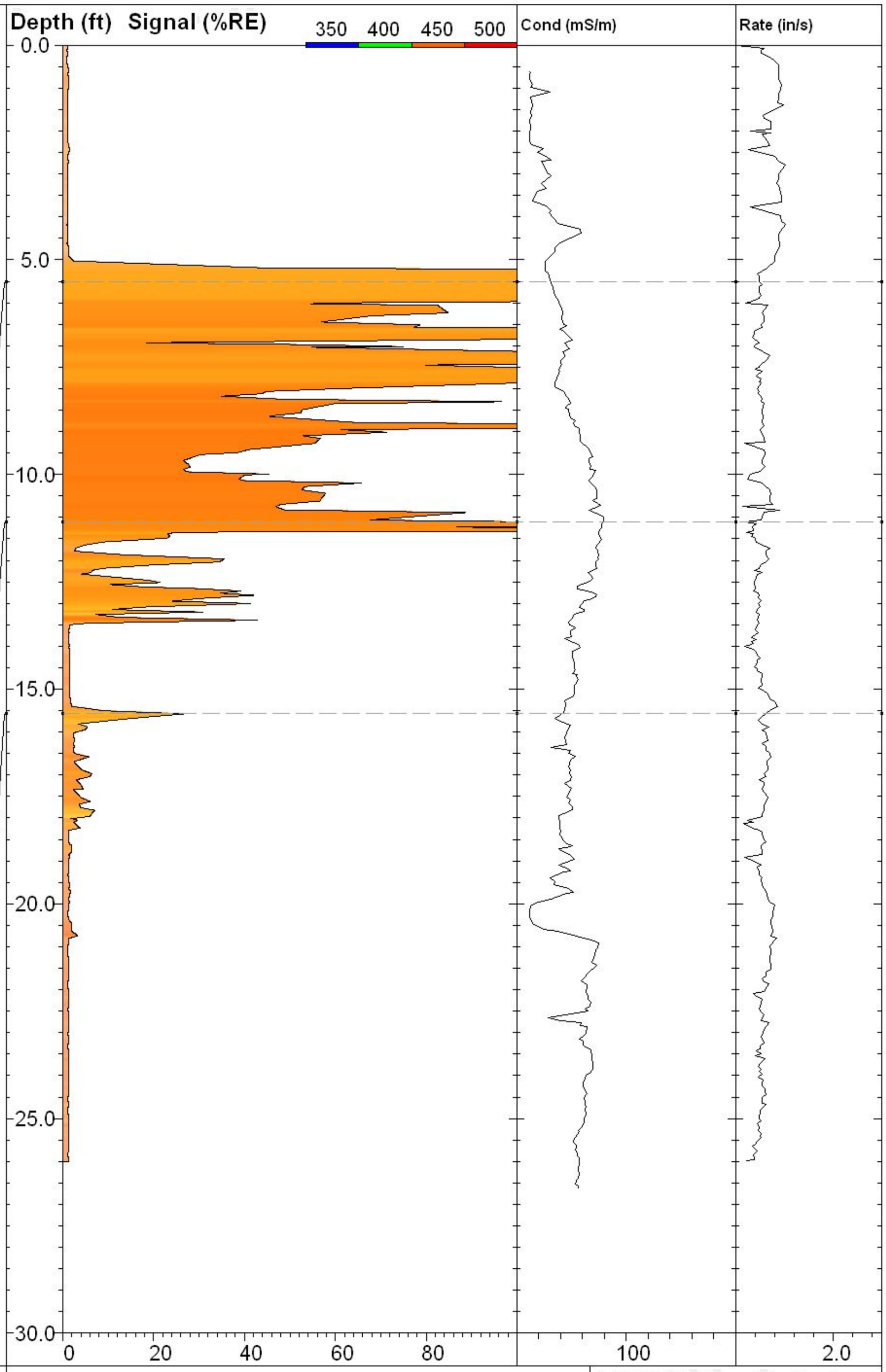
5.5 ft
243.7 %RE



11.1 ft
106.8 %RE



15.6 ft
26.9 %RE



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LIF-40-008

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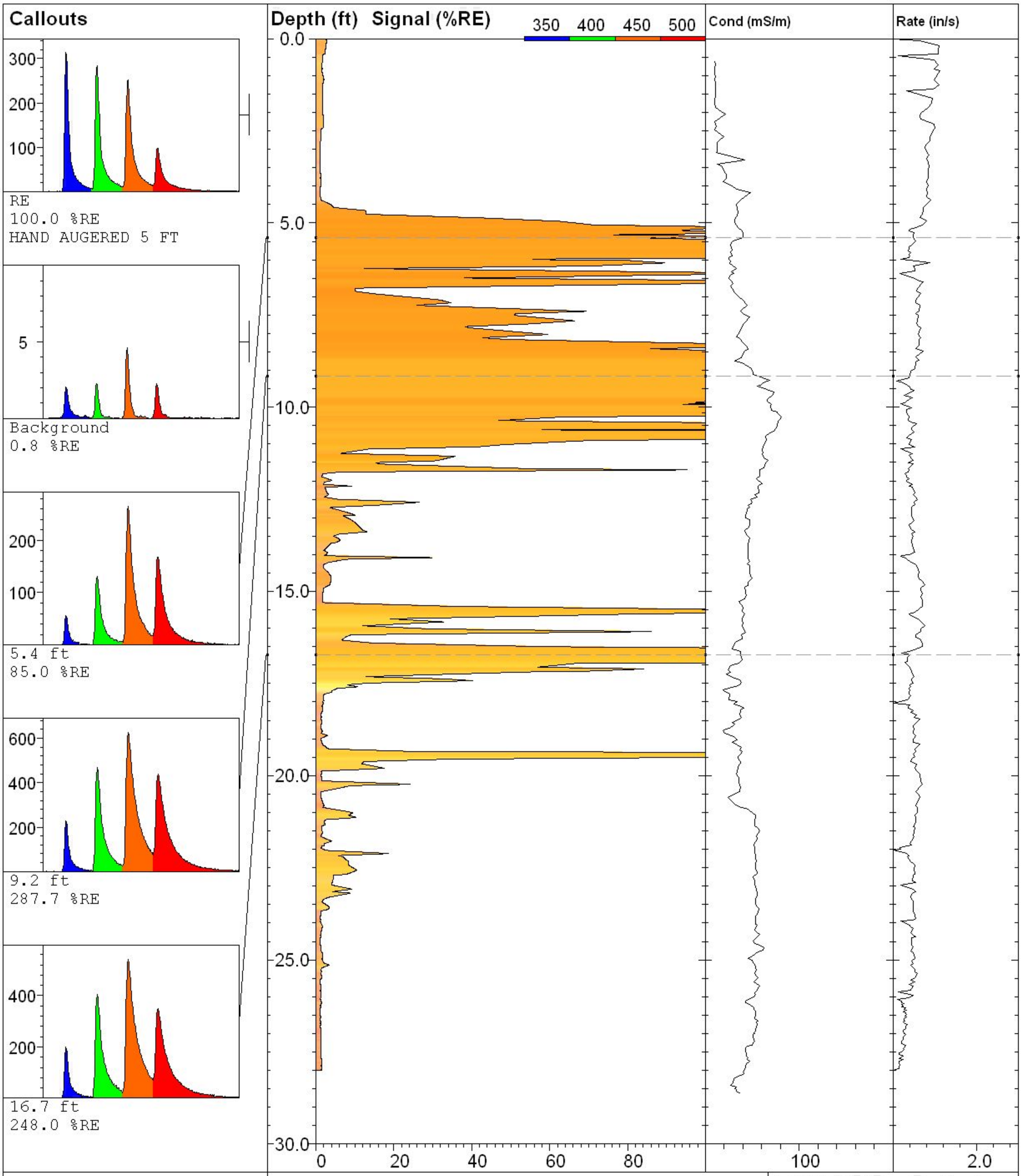
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **259.9 % @ 6.64 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-07 14:44 CDT**



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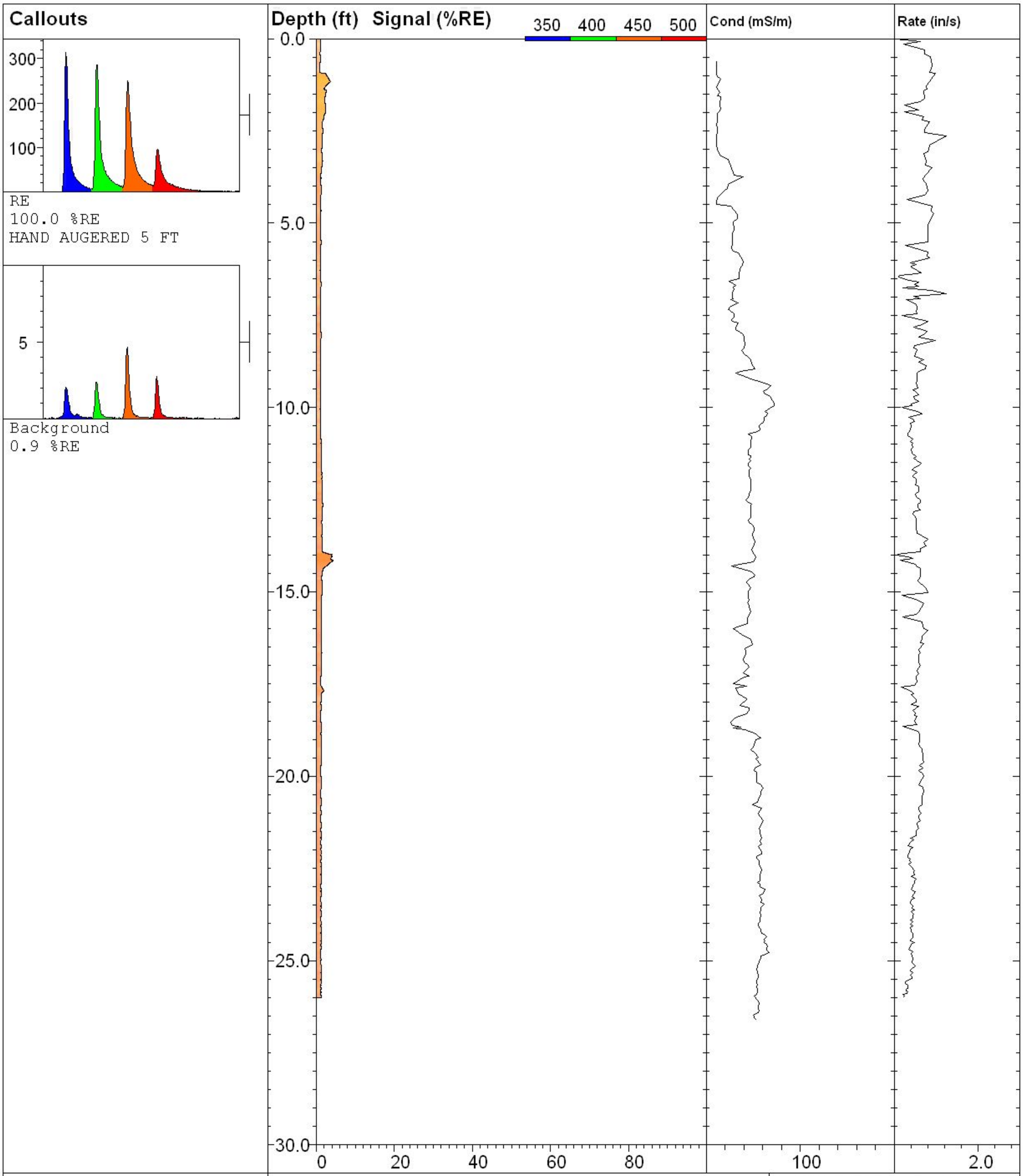
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **28.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **334.3 % @ 10.77 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-09 08:19 CDT**



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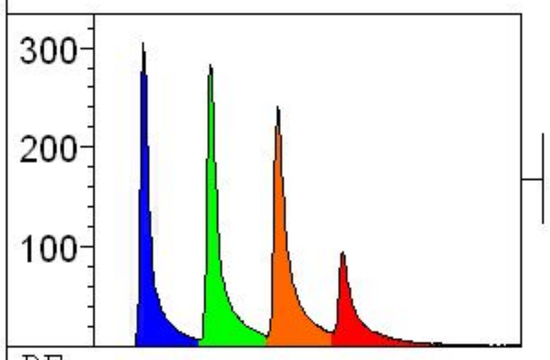
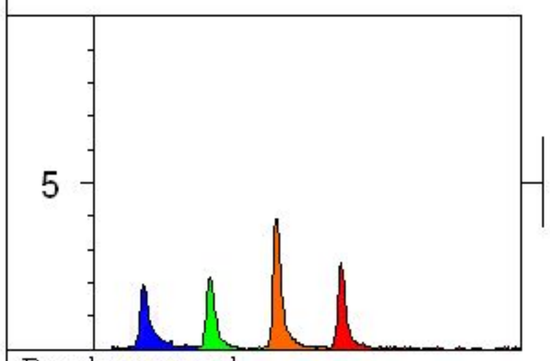
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **4.3 % @ 14.15 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-09 09:00 CDT**

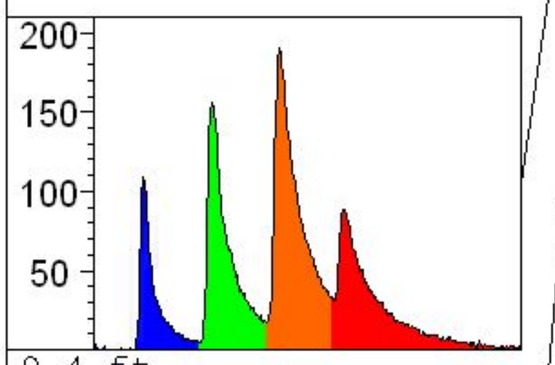
Callouts



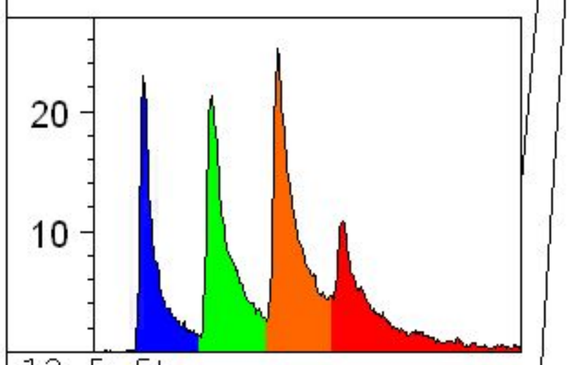
RE
100.0 %RE
HAND AUGERED 5 FT



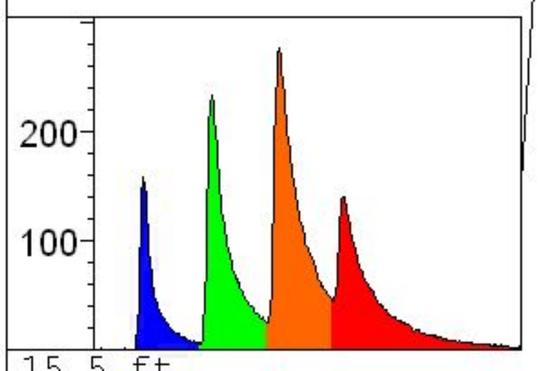
Background
0.9 %RE



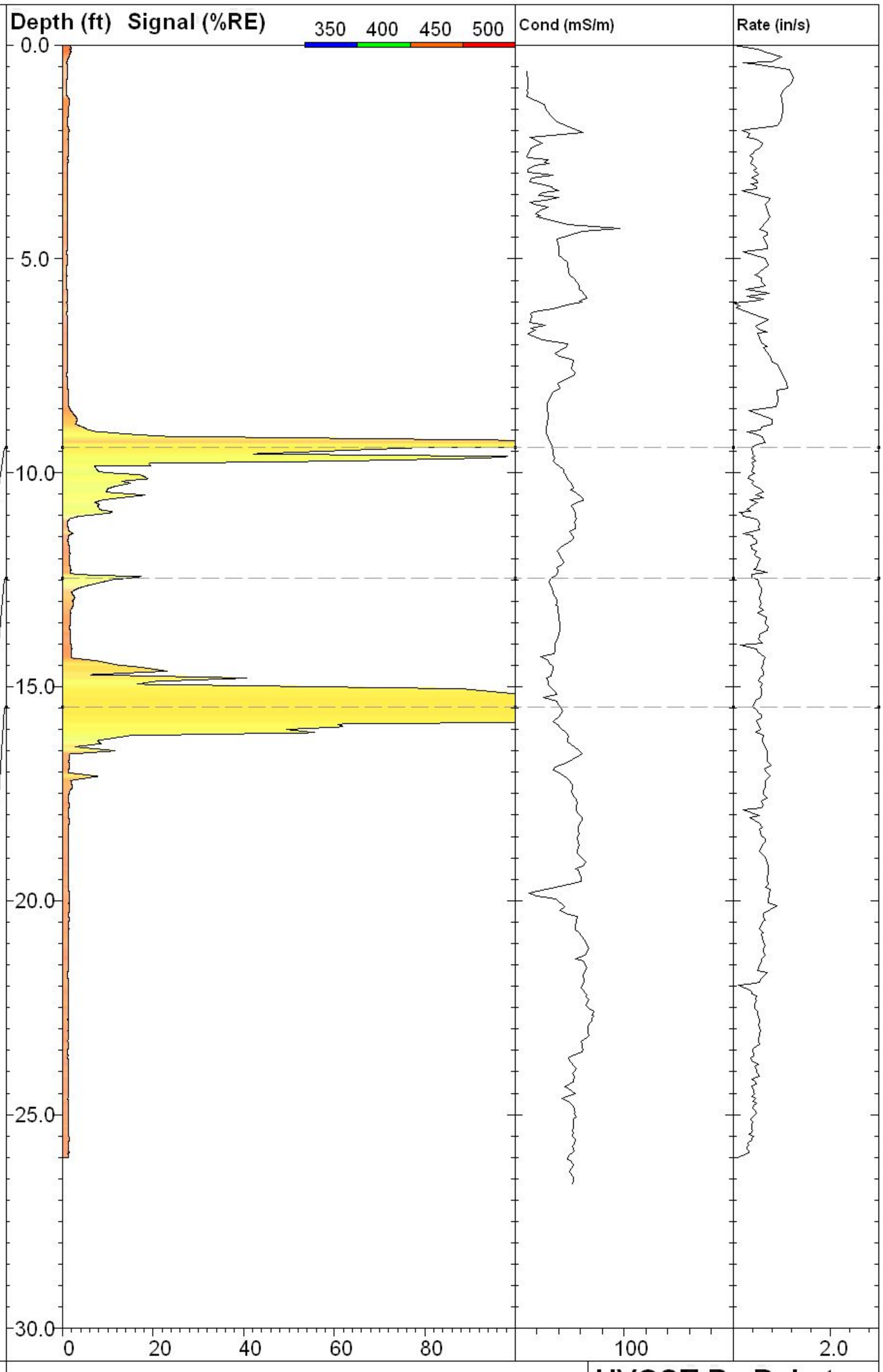
9.4 ft
102.2 %RE



12.5 ft
13.8 %RE



15.5 ft
150.2 %RE



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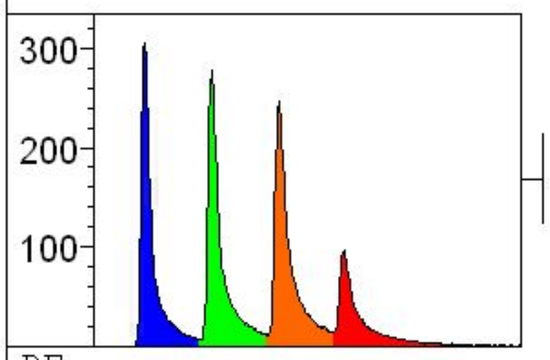
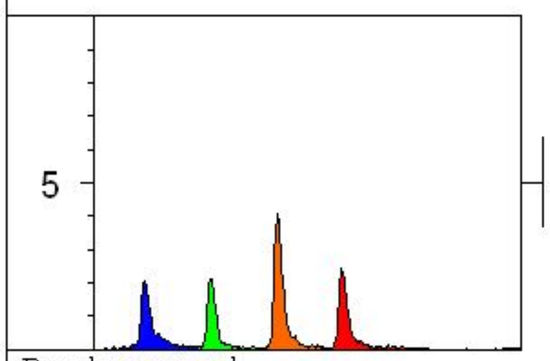
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **155.0 % @ 15.66 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-09 09:42 CDT**

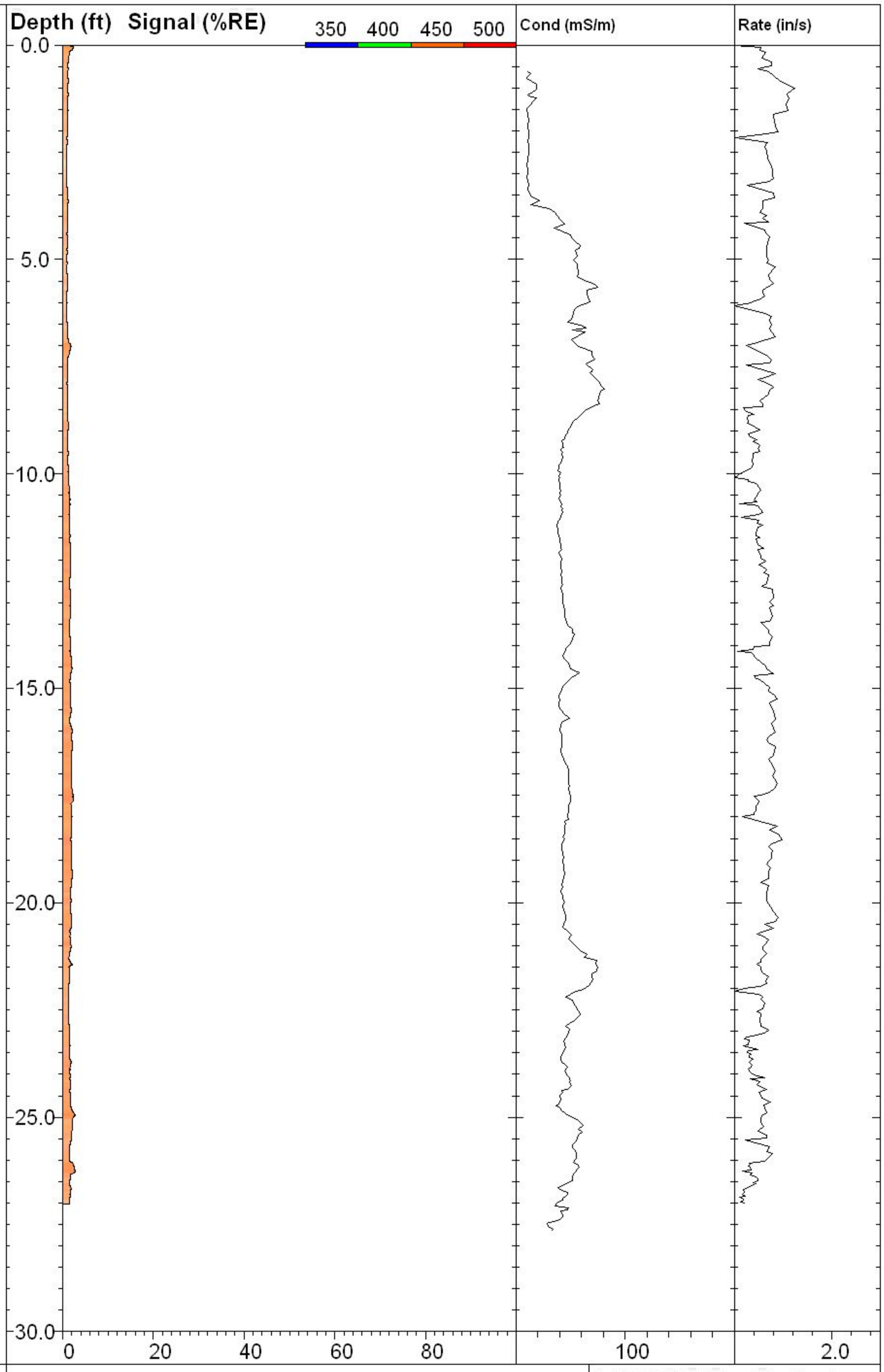
Callouts



RE
100.0 %RE
HAND AUGERED 5 FT



Background
0.9 %RE



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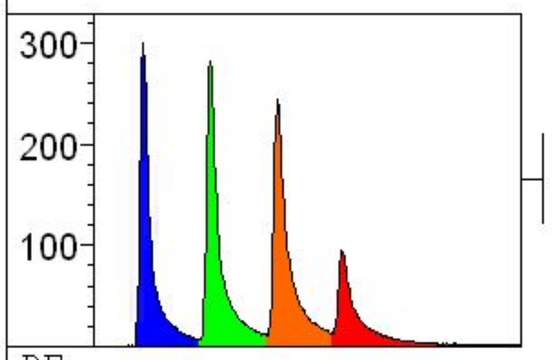
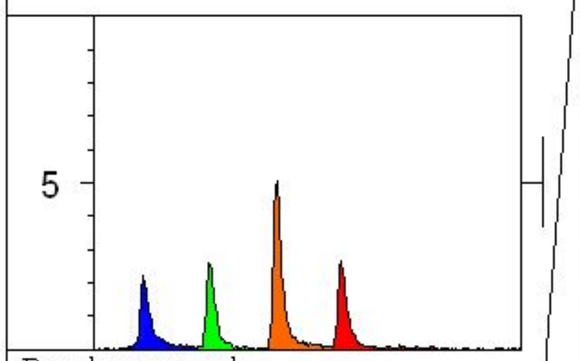
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **27.02 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **2.8 % @ 26.26 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-09 13:02 CDT**

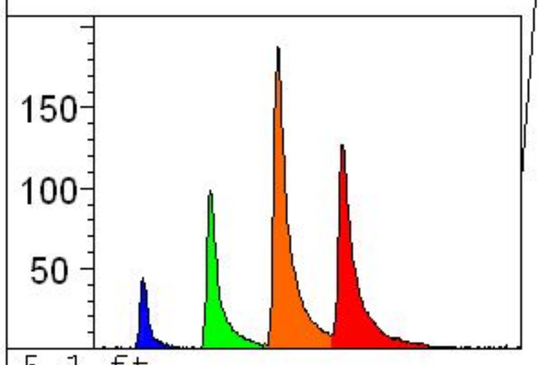
Callouts



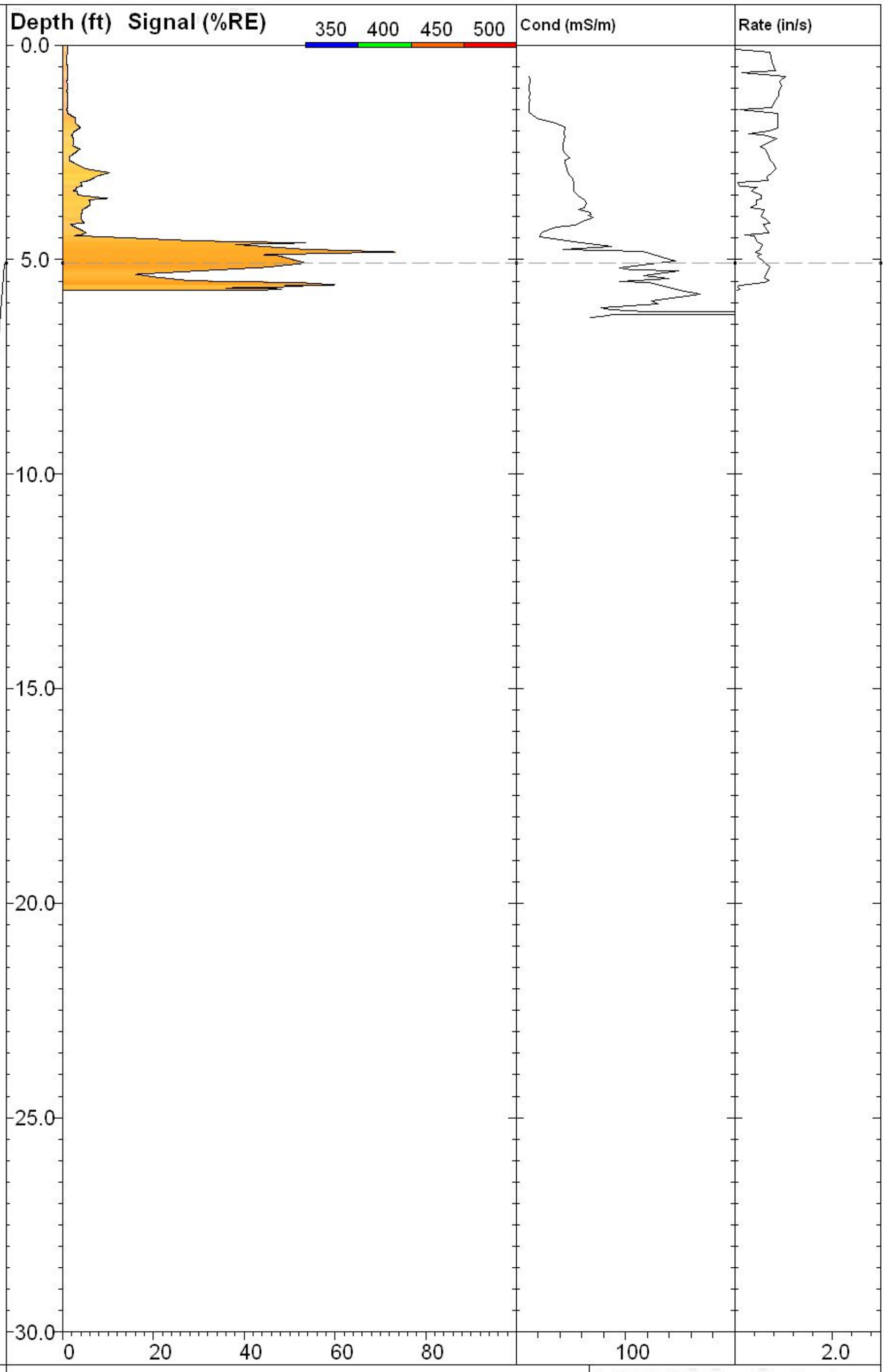
RE
100.0 %RE
HAND AUGERED 5 FT



Background
1.0 %RE



5.1 ft
53.5 %RE



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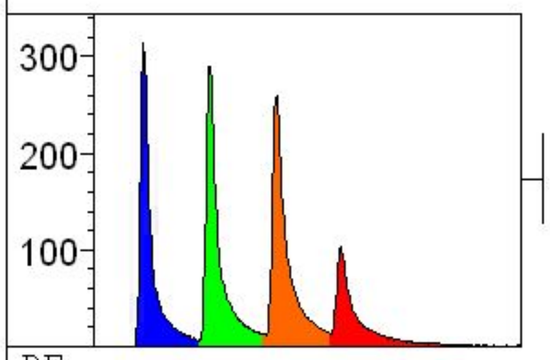
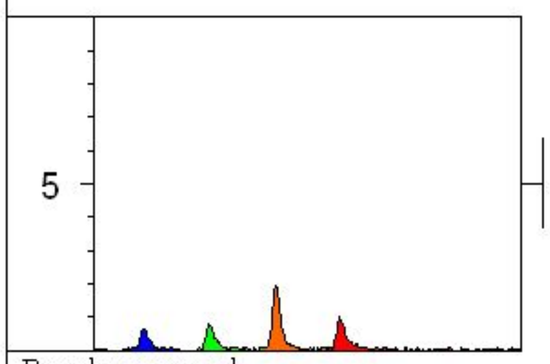
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **5.72 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **73.5 % @ 4.82 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-09 15:43 CDT**

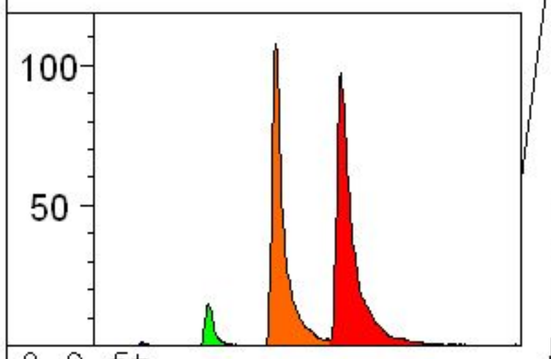
Callouts



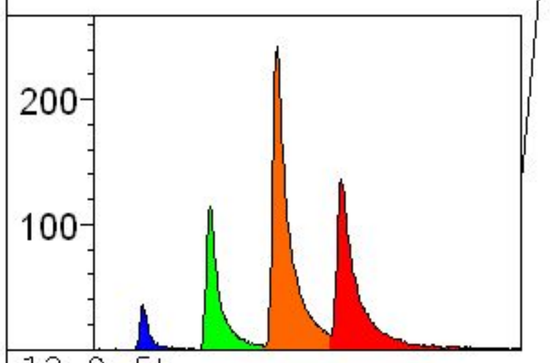
RE
100.0 %RE
HAND AUGERED 5 FT



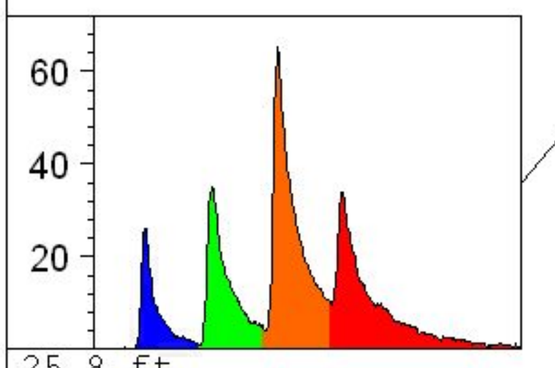
Background
0.4 %RE



8.9 ft
22.9 %RE

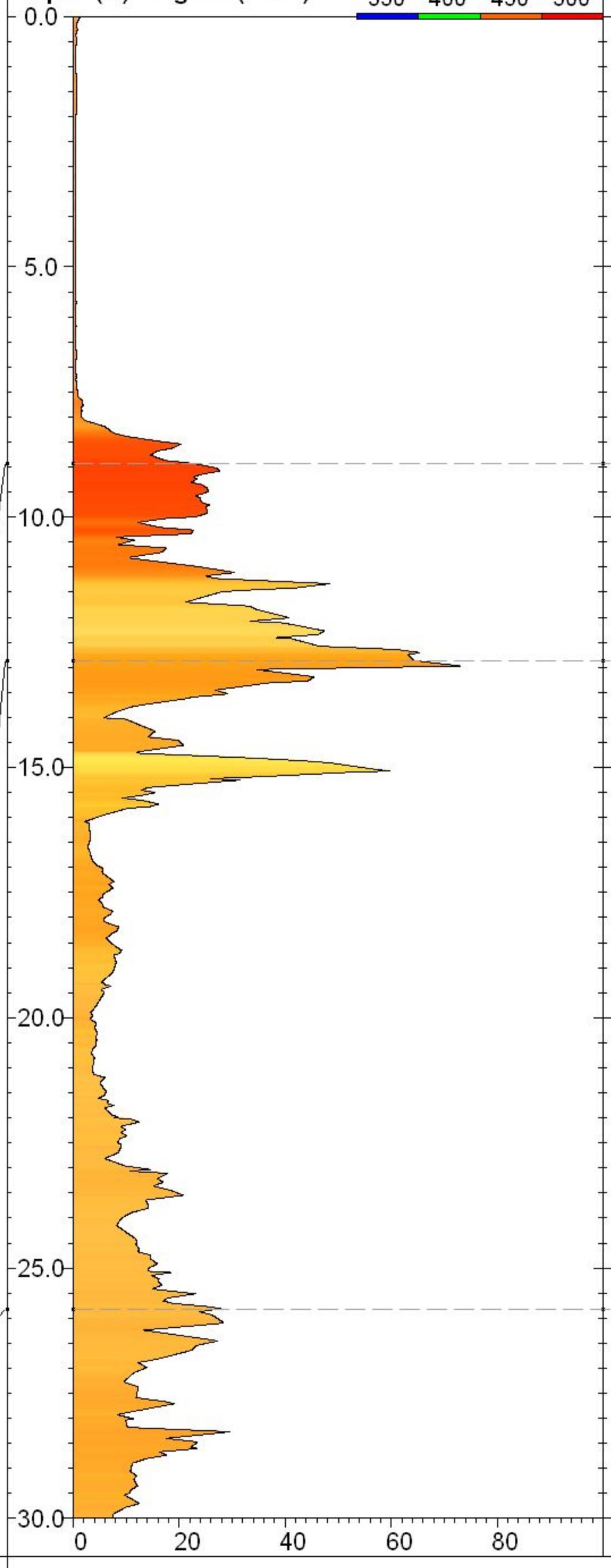


12.9 ft
64.3 %RE

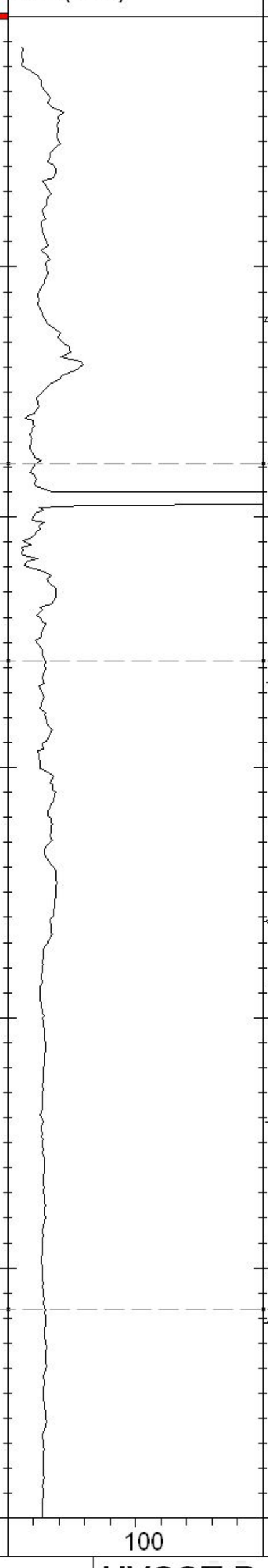


25.8 ft
27.9 %RE

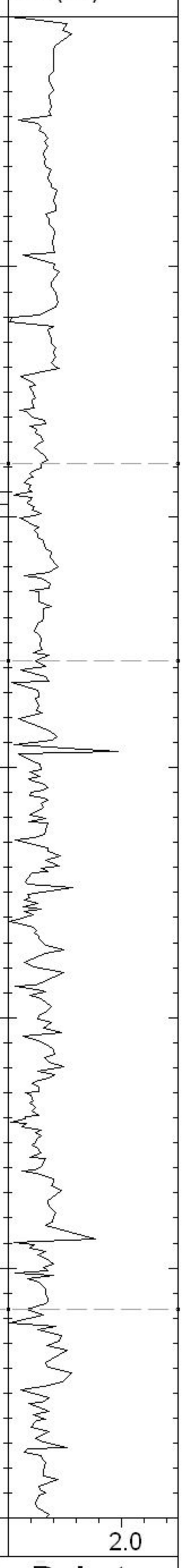
Depth (ft) Signal (%RE)



Cond (mS/m)



Rate (in/s)



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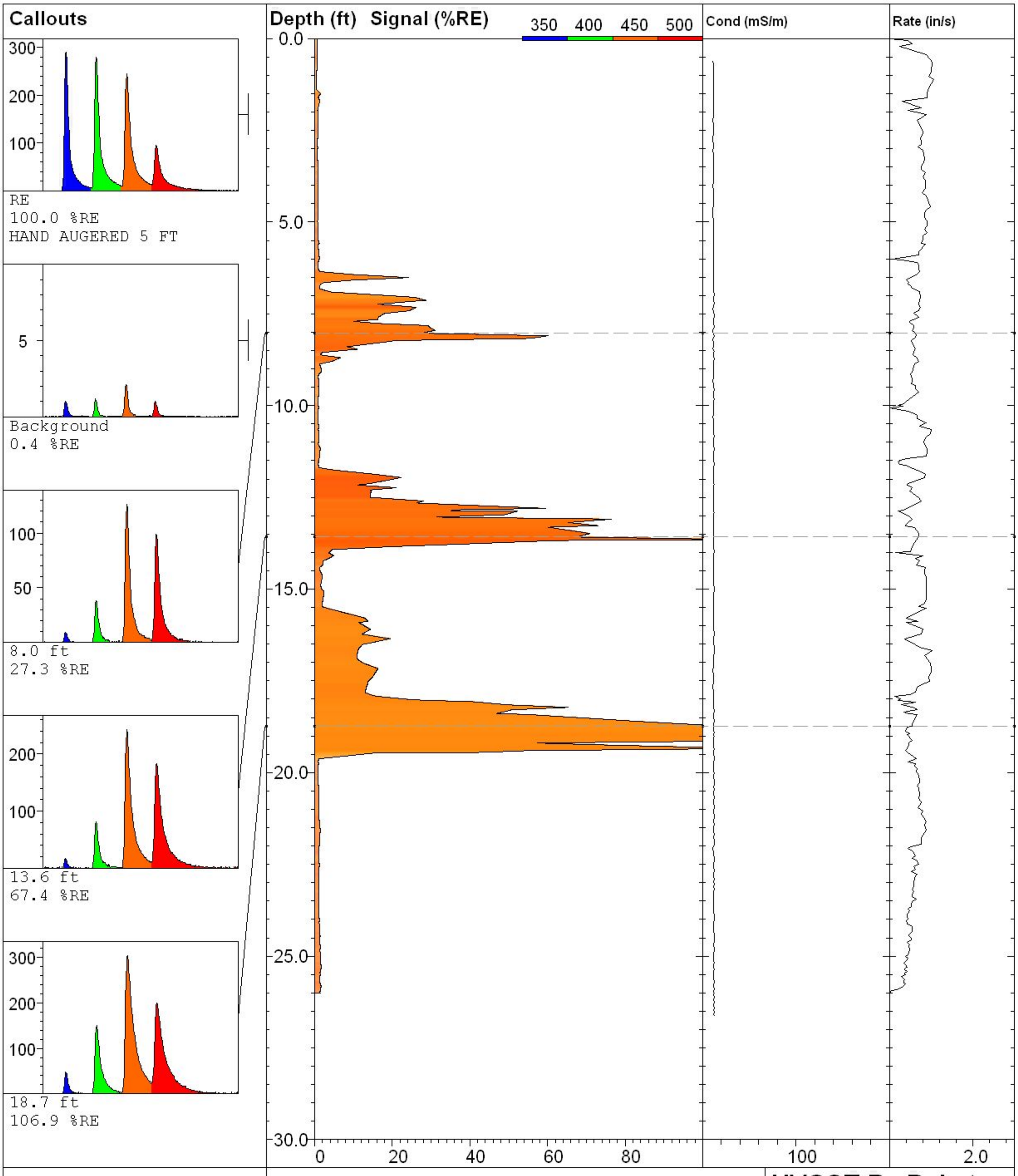
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **37.01 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **73.2 % @ 12.98 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-14 09:37 CDT**



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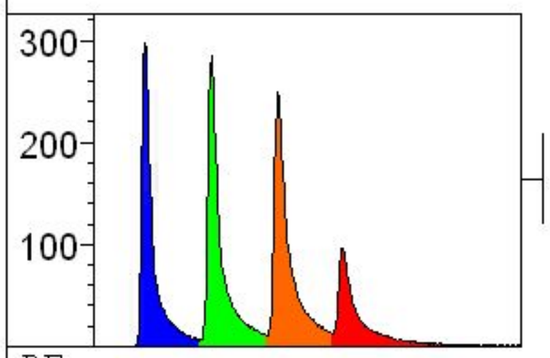
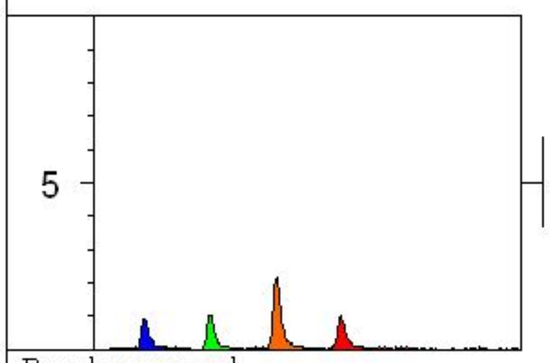
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **139.0 % @ 18.76 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-14 11:33 CDT**

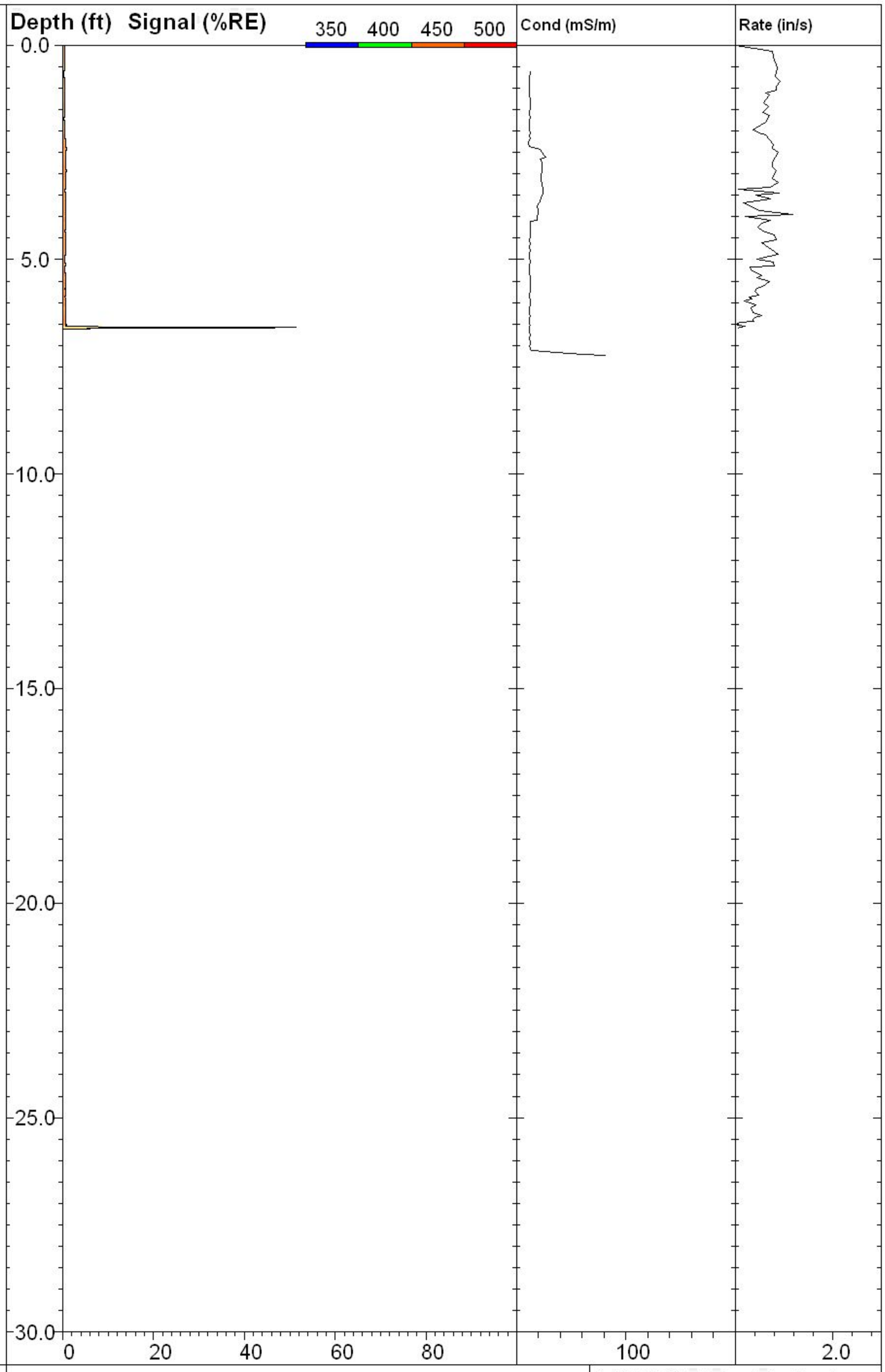
Callouts



RE
100.0 %RE
HAND AUGERED 5 FT



Background
0.4 %RE



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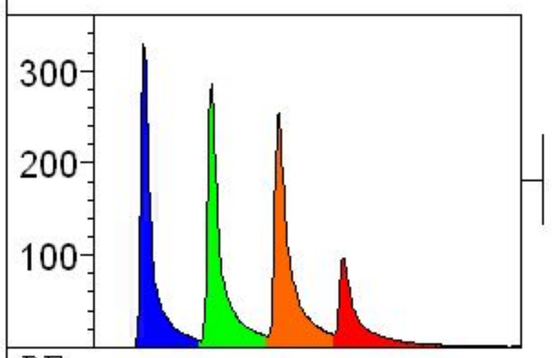
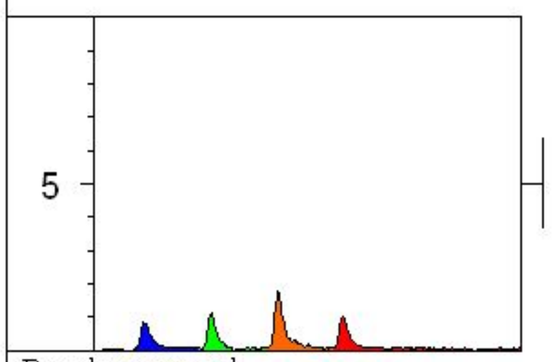
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **6.62 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **59.7 % @ 6.59 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-14 14:41 CDT**

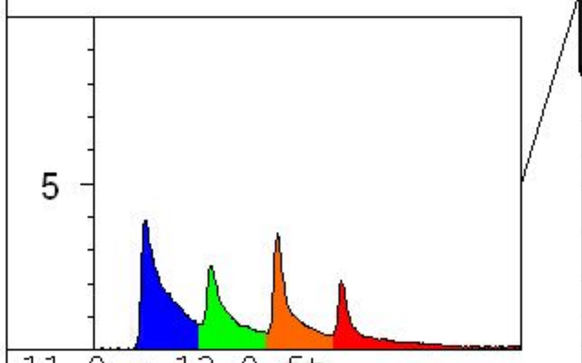
Callouts



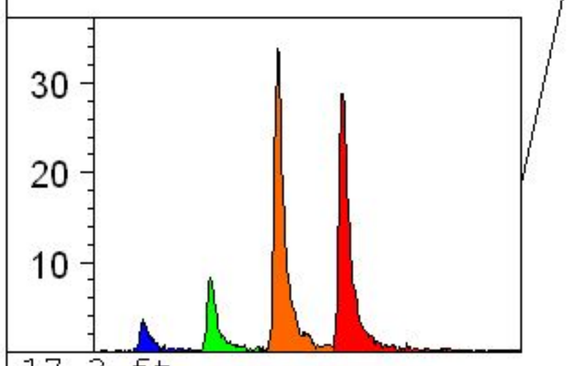
RE
100.0 %RE



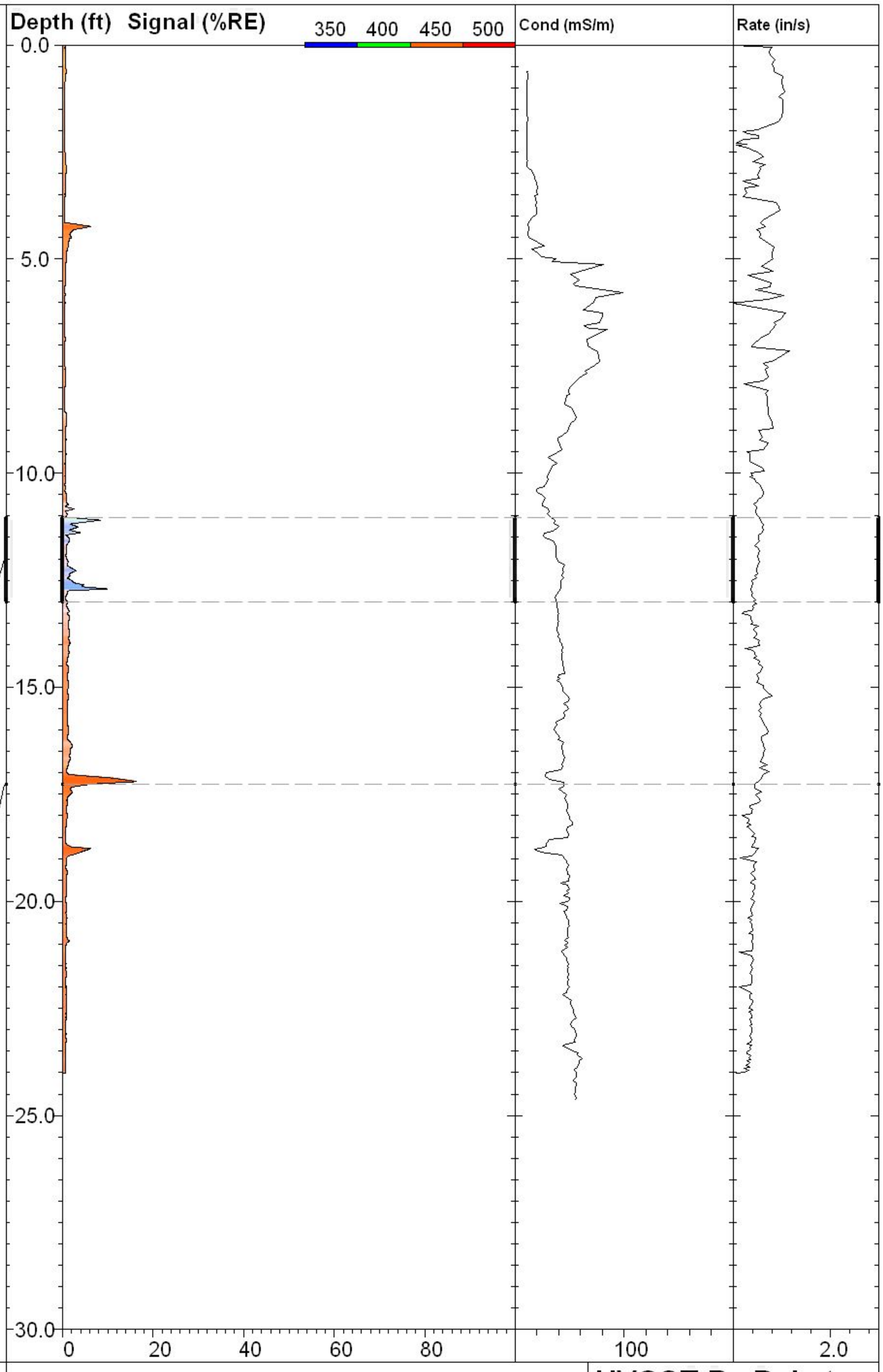
Background
0.5 %RE



11.0 - 13.0 ft
2.0 %RE (s 2.1)



17.3 ft
6.5 %RE



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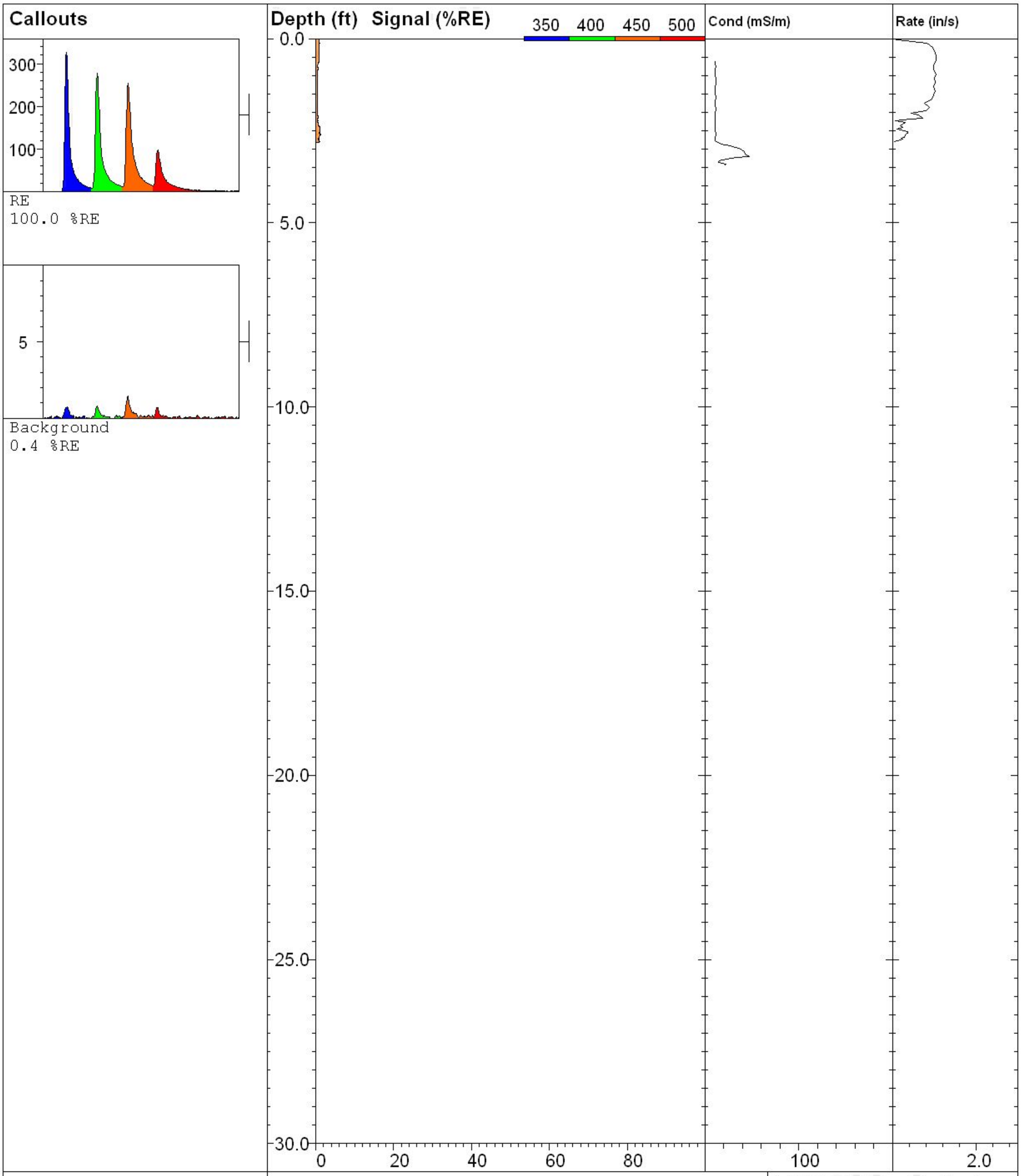
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **24.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **16.4 % @ 17.20 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-16 09:31 CDT**



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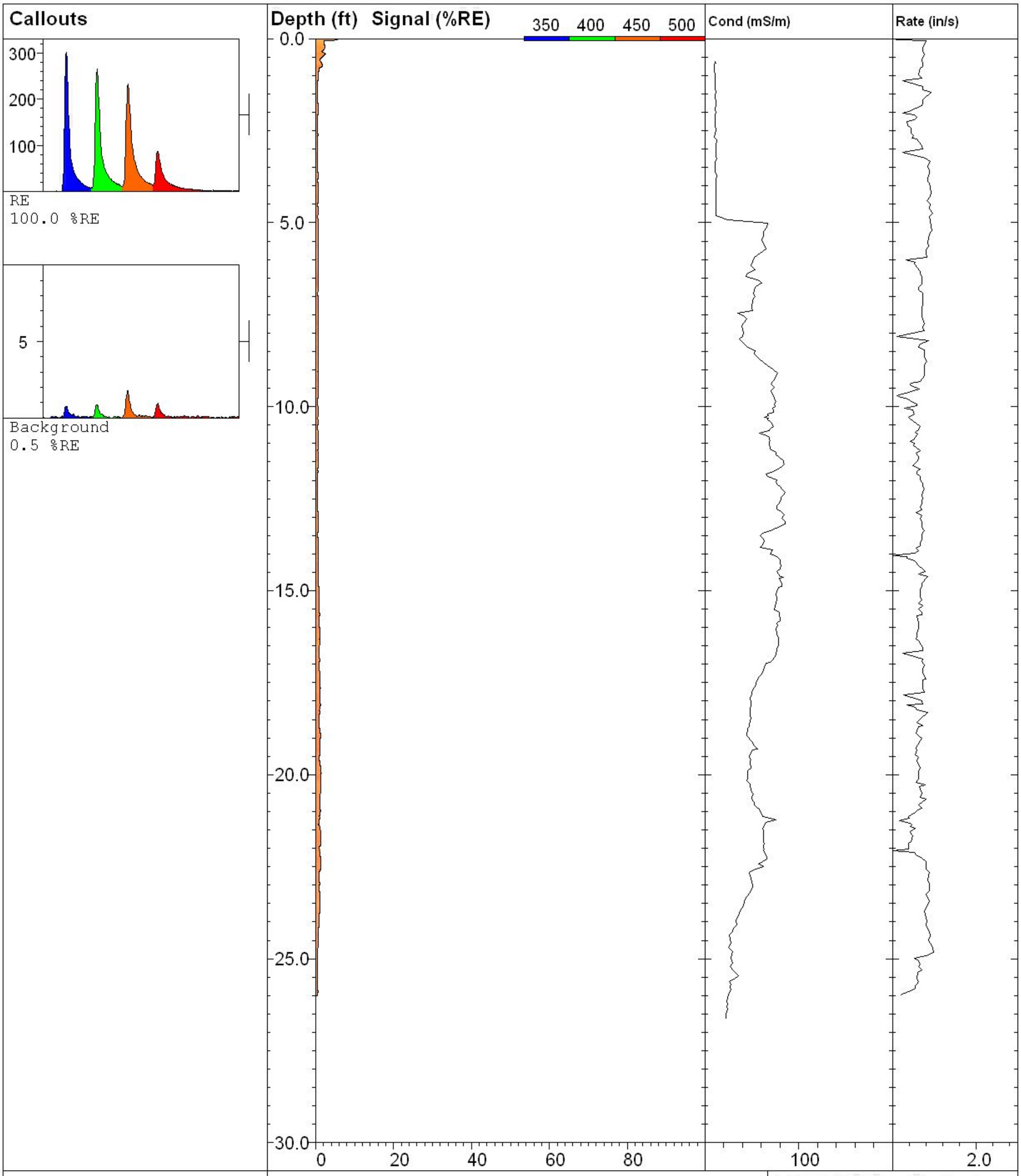
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **2.82 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **1.3 % @ 2.60 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-16 13:30 CDT**



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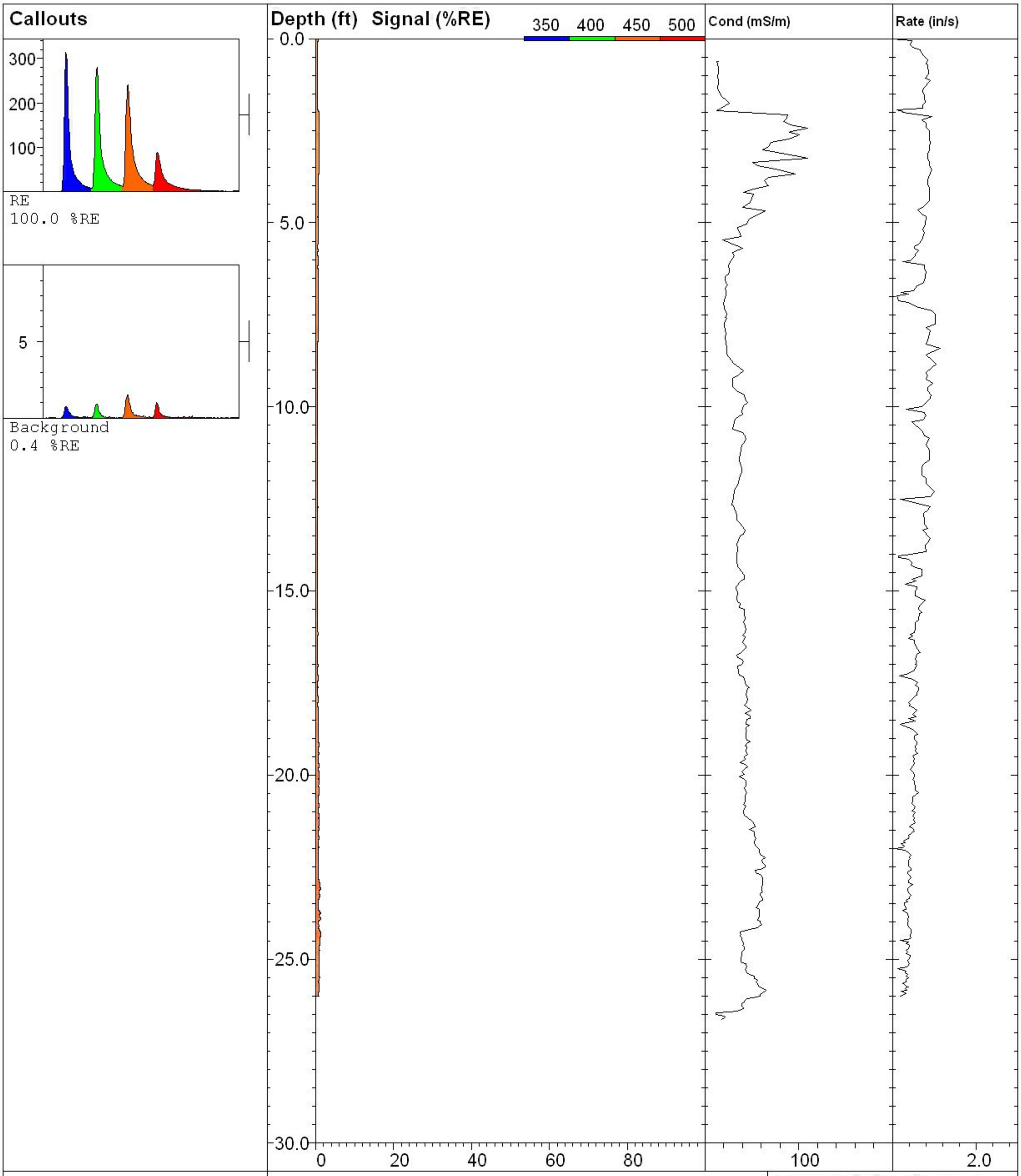
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **5.9 % @ 0.00 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-18 08:12 CDT**



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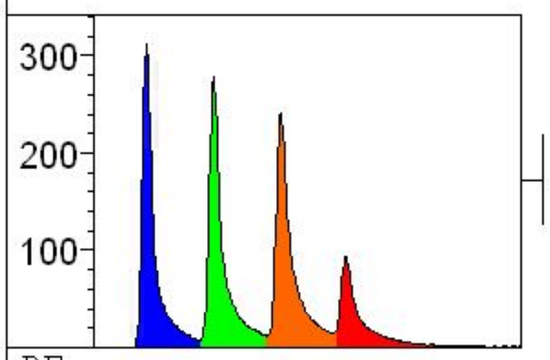
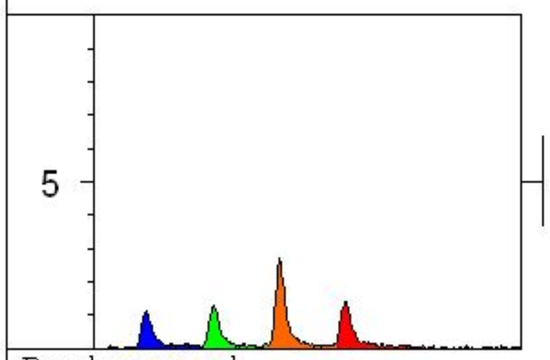
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **1.4 % @ 24.37 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-18 09:00 CDT**

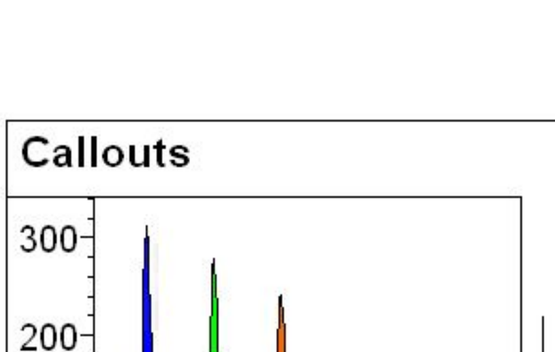
Callouts



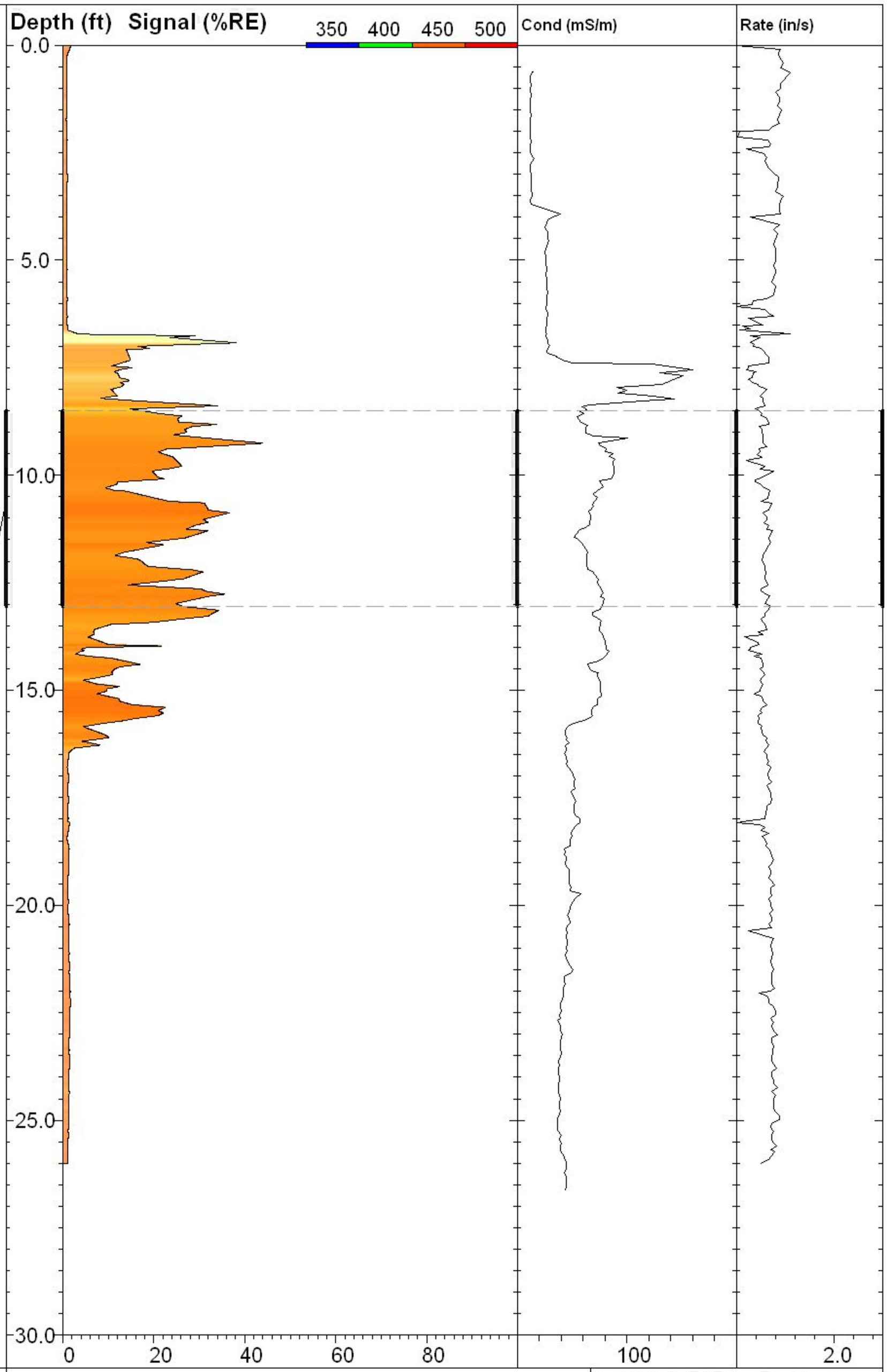
RE
100.0 %RE



Background
0.6 %RE



8.5 - 13.1 ft
24.3 %RE (s 7.2)



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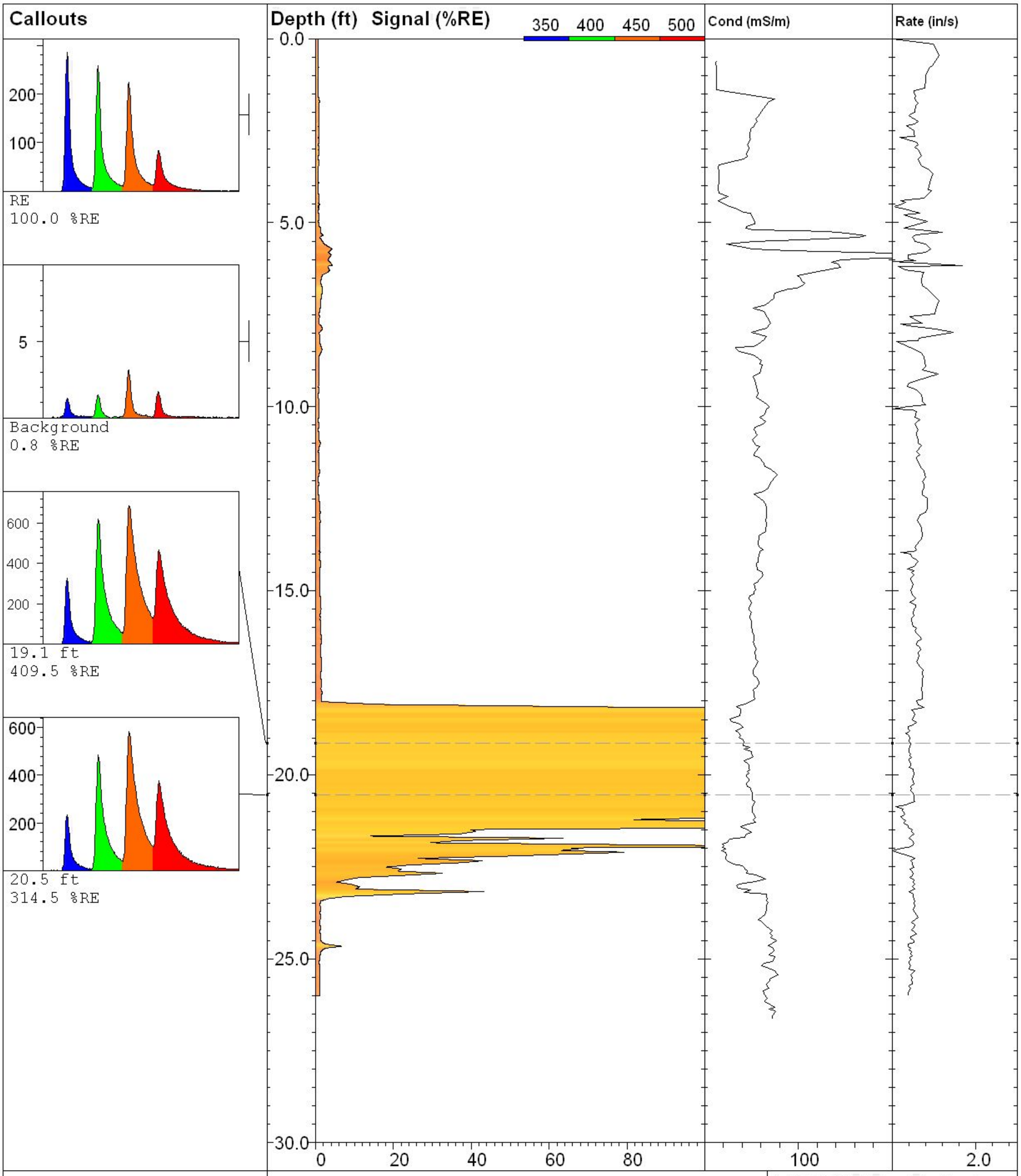
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **44.2 % @ 9.26 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-18 14:05 CDT**



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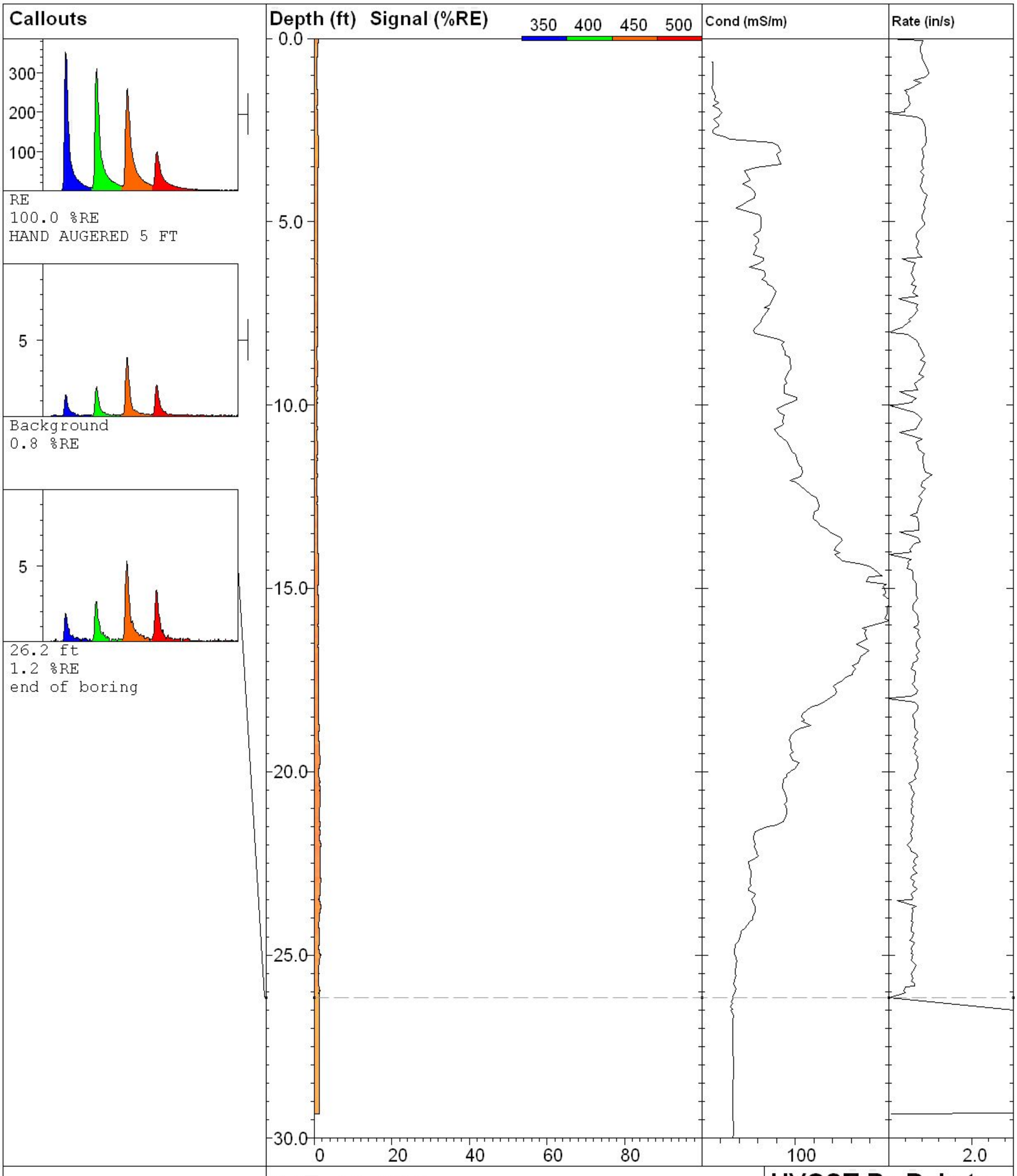
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **409.5 % @ 19.15 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-18 14:41 CDT**



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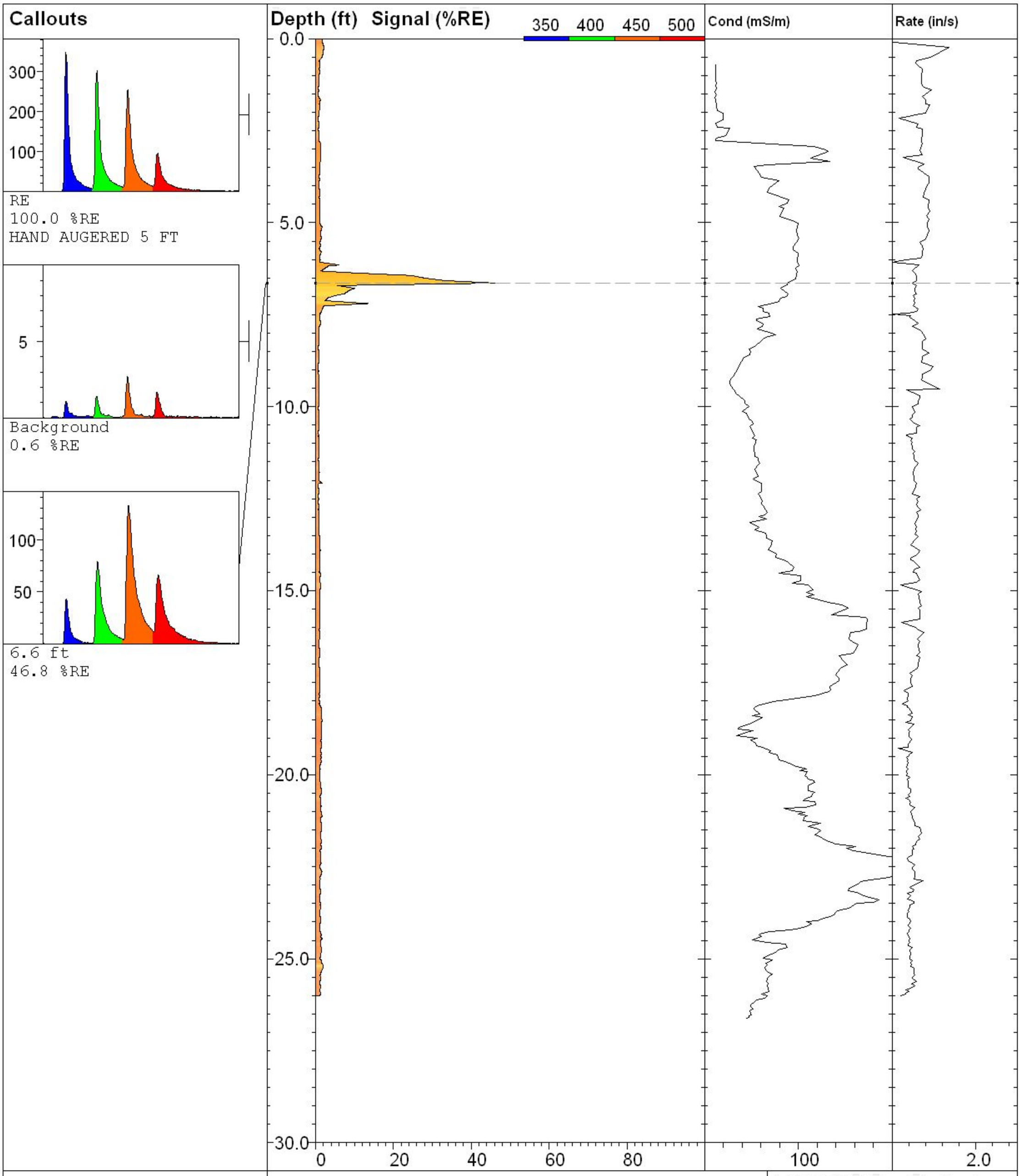
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **29.33 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **1.7 % @ 22.99 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-19 10:19 CDT**



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LIF-40-024

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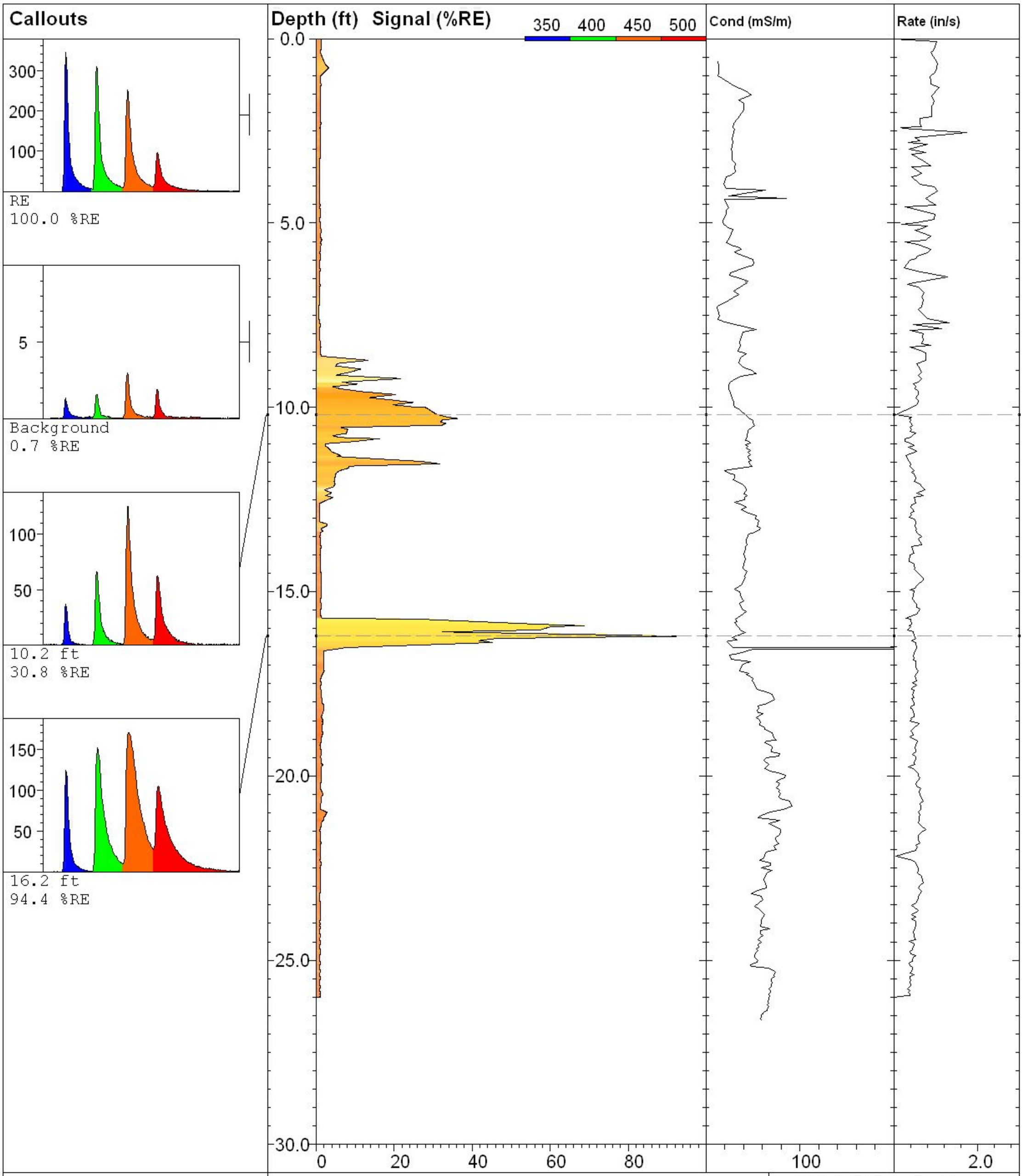
Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **46.8 % @ 6.64 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-19 10:52 CDT**



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www.matrixenv.com

LIF-40-025

UVOST By Dakota
www.DakotaTechnologies.com

Site: **Flint MLC -- Buick City**	*Latitude / Datum:* **Unavailable / NA**	*Final depth:* **26.00 ft**
Client: **ARCADIS**	*Longitude / Fix:* **Unavailable / NA**	*Max signal:* **94.4 % @ 16.21 ft**
Job: **100-MNDS-10UV**	*Operator/Unit:* **DT/UVOST1003**	*Date & Time:* **2010-08-19 14:50 CDT**

Summary Flint, MI LIF-02.xls

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Client: ARCADIS
Contact: Brad Koons
Services: UVOST Logging

Date: 08/02/10 - 08/21/10
Project: MLC-Buick City (Area LIF-02)
Project #: 100-MNDS-10UV
Address: Flint, MI

UVOST Log Summary

File	Date/Time	Latitude	Longitude	Final Depth *(ft)*	Max Signal *(%RE)*	Max. Signal Depth *(ft)*	Initial RE Area *(pVs)*	Background Area *(pVs)*	Fluorescence Top - Bottom *(ft)*
LIF-emulation 2	8/17/2010 16:02	NA	NA	7.9	3	3.8	11120	58	NA
LIF-02-001	8/6/2010 8:39	NA	NA	26.0	2	2.0	11488	91	NA
LIF-02-002	8/6/2010 9:14	NA	NA	26.0	14	6.5	11663	89	6.0-7.0
LIF-02-003	8/6/2010 9:46	NA	NA	26.0	2	21.4	11253	93	NA
LIF-02-004	8/6/2010 10:18	NA	NA	26.0	277	9.0	11798	93	5.75-10, 11-12.75
LIF-02-005	8/6/2010 12:59	NA	NA	26.0	4	5.0	11241	97	NA
LIF-02-006	8/6/2010 14:04	NA	NA	26.0	216	8.9	11697	89	7.5-11
LIF-02-007	8/6/2010 14:41	NA	NA	22.9	311	8.7	11273	84	7.75-12.5
LIF-02-008	8/6/2010 15:16	NA	NA	23.5	2	23.4	11047	95	NA
LIF-02-009	8/7/2010 8:13	NA	NA	7.6	137	5.8	11046	93	2.5-7.5
LIF-02-010	8/13/2010 10:54	NA	NA	26.0	7	5.2	11218	42	4.75-5.5
LIF-02-011	8/13/2010 13:26	NA	NA	11.1	94	10.2	11475	40	7-11.25
LIF-02-012	8/13/2010 13:53	NA	NA	4.6	9	4.1	11339	42	3.25-4.75
LIF-02-013	8/13/2010 14:15	NA	NA	26.1	9	1.3	11240	42	surface
LIF-02-014	8/13/2010 15:16	NA	NA	26.0	65	6.7	11309	49	6.25-10
LIF-02-015	8/14/2010 8:58	NA	NA	26.0	2	15.5	11523	41	NA
LIF-02-016	8/19/2010 13:44	NA	NA	26.0	7	0.6	11056	83	low
LIF-02-017	8/18/2010 9:33	NA	NA	9.4	57	8.7	11810	48	0-9.5
LIF-02-018	8/18/2010 10:09	NA	NA	26.0	335	7.3	11160	52	6.5-11
LIF-02-019	8/18/2010 10:47	NA	NA	38.9	259	9.5	11249	74	7.5-15
LIF-02-020	8/19/2010 15:59	NA	NA	26.0	22	10.0	11050	84	9.5-12
LIF-02-021	8/19/2010 16:34	NA	NA	15.1	86	8.1	11194	88	7.25-9.75
LIF-02-022	8/20/2010 7:25	NA	NA	26.0	4	23.4	11711	93	NA

Summary Flint, MI LIF-09.xls

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Date: 08/02/10 - 08/21/10
Project: MLC-Buick City (Area LIF-09)
Project #: 100-MNDS-10UV
Address: Flint, MI

UVOST Log Summary

File	Date/Time	Latitude	Longitude	Final Depth *(ft)*	Max Signal *(%RE)*	Max. Signal Depth *(ft)*	Initial RE Area *(pVs)*	Background Area *(pVs)*	Fluorescence Top - Bottom *(ft)*
LIF-09-emulation	8/3/2010 13:22	NA	NA	11.5	42	6.4	10793	74	NA
LIF-09-001	8/2/2010 10:41	NA	NA	30.0	20	20.2	10928	71	10-13.5 (low), 20-20.5
LIF-09-002	8/2/2010 11:28	NA	NA	30.0	13	19.2	10518	124	12-13.5, 19-19.5 (low)
LIF-09-003	8/2/2010 12:02	NA	NA	30.0	11	12.5	11358	76	12-14.5 (low)
LIF-09-004	8/3/2010 13:36	NA	NA	26.0	23	8.0	10639	70	5.5-13.75
LIF-09-005	8/3/2010 14:14	NA	NA	26.0	2	20.9	11140	72	NA
LIF-09-006	8/3/2010 14:42	NA	NA	26.0	16	11.5	10210	72	9.25-13.25
LIF-09-007	8/4/2010 7:41	NA	NA	26.0	3	15.2	10348	68	NA
LIF-09-008	8/4/2010 8:39	NA	NA	26.0	42	16.0	11735	83	15.5-16.5
LIF-09-009	8/4/2010 9:14	NA	NA	30.7	6	24.5	10548	71	23.5, 24.5 (low spikes)
LIF-09-010	8/4/2010 9:57	NA	NA	26.2	9	12.3	11583	83	9.5-14.5
LIF-09-011	8/4/2010 10:30	NA	NA	26.0	5	11.4	11175	96	10.75-12.25 (low)
LIF-09-012	8/4/2010 12:41	NA	NA	19.9	5	8.5	10872	102	8-15 (few low spikes)
LIF-09-013	8/4/2010 13:19	NA	NA	30.0	4	21.9	11751	112	21.75-22.5 (low)
LIF-09-014	8/4/2010 15:09	NA	NA	30.0	3	21.7	11496	103	16-17.5 (low blue waveform)
LIF-09-015	8/5/2010 7:29	NA	NA	30.0	11	24.4	11751	109	15.5, 20.5, 24.5 (low spikes)
LIF-09-016	8/5/2010 8:10	NA	NA	26.0	2	17.4	11225	98	NA
LIF-09-017	8/5/2010 8:49	NA	NA	26.0	442	14.1	11284	103	2-17.25
LIF-09-018	8/5/2010 9:22	NA	NA	26.0	230	5.4	11776	113	4.0-14
LIF-09-019	8/5/2010 9:56	NA	NA	20.0	3	19.2	10946	106	NA
LIF-09-020	8/5/2010 10:23	NA	NA	26.0	259	10.9	11307	110	1-2.5, 4.25-15
LIF-09-021	8/5/2010 12:59	NA	NA	26.0	565	12.7	10928	110	0.5-4.25, 11.5-14
LIF-09-022	8/5/2010 13:35	NA	NA	26.0	2	13.6	11270	114	NA
LIF-09-023	8/5/2010 14:04	NA	NA	26.0	3	1.9	10758	113	NA
LIF-09-024	8/5/2010 14:39	NA	NA	26.1	15	6.3	11547	121	5.75-8.75, 11.5-12.5, 14.25
LIF-09-025	8/5/2010 15:25	NA	NA	26.0	10	9.8	10822	118	9.5-10.5
LIF-09-026	8/5/2010 16:18	NA	NA	29.4	4	0.0	11467	115	6-9.75, 12.25-14
LIF-09-027	8/5/2010 16:59	NA	NA	26.0	70	12.6	11568	129	NA
LIF-09-028	8/21/2010 8:46	NA	NA	3.9	2	2.6	11491	88	NA
LIF-09-029	8/21/2010 9:21	NA	NA	26.0	26	12.9	11566	89	8.75-10 (low), 10.75-11.5, 12.5-14.25
LIF-09-030	8/21/2010 9:57	NA	NA	26.0	6	9.9	11471	87	9.75 (low spike)
LIF-09-031	8/21/2010 10:38	NA	NA	29.7	3	17.4	11259	88	NA
LIF-09-032	8/21/2010 13:13	NA	NA	12.7	13	12.6	11911	81	8.25-12.75
LIF-09-033	8/21/2010 13:56	NA	NA	26.0	11	8.7	11550	92	8.5-9
LIF-09-034	8/21/2010 14:30	NA	NA	26.0	2	8.2	11230	90	NA

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Services: UVOST Logging

Date: 08/02/10 - 08/21/10
Project: MLC-Buick City (Area LIF-12)
Project #: 100-MNDS-10UV
Address: Flint, MI

UVOST Log Summary

File	Date/Time	Latitude	Longitude	Final Depth *(ft)*	Max Signal *(%RE)*	Max. Signal Depth *(ft)*	Initial RE Area *(pVs)*	Background Area *(pVs)*	Fluorescence Top - Bottom *(ft)*
LIF-12-001	8/10/2010 12:57	NA	NA	24.7	141	8.9	11662	67	6.75-14
LIF-12-002	8/10/2010 13:33	NA	NA	4.0	1	2.8	11524	68	NA
LIF-12-003	8/10/2010 13:51	NA	NA	3.9	1	1.4	11498	68	NA
LIF-12-004	8/10/2010 14:04	NA	NA	30.0	31	14.1	11305	68	4.25-19.5, spike @ 24.5
LIF-12-005	8/10/2010 15:04	NA	NA	14.5	111	10.1	12140	78	0.5-6.25, 7.75-12.25
LIF-12-006	8/10/2010 15:45	NA	NA	10.3	1	0.1	11960	85	NA
LIF-12-007	8/10/2010 16:23	NA	NA	6.3	25	4.3	10746	72	0-6.25
LIF-12-008	8/10/2010 16:41	NA	NA	2.1	1	0.0	11780	87	NA
LIF-12-009	8/11/2010 8:35	NA	NA	26.0	2	18.2	11912	82	NA
LIF-12-010	8/11/2010 9:14	NA	NA	30.0	177	20.1	11695	85	12.25-22.5, spike @24.75
LIF-12-011	8/11/2010 9:56	NA	NA	26.0	511	12.7	11420	81	1-14.5
LIF-12-012	8/11/2010 10:54	NA	NA	30.0	98	7.5	10737	75	6.25-12.75, 14-15, 21.25-24
LIF-12-013	8/11/2010 13:58	NA	NA	26.0	11	12.2	11777	78	11.25-15.25
LIF-12-014	8/11/2010 14:58	NA	NA	26.0	30	14.8	11535	79	13.75-15
LIF-12-015	8/11/2010 15:35	NA	NA	26.0	3	0.0	11070	70	NA
LIF-12-016	8/12/2010 7:34	NA	NA	30.0	242	14.3	11786	76	6.25-17, 17.75-20
LIF-12-017	8/12/2010 8:15	NA	NA	30.0	37	14.8	11452	88	7.25-15.75, 22.75-23.5
LIF-12-018	8/12/2010 8:53	NA	NA	30.0	157	8.1	11513	84	6.5-16.5
LIF-12-019	8/12/2010 9:39	NA	NA	2.6	19	1.2	11979	76	0-2.5
LIF-12-020	8/12/2010 9:55	NA	NA	30.0	440	12.7	11823	78	11.25-16.75, 20.75-22.5
LIF-12-021	8/12/2010 10:30	NA	NA	10.9	14	4.3	11890	78	3.5-4.5
LIF-12-022	8/12/2010 12:58	NA	NA	24.0	336	10.2	11959	88	15-Jul
LIF-12-023	8/12/2010 13:31	NA	NA	26.0	15	7.2	11191	78	6.75-8, spikes@ 10, 13, 17.5
LIF-12-023A	8/12/2010 16:23	NA	NA	26.0	64	8.0	11390	43	6.5-14, 16.75-18
LIF-12-024	8/12/2010 14:14	NA	NA	34.0	514	16.6	11627	72	8-19, 22.5-25.25, spikes@ 26.5, 28
LIF-12-025	8/12/2010 17:03	NA	NA	26.0	24	9.3	11569	46	8-10, 16-17
LIF-12-026	8/13/2010 8:12	NA	NA	30.0	166	23.0	11408	51	12.25-26
LIF-12-027	8/13/2010 8:59	NA	NA	11.3	70	11.1	11908	49	10-11.25
LIF-12-028	8/16/2010 14:11	NA	NA	26.0	174	14.1	11480	51	10.5-18
LIF-12-029	8/16/2010 14:49	NA	NA	26.0	4	19.6	11387	29	19.5 (small spike)
LIF-12-030	8/16/2010 15:24	NA	NA	4.0	1	0.8	11485	48	NA
LIF-12-031	8/16/2010 15:39	NA	NA	4.3	1	2.7	11080	32	NA
LIF-12-032	8/17/2010 8:58	NA	NA	26.0	53	8.0	11904	46	6.5-11.75
LIF-12-033	8/17/2010 10:27	NA	NA	26.0	2	21.3	11505	39	NA
LIF-12-034	8/17/2010 10:59	NA	NA	12.0	2	0.8	11522	40	NA
LIF-12-035	8/17/2010 12:49	NA	NA	26.0	4	23.2	11037	35	NA
LIF-12-036	8/17/2010 13:46	NA	NA	21.0	9	16.8	11264	44	16.5-17.5 (low)
LIF-12-037	8/17/2010 14:35	NA	NA	24.0	9	6.3	11112	47	6-6.5 (low)
LIF-12-038	8/17/2010 15:29	NA	NA	4.0	1	0.7	11254	50	NA
LIF-12-039	8/18/2010 7:11	NA	NA	3.9	3	1.9	11765	51	NA
LIF-12-040	8/20/2010 10:42	NA	NA	13.8	6	4.6	11220	78	4.25-5
LIF-12-041	8/20/2010 13:29	NA	NA	7.2	127	7.0	11448	82	6.25-7.25
LIF-12-042	8/20/2010 15:14	NA	NA	26.0	8	5.4	11956	98	4.25-10 (low)
LIF-12-043	8/20/2010 16:01	NA	NA	26.0	4	21.4	11336	80	21-22 (low)

Summary Flint, MI LIF-16.xls

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Client:	ARCADIS
Contact:	Brad Koons
Services:	UVOST Logging
Date:	08/02/10 - 08/21/10
Project:	MLC-Buick City (Area LIF-16)
Project #:	100-MNDS-10UV
Address:	Flint, MI

UVOST Log Summary

File	Date/Time	Latitude	Longitude	Final Depth *(ft)*	Max Signal *(%RE)*	Max. Signal Depth *(ft)*	Initial RE Area *(pVs)*	Background Area *(pVs)*	Fluorescence Top - Bottom *(ft)*
LIF-16-001	8/9/2010 16:46	NA	NA	26.0	43	14.3	11658	70	13.75-16.25
LIF-16-002	8/10/2010 7:14	NA	NA	26.0	70	8.5	11498	67	7.75-11
LIF-16-003	8/10/2010 7:46	NA	NA	26.0	99	10.0	11910	65	9.5-12.5
LIF-16-004	8/10/2010 8:32	NA	NA	26.0	3	8.2	11292	66	small spike @ 8
LIF-16-005	8/10/2010 9:06	NA	NA	26.0	7	8.3	11363	64	7.75-9 (low)
LIF-16-006	8/10/2010 9:51	NA	NA	26.0	196	12.5	11802	74	spike @ 4.5, 8.25-20.25
LIF-16-007	8/14/2010 15:05	NA	NA	26.0	45	9.8	11005	37	7.5-11.5, 13.25-14.5 spike @
LIF-16-008	8/16/2010 7:18	NA	NA	26.0	3	3.5	11209	47	NA
LIF-16-009	8/16/2010 7:50	NA	NA	9.1	31	0.4	11521	44	0-1
LIF-16-010	8/16/2010 8:13	NA	NA	11.7	19	11.6	11262	43	11-11.75
LIF-16-011	8/16/2010 9:10	NA	NA	4.2	1	0.4	11446	42	NA
LIF-16-012	8/18/2010 16:33	NA	NA	26.0	2	20.3	11512	65	NA
LIF-16-013	8/16/2010 11:02	NA	NA	30.0	284	21.8	11663	37	5-27.75
LIF-16-014	8/18/2010 15:50	NA	NA	26.0	14	19.4	10423	57	18.5-20 (low)
LIF-16-015	8/19/2010 7:41	NA	NA	9.6	16	0.0	11028	72	NA
LIF-16-016	8/19/2010 8:44	NA	NA	26.0	10	7.0	11220	73	6.75-7.5
LIF-16-017	8/19/2010 9:29	NA	NA	30.0	220	19.5	11754	78	11.25-25.5
LIF-16-018	8/20/2010 9:34	NA	NA	26.0	24	15.8	11806	82	14.5-16.5

Summary Flint, MI LIF-40.xls

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Client: ARCADIS
Contact: Brad Koons
Services: UVOST Logging

Date: 08/02/10 - 08/21/10
Project: MLC-Buick City (Area LIF-40)
Project #: 100-MNDS-10UV
Address: Flint, MI

UVOST Log Summary

File	Date/Time	Latitude	Longitude	Final Depth *(ft)*	Max Signal *(%RE)*	Max. Signal Depth *(ft)*	Initial RE Area *(pVs)*	Background Area *(pVs)*	Fluorescence Top - Bottom *(ft)*
LIF-40-001	8/7/2010 8:37	NA	NA	13.2	8	11.1	11561	98	8.75-13.25
LIF-40-002	8/7/2010 9:24	NA	NA	4.8	2	1.7	11151	100	NA
LIF-40-003	8/7/2010 9:36	NA	NA	34.0	213	27.7	11948	88	4.75-6.5, 12-(30=bottom)
LIF-40-004	8/7/2010 10:15	NA	NA	34.0	247	30.1	11261	95	5-14, 17.25-(30=bottom)
LIF-40-005	8/7/2010 12:53	NA	NA	14.3	43	7.7	11602	96	7.25-10.5
LIF-40-006	8/7/2010 13:16	NA	NA	26.0	233	6.2	11577	100	5.25-11.25, spikes @ 15.25, 16.25
LIF-40-007	8/7/2010 14:09	NA	NA	6.1	3	5.8	11763	93	NA
LIF-40-008	8/7/2010 14:44	NA	NA	26.0	260	6.6	11993	105	5-13.5, 15.5-18.25
LIF-40-009	8/9/2010 8:19	NA	NA	28.0	334	10.8	11531	97	4.25-17.75, 19.25-25
LIF-40-010	8/9/2010 9:00	NA	NA	26.0	4	14.2	11350	101	small spike @ 14
LIF-40-011	8/9/2010 9:42	NA	NA	26.0	155	15.7	11055	97	8.5-11, 14.25-16.5,spike @ 12.5
LIF-40-012	8/9/2010 13:02	NA	NA	27.0	3	26.3	11371	98	NA
LIF-40-013	8/9/2010 15:43	NA	NA	5.7	73	4.8	11181	112	1.5-4.5 (low), 4.5-5.75
LIF-40-014	8/14/2010 9:37	NA	NA	37.0	73	13.0	11656	42	8-16, 16.5-(30=bottom)
LIF-40-015	8/14/2010 11:33	NA	NA	26.0	139	18.8	11009	40	6.25-9, 11.75-14, 15.5-19.75
LIF-40-016	8/14/2010 14:41	NA	NA	6.6	60	6.6	11209	41	spike @ 6.5
LIF-40-017	8/16/2010 9:31	NA	NA	24.0	16	17.2	11771	53	spikes @ 4.25, 11, 12.5,17, 18.75
LIF-40-018	8/16/2010 13:30	NA	NA	2.8	1	2.6	11733	45	NA
LIF-40-019	8/18/2010 8:12	NA	NA	26.0	6	0.0	11251	52	NA
LIF-40-020	8/18/2010 9:00	NA	NA	26.0	1	24.4	11648	45	NA
LIF-40-021	8/18/2010 14:05	NA	NA	26.0	44	9.3	11903	74	6.5-16.5
LIF-40-022	8/18/2010 14:41	NA	NA	26.0	409	19.1	11001	84	18-23.5
LIF-40-023	8/19/2010 10:19	NA	NA	29.3	2	23.0	11960	93	NA
LIF-40-024	8/19/2010 10:52	NA	NA	26.0	47	6.6	11669	71	6-7.5
LIF-40-025	8/19/2010 14:50	NA	NA	26.0	94	16.2	11575	76	8.5-12.5, 15.75-16.75

Tuesday, August 31, 2010

8633 Jefferson Highway
Osseo, MN 55369
763-424-4803
FAX: 763-424-9452

-Direct Sensing Report-

Client:	**ARCADIS**
Project Name:	**Flint MLC-Buick City**
Location:	**Flint, MI**
Project Number:	**100-MNDS-10UV**

The analysis and opinions expressed in this report are based upon data obtained from UVOST logs generated (and samples collected for emulations if applicable) at the location specified, and from other information discussed in this report. Exceptions, if any, are discussed in the accompanying discussion if applicable. This report is prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted practices. Reported results shall not be reproduced, except in full, without written approval of the lab. The sample results relate only to the analytes of interest tested. No warranties, expressed or implied are intended or made.

I certify that the data contained in this final report has been generated and reviewed in accordance with approved methods and our Standard Operating Procedure. Release of this final report is authorized by Laboratory management, which is verified by the following signature.

_____ _____

Approval Signature Date

LIF SYSTEM DESCRIPTION & ANALYSIS

UVOST

Fluorescence is a property of some compounds where absorbed UV light stimulates the emission of photons (light) of a longer wavelength relative to the source emission. The release of the photons can be used to detect small amounts of substance (i.e. polycyclic aromatic hydrocarbons or PAHs) in a larger matrix (soil). This method of detection has been used in laboratories for decades. Now, with the availability of lasers and optical fibers, this technology can be applied down hole in the field.

The UVOST system sends light (via 308 nm laser) through a fiber optic cable strung within probe rods. The light, reflected by a parabolic mirror, then exits through a sapphire window in the side of the probe. As the probe is advanced, the soil is exposed to the UV laser light. If PAHs are present (compounds in POLs that fluoresce, i.e. LNAPL) longer wavelength light is emitted by the contaminants. This "signal" light is transmitted through a return fiber, back up hole to be analyzed. Responses are indicated in real-time on a graph of signal vs. depth. The UVOST log displays "color mixed" signal logs (contributions from 4 channels) and waveforms ("fingerprint" of multi-wavelength) to aid in identification and relative quantity of the contaminant present.

Prior to every log the UVOST system is checked for optical quality by observing the background signal for sources of signal in the fiber, filter, mirror and sapphire window. Also, the reference emitter (a standard proprietary NAPL mixture called the "RE") is placed on the window to determine the qualitative and semi-quantitative properties of the laser system. This is to assure that the RE response has the correct shape and intensity and that the UVOST system is ready to log. Typically the RE will fall between 10,000 and 12,000 pVs (picovolt-seconds, a measure of waveform area) and the background can vary from 0.1% to 1% (area of about 0-100 pVs). It is important to remember that the relationship between the NAPL in the ground and the RE depends on that particular NAPL. The calibration of the system is not to a concentration, but to a known fluorescence signature.

EC (Electrical Conductivity)

Electrical Conductivity (EC) is a measure of the soils ability to conduct an electrical current between two dipoles on the LIF/EC probe. Conductivity is the reciprocal of electrical resistivity and has the units (in our application) of millisiemens per meter (mS/m). Since soil is in the pathway of the charge flow, the grain size can be determined by comparing the EC log to a soil boring. Conductivity readings in the 100s indicate smaller grain (size such as clay). Larger grain size (sand and gravels) are typically in the 10s of mS/m range. Prior to every log the EC point of the UVOST probe is checked for proper operation by performing a voltage test with a voltage meter and a conductivity test with a test block.

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Appendix B

AOI-09 Soil Boring Logs

Date Start/Finish: 8/16/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 4' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-01**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0	1	0-2'	2.0'	0.0		FILL; asphalt, slag, loose; dry, gray.	Borehole backfilled with soil cuttings.
				0.0		FILL; sandy silt, some gravel; dry, dark brown.	
				0.0		SAND; fine, silty, little gravel; dry to slightly moist, brown.	
	2	2-4'	2.0'	0.0		SAND; very fine to fine, silt, somewhat cohesive, soft, some gravel and cobbles, loose, soft; slighty moist, light brown.	
				0.0		SAND; silty, somewhat cohesive, trace cobbles, loose to slightly dense; slighty moist, light brown.	
				0.0		SAND; silty, trace clay, somewhat cohesive, soft, trace cobbles, loose to slightly dense; wet, light brown.	
5 / -5						End of boring at 4' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil samples collected at 0-2' and 2-4' bgs for laboratory analysis
Groundwater encountered at 3.5' bgs
No ordor or staining observed

Date Start/Finish: 8/16/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: Enter Rig Type Here

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 4' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-02**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0	1	0-2'	2.0'	0.0		FILL; asphalt; dry, black.	
				0.0		FILL; asphalt, trace glass; dry, black.	
	2	2-4'	2.0'	0.0		SILT; sand, loose, somewhat cohesive; slightly moist, light brown.	Borehole backfilled with soil cuttings.
				0.0		SILT; very fine to medium sand, loose to medium dense; moist, light brown.	
				0.0		SAND; very fine to medium, trace coarse, little clay, trace silt; moist to wet, brown.	
5 / -5						End of boring at 4' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil samples collected at 0-2' and 2-4' bgs for laboratory analysis
Groundwater encountered at 3.5' bgs
No ordor or staining observed

Date Start/Finish: 8/16/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 4' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-03**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0	1	0-2'	2.0'	0.0		FILL; asphalt, loose; dry, black.	Borehole backfilled with soil cuttings.
				0.0		SAND; very fine, silty, loose, slightly cohesive, contains sludge; slightly moist, black.	
	2	2-4'	2.0'	0.0		SAND; very fine, silty, loose, slightly cohesive, contains sludge; slightly moist, black, greenish brown mottling.	
				0.0		SAND; very fine to medium, little silt, slightly cohesive; slightly moist, olive brown.	
				0.0		SAND; very fine to medium, little silt, slightly cohesive; slightly moist, to moist olive brown.	
				0.0		SAND; very fine to medium, little silt, slightly cohesive; wet, olive brown.	
						End of boring at 4' bgs.	
5 / -5							

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil samples collected at 0-2' and 2-4' bgs for laboratory analysis
Groundwater encountered at 3.5' bgs
No ordor or staining observed

Date Start/Finish: 8/16/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 4' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-04**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0	1	0-2'	2.0'	0.0		FILL; asphalt, slag, sand and gravel, glass, brick fragments, loose; dry.	
				0.0		SAND; very fine, silty, loose, slightly cohesive; slightly moist to moist, brownish black.	Borehole backfilled with soil cuttings.
	2	2-4'	2.0'	0.0		SAND; very fine to medium, trace cobbles, loose to medium dense; slight moist to moist to wet, light brown.	
5 / -5						End of boring at 4' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil samples collected at 0-2' and 2-4' bgs for laboratory analysis
Groundwater encountered at 3.5' bgs
No ordor or staining observed

Date Start/Finish: 8/16/10 **Drilling Company:** Boart Longyear **Driller's Name:** **Drilling Method:** Direct Push **Sampling Method:** Geoprobe **Rig Type:** NA	**Northing:** NA **Easting:** NA **Casing Elevation:** NA **Borehole Depth:** 10' bgs **Surface Elevation:** NA **Descriptions By:** Jay Read	**Well/Boring ID:** **SB-09-05** **Client:** Motors Liquidation Company **Location:** MLC Buick City Flint, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0							
					0.0		ASPHALT	
					0.0		FILL; sand, slag, little gravel, loose; dry, black.	
		1	0-5'	4.0	0.0		FILL; sand, gravel, trace clay, trace brick, loose; moist, black.	
					0.0		FILL; sand, gravel, clay content, trace brick, loose; wet, black, strong odor.	
					0.0		CLAY; some sand, some gravel, soft; wet, black.	
					0.0		CLAY; silty, soft; wet, green, black mottling, odor.	
5	-5						CLAY; soft; wet, gray.	Borehole backfilled with soil cuttings.
		2	5-10'	3.5	0.0			
10	-10						End of boring at 10' bgs.	
15	-15							

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil samples collected at 4-5' and 7-8.5' bgs for laboratory analysis
Groundwater encountered at 3' bgs
No staining observed

Date Start/Finish: 8/16/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-06**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0							
				0.0		ASPHALT	
				0.0		FILL; sand, silty, gravel; dry, black.	
				0.0		SAND; silty, little gravel, little rock fragments, loose; slightly moist, dark brown.	
	1	0-5'	4.0	0.0		SAND; fine, and silt, loose; slightly moist to moist, gray to dark gray.	
				0.0		SAND; silty clay, clay content, soft, loose; slightly moist to moist, gray to dark gray.	
				0.0		SILT; clayey, very soft, little sand, trace gravel; moist, dark gray.	
5 / -5						CLAY; silty, no to little plasticity, very soft; moist to wet, gray.	Borehole backfilled with soil cuttings.
	2	5-10'	5.0	0.0			
10 / -10						End of boring at 10' bgs.	
15 / -15							

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample collected at 1-2' bgs for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/16/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-07**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0							
		1	0-5'	0.0	0.0		CONCRETE	
5	-5						CLAY; soft to medium hard; moist to wet, gray.	Borehole backfilled with soil cuttings.
		2	5-10'	1.4	0.0			
10	-10						End of boring at 10' bgs.	
15	-15							

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/16/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-08**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0						CONCRETE	
					0.0		FILL; steel cuttings, tabs and pieces.	
					0.0		SAND; very fine to fine, silty, poorly sorted, trace gravel, trace steel pieces; slightly moist, dark brown to black.	
		1	0-5'	4.0	0.0		SILT; clayey, some sand, trace gravel, soft, loose; slightly moist, dark gray to black.	
					0.0		CLAY; soft, very fine sand, trace gravel; slightly moist, dark gray.	
5	-5						CLAY; little sand, little silt, soft to medium hard; moist, gray.	Borehole backfilled with soil cuttings.
		2	5-10'	4.5	0.0			
10	-10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil samples collected at 1.5-2.5' and 2.5-3.5' bgs for laboratory analysis
Groundwater not encountered
No odor or staining observed

Date Start/Finish: 8/16/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-09**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						ASPHALT	
						FILL; silt, sand, gravel, trace glass, trace slag, loose; dry, dark brown.	
				20.0		SAND; very fine to fine, some silt, trace gravel, poorly sorted, loose; slightly moist, dark brown.	
	1	0-5'	4.2	14.0		SAND; very fine, silty, loose to medium dense, poorly sorted; moist, dark brown.	
				90.0		SILT; clayey, no plasticity, soft, little sand; moist, dark brown.	
				329		CLAY; and silt, soft, trace sand; moist, greenish gray.	
5 / -5						SILT; and clay, soft to medium hard, little sand; moist, gray, slight odor.	Borehole backfilled with soil cuttings.
	2	5-10'	1.5	68.6			
10 / -10						End of boring at 10' bgs.	
15 / -15							

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil samples collected at 1-2' and 2-3' bgs for laboratory analysis
Groundwater not encountered
No staining observed

Date Start/Finish: 8/17/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-10**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						CONCRETE	
						FILL; slag, sand, gravel; slightly moist, dark reddish brown to black.	
				33.8		SAND; fine, little to some silt, trace gravel, loose, poorly sorted; slightly moist, brown.	
	1	0-5'	4.2	2.6		SAND; very fine to fine, some silt, little to some gravel, loose, poorly sorted; slightly moist, brown. Trace to little clay at 2.25-3.0' bgs.	
				30.8		SILT; little sand, soft, loose; slightly moist, gray, odor.	
						SILT; clayey, soft; moist, gray, slight odor. No odor at 4.0-4.75' bgs.	
5 / -5						SAND; very fine, silty, loose, poorly sorted; moist, greenish gray.	Borehole backfilled with soil cuttings.
				49.7		CLAY; silty, soft to medium hard, lose plasticity; moist to wet, gray with trace brown mottling.	
				88.4			
	2	5-10'	3.5				
				77.8			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No staining observed

Date Start/Finish: 8/17/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-11**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						CONCRETE	
						FILL; sand, slag, concrete; slightly moist, black.	
				25.9		SAND; fine, little silt, little gravel, loose, poorly sorted; slightly moist, reddish brown.	
	1	0-5'	4.0	37.3		SAND; fine to medium, gravel, trace clay, trace cobbles, loose, poorly sorted; slightly moist, dark brown.	
						SAND; and silt, trace gravel, soft, loose; slightly moist.	
				46.9		SILT; little to some sand, trace gravel, soft, loose; slightly moist, dark brown to light brown.	
				40.3		CLAY; silty, soft to medium hard; slightly moist, brown.	
5 / -5						CLAY; silty, medium hard; moist to wet, brownish gray.	Borehole backfilled with soil cuttings.
				20.2			
				25.6			
	2	5-10'	4.5	28.5			
				34.2			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/17/10 **Drilling Company:** Boart Longyear **Driller's Name:** **Drilling Method:** Direct Push **Sampling Method:** Geoprobe **Rig Type:** NA	**Northing:** NA **Easting:** NA **Casing Elevation:** NA **Borehole Depth:** 10' bgs **Surface Elevation:** NA **Descriptions By:** Jay Read	**Well/Boring ID:** **SB-09-12** **Client:** Motors Liquidation Company **Location:** MLC Buick City Flint, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0						CONCRETE	
					212		FILL; sand, gravel, brick fragments, loose; dry, black.	
							SAND; and gravel, loose, some tar-like material, very dense, sticky; slightly moist, black, strange odor.	
		1	0-5'	2.5			FILL; concrete, brick, sand, gravel, loose; dry.	
					22.9		SILT; and sand, very fine, loose, soft; slightly moist, dark brown.	
							SAND; very fine to fine, silty, loose, slightly cohisive, poorly sorted; slightly moist to moist, brown.	
					20.9			
5	-5						SAND; very fine to medium, poorly sorted, loose; moist to wet, light brown.	Borehole backfilled with soil cuttings.
					39.3			
					39.0		CLAY; silty, medium hard; moist to wet, brownish gray.	
		2	5-10'	4.2	47.2			
					60.3			
10	-10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample collected at 2-3' bgs for laboratory analysis
Groundwater encountered at 5' bgs
No staining observed

Date Start/Finish: 8/17/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-13**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						CONCRETE	
				12.3		SILT; and sand, loose, soft; slightly moist, light brown to dark brown.	
	1	0-5'	3.5	43.1		FILL; sandy silt, large wood fragments.	
				39.3		SAND; very fine to fine, silty, little clay, slightly cohesive, loose, poorly sorted; slightly moist, light brown.	
				47.6			
5 / -5				41.2		SAND; very fine to medium, poorly sorted, medium dense; wet, light brown.	Borehole backfilled with soil cuttings.
				45.8		CLAY; silty, low plasticity, medium hard; moist, brownish gray.	
	2	5-10'	4.3	422			
				378			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No staining observed

Date Start/Finish: 8/17/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-14**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						CONCRETE	
				23.4		SAND; fine, some silt, loose, poorly sorted; dry, black to brown.	
	1	0-5'	4.0	27.7		SAND; silty, loose, soft; slightly moist, brown.	
				30.8			
				27.2		SAND; fine to coarse, little silt, trace gravel, poorly sorted, loose; moist.	
5 / -5				18.7		CLAY; interbedded silt, low plasticity, soft to medium hard; moist to wet, gayish brown.	Borehole backfilled with soil cuttings.
				16.2			
	2	5-10'	5.0	17.3			
				9.7			
				14.6			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample collected at 1-2' bgs for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/17/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-15**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						CONCRETE	
	1	0-5'	3.0	2.4		SILT; and sand, very fine, loose, soft; slightly moist, dark brown.	
				7.8		SAND; fine to coarse, little silt, loose, poorly sorted; moist, light brown.	
				10.4			
5 / -5				16.7		CLAY; little interbedded silt, soft to hard; moist to wet, brown grading to gray.	Borehole backfilled with soil cuttings.
	2	5-10'	5.0	18.4			
				26.7			
				221.2			
				30.4			
10 / -10						End of boring at 10' bgs.	

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Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/17/10 **Drilling Company:** Boart Longyear **Driller's Name:** **Drilling Method:** Direct Push **Sampling Method:** Geoprobe **Rig Type:** NA	**Northing:** NA **Easting:** NA **Casing Elevation:** NA **Borehole Depth:** 10' bgs **Surface Elevation:** NA **Descriptions By:** Jay Read	**Well/Boring ID:** **SB-09-16** **Client:** Motors Liquidation Company **Location:** MLC Buick City Flint, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0						CONCRETE	
					16.7		SILT; and sand, fine, loose, poorly sorted; dry, dark brown.	
		1	0-5'	3.5	20.3			
					22.4		SAND; fine to medium to coarse, little silt, loose, poorly sorted; slightly moist to moist to wet, reddish brown.	
					25.7			
5	-5				22.6		CLAY; little silt, medium hard to hard; moist to wet, light brown.	Borehole backfilled with soil cuttings.
					30.4			
		2	5-10'	5.0	32.6		SILT; little clay, soft; wet, gray.	
					35.4			
					37.7			
10	-10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 4' bgs
No odor or staining observed

Date Start/Finish: 8/17/10 **Drilling Company:** Boart Longyear **Driller's Name:** **Drilling Method:** Direct Push **Sampling Method:** Geoprobe **Rig Type:** NA	**Northing:** NA **Easting:** NA **Casing Elevation:** NA **Borehole Depth:** 10' bgs **Surface Elevation:** NA **Descriptions By:** Jay Read	**Well/Boring ID:** **SB-09-17** **Client:** Motors Liquidation Company **Location:** MLC Buick City Flint, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0						CONCRETE	
					16.7		FILL; sand, slag, silt, gravel; dry, black.	
		1	0-5'	3.5	20.3		SILT; sandy, loose, soft; moist, dark brown to light brown.	
					27.6		CLAY; sandy, little silt, beyond plastic limit, soft; wet, light brown.	
					19.2		CLAY; moderately plastic, medium hard to hard; wet, grayish brown.	
5	-5						CLAY; some silt, little to no plasticity, little sand, soft to medium hard; wet, brownish gray.	Borehole backfilled with soil cuttings.
					24.2			
					29.3			
		2	5-10'	2.6				
10	-10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 3' bgs
No odor or staining observed

Date Start/Finish: 8/17/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-18**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						CONCRETE	
				79.1		SAND; fine, and silt, little gravel, loose; dry, dark brown.	
	1	0-5'	4.0			SAND; fine, silty, loose, poorly sorted; slightly moist, dark brown.	
				54.7		SAND; very fine to fine, little to trace silt, loose, poorly sorted; slightly moist to moist, dark brown.	
						SAND; fine to medium, silty, loose, poorly sorted; moist to wet, reddish brown.	
5 / -5				78.7		CLAY; low plasticity, medium hard to hard; slightly moist, brown.	Borehole backfilled with soil cuttings.
				50.2			
	2	5-10'	5.0	55.4			
				60.1		SILT; little clay, no plasticity, soft to medium hard; moist to wet, gray.	
10 / -10				42.7		End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 4' bgs
No odor or staining observed

Date Start/Finish: 8/17/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-19**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						ASPHALT	
				0.0		FILL; slag, brick, sand, loose; dry, black.	
	1	0-5'	0.0	0.0		SAND; very fine to medium, silty, loose, poorly sorted; slightly moist to moist, dark brown.	
				0.0		SAND; fine to medium, little silt, loose, poorly sorted; moist, brown.	
				0.0		CLAY; low plasticity, medium hard to hard; moist, brownish gray.	
5 / -5							Borehole backfilled with soil cuttings.
	2	5-10'	2.3	0.0		SILT; little clay, soft; wet, gray.	
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 6.4' bgs
No odor or staining observed

Date Start/Finish: 8/17/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-20**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0				0.0		FILL; topsoil, silt, sand, gravel, rootlets, loose; dry, dark brown.	
				40.0		FILL; slag, silt, sand, little gravel, loose; dry, dark brown to black.	
						SILT, little sand, trace clay, soft; dry, mottled dark brown and orange.	
	1	0-5'	5.0	30.0		CLAY; little silt, trace sand, medium hard; dry, gray.	
				15.0		SILT; clayey, low plasticity, soft to medium hard; slightly moist to moist, dark gray to gray.	
				29.0		CLAY; little silt, low plasticity, medium hard; slightly moist, gray, little orange mottling.	
5 / -5				0.6		CLAY; silty, interbedded silt layers, low plasticity, soft to medium hard; moist to wet, gray.	Borehole backfilled with soil cuttings.
				1.3			
	2	5-10'	4.3	1.1			
				1.6			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/18/10 **Drilling Company:** Boart Longyear **Driller's Name:** **Drilling Method:** Direct Push **Sampling Method:** Geoprobe **Rig Type:** NA	**Northing:** NA **Easting:** NA **Casing Elevation:** NA **Borehole Depth:** 10' bgs **Surface Elevation:** NA **Descriptions By:** Jay Read	**Well/Boring ID:** **SB-09-21** **Client:** Motors Liquidation Company **Location:** MLC Buick City Flint, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0							
					263		FILL; silt, gravel, slag, glass, loose; dry, dark brown to black.	
					145			
		1	0-5'	5.0	13.3		CLAY; silty, low plasticity, medium hard, little to trace sand; slightly moist, gray, trace orange mottling.	
					9.5			
					11.5			
5	-5						CLAY; silty, interbedded silt, low plasticity, soft to medium hard; moist to wet, gray.	Borehole backfilled with soil cuttings.
					78			
					30			
		2	5-10'	4.5	17			
10	-10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/18/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-22**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0				1403		FILL; sand, silt, slag, glass, loose; dry, black.	
				661			
	1	0-5'	5.0	0.5		CLAY; silty, little sand, soft to medium hard; slightly moist, brownish gray.	
				98.2		SILT; sandy, soft; moist, gray.	
				93.0		CLAY; little to some silt, medium hard; slightly moist, gray.	
5 / -5				1.0		SILT and CLAY; interbedded, soft to medium hard; moist to wet, mottled gray and brown.	Borehole backfilled with soil cuttings.
				1.2			
	2	5-10'	5.0	108			
				11.2			
				50.0			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/18/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-23**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0							
					268		FILL; topsoil, silt, gravel, slag, rootlets, loose; dry, black.	
					45.0			
		1	0-5'	5.0	121		SILT; little clay, soft, slightly moist, gray.	
					0.0			
					0.8		CLAY; silty, no plasticity, soft to medium hard; slightly moist, gray.	
5	-5						CLAY; silty, no plasticity, soft, sticky; wet, gray.	Borehole backfilled with soil cuttings.
					0.0			
					0.0			
		2	5-10'	3.7	0.0			
10	-10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/18/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-24**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0							
				123		FILL; topsoil, silt, sand, slag, loose; dry, black.	
				122		CLAY; silty, soft; dry, dark brown.	
						SAND; very fine to medium, little clay, loose, poorly sorted; slightly moist, light brown.	
	1	0-5'	4.0	0.0		SILT; clayey, no plasticity, soft; slightly moist, black.	
						SILT; little clay, no plasticity, soft, trace sand; slightly moist, gray.	
				35.0			
				55.0		CLAY; silty, no plasticity, medium to hard; slightly moist, brownish gray.	
5 / -5						CLAY; little silt, medium hard to hard; moist, mottled gray and orange.	Borehole backfilled with soil cuttings.
				89.0			
				0.0			
	2	5-10'	5.0	0.0			
				0.0			
				0.0			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater not encountered
No odor or staining observed

Date Start/Finish: 8/18/10 **Drilling Company:** Boart Longyear **Driller's Name:** **Drilling Method:** Direct Push **Sampling Method:** Geoprobe **Rig Type:** NA	**Northing:** NA **Easting:** NA **Casing Elevation:** NA **Borehole Depth:** 10' bgs **Surface Elevation:** NA **Descriptions By:** Jay Read	**Well/Boring ID:** **SB-09-25** **Client:** Motors Liquidation Company **Location:** MLC Buick City Flint, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0							
					4.1		FILL; topsoil, silt, gravel, sand, some clay, loose; dry, black.	
					0.0			
		1	0-5'	5.0	21.7		SILT; clayey, crumbly, soft; slightly moist to moist, dark brown.'CLAY; little silt, trace sand, soft; moist, brown.	
					0.0		CLAY; little silt, trace sand, soft; moist, brown.	
					0.0			
5	-5						CLAY; little silt, medium hard to ard; slightly moist to wet, gray.	Borehole backfilled with soil cuttings.
		2	5-10'	4.2	0.0			
10	-10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/18/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-26**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0				1.0		FILL; topsoil, sand, silt, gravel, little clay, rootlets, slag, glass, loose; dry, black.	
				5.9			
	1	0-5'	5.0	0.0		CLAY; little silt, no plasticity, little to some sand, soft; moist, mottled dark and light brown.	
				0.0		CLAY; silty, no plasticity, crumbly, trace sand, trace mica, soft; moist, light brown.	
				0.0		CLAY; and sand, trace silt, trace gravel, soft; wet, mottled gray and orange.	
				0.0		SAND; very fine to fine, trace to little clay, poorly sorted; wet, gray.	
5 / -5				32.8		CLAY; little silt, little plasticity, trace sand, soft to medium hard; wet, gray.	Borehole backfilled with soil cuttings.
				61.2			
	2	5-10'	1.9				
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 4' bgs
No odor or staining observed

Date Start/Finish: 8/18/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-27**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0							
				114		RAILROAD BALLAST	
						FILL	
				16.4		CLAY; silt, trace sand, medium hard; slightly moist, gray.	
	1	0-5'	5.0	7.5		SILT; no plasticity, little sand, mica, soft; slightly moist, black.	
				0.0		SAND; very fine, trace silt, moderately sorted, loose; slightly moist, brown.	
				0.0		CLAY; some sand, medium hard; slightly moist; slightly moist, orangish brown.	
5 / -5							Borehole backfilled with soil cuttings.
				0.0		SAND; fine to coarse, little clay, loose, poorly sorted; wet, brown.	
				0.0		CLAY; some silt, soft to hard; moist to wet, brown to gray.	
	2	5-10'	1.9	0.0			
				0.0			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/18/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-28**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0							
					6.0		FILL; topsoil, silt, sand, little clay, slag, trace gravel, loose; dry, black.	
					20.5		CLAY; little sand, rootlets, soft; slightly moist to moist, dark brown.	
		1	0-5'	5.0	1.0		SAND; very fine to fine, trace silt, poorly sorted, loose; moist to wet, brown.	
							SILT; clayey, trace sand, soft; slightly moist, brown.	
					0.2			
							SAND; and clay, no plasticity, loose, soft; moist to wet, brown.	
					2.2			
5	-5						CLAY; little silt, no plasticity, soft to medium hard; moist to wet, gray.	Borehole backfilled with soil cuttings.
					2.8			
					18.8			
		2	5-10'	3.0	20.5			
10	-10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 2.4' bgs
No odor or staining observed

Date Start/Finish: 8/18/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 6.4' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-29**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0							
				1.1		FILL; silt, sand, slag, loose, dark brown.	
				0.5			
	1	0-5'	5.0	0.2		SILT; little clay, medium hard; slightly moist, reddish brown.	
				0.0		Gray and brown mottled at 3-4' bgs.	Borehole backfilled with soil cuttings.
				0.0		CLAY; silty, soft to medium hard; moist, brownish gray.	
5 / -5							
	2	5-6.4'	1.4	0.0		SAND; concrete; dry.	
						End of boring at 6.4' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater not encountered
No odor or staining observed

Date Start/Finish: 8/18/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-30**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0							
					0.0		FILL; topsoil, silt, sand, slag, loose; dry, black.	
					0.0			
		1	0-5'	5.0	0.0		SAND; fine to medium, little silt, loose, poorly sorted; slightly moist to moist, brown.	
					0.0		CLAY; sandy, medium hard; slightly moist, brown.	
					15.6		SAND; fine to medium, little clay, loose, poorly sorted; wet, light brown.	
5	-5						CLAY; some silt, little to no plasticity, soft to hard; moist to wet, gray, trace brown mottling.	Borehole backfilled with soil cuttings.
					0.0			
					0.0			
		2	5-10'	4.6	0.0			
					0.0			
10	-10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 4' bgs
No odor or staining observed

Date Start/Finish: 8/18/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 8.6' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-31**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0				0.0		COBBLES; railroad ballast.	
				0.0		SAND; silty, loose, soft; slightly moist to moist, dark brown to black.	
	1	0-5'	5.0	0.0		SILT; sandy, soft, crumbly; slightly moist, brown.	
				0.0		CLAY; trace silt, low plasticity, some sand, soft; slightly moist, brown.	
				0.0		CLAY; some silt, soft; slightly moist to moist, gray, brown mottled.	Borehole backfilled with soil cuttings.
5 / -5				0.0		CLAY; little to some silt, medium hard to hard; moist to wet, gray, trace brown mottling.	
	2	5-8.6'	3.6	0.0			
				0.0			
						End of boring at 8.6' bgs.	
10 / -10							

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/18/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 6.7' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-32**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0				0.8		FILL; topsoil, silt, sand, slag, loose; dry, black.	
				0.0		SILT; trace gravel, soft; dry, brown.	
	1	0-5'	5.0	0.0		CLAY; silty, no plasticity, soft; slightly moist, light brown to gray.	
				0.0			
				0.0			
5 / -5							
	2	5-6.7'		0.0		CLAY; little silt, little plasticity, soft to medium hard; slightly moist to moist, gray. Brick at 5.8-6.1' bgs.	
			3.6			End of boring at 6.7' bgs.	

Borehole backfilled with soil cuttings.

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater not encountered
No odor or staining observed

Date Start/Finish: 8/18/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 4' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-33**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0	1	0-2'	2.0	80.1		TOPSOIL; grading to fill, sand, silt, gravel, slag, loose; dry, dark brown.	
				92.4		SILT; incohesive, crumbly, some sand, loose, soft; dry, dark to light brown.	
	2	2-4'	2.0	15.0		SAND; fine to coarse, trace to little clay, loose, poorly sorted; slightly moist, light brown.	Borehole backfilled with soil cuttings.
				13.0		CLAY; no plasticity, hard; slightly moist, gray, brown mottled.	
5 / -5						End of boring at 4' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil samples collected at 0-2' and 2-4' for laboratory analysis
Groundwater not encountered
No odor or staining observed

Date Start/Finish: 8/18/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 4' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-34**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0							
				94.1		TOPSOIL; grading to fill, sand, silt, gravel, slag, loose; dry, dark brown.	
	1	0-2'	2.0	11.2		SAND; very fine to fine, and silt, loose, poorly sorted; dry, brown.	
				6.0		SAND; very fine to fine, trace silt, little gravel, loose, poorly sorted; dry, reddish brown.	Borehole backfilled with soil cuttings.
	2	2-4'	2.0	0.5		CLAY; silty, moderate plasticity, soft to medium hard; slightly moist, mottled gray and brown.	
						End of boring at 4' bgs.	
5 / -5							

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil samples collected at 0-2' and 2-4' for laboratory analysis
Groundwater not encountered
No odor or staining observed

Date Start/Finish: 8/19/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 4' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-35**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0							
				92.1		ASPHALT; and fill, silt, sand, clay, loose; dry, black.	
	1	0-2'	2.0			SAND; fine, little silt, little gravel, loose, poorly sorted; dry, dark brown to black.	
				87.1			
				28.5		SAND; very fine to coarse, little to some silt, slightly cohesive, poorly sorted; slightly moist, dark brown.	Borehole backfilled with soil cuttings.
	2	2-4'	1.0				
				3.0		CLAY; low plasticity, trace sand, medium hard; moist, gray.	
						End of boring at 4' bgs.	
5 / -5							

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil samples collected at 0-2' and 2-4' for laboratory analysis
Groundwater not encountered
No odor or staining observed

Date Start/Finish: 8/19/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 4' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-36**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0							
						ASPHALT	
	1	0-2'	1.0	2.0		FILL; silty sand, trace gravel, slag, loose; dry, black.	
	2	2-4'	2.0	0.4		SAND; very fine to fine, silty, little clay, slightly cohesive, loose, poorly sorted; slightly moist to moist, light brown.	Borehole backfilled with soil cuttings.
5 / -5						End of boring at 4' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil samples collected at 1-2' and 2-4' for laboratory analysis
Groundwater not encountered
No odor or staining observed

Date Start/Finish: 8/19/10 **Drilling Company:** Boart Longyear **Driller's Name:** **Drilling Method:** Direct Push **Sampling Method:** Geoprobe **Rig Type:** NA	**Northing:** NA **Easting:** NA **Casing Elevation:** NA **Borehole Depth:** 10' bgs **Surface Elevation:** NA **Descriptions By:** Jay Read	**Well/Boring ID:** **SB-09-37** **Client:** Motors Liquidation Company **Location:** MLC Buick City Flint, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0							
		1	0-5'	3.0			CONCRETE	
					0.5		SAND; fine to medium, trace gravel, loose, poorly sorted; slightly moist, brown.	
					0.0			
5	-5				3.7		CLAY; silty, soft; moist, brown to gray.	Borehole backfilled with soil cuttings.
		2	5-10'	3.2	76.9			
					37.0			
10	-10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater not encountered
No odor or staining observed

Date Start/Finish: 8/19/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-38**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						CONCRETE	
				11.3		FILL; silt, sand, slag, loose; dry, black.	
	1	0-5'	4.0	51.4 24.6		SILT; some sand, little gravel, trace to little clay, soft, loose; moist, gray, stained gray, strong odor.	
				2.9		CLAY; sandy, soft; moist, gray.	
5 / -5				2.9		CLAY; interbedded with silt, medium hard; moist to wet, gray.	Borehole backfilled with soil cuttings.
	2	5-10'	4.0	6.6 25.0 2.8			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
Odor and staining observed

Date Start/Finish: 8/19/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-39**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0						CONCRETE	
					1886		FILL; sandy silt, little gravel, trace slag loose; dry, black.	
		1	0-5'	4.0	291		FILL; brick, concrete, silt, sand, loose; dry, gray and red.	
					122		CLAY; silty, soft; moist, gray, stained black, odor.	
					75.0		CLAY; sandy, little silt; moist, gray.	
5	-5				11.5		CLAY; silty, soft to medium hard; moist to wet, gray.	Borehole backfilled with soil cuttings.
					36.1			
		2	5-10'	4.2	35.0			
					150			
10	-10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil samples collected at 1-2' and 2-3' for laboratory analysis
Groundwater encountered at 5' bgs
Odor and staining observed

Date Start/Finish: 8/19/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-40**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						CONCRETE	
				1.2		FILL; silt, sand, little clay, trace slag, loose; dry to slightly moist, black.	
	1	0-5'	4.0	0.7		CLAY; sandy, little silt, crumbly, soft; moist, dark brown.	
				0.0		SAND; clayey, loose, poorly sorted; moist, dark gray.	
				0.3		CLAY; silty, little sand, soft; moist to wet, gray.	
5 / -5				6.9		CLAY; silty, low plasticity, soft; wet, gray.	Borehole backfilled with soil cuttings.
				285			
	2	5-10'	3.7	104			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 4' bgs
No odor or staining observed

Date Start/Finish: 8/16/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-41**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						ASPHALT	
				2.4		FILL; silt, sand, little gravel, concrete, trace slag, loose; dry, black to dark gray to brown.	
	1	0-5'	4.0	8.5			
				1.3		SAND; silty, slightly cohesive; moist, black.	
				0.0		SAND; and silt, loose; moist, gray.	
5 / -5						CLAY; some silt, little sand, mediuim hard; moist to wet, gray.	Borehole backfilled with soil cuttings.
				3.7			
				13.5			
	2	5-10'	4.1	41.0			
				84.2			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/16/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-42**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						CONCRETE	
				55.2		FILL; silt, sand, some gravel, trace slag, loose; dry, brown to black.	
	1	0-5'	4.0	12.5		SAND; and silt, loose, soft; slightly moist to moist, brown.	
				13.8		CLAY; sandy, clayey sand, soft; moist, dark brown.	
				4.4		SAND; some to little clay, loose; moist, brown.	
5 / -5						CLAY; some silt, little sand, soft to medium hard; moist to wet, brown to gray.	Borehole backfilled with soil cuttings.
				0.0			
				17.5			
	2	5-10'	4.1	21.9			
				55.2			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/19/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-43**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						CONCRETE	
				4.0		SAND; silty, loose, slightly moist, brown.	
	1	0-5'	4.0	1.3		SILT; sandy, crumbly, soft; slightly moist, dark brown.	
				0.5		SAND; little silt, loose; moist, brown.	
				1.0		CLAY; silty, soft; moist, mottled gay to brown.	
5 / -5						CLAY; some silt, little sand, medium hard; slightly moist to wet, brown to gray.	Borehole backfilled with soil cuttings.
				0.0			
				0.0			
	2	5-10'	4.8	0.0			
				0.0			
				0.0			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/19/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-44**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						ASPHALT	
				1.0		FILL; sand, gravel, slag, silt, loose; dry, black.	
	1	0-5'	3.0	0.2		SILT; and gravel, little sand, trace clay, loose; slightly moist, dark grayish brown.	
				1.2			
				1.3		SAND; silty, loose; moist, greenish gray.	
5 / -5				0.3		CLAY; some silt, no plasticity, little sand, soft to hard; moist to wet, brown, gray mottled.	Borehole backfilled with soil cuttings.
				1.0			
	2	5-10'	5.0	2.2			
				2.0			
				1.3			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/20/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-45**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						CONCRETE	
				2.2		FILL; silty sand, little to some gravel, trace slag, trace brick, loose; dry, dark brown.	
	1	0-5'	4.0	5.6		SILT; sandy, little gravel, little clay, loose; slightly moist to dry; dark brown.	
				10.0			
				11.2		SILT; clayey, crumbly, soft; slightly moist, brown	
5 / -5				5.6		CLAY; medium hard to hard; moist to wet, brown.	Borehole backfilled with soil cuttings.
				5.2			
	2	5-10'	5.0	6.4			
				135		SILT; trace clay, soft; wet, gray.	
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/20/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-46**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						CONCRETE	
				4.0		SILT; and sand, little gravel, loose; slightly moist, dark brown to brown.	
	1	0-5'	4.0	3.9		SILT; sandy, little gravel, trace wood, soft; moist, gray.	
				8.1		SAND; very fine to coarse, little silt, loose; moist to dry, brown.	
				7.9			
5 / -5				5.0		CLAY; little silt, soft to medium hard; slightly moist to wet, brown grading to gray.	Borehole backfilled with soil cuttings.
				4.5			
	2	5-10'	5.0	6.1			
				8.4			
				8.9			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/20/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-47**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						CONCRETE	
				9.2		SAND; silty, loose; slightly moist, brown.	
	1	0-5'	4.0	1.8			
				1.1		SAND; very fine to coarse, trace silt, loose, poorly sorted; moist, brown.	
				1.0			
5 / -5				11.6		CLAy; some silt, no plasticity, soft to hard; moist to wet, brown to gray.	Borehole backfilled with soil cuttings.
				152			
	2	5-10'	4.5	243			
				5.3			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/20/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-48**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						RAILROAD BALLAST	
				0.0		FILL; silt, sand, little gravel, trace slag, loose; dry, black.	
	1	0-5'	3.0	0.0		SAND; little silt, loose, poorly sorted; slightly moist to moist, greenish gray.	
				0.0		SILT; litle clay, trace sand, soft, currmbly; slightly moist, greenish gray to black.	
				0.0		CLAY; little to some silt, soft; slightly moist to moist, mottled orange and gray.	
5 / -5						CLAY; little to some silt, trace sand, soft to medium hard; moist to wet, brown grading to gray.	Borehole backfilled with soil cuttings.
				0.0			
				0.0			
	2	5-10'	4.2	6.0			
				0.3			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/20/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 5' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-49**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0							
						CONCRETE	
						FILL	
	1	0-5'	4.0	0.0		SAND; silty, medium dense; slightly moist to moist, brown.	Borehole backfilled with soil cuttings.
5 / 5						End of boring at 5' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil samples collected at 1-2', 2-3' and 3-4' bgs for laboratory analysis
Groundwater not encountered
No odor or staining observed

Date Start/Finish: 8/20/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 4' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-50**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0							
						CONCRETE	
						FILL	
	1	0-4'	3.0	0.0		CLAY; medium hard; dry, gray.	Borehole backfilled with soil cuttings.
						SAND; loose; moist, brown.	
						End of boring at 4' bgs.	
5 / -5							

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil samples collected at 1-2', 2-3' and 3-4' bgs for laboratory analysis
Groundwater not encountered
No odor or staining observed

Date Start/Finish: 8/20/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-51**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0				0.0		ASPHALT	
				0.0		FILL; sand, silty, gravel; dry, black.	
				0.0		SAND; silty, little gravel, little rock fragments, loose; slightly moist, dark brown.	
	1	0-5'	4.0	0.0		SAND; fine, and silt, loose; slightly moist to moist, gray to dark gray.	
				0.0		SAND; silty clay, clay content, soft, loose; slightly moist to moist, gray to dark gray.	
				0.0		SILT; clayey, very soft, little sand, trace gravel; moist, dark gray.	
5 / -5						CLAY; silty, no to little plasticity, very soft; moist to wet, gray.	Borehole backfilled with soil cuttings.
	2	5-10'	5.0	0.0			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil sample not collected for laboratory analysis
Groundwater encountered at 5' bgs
No odor or staining observed

Date Start/Finish: 8/20/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-52**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0							
					0.0		CONCRETE	
							FILL; steel cuttings, tabs and pieces.	
					0.0		SAND; very fine to fine, silty, poorly sorted, trace gravel, trace steel pieces; slightly moist, dark brown to black.	
		1	0-5'	4.0				
					0.0		SILT; clayey, some sand, trace gravel, soft, loose; slightly moist, dark gray to black.	
							CLAY; soft, very fine sand, trace gravel; slightly moist, dark gray.	
					0.0			
5	-5						CLAY; little sand, little silt, soft to medium hard; moist, gray.	Borehole backfilled with soil cuttings.
		2	5-10'	4.5	0.0			
10	-10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil samples collected at 1-2', 2-3, 3-4' and 4-5' bgs for laboratory analysis
Groundwater not encountered
No odor or staining observed

Date Start/Finish: 8/19/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-53**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						CONCRETE	
				11.3		FILL; silt, sand, slag, loose; dry, black.	
	1	0-5'	4.0	51.4		SILT; some sand, little gravel, trace to little clay, soft, loose; moist, gray, stained gray, strong odor.	
				24.6			
				2.9		CLAY; sandy, soft; moist, gray.	
5 / -5				2.9		CLAY; interbedded with silt, medium hard; moist to wet, gray.	Borehole backfilled with soil cuttings.
	2	5-10'	4.0	6.6			
				25.0			
				2.8			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil samples collected at 1-2', 2-3', 3-4' and 4-5' for laboratory analysis
Groundwater encountered at 5' bgs
Odor and staining observed

Date Start/Finish: 8/20/10
Drilling Company: Boart Longyear
Driller's Name:
Drilling Method: Direct Push
Sampling Method: Geoprobe
Rig Type: NA

Northing: NA
Easting: NA
Casing Elevation: NA

Borehole Depth: 10' bgs
Surface Elevation: NA

Descriptions By: Jay Read

Well/Boring ID: **SB-09-54**

Client: Motors Liquidation Company

Location: MLC Buick City
Flint, Michigan

DEPTH / ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0 / 0						CONCRETE	
				212		FILL; sand, gravel, brick fragments, loose; dry, black.	
						SAND; and gravel, loose, some tar-like material, very dense, sticky; slightly moist, black, strange odor.	
	1	0-5'	2.5			FILL; concrete, brick, sand, gravel, loose; dry.	
				22.9		SILT; and sand, very fine, loose, soft; slightly moist, dark brown.	
						SAND; very fine to fine, silty, loose, slightly cohisive, poorly sorted; slightly moist to moist, brown.	
				20.9			
5 / -5						SAND; very fine to medium, poorly sorted, loose; moist to wet, light brown.	Borehole backfilled with soil cuttings.
				39.3			
				39.0		CLAY; silty, medium hard; moist to wet, brownish gray.	
	2	5-10'	4.2	47.2			
				60.3			
10 / -10						End of boring at 10' bgs.	

ARCADIS
Infrastructure, environment, buildings

Remarks: bgs = below ground surface

Soil samples collected at 1-2', 2-3', 3-4' and 4-5' bgs for laboratory analysis
Groundwater encountered at 5' bgs
No staining observed

ARCADIS

Appendix C

AOI-09 Laboratory Analytical

Analytical Laboratory Report

Supplemental Report

Report ID: S45290.01(03)
Generated on 09/02/2010
Replaces report S45290.01(02) generated on 08/19/2010

Report to

Attention: Micki Maki
Arcadis
10559 Citation Drive
Suite 100
Brighton, MI 48116

Phone: 810-229-8594 FAX: 810-229-8837
Email: micki.maki@ARCADIS-us.com

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S45290.01-S45290.13
Project: Flint NAO Flint, MI
Collected Date: 08/16/2010
Submitted Date/Time: 08/16/2010 16:30
Sampled by: Michael Mathiah
P.O. #: B0064410.2010 0

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Laboratory Certifications:
Michigan DNRE (#9956), Ohio EPA (#CL0002), NELAC NY (#11814), NELAC FL (#E871045), WBENC (#2005110032)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director

Sample Summary (13 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S45290.01	SB-09-01 (0-2)	Soil	08/16/2010 11:00
S45290.02	SB-09-01 (0-2) MS	Soil	08/16/2010 11:00
S45290.03	SB-09-01 (0-2) MSD	Soil	08/16/2010 11:00
S45290.04	SB-09-01 (2-4)	Soil	08/16/2010 11:15
S45290.05	SB-09-02 (0-2)	Soil	08/16/2010 11:30
S45290.06	SB-09-02 (2-4)	Soil	08/16/2010 11:40
S45290.07	SB-09-03 (0-2)	Soil	08/16/2010 12:00
S45290.08	SB-09-03 (2-4)	Soil	08/16/2010 12:10
S45290.09	SB-09-04 (0-2)	Soil	08/16/2010 12:15
S45290.10	SB-09-04 (2-4)	Soil	08/16/2010 12:20
S45290.11	SB-09-05 (4-5)	Soil	08/16/2010 14:00
S45290.12	SB-09-05 (7-8.5)	Soil	08/16/2010 14:15
S45290.13	SB-09-06 (1-2)	Soil	08/16/2010 14:20

Lab Sample ID: S45290.01
Sample Tag: SB-09-01 (0-2)
Collected Date/Time: 08/16/2010 11:00
Matrix: Soil
COC Reference: 16174

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
BNA Extraction	Completed			3550B	08/16/10 21:04	EMR		
Inorganics								
Total Solids	93	%	1	Std M 2540 B	08/17/10 12:00	DJS		
Organics - Semi-Volatiles								
Semi-Volatile Organics - MDEQ								
Acenaphthene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Acenaphthylene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Anthracene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Benzo(a)anthracene	400	ug/kg	300	8270C	08/17/10 11:29	PL		
Benzo(b)fluoranthene	400	ug/kg	300	8270C	08/17/10 11:29	PL		
Benzo(k)fluoranthene	400	ug/kg	300	8270C	08/17/10 11:29	PL		
Benzo(ghi)perylene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Benzo(a)pyrene	400	ug/kg	300	8270C	08/17/10 11:29	PL		
bis(2-Chloroethoxy)methane	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
bis(2-Chloroethyl)ether	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
4-Bromophenyl phenyl ether	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Butyl benzyl phthalate	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
4-Chloroaniline	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
2-Chloronaphthalene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
4-Chloro-3-methylphenol	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
2-Chlorophenol	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
4-Chlorophenyl phenyl ether	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Chrysene	400	ug/kg	300	8270C	08/17/10 11:29	PL		
p,m-Cresol	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
o-Cresol	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Dibenzo(ah)anthracene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Dibenzofuran	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
di-n-Butyl phthalate	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
1,2-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
1,3-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
1,4-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	8270C	08/17/10 11:29	PL		
2,4-Dichlorophenol	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Diethyl phthalate	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
2,4-Dimethylphenol	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Dimethyl phthalate	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	800	8270C	08/17/10 11:29	PL		
2,4-Dinitrophenol	Not detected	ug/kg	800	8270C	08/17/10 11:29	PL		
2,4-Dinitrotoluene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		

Lab Sample ID: S45290.01 (continued)
Sample Tag: SB-09-01 (0-2)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
2,6-Dinitrotoluene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
1,2-Diphenylhydrazine	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
di-n-Octyl phthalate	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Fluoranthene	800	ug/kg	300	8270C	08/17/10 11:29	PL		
Fluorene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Hexachlorobenzene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Hexachlorobutadiene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Hexachlorocyclopentadiene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Hexachloroethane	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Isophorone	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
2-Methylnaphthalene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Naphthalene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
2-Nitroaniline	Not detected	ug/kg	800	8270C	08/17/10 11:29	PL		
3-Nitroaniline	Not detected	ug/kg	800	8270C	08/17/10 11:29	PL		
4-Nitroaniline	Not detected	ug/kg	800	8270C	08/17/10 11:29	PL		
Nitrobenzene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
2-Nitrophenol	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
4-Nitrophenol	Not detected	ug/kg	800	8270C	08/17/10 11:29	PL		
N-Nitrosodiphenylamine	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
N-Nitrosodi-n-propylamine	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Pentachlorophenol	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Phenanthrene	500	ug/kg	300	8270C	08/17/10 11:29	PL		
Phenol	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
Pyrene	700	ug/kg	300	8270C	08/17/10 11:29	PL		
1,2,4-Trichlorobenzene	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
2,4,5-Trichlorophenol	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		
2,4,6-Trichlorophenol	Not detected	ug/kg	300	8270C	08/17/10 11:29	PL		

Lab Sample ID: S45290.02
Sample Tag: SB-09-01 (0-2) MS
Collected Date/Time: 08/16/2010 11:00
Matrix: Soil
COC Reference: 16174

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
BNA Extraction	Completed			3550B	08/16/10 21:04	EMR		
Inorganics								
Total Solids	93	%	1	Std M 2540 B	08/17/10 12:00	DJS		
Organics - Semi-Volatiles								
Semi-Volatile Organics - MDEQ								
Acenaphthene	1,700	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Acenaphthylene	1,500	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Anthracene	1,900	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Benzo(a)anthracene	2,700	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Benzo(b)fluoranthene	3,100	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Benzo(k)fluoranthene	2,900	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Benzo(ghi)perylene	1,100	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Benzo(a)pyrene	2,700	ug/kg	300	8270C	08/17/10 11:57	PL		I1
bis(2-Chloroethoxy)methane	1,500	ug/kg	300	8270C	08/17/10 11:57	PL		I1
bis(2-Chloroethyl)ether	1,300	ug/kg	300	8270C	08/17/10 11:57	PL		I1
bis(2-Chloroisopropyl)ether	1,400	ug/kg	300	8270C	08/17/10 11:57	PL		I1
bis(2-Ethylhexyl)phthalate	2,200	ug/kg	300	8270C	08/17/10 11:57	PL		I1
4-Bromophenyl phenyl ether	1,700	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Butyl benzyl phthalate	1,900	ug/kg	300	8270C	08/17/10 11:57	PL		I1
4-Chloroaniline	1,300	ug/kg	300	8270C	08/17/10 11:57	PL		I1
2-Chloronaphthalene	1,600	ug/kg	300	8270C	08/17/10 11:57	PL		I1
4-Chloro-3-methylphenol	1,500	ug/kg	300	8270C	08/17/10 11:57	PL		I1
2-Chlorophenol	1,400	ug/kg	300	8270C	08/17/10 11:57	PL		I1
4-Chlorophenyl phenyl ether	1,700	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Chrysene	2,500	ug/kg	300	8270C	08/17/10 11:57	PL		I1
p,m-Cresol	1,700	ug/kg	300	8270C	08/17/10 11:57	PL		I1
o-Cresol	1,500	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Dibenzo(ah)anthracene	1,100	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Dibenzofuran	1,600	ug/kg	300	8270C	08/17/10 11:57	PL		I1
di-n-Butyl phthalate	1,900	ug/kg	300	8270C	08/17/10 11:57	PL		I1
1,2-Dichlorobenzene	1,300	ug/kg	300	8270C	08/17/10 11:57	PL		I1
1,3-Dichlorobenzene	1,200	ug/kg	300	8270C	08/17/10 11:57	PL		I1
1,4-Dichlorobenzene	1,300	ug/kg	300	8270C	08/17/10 11:57	PL		I1
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	8270C	08/17/10 11:57	PL		I1
2,4-Dichlorophenol	1,600	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Diethyl phthalate	1,700	ug/kg	300	8270C	08/17/10 11:57	PL		I1
2,4-Dimethylphenol	1,300	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Dimethyl phthalate	1,600	ug/kg	300	8270C	08/17/10 11:57	PL		I1
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	800	8270C	08/17/10 11:57	PL		I1
2,4-Dinitrophenol	Not detected	ug/kg	800	8270C	08/17/10 11:57	PL		I1

I-Matrix interference with internal standard 1-Dry Weight Spike: 1.8 mg/kg

Lab Sample ID: S45290.02 (continued)
Sample Tag: SB-09-01 (0-2) MS

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
2,4-Dinitrotoluene	1,500	ug/kg	300	8270C	08/17/10 11:57	PL		I1
2,6-Dinitrotoluene	1,700	ug/kg	300	8270C	08/17/10 11:57	PL		I1
1,2-Diphenylhydrazine	1,500	ug/kg	300	8270C	08/17/10 11:57	PL		I1
di-n-Octyl phthalate	3,000	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Fluoranthene	3,600	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Fluorene	1,700	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Hexachlorobenzene	1,800	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Hexachlorobutadiene	1,500	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Hexachlorocyclopentadiene	500	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Hexachloroethane	1,300	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Indeno(1,2,3-cd)pyrene	1,200	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Isophorone	1,400	ug/kg	300	8270C	08/17/10 11:57	PL		I1
2-Methylnaphthalene	1,600	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Naphthalene	1,600	ug/kg	300	8270C	08/17/10 11:57	PL		I1
2-Nitroaniline	1,500	ug/kg	800	8270C	08/17/10 11:57	PL		I1
3-Nitroaniline	1,400	ug/kg	800	8270C	08/17/10 11:57	PL		I1
4-Nitroaniline	1,500	ug/kg	800	8270C	08/17/10 11:57	PL		I1
Nitrobenzene	1,500	ug/kg	300	8270C	08/17/10 11:57	PL		I1
2-Nitrophenol	1,500	ug/kg	300	8270C	08/17/10 11:57	PL		I1
4-Nitrophenol	900	ug/kg	800	8270C	08/17/10 11:57	PL		I1
N-Nitrosodiphenylamine	3,600	ug/kg	300	8270C	08/17/10 11:57	PL		I1
N-Nitrosodi-n-propylamine	1,400	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Pentachlorophenol	700	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Phenanthrene	2,400	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Phenol	1,400	ug/kg	300	8270C	08/17/10 11:57	PL		I1
Pyrene	3,800	ug/kg	300	8270C	08/17/10 11:57	PL		I1
1,2,4-Trichlorobenzene	1,500	ug/kg	300	8270C	08/17/10 11:57	PL		I1
2,4,5-Trichlorophenol	1,500	ug/kg	300	8270C	08/17/10 11:57	PL		I1
2,4,6-Trichlorophenol	1,500	ug/kg	300	8270C	08/17/10 11:57	PL		I1

I-Matrix interference with internal standard 1-Dry Weight Spike: 1.8 mg/kg

Lab Sample ID: S45290.03
Sample Tag: SB-09-01 (0-2) MSD
Collected Date/Time: 08/16/2010 11:00
Matrix: Soil
COC Reference: 16174

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
BNA Extraction	Completed			3550B	08/16/10 21:04	EMR		
Inorganics								
Total Solids	93	%	1	Std M 2540 B	08/17/10 12:00	DJS		
Organics - Semi-Volatiles								
Semi-Volatile Organics - MDEQ								
Acenaphthene	1,700	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Acenaphthylene	1,500	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Anthracene	2,500	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Benzo(a)anthracene	2,400	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Benzo(b)fluoranthene	2,700	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Benzo(k)fluoranthene	2,500	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Benzo(ghi)perylene	1,000	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Benzo(a)pyrene	2,300	ug/kg	300	8270C	08/17/10 12:25	PL		1I
bis(2-Chloroethoxy)methane	1,400	ug/kg	300	8270C	08/17/10 12:25	PL		1I
bis(2-Chloroethyl)ether	1,300	ug/kg	300	8270C	08/17/10 12:25	PL		1I
bis(2-Chloroisopropyl)ether	1,400	ug/kg	300	8270C	08/17/10 12:25	PL		1I
bis(2-Ethylhexyl)phthalate	2,400	ug/kg	300	8270C	08/17/10 12:25	PL		1I
4-Bromophenyl phenyl ether	1,700	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Butyl benzyl phthalate	2,200	ug/kg	300	8270C	08/17/10 12:25	PL		1I
4-Chloroaniline	1,200	ug/kg	300	8270C	08/17/10 12:25	PL		1I
2-Chloronaphthalene	1,600	ug/kg	300	8270C	08/17/10 12:25	PL		1I
4-Chloro-3-methylphenol	1,400	ug/kg	300	8270C	08/17/10 12:25	PL		1I
2-Chlorophenol	1,400	ug/kg	300	8270C	08/17/10 12:25	PL		1I
4-Chlorophenyl phenyl ether	1,700	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Chrysene	2,200	ug/kg	300	8270C	08/17/10 12:25	PL		1I
p,m-Cresol	1,600	ug/kg	300	8270C	08/17/10 12:25	PL		1I
o-Cresol	1,400	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Dibenzo(ah)anthracene	1,000	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Dibenzofuran	1,600	ug/kg	300	8270C	08/17/10 12:25	PL		1I
di-n-Butyl phthalate	1,900	ug/kg	300	8270C	08/17/10 12:25	PL		1I
1,2-Dichlorobenzene	1,300	ug/kg	300	8270C	08/17/10 12:25	PL		1I
1,3-Dichlorobenzene	1,200	ug/kg	300	8270C	08/17/10 12:25	PL		1I
1,4-Dichlorobenzene	1,300	ug/kg	300	8270C	08/17/10 12:25	PL		1I
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	8270C	08/17/10 12:25	PL		1I
2,4-Dichlorophenol	1,500	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Diethyl phthalate	1,600	ug/kg	300	8270C	08/17/10 12:25	PL		1I
2,4-Dimethylphenol	1,300	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Dimethyl phthalate	1,500	ug/kg	300	8270C	08/17/10 12:25	PL		1I
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	800	8270C	08/17/10 12:25	PL		1I
2,4-Dinitrophenol	Not detected	ug/kg	800	8270C	08/17/10 12:25	PL		1I

1-Dry Weight Spike: 1.8 mg/kg I-Matrix interference with internal standard

Lab Sample ID: S45290.03 (continued)
Sample Tag: SB-09-01 (0-2) MSD

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
2,4-Dinitrotoluene	1,400	ug/kg	300	8270C	08/17/10 12:25	PL		1I
2,6-Dinitrotoluene	1,600	ug/kg	300	8270C	08/17/10 12:25	PL		1I
1,2-Diphenylhydrazine	1,600	ug/kg	300	8270C	08/17/10 12:25	PL		1I
di-n-Octyl phthalate	3,500	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Fluoranthene	3,000	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Fluorene	1,800	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Hexachlorobenzene	1,700	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Hexachlorobutadiene	1,500	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Hexachlorocyclopentadiene	Not detected	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Hexachloroethane	1,200	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Indeno(1,2,3-cd)pyrene	1,100	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Isophorone	1,400	ug/kg	300	8270C	08/17/10 12:25	PL		1I
2-Methylnaphthalene	1,700	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Naphthalene	1,600	ug/kg	300	8270C	08/17/10 12:25	PL		1I
2-Nitroaniline	1,400	ug/kg	800	8270C	08/17/10 12:25	PL		1I
3-Nitroaniline	1,200	ug/kg	800	8270C	08/17/10 12:25	PL		1I
4-Nitroaniline	1,200	ug/kg	800	8270C	08/17/10 12:25	PL		1I
Nitrobenzene	1,500	ug/kg	300	8270C	08/17/10 12:25	PL		1I
2-Nitrophenol	1,300	ug/kg	300	8270C	08/17/10 12:25	PL		1I
4-Nitrophenol	Not detected	ug/kg	800	8270C	08/17/10 12:25	PL		1I
N-Nitrosodiphenylamine	3,600	ug/kg	300	8270C	08/17/10 12:25	PL		1I
N-Nitrosodi-n-propylamine	1,400	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Pentachlorophenol	700	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Phenanthrene	2,500	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Phenol	1,400	ug/kg	300	8270C	08/17/10 12:25	PL		1I
Pyrene	3,500	ug/kg	300	8270C	08/17/10 12:25	PL		1I
1,2,4-Trichlorobenzene	1,400	ug/kg	300	8270C	08/17/10 12:25	PL		1I
2,4,5-Trichlorophenol	1,500	ug/kg	300	8270C	08/17/10 12:25	PL		1I
2,4,6-Trichlorophenol	1,500	ug/kg	300	8270C	08/17/10 12:25	PL		1I

1-Dry Weight Spike: 1.8 mg/kg I-Matrix interference with internal standard

Lab Sample ID: S45290.04
Sample Tag: SB-09-01 (2-4)
Collected Date/Time: 08/16/2010 11:15
Matrix: Soil
COC Reference: 16174

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Other / Misc.								
Hold until notified	Completed				08/17/10 08:00	PCS		

Lab Sample ID: S45290.05
Sample Tag: SB-09-02 (0-2)
Collected Date/Time: 08/16/2010 11:30
Matrix: Soil
COC Reference: 16174

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
BNA Extraction	Completed			3550B	08/16/10 21:04	EMR		
Inorganics								
Total Solids	84	%	1	Std M 2540 B	08/17/10 12:00	DJS		
Organics - Semi-Volatiles								
Semi-Volatile Organics - MDEQ								
Acenaphthene	68,000	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Acenaphthylene	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Anthracene	168,000	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Benzo(a)anthracene	200,000	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Benzo(b)fluoranthene	201,000	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Benzo(k)fluoranthene	153,000	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Benzo(ghi)perylene	63,000	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Benzo(a)pyrene	195,000	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
bis(2-Chloroethoxy)methane	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
bis(2-Chloroethyl)ether	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
4-Bromophenyl phenyl ether	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Butyl benzyl phthalate	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
4-Chloroaniline	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
2-Chloronaphthalene	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
4-Chloro-3-methylphenol	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
2-Chlorophenol	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
4-Chlorophenyl phenyl ether	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Chrysene	183,000	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
p,m-Cresol	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
o-Cresol	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Dibenzo(ah)anthracene	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Dibenzofuran	48,000	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
di-n-Butyl phthalate	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
1,2-Dichlorobenzene	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
1,3-Dichlorobenzene	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
1,4-Dichlorobenzene	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
3,3'-Dichlorobenzidine	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
2,4-Dichlorophenol	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Diethyl phthalate	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
2,4-Dimethylphenol	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Dimethyl phthalate	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
2,4-Dinitrophenol	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI

X-Elevated reporting limit due to matrix interference I-Matrix interference with internal standard

Lab Sample ID: S45290.05 (continued)
Sample Tag: SB-09-02 (0-2)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
2,4-Dinitrotoluene	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
2,6-Dinitrotoluene	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
1,2-Diphenylhydrazine	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
di-n-Octyl phthalate	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Fluoranthene	536,000	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Fluorene	82,000	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Hexachlorobenzene	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Hexachlorobutadiene	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Hexachlorocyclopentadiene	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Hexachloroethane	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Indeno(1,2,3-cd)pyrene	61,000	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Isophorone	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
2-Methylnaphthalene	12,000	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Naphthalene	30,000	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
2-Nitroaniline	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
3-Nitroaniline	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
4-Nitroaniline	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Nitrobenzene	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
2-Nitrophenol	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
4-Nitrophenol	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
N-Nitrosodiphenylamine	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
N-Nitrosodi-n-propylamine	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Pentachlorophenol	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Phenanthrene	545,000	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Phenol	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
Pyrene	534,000	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
1,2,4-Trichlorobenzene	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
2,4,5-Trichlorophenol	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI
2,4,6-Trichlorophenol	Not detected	ug/kg	5,000	8270C	08/17/10 13:22	PL		XI

X-Elevated reporting limit due to matrix interference I-Matrix interference with internal standard

Lab Sample ID: S45290.06
Sample Tag: SB-09-02 (2-4)
Collected Date/Time: 08/16/2010 11:40
Matrix: Soil
COC Reference: 16174

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
BNA Extraction	Completed			3550B	08/18/10 21:08	EMR		
Inorganics								
Total Solids	89	%	1	Std M 2540 B	08/17/10 16:30	DJS		
Organics - Semi-Volatiles								
Semi-Volatile Organics - MDEQ								
Acenaphthene	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
Acenaphthylene	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
Anthracene	600	ug/kg	300	8270C	08/19/10 12:42	PL		
Benzo(a)anthracene	1,000	ug/kg	300	8270C	08/19/10 12:42	PL		
Benzo(b)fluoranthene	800	ug/kg	300	8270C	08/19/10 12:42	PL		
Benzo(k)fluoranthene	600	ug/kg	300	8270C	08/19/10 12:42	PL		
Benzo(ghi)perylene	500	ug/kg	300	8270C	08/19/10 12:42	PL		
Benzo(a)pyrene	900	ug/kg	300	8270C	08/19/10 12:42	PL		
bis(2-Chloroethoxy)methane	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
bis(2-Chloroethyl)ether	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
4-Bromophenyl phenyl ether	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
Butyl benzyl phthalate	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
4-Chloroaniline	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
2-Chloronaphthalene	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
4-Chloro-3-methylphenol	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
2-Chlorophenol	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
4-Chlorophenyl phenyl ether	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
Chrysene	900	ug/kg	300	8270C	08/19/10 12:42	PL		
p,m-Cresol	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
o-Cresol	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
Dibenzo(ah)anthracene	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
Dibenzofuran	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
di-n-Butyl phthalate	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
1,2-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
1,3-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
1,4-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	8270C	08/19/10 12:42	PL		
2,4-Dichlorophenol	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
Diethyl phthalate	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
2,4-Dimethylphenol	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
Dimethyl phthalate	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	800	8270C	08/19/10 12:42	PL		
2,4-Dinitrophenol	Not detected	ug/kg	800	8270C	08/19/10 12:42	PL		
2,4-Dinitrotoluene	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		

Lab Sample ID: S45290.06 (continued)
Sample Tag: SB-09-02 (2-4)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
2,6-Dinitrotoluene	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
1,2-Diphenylhydrazine	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
di-n-Octyl phthalate	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
Fluoranthene	2,700	ug/kg	300	8270C	08/19/10 12:42	PL		
Fluorene	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
Hexachlorobenzene	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
Hexachlorobutadiene	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
Hexachlorocyclopentadiene	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
Hexachloroethane	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
Indeno(1,2,3-cd)pyrene	500	ug/kg	300	8270C	08/19/10 12:42	PL		
Isophorone	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
2-Methylnaphthalene	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
Naphthalene	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
2-Nitroaniline	Not detected	ug/kg	800	8270C	08/19/10 12:42	PL		
3-Nitroaniline	Not detected	ug/kg	800	8270C	08/19/10 12:42	PL		
4-Nitroaniline	Not detected	ug/kg	800	8270C	08/19/10 12:42	PL		
Nitrobenzene	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
2-Nitrophenol	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
4-Nitrophenol	Not detected	ug/kg	800	8270C	08/19/10 12:42	PL		
N-Nitrosodiphenylamine	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
N-Nitrosodi-n-propylamine	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
Pentachlorophenol	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
Phenanthrene	2,100	ug/kg	300	8270C	08/19/10 12:42	PL		
Phenol	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
Pyrene	2,200	ug/kg	300	8270C	08/19/10 12:42	PL		
1,2,4-Trichlorobenzene	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
2,4,5-Trichlorophenol	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		
2,4,6-Trichlorophenol	Not detected	ug/kg	300	8270C	08/19/10 12:42	PL		

Lab Sample ID: S45290.07
Sample Tag: SB-09-03 (0-2)
Collected Date/Time: 08/16/2010 12:00
Matrix: Soil
COC Reference: 16174

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
BNA Extraction	Completed			3550B	08/16/10 21:04	EMR		
Inorganics								
Total Solids	85	%	1	Std M 2540 B	08/17/10 12:00	DJS		
Organics - Semi-Volatiles								
Semi-Volatile Organics - MDEQ								
Acenaphthene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Acenaphthylene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Anthracene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Benzo(a)anthracene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Benzo(b)fluoranthene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Benzo(k)fluoranthene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Benzo(ghi)perylene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Benzo(a)pyrene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
bis(2-Chloroethoxy)methane	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
bis(2-Chloroethyl)ether	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
4-Bromophenyl phenyl ether	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Butyl benzyl phthalate	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
4-Chloroaniline	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
2-Chloronaphthalene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
4-Chloro-3-methylphenol	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
2-Chlorophenol	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
4-Chlorophenyl phenyl ether	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Chrysene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
p,m-Cresol	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
o-Cresol	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Dibenzo(ah)anthracene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Dibenzofuran	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
di-n-Butyl phthalate	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
1,2-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
1,3-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
1,4-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	8270C	08/17/10 11:00	PL		
2,4-Dichlorophenol	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Diethyl phthalate	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
2,4-Dimethylphenol	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Dimethyl phthalate	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	800	8270C	08/17/10 11:00	PL		
2,4-Dinitrophenol	Not detected	ug/kg	800	8270C	08/17/10 11:00	PL		
2,4-Dinitrotoluene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		

Lab Sample ID: S45290.07 (continued)
Sample Tag: SB-09-03 (0-2)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
2,6-Dinitrotoluene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
1,2-Diphenylhydrazine	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
di-n-Octyl phthalate	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Fluoranthene	500	ug/kg	300	8270C	08/17/10 11:00	PL		
Fluorene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Hexachlorobenzene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Hexachlorobutadiene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Hexachlorocyclopentadiene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Hexachloroethane	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Isophorone	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
2-Methylnaphthalene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Naphthalene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
2-Nitroaniline	Not detected	ug/kg	800	8270C	08/17/10 11:00	PL		
3-Nitroaniline	Not detected	ug/kg	800	8270C	08/17/10 11:00	PL		
4-Nitroaniline	Not detected	ug/kg	800	8270C	08/17/10 11:00	PL		
Nitrobenzene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
2-Nitrophenol	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
4-Nitrophenol	Not detected	ug/kg	800	8270C	08/17/10 11:00	PL		
N-Nitrosodiphenylamine	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
N-Nitrosodi-n-propylamine	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Pentachlorophenol	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Phenanthrene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Phenol	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
Pyrene	500	ug/kg	300	8270C	08/17/10 11:00	PL		
1,2,4-Trichlorobenzene	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
2,4,5-Trichlorophenol	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		
2,4,6-Trichlorophenol	Not detected	ug/kg	300	8270C	08/17/10 11:00	PL		

Lab Sample ID: S45290.08
Sample Tag: SB-09-03 (2-4)
Collected Date/Time: 08/16/2010 12:10
Matrix: Soil
COC Reference: 16174

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Other / Misc.								
Hold until notified	Completed				08/17/10 08:00	PCS		

Lab Sample ID: S45290.09
Sample Tag: SB-09-04 (0-2)
Collected Date/Time: 08/16/2010 12:15
Matrix: Soil
COC Reference: 16174

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
BNA Extraction	Completed			3550B	08/16/10 21:04	EMR		
Inorganics								
Total Solids	87	%	1	Std M 2540 B	08/17/10 12:00	DJS		
Organics - Semi-Volatiles								
Semi-Volatile Organics - MDEQ								
Acenaphthene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Acenaphthylene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Anthracene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Benzo(a)anthracene	600	ug/kg	300	8270C	08/17/10 12:54	PL		I
Benzo(b)fluoranthene	700	ug/kg	300	8270C	08/17/10 12:54	PL		I
Benzo(k)fluoranthene	600	ug/kg	300	8270C	08/17/10 12:54	PL		I
Benzo(ghi)perylene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Benzo(a)pyrene	700	ug/kg	300	8270C	08/17/10 12:54	PL		I
bis(2-Chloroethoxy)methane	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
bis(2-Chloroethyl)ether	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
bis(2-Ethylhexyl)phthalate	400	ug/kg	300	8270C	08/17/10 12:54	PL		I
4-Bromophenyl phenyl ether	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Butyl benzyl phthalate	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
4-Chloroaniline	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
2-Chloronaphthalene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
4-Chloro-3-methylphenol	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
2-Chlorophenol	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
4-Chlorophenyl phenyl ether	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Chrysene	600	ug/kg	300	8270C	08/17/10 12:54	PL		I
p,m-Cresol	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
o-Cresol	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Dibenzo(ah)anthracene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Dibenzofuran	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
di-n-Butyl phthalate	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
1,2-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
1,3-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
1,4-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	8270C	08/17/10 12:54	PL		I
2,4-Dichlorophenol	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Diethyl phthalate	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
2,4-Dimethylphenol	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Dimethyl phthalate	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	800	8270C	08/17/10 12:54	PL		I
2,4-Dinitrophenol	Not detected	ug/kg	800	8270C	08/17/10 12:54	PL		I

I-Matrix interference with internal standard

Lab Sample ID: S45290.09 (continued)
Sample Tag: SB-09-04 (0-2)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
2,4-Dinitrotoluene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
2,6-Dinitrotoluene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
1,2-Diphenylhydrazine	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
di-n-Octyl phthalate	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Fluoranthene	1,300	ug/kg	300	8270C	08/17/10 12:54	PL		I
Fluorene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Hexachlorobenzene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Hexachlorobutadiene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Hexachlorocyclopentadiene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Hexachloroethane	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Isophorone	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
2-Methylnaphthalene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Naphthalene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
2-Nitroaniline	Not detected	ug/kg	800	8270C	08/17/10 12:54	PL		I
3-Nitroaniline	Not detected	ug/kg	800	8270C	08/17/10 12:54	PL		I
4-Nitroaniline	Not detected	ug/kg	800	8270C	08/17/10 12:54	PL		I
Nitrobenzene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
2-Nitrophenol	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
4-Nitrophenol	Not detected	ug/kg	800	8270C	08/17/10 12:54	PL		I
N-Nitrosodiphenylamine	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
N-Nitrosodi-n-propylamine	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Pentachlorophenol	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Phenanthrene	600	ug/kg	300	8270C	08/17/10 12:54	PL		I
Phenol	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
Pyrene	1,400	ug/kg	300	8270C	08/17/10 12:54	PL		I
1,2,4-Trichlorobenzene	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
2,4,5-Trichlorophenol	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I
2,4,6-Trichlorophenol	Not detected	ug/kg	300	8270C	08/17/10 12:54	PL		I

I-Matrix interference with internal standard

Lab Sample ID: S45290.10
Sample Tag: SB-09-04 (2-4)
Collected Date/Time: 08/16/2010 12:20
Matrix: Soil
COC Reference: 16174

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Other / Misc.								
Hold until notified	Completed				08/17/10 08:00	PCS		

Lab Sample ID: S45290.11
Sample Tag: SB-09-05 (4-5)
Collected Date/Time: 08/16/2010 14:00
Matrix: Soil
COC Reference: 16174

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/17/10 12:00	SLS		
Inorganics								
Total Solids	78	%	1	Std M 2540 B	08/17/10 12:00	DJS		
Metals								
Lead	26.7	mg/kg	0.30	6020	08/17/10 14:12	SLS		

Lab Sample ID: S45290.12
Sample Tag: SB-09-05 (7-8.5)
Collected Date/Time: 08/16/2010 14:15
Matrix: Soil
COC Reference: 16174

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/17/10 12:00	SLS		
Inorganics								
Total Solids	81	%	1	Std M 2540 B	08/17/10 12:00	DJS		
Metals								
Lead	8.98	mg/kg	0.30	6020	08/17/10 14:14	SLS		

Lab Sample ID: S45290.13
Sample Tag: SB-09-06 (1-2)
Collected Date/Time: 08/16/2010 14:20
Matrix: Soil
COC Reference: 16174

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/17/10 12:00	SLS		
Metal Digestion (Replicate 01)	Completed			3050B	09/01/10 12:00	SLS		
Metal Digestion	Completed			3015A	08/17/10 12:00	PER		
TCLP Extraction								
Inital Sample pH	N/A			1311	08/16/10 16:00	WAR		
pH after 3.5 ml HCl	N/A			1311	08/16/10 16:00	WAR		
% Solids	100			1311	08/16/10 16:00	WAR		
Sample Used g	100			1311	08/16/10 16:00	WAR		
Final Volume mL	2,000			1311	08/16/10 16:00	WAR		
TCLP Extraction Fluid	2			1311	08/16/10 16:00	WAR		
Final Extract pH	4.69			1311	08/16/10 16:00	WAR		
Inorganics								
Total Solids	88	%	1	Std M 2540 B	08/17/10 12:00	DJS		
Metals								
Lead	447	mg/kg	0.30	6020	08/17/10 14:17	SLS		
Lead (Replicate 01)	513	mg/kg	0.30	6020	09/01/10 17:57	SLS		
Lead, TCLP	1.29	mg/L	0.03	6020	08/17/10 13:04	PER	5.0	

ARCADIS
Infrastructure, environment, buildings

ID#: 16174

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Contact & Company Name: Micki Maki Arcadis	Telephone:
Address: 10559 Citation Dr	Fax: 810-229-8837
City: Brighton State: MI Zip: 48116	E-mail Address: Micki.Maki@Arcadis-us.com
Project Name/Location (City, State): Flint NAD Flint MI	Project #: B0064410
Sampler's Printed Name: Michael Mathiah	Sampler's Signature: [signature]

Send Results

Preservative	E	E	E										
Filtered (✓)													
# of Containers	1	1	2										
Container Information	4oz-Jar	4oz-Jar	4oz Jar										

Keys

Container Information Key:
1. 40 ml Vial
2. [illegible]
3. [illegible]
4. 500 ml [illegible]
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. [illegible]

D. NaOH
E. None
F. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil, W - Water, SL - Sludge, SW - Sample Wipe, T - Tissue, A - Air, Other: _____

PARAMETER ANALYSIS & METHOD

45290	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	SVOCs 8270	Total Lead	TCLP Lead					REMARKS
.01	SB-09-01(0-2)	8/16/10	1100	✓		SO	X							24-hour TAT
.02 .03	SB-09-01(0-2) MS/MSD	8/16/10	1100	✓		SO	X							~~[illegible]~~ ~~[illegible]~~ Standard TAT 24 hr per Tony Maffeo PS 8-16-10
.04	SB-09-01(2-4)	8/16/10	1115	✓		SO	X							HOLD
.05	SB-09-02(0-2)	8/16/10	1130	✓		SO	X							24-hour TAT
→	DUP-01		1130	✓		SO	X			45291.01				~~[illegible]~~ Standard TAT
.06	SB-09-02(2-4)		1140	✓		SO	X							HOLD
.07	SB-09-03(0-2)		1200	✓		SO	X							24-hour TAT
.08	SB-09-03(2-4)		1210	✓		SO	X							HOLD
.09	SB-09-04(0-2)		1215	✓		SO	X							24-hour TAT
.10	SB-09-04(2-4)		1220	✓		SO	X							HOLD
.11	SB-09-05(4-5)		1400	✓	✓	SO		X						24-hour TAT
.12	SB-09-05(7-8.5)		1415		✓	SO		X						24-hour TAT
.13	SB-09-06(1-2)		1420		✓	SO		X	X					24-hour TAT
	~~[illegible]~~		~~[illegible]~~											

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	[illegible]
Lab Name: Merit	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Michael Mathiah	Printed Name: Chris Gauthier	Printed Name: Chris Gauthier	Printed Name: Paula Shaw
☐ Cooler packed with ice (✓)		Signature: [signature]	Signature: [signature]	Signature: [signature]	Signature: [signature]
Specify Turnaround Requirements:	Sample Receipt:	Firm: Arcadis	Firm/Courier: Merit	Firm/Courier: Merit	Firm: Merit
Shipping Tracking #:	Condition/Cooler Temp:	Date/Time: 8-16-10 1500	Date/Time: 8-16-10 1530	Date/Time: 8-16-10 1630	Date/Time: 8-16-10 1630

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by ARCADIS

Analytical Laboratory Report

Report ID: S45303.01(01)
Generated on 08/18/2010

Report to

Attention: Micki Maki
Arcadis
10559 Citation Drive
Suite 100
Brighton, MI 48116

Phone: 810-229-8594 FAX: 810-229-8837
Email: micki.maki@ARCADIS-us.com

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S45303.01-S45303.02
Project: Flint NAO Flint, MI
Collected Date: 08/16/2010 - 08/17/2010
Submitted Date/Time: 08/17/2010 16:40
Sampled by: Michael Mathiah
P.O. #: B0064410

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Violetta F. Murshak
Laboratory Director

Analytical Laboratory Report

Sample Summary (2 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S45303.01	SB-09-08 (1.5-2.5)	Soil	08/16/2010 16:05
S45303.02	SB-09-12 (2-3)	Soil	08/17/2010 10:30

Analytical Laboratory Report

Lab Sample ID: S45303.01
Sample Tag: SB-09-08 (1.5-2.5)
Collected Date/Time: 08/16/2010 16:05
Matrix: Soil
COC Reference: 16175

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/18/10 12:00	PER		
Inorganics								
Total Solids	87	%	1	Std M 2540 B	08/17/10 16:30	DJS		
Metals								
Lead	2,480	mg/kg	1.0	6020	08/18/10 16:22	PER	7439-92-1	

Analytical Laboratory Report

Lab Sample ID: S45303.02
Sample Tag: SB-09-12 (2-3)
Collected Date/Time: 08/17/2010 10:30
Matrix: Soil
COC Reference: 16175

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/18/10 12:00	PER		
Inorganics								
Total Solids	84	%	1	Std M 2540 B	08/17/10 16:30	DJS		
Metals								
Lead	128,000	mg/kg	100	6020	08/18/10 16:25	PER	7439-92-1	

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ID#: 16175

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Micki Maki Arcadis	Telephone
Address: 10559 Citation Dr	Fax: 810 229-8837
City: Brighton State: MI Zip: 48116	E-mail Address: Micki.Maki@Arcadis-us.com
Project Name/Location (City, State): Flint NAO Flint, MI	Project #: B0064410
Sampler's Printed Name: Michael Mathiel	Sampler's Signature: [signature]

Preservative	E
Filtered (✓)	
# of Containers	1
Container Information	7

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO3 D. [illegible] E. None F. Other: ____ G. Other: ____ H. Other: ____

Container Information Key: 1. 40 ml Vial 2. [illegible] Amber 3. [illegible] Plastic 4. [illegible] 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: ____

Matrix Key: SO - Soil, SE - Sediment, NL - NAPL/Oil, W - Water, SL - Sludge, SW - Sample Wipe, T - Tissue, A - Air, Other: ____

45303	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Total Lead							REMARKS
.01	SB-01-08 (1.5-2.5)	8/16/10	1605		✓	SO	✓							24-hour TAT
.02	SB-09-12 (2-3)	8/17/10	1030		✓	SO	✓							24-hour TAT

Special Instructions/Comments:

☐ Special QA/QC Instructions (✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Merit	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Michael Mathiel	Printed Name: Chris Gardner	Printed Name: Chris Gardner	Printed Name: Barb Richardson
☐ Cooler packed with ice (✓)		Signature: [signature]	Signature: [signature]	Signature: [signature]	Signature: Barbara Richardson
Specify Turnaround Requirements:	Sample Receipt:	Firm: Arcadis	Firm/Courier: Merit	Firm/Courier: Merit	Firm: Merit
Shipping Tracking #:	Condition/Cooler Temp: 4.7	Date/Time: 8/17/10 1530	Date/Time: 8-17-10 1530	Date/Time: 8-17-10 1640	Date/Time: 8/17/10 16:40

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by ARCADIS

Analytical Laboratory Report

Supplemental Report

Report ID: S45304.01(03)
Generated on 09/03/2010
Replaces report S45304.01(02) generated on 08/27/2010

Report to

Attention: Micki Maki
Arcadis
10559 Citation Drive
Suite 100
Brighton, MI 48116

Phone: 810-229-8594 FAX: 810-229-8837
Email: micki.maki@ARCADIS-us.com

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S45304.01-S45304.06
Project: Flint NAO Flint, MI
Collected Date: 08/16/2010 - 08/17/2010
Submitted Date/Time: 08/17/2010 16:40
Sampled by: Michael Mathiah
P.O. #: B0064410

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Laboratory Certifications:
Michigan DNRE (#9956), Ohio EPA (#CL0002), NELAC NY (#11814), NELAC FL (#E871045), WBENC (#2005110032)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director

Sample Summary (6 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S45304.01	SB-09-08 (2.5-3.5)	Soil	08/16/2010 16:15
S45304.02	SB-09-09 (1-2)	Soil	08/17/2010 08:40
S45304.03	SB-09-09 (2-3)	Soil	08/17/2010 08:50
S45304.04	SB-09-12 (2-3)	Soil	08/17/2010 10:30
S45304.05	DUP-02	Soil	08/17/2010 10:30
S45304.06	SB-09-14 (1-2)	Soil	08/17/2010 13:15

Lab Sample ID: S45304.01
Sample Tag: SB-09-08 (2.5-3.5)
Collected Date/Time: 08/16/2010 16:15
Matrix: Soil
COC Reference: 16176

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/18/10 12:00	PER		
Metal Digestion (Replicate 01)	Completed			3050B	09/01/10 12:00	SLS		
Metal Digestion	Completed			3015A	08/19/10 12:00	PER		
TCLP Extraction								
Inital Sample pH	N/A			1311	08/18/10 17:00	WAR		
pH after 3.5 ml HCl	N/A			1311	08/18/10 17:00	WAR		
% Solids	100			1311	08/18/10 17:00	WAR		
Sample Used g	100			1311	08/18/10 17:00	WAR		
Final Volume mL	2,000			1311	08/18/10 17:00	WAR		
TCLP Extraction Fluid	1			1311	08/18/10 17:00	WAR		
Final Extract pH	5.22			1311	08/18/10 17:00	WAR		
Inorganics								
Total Solids	84	%	1	Std M 2540 B	08/17/10 16:30	DJS		
Metals								
Lead	2,010	mg/kg	5.0	6020	08/18/10 16:26	PER		
Lead (Replicate 01)	579	mg/kg	0.30	6020	09/01/10 17:59	SLS		
Lead, TCLP	2.07	mg/L	0.03	6020	08/19/10 14:47	PER	5.0	

Lab Sample ID: S45304.02
Sample Tag: SB-09-09 (1-2)
Collected Date/Time: 08/17/2010 08:40
Matrix: Soil
COC Reference: 16176

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/18/10 12:00	PER		
Metal Digestion (Replicate 01)	Completed			3050B	09/01/10 12:00	SLS		
Metal Digestion	Completed			3015A	08/27/10 12:00	PER		
TCLP Extraction								
Inital Sample pH	N/A			1311	08/26/10 17:00	WAR		
pH after 3.5 ml HCl	N/A			1311	08/26/10 17:00	WAR		
% Solids	100			1311	08/26/10 17:00	WAR		
Sample Used g	100			1311	08/26/10 17:00	WAR		
Final Volume mL	2,000			1311	08/26/10 17:00	WAR		
TCLP Extraction Fluid	2			1311	08/26/10 17:00	WAR		
Final Extract pH	5.08			1311	08/26/10 17:00	WAR		
Inorganics								
Total Solids	88	%	1	Std M 2540 B	08/17/10 16:30	DJS		
Metals								
Lead	6,070	mg/kg	5.0	6020	08/18/10 16:27	PER		
Lead (Replicate 01)	3,250	mg/kg	0.30	6020	09/01/10 18:01	SLS		
Lead, TCLP	47.3	mg/L	0.003	6020	08/27/10 13:26	PER	5.0	!

!-Result is outside of stated limit criteria

Lab Sample ID: S45304.03
Sample Tag: SB-09-09 (2-3)
Collected Date/Time: 08/17/2010 08:50
Matrix: Soil
COC Reference: 16176

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Lead, Coarse Digestion	Completed			3050B	09/02/10 12:00	SLS		
Lead, Fine and Coarse Prep	Completed			3050B	09/02/10 12:00	SLS		
Lead, Fine Digestion	Completed			3050B	09/02/10 12:00	SLS		
Metal Digestion	Completed			3050B	08/18/10 12:00	PER		
Metal Digestion (Replicate 01)	Completed			3050B	09/01/10 12:00	SLS		
Metal Digestion	Completed			3015A	08/27/10 12:00	PER		
TCLP Extraction								
Inital Sample pH	N/A			1311	08/26/10 17:00	WAR		
pH after 3.5 ml HCl	N/A			1311	08/26/10 17:00	WAR		
% Solids	100			1311	08/26/10 17:00	WAR		
Sample Used g	100			1311	08/26/10 17:00	WAR		
Final Volume mL	2,000			1311	08/26/10 17:00	WAR		
TCLP Extraction Fluid	1			1311	08/26/10 17:00	WAR		
Final Extract pH	4.06			1311	08/26/10 17:00	WAR		
Inorganics								
Total Solids	89	%	1	Std M 2540 B	08/17/10 16:30	DJS		
Total Solids	88	%	1	Std M 2540 B	09/02/10 12:00	SLS		
Metals								
% Coarse by Weight	76.5	%		6020	09/02/10 12:00	SLS		
% Fine by Weight	23.5	%		6020	09/02/10 12:00	SLS		
Lead, Coarse	12,600	mg/kg	1.2	6020	09/02/10 18:20	SLS		
Lead, Fine	10,900	mg/kg	1.2	6020	09/02/10 18:18	SLS		
Lead, Total Calculated	12,200	mg/kg		6020	09/02/10 12:00	sls		
Lead	258	mg/kg	1.0	6020	08/18/10 16:29	PER		
Lead (Replicate 01)	8,600	mg/kg	0.34	6020	09/01/10 18:34	SLS		
Lead, TCLP	13.5	mg/L	0.003	6020	08/27/10 13:27	PER	5.0	!

!-Result is outside of stated limit criteria

Lab Sample ID: S45304.04
Sample Tag: SB-09-12 (2-3)
Collected Date/Time: 08/17/2010 10:30
Matrix: Soil
COC Reference: 16176

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Other / Misc.								
Hold until notified	Completed				08/20/10 10:00	PCS		

Lab Sample ID: S45304.05
Sample Tag: DUP-02
Collected Date/Time: 08/17/2010 10:30
Matrix: Soil
COC Reference: 16176

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/18/10 12:00	PER		
Inorganics								
Total Solids	84	%	1	Std M 2540 B	08/17/10 16:30	DJS		
Metals								
Lead	194,000	mg/kg	300	6020	08/18/10 16:38	PER		

Lab Sample ID: S45304.06
Sample Tag: SB-09-14 (1-2)
Collected Date/Time: 08/17/2010 13:15
Matrix: Soil
COC Reference: 16176

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	4oz Glass	None	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/18/10 12:00	PER		
Inorganics								
Total Solids	87	%	1	Std M 2540 B	08/17/10 16:30	DJS		
Metals								
Lead	67,800	mg/kg	25	6020	08/18/10 16:42	PER		

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ID#: 16176

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Micki Maki Arcadis	Telephone:
Address: 10559 Citation Dr	Fax: 810-229-8837
City: Brighton State: MI Zip: 48116	E-mail Address: Micki.Maki@Arcadis-us.com
Project Name/Location (City, State): Flint NAO Flint MI	Project #: B0064410
Sampler's Printed Name: Michael Mathieb	Sampler's Signature: [signature]

Preservative	E	E
Filtered (✓)		
# of Containers	1	2
Container Information	4 oz	4 oz

PARAMETER ANALYSIS & METHOD

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 E. None F. Other: ____ G. Other: ____

Container Key: 1. 40 ml Vial 2. 1 L Amber 3. [illegible] ml Plastic 4. [illegible] 5. Enclosed 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: ____

Matrix Key: SO - Soil SE - Sediment NL - [illegible] W - Water SL - Sludge SW - Sample Wipe T - Tissue A - Air Other: ____

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Total Lead	TCLP Lead						REMARKS
453														
.01	SB-09-08 (2.5-3.5)	8/16/10	1615		✓	SO	X	X						
.02	SB-09-09 (1-2)	8/17/10	0840		✓	SO	X	X						
.03	SB-09-09 (2-3)	8/17/10	0850		✓	SO	X	X						
.04	SB-09-12 (2-3)	8/17/10	1030		✓	SO		X						
.05	DUP-02	8/17/10	1030		✓	SO	X							
.06	SB-09-14 (1-2)	8/17/10	1315		✓	SO	X	X						

Special Instructions/Comments:

☐ Special QA/QC Instructions (✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: ~~[illegible]~~ Merit	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Michael Mathieb	Printed Name: Chris Gauthier	Printed Name: Chris Gauthier	Printed Name: Barb Richardson
☐ Cooler packed with ice (✓)		Signature: [signature]	Signature: [signature]	Signature: [signature]	Signature: Barbara Richardson
Specify Turnaround Requirements: Standard	Sample Receipt:	Firm: Arcadis	Firm/Courier: Merit	Firm/Courier: Merit	Firm: Merit
Shipping Tracking #:	Condition/Cooler Temp: 4.7	Date/Time: 8/17/10 1530	Date/Time: 8-17-10 1530	Date/Time: 8-17-10 1640	Date/Time: 8/17/10 1640

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by ARCADIS

Analytical Laboratory Report

Report ID: S45342.01(01)
Generated on 08/20/2010

Report to

Attention: Micki Maki/ Tony Maffeo
Arcadis
10559 Citation Drive
Suite 100
Brighton, MI 48116

Phone: 810-229-8594 FAX: 810-229-8837
Email: micki.maki@ARCADIS-us.com

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S45342.01-S45342.04
Project: Flint NAO Flint, MI
Collected Date: 08/19/2010
Submitted Date/Time: 08/19/2010 14:30
Sampled by: Michael Mathiah
P.O. #: B0064410

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
""Not detected"" indicates that parameter was not found at a level equal to or greater than the RL.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Laboratory Certifications:
Michigan DNRE (#9956), Ohio EPA (#CL0002), NELAC NY (#11814), NELAC FL (#E871045), WBENC (#2005110032)
Some analytes reported may not be certified.Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director

Analytical Laboratory Report

Sample Summary (4 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S45342.01	SB-09-33 (0-2)	Soil	08/19/2010 08:30
S45342.02	SB-09-34 (0-2)	Soil	08/19/2010 08:40
S45342.03	SB-09-35 (0-2)	Soil	08/19/2010 09:35
S45342.04	SB-09-36 (1-2)	Soil	08/19/2010 09:45

Analytical Laboratory Report

Lab Sample ID: S45342.01
Sample Tag: SB-09-33 (0-2)
Collected Date/Time: 08/19/2010 08:30
Matrix: Soil
COC Reference: 16177

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3550B	08/19/10 22:26	EMR		
Inorganics								
Total Solids	91	%	1	Std M 2540 B	08/19/10 15:45	DJS		
Organics - Semi-Volatiles								
Semi-Volatile Organics - MDEQ								
Acenaphthene	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	83-32-9	I
Acenaphthylene	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	208-96-8	I
Anthracene	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	120-12-7	I
Benzo(a)anthracene	1,500	ug/kg	300	8270C	08/20/10 13:03	PL	56-55-3	I
Benzo(b)fluoranthene	1,800	ug/kg	300	8270C	08/20/10 13:03	PL	205-99-2	I
Benzo(k)fluoranthene	1,500	ug/kg	300	8270C	08/20/10 13:03	PL	207-08-9	I
Benzo(ghi)perylene	800	ug/kg	300	8270C	08/20/10 13:03	PL	191-24-2	I
Benzo(a)pyrene	1,800	ug/kg	300	8270C	08/20/10 13:03	PL	50-32-8	I
bis(2-Chloroethoxy)methane	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	111-91-1	I
bis(2-Chloroethyl)ether	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	111-44-4	I
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	108-60-1	I
bis(2-Ethylhexyl)phthalate	1,100	ug/kg	300	8270C	08/20/10 13:03	PL	117-81-7	I
4-Bromophenyl phenyl ether	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	101-55-3	I
Butyl benzyl phthalate	500	ug/kg	300	8270C	08/20/10 13:03	PL	85-68-7	I
4-Chloroaniline	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	106-47-8	I
2-Chloronaphthalene	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	91-58-7	I
4-Chloro-3-methylphenol	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	59-50-7	I
2-Chlorophenol	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	95-57-8	I
4-Chlorophenyl phenyl ether	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	7005-72-3	I
Chrysene	1,700	ug/kg	300	8270C	08/20/10 13:03	PL	218-01-9	I
p,m-Cresol	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	3/4-Cresol	I
o-Cresol	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	95-48-7	I
Dibenzo(ah)anthracene	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	53-70-3	I
Dibenzofuran	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	132-64-9	I
di-n-Butyl phthalate	1,500	ug/kg	300	8270C	08/20/10 13:03	PL	84-74-2	I
1,2-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	95-50-1	I
1,3-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	541-73-1	I
1,4-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	106-46-7	I
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	8270C	08/20/10 13:03	PL	91-94-1	I
2,4-Dichlorophenol	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	120-83-2	I
Diethyl phthalate	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	84-66-2	I
2,4-Dimethylphenol	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	105-67-9	I
Dimethyl phthalate	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	131-11-3	I
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	800	8270C	08/20/10 13:03	PL	534-52-1	I
2,4-Dinitrophenol	Not detected	ug/kg	800	8270C	08/20/10 13:03	PL	51-28-5	I

I-Matrix interference with internal standard

Lab Sample ID: S45342.01 (continued)
Sample Tag: SB-09-33 (0-2)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
2,4-Dinitrotoluene	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	121-14-2	I
2,6-Dinitrotoluene	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	606-20-2	I
1,2-Diphenylhydrazine	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	122-66-7	I
di-n-Octyl phthalate	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	117-84-0	I
Fluoranthene	3,400	ug/kg	300	8270C	08/20/10 13:03	PL	206-44-0	I
Fluorene	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	86-73-7	I
Hexachlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	118-74-1	I
Hexachlorobutadiene	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	87-68-3	I
Hexachlorocyclopentadiene	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	77-47-4	I
Hexachloroethane	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	67-72-1	I
Indeno(1,2,3-cd)pyrene	700	ug/kg	300	8270C	08/20/10 13:03	PL	193-39-5	I
Isophorone	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	78-59-1	I
2-Methylnaphthalene	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	91-57-6	I
Naphthalene	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	91-20-3	I
2-Nitroaniline	Not detected	ug/kg	800	8270C	08/20/10 13:03	PL	88-74-4	I
3-Nitroaniline	Not detected	ug/kg	800	8270C	08/20/10 13:03	PL	99-09-2	I
4-Nitroaniline	Not detected	ug/kg	800	8270C	08/20/10 13:03	PL	100-01-6	I
Nitrobenzene	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	98-95-3	I
2-Nitrophenol	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	88-75-5	I
4-Nitrophenol	Not detected	ug/kg	800	8270C	08/20/10 13:03	PL	100-02-7	I
N-Nitrosodiphenylamine	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	86-30-6	I
N-Nitrosodi-n-propylamine	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	621-64-7	I
Pentachlorophenol	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	87-86-5	I
Phenanthrene	1,500	ug/kg	300	8270C	08/20/10 13:03	PL	85-01-8	I
Phenol	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	108-95-2	I
Pyrene	3,000	ug/kg	300	8270C	08/20/10 13:03	PL	129-00-0	I
1,2,4-Trichlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	120-82-1	I
2,4,5-Trichlorophenol	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	95-95-4	I
2,4,6-Trichlorophenol	Not detected	ug/kg	300	8270C	08/20/10 13:03	PL	88-06-2	I

I-Matrix interference with internal standard

Analytical Laboratory Report

Lab Sample ID: S45342.02
Sample Tag: SB-09-34 (0-2)
Collected Date/Time: 08/19/2010 08:40
Matrix: Soil
COC Reference: 16177

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3550B	08/19/10 22:26	EMR		
Inorganics								
Total Solids	92	%	1	Std M 2540 B	08/19/10 15:45	DJS		
Organics - Semi-Volatiles								
Semi-Volatile Organics - MDEQ								
Acenaphthene	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	120-12-7	
Benzo(a)anthracene	400	ug/kg	300	8270C	08/20/10 11:37	PL	56-55-3	
Benzo(b)fluoranthene	400	ug/kg	300	8270C	08/20/10 11:37	PL	205-99-2	
Benzo(k)fluoranthene	400	ug/kg	300	8270C	08/20/10 11:37	PL	207-08-9	
Benzo(ghi)perylene	300	ug/kg	300	8270C	08/20/10 11:37	PL	191-24-2	
Benzo(a)pyrene	500	ug/kg	300	8270C	08/20/10 11:37	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	400	ug/kg	300	8270C	08/20/10 11:37	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	7005-72-3	
Chrysene	400	ug/kg	300	8270C	08/20/10 11:37	PL	218-01-9	
p,m-Cresol	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	132-64-9	
di-n-Butyl phthalate	400	ug/kg	300	8270C	08/20/10 11:37	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	8270C	08/20/10 11:37	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	800	8270C	08/20/10 11:37	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	800	8270C	08/20/10 11:37	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	121-14-2	

Lab Sample ID: S45342.02 (continued)
Sample Tag: SB-09-34 (0-2)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
2,6-Dinitrotoluene	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	117-84-0	
Fluoranthene	800	ug/kg	300	8270C	08/20/10 11:37	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	193-39-5	
Isophorone	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	91-57-6	
Naphthalene	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	800	8270C	08/20/10 11:37	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	800	8270C	08/20/10 11:37	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	800	8270C	08/20/10 11:37	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	800	8270C	08/20/10 11:37	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	87-86-5	
Phenanthrene	400	ug/kg	300	8270C	08/20/10 11:37	PL	85-01-8	
Phenol	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	108-95-2	
Pyrene	700	ug/kg	300	8270C	08/20/10 11:37	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	300	8270C	08/20/10 11:37	PL	88-06-2	

Analytical Laboratory Report

Lab Sample ID: S45342.03
Sample Tag: SB-09-35 (0-2)
Collected Date/Time: 08/19/2010 09:35
Matrix: Soil
COC Reference: 16177

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3550B	08/19/10 22:26	EMR		
Inorganics								
Total Solids	92	%	1	Std M 2540 B	08/19/10 15:45	DJS		
Organics - Semi-Volatiles								
Semi-Volatile Organics - MDEQ								
Acenaphthene	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	120-12-7	
Benzo(a)anthracene	800	ug/kg	300	8270C	08/20/10 12:06	PL	56-55-3	
Benzo(b)fluoranthene	800	ug/kg	300	8270C	08/20/10 12:06	PL	205-99-2	
Benzo(k)fluoranthene	600	ug/kg	300	8270C	08/20/10 12:06	PL	207-08-9	
Benzo(ghi)perylene	400	ug/kg	300	8270C	08/20/10 12:06	PL	191-24-2	
Benzo(a)pyrene	900	ug/kg	300	8270C	08/20/10 12:06	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	300	ug/kg	300	8270C	08/20/10 12:06	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	7005-72-3	
Chrysene	900	ug/kg	300	8270C	08/20/10 12:06	PL	218-01-9	
p,m-Cresol	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	8270C	08/20/10 12:06	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	800	8270C	08/20/10 12:06	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	800	8270C	08/20/10 12:06	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	121-14-2	

Lab Sample ID: S45342.03 (continued)
Sample Tag: SB-09-35 (0-2)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
2,6-Dinitrotoluene	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	117-84-0	
Fluoranthene	1,400	ug/kg	300	8270C	08/20/10 12:06	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	400	ug/kg	300	8270C	08/20/10 12:06	PL	193-39-5	
Isophorone	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	91-57-6	
Naphthalene	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	800	8270C	08/20/10 12:06	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	800	8270C	08/20/10 12:06	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	800	8270C	08/20/10 12:06	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	800	8270C	08/20/10 12:06	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	87-86-5	
Phenanthrene	700	ug/kg	300	8270C	08/20/10 12:06	PL	85-01-8	
Phenol	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	108-95-2	
Pyrene	1,500	ug/kg	300	8270C	08/20/10 12:06	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	300	8270C	08/20/10 12:06	PL	88-06-2	

Analytical Laboratory Report

Lab Sample ID: S45342.04
Sample Tag: SB-09-36 (1-2)
Collected Date/Time: 08/19/2010 09:45
Matrix: Soil
COC Reference: 16177

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3550B	08/19/10 22:26	EMR		
Inorganics								
Total Solids	92	%	1	Std M 2540 B	08/19/10 15:45	DJS		
Organics - Semi-Volatiles								
Semi-Volatile Organics - MDEQ								
Acenaphthene	800	ug/kg	300	8270C	08/20/10 13:31	PL	83-32-9	I
Acenaphthylene	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	208-96-8	I
Anthracene	2,900	ug/kg	300	8270C	08/20/10 13:31	PL	120-12-7	I
Benzo(a)anthracene	7,400	ug/kg	300	8270C	08/20/10 13:31	PL	56-55-3	I
Benzo(b)fluoranthene	8,600	ug/kg	300	8270C	08/20/10 13:31	PL	205-99-2	I
Benzo(k)fluoranthene	6,800	ug/kg	300	8270C	08/20/10 13:31	PL	207-08-9	I
Benzo(ghi)perylene	3,200	ug/kg	300	8270C	08/20/10 13:31	PL	191-24-2	I
Benzo(a)pyrene	8,600	ug/kg	300	8270C	08/20/10 13:31	PL	50-32-8	I
bis(2-Chloroethoxy)methane	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	111-91-1	I
bis(2-Chloroethyl)ether	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	111-44-4	I
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	108-60-1	I
bis(2-Ethylhexyl)phthalate	800	ug/kg	300	8270C	08/20/10 13:31	PL	117-81-7	I
4-Bromophenyl phenyl ether	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	101-55-3	I
Butyl benzyl phthalate	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	85-68-7	I
4-Chloroaniline	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	106-47-8	I
2-Chloronaphthalene	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	91-58-7	I
4-Chloro-3-methylphenol	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	59-50-7	I
2-Chlorophenol	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	95-57-8	I
4-Chlorophenyl phenyl ether	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	7005-72-3	I
Chrysene	7,000	ug/kg	300	8270C	08/20/10 13:31	PL	218-01-9	I
p,m-Cresol	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	3/4-Cresol	I
o-Cresol	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	95-48-7	I
Dibenzo(ah)anthracene	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	53-70-3	I
Dibenzofuran	400	ug/kg	300	8270C	08/20/10 13:31	PL	132-64-9	I
di-n-Butyl phthalate	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	84-74-2	I
1,2-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	95-50-1	I
1,3-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	541-73-1	I
1,4-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	106-46-7	I
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	8270C	08/20/10 13:31	PL	91-94-1	I
2,4-Dichlorophenol	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	120-83-2	I
Diethyl phthalate	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	84-66-2	I
2,4-Dimethylphenol	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	105-67-9	I
Dimethyl phthalate	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	131-11-3	I
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	800	8270C	08/20/10 13:31	PL	534-52-1	I
2,4-Dinitrophenol	Not detected	ug/kg	800	8270C	08/20/10 13:31	PL	51-28-5	I

I-Matrix interference with internal standard

Lab Sample ID: S45342.04 (continued)
Sample Tag: SB-09-36 (1-2)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
2,4-Dinitrotoluene	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	121-14-2	I
2,6-Dinitrotoluene	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	606-20-2	I
1,2-Diphenylhydrazine	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	122-66-7	I
di-n-Octyl phthalate	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	117-84-0	I
Fluoranthene	17,600	ug/kg	300	8270C	08/20/10 13:31	PL	206-44-0	I
Fluorene	800	ug/kg	300	8270C	08/20/10 13:31	PL	86-73-7	I
Hexachlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	118-74-1	I
Hexachlorobutadiene	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	87-68-3	I
Hexachlorocyclopentadiene	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	77-47-4	I
Hexachloroethane	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	67-72-1	I
Indeno(1,2,3-cd)pyrene	3,000	ug/kg	300	8270C	08/20/10 13:31	PL	193-39-5	I
Isophorone	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	78-59-1	I
2-Methylnaphthalene	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	91-57-6	I
Naphthalene	400	ug/kg	300	8270C	08/20/10 13:31	PL	91-20-3	I
2-Nitroaniline	Not detected	ug/kg	800	8270C	08/20/10 13:31	PL	88-74-4	I
3-Nitroaniline	Not detected	ug/kg	800	8270C	08/20/10 13:31	PL	99-09-2	I
4-Nitroaniline	Not detected	ug/kg	800	8270C	08/20/10 13:31	PL	100-01-6	I
Nitrobenzene	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	98-95-3	I
2-Nitrophenol	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	88-75-5	I
4-Nitrophenol	Not detected	ug/kg	800	8270C	08/20/10 13:31	PL	100-02-7	I
N-Nitrosodiphenylamine	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	86-30-6	I
N-Nitrosodi-n-propylamine	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	621-64-7	I
Pentachlorophenol	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	87-86-5	I
Phenanthrene	11,000	ug/kg	300	8270C	08/20/10 13:31	PL	85-01-8	I
Phenol	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	108-95-2	I
Pyrene	16,600	ug/kg	300	8270C	08/20/10 13:31	PL	129-00-0	I
1,2,4-Trichlorobenzene	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	120-82-1	I
2,4,5-Trichlorophenol	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	95-95-4	I
2,4,6-Trichlorophenol	Not detected	ug/kg	300	8270C	08/20/10 13:31	PL	88-06-2	I

I-Matrix interference with internal standard

ARCADIS
Infrastructure, environment, buildings

ID#: 16177

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page ___ of ___

Lab Work Order

Contact & Company Name: Michi Maki Arcadis	Telephone: 8
Address: 10559 Citation Dr	Fax: 810-229-8837
City: Brighton State: MI Zip: 48116	E-mail Address: Michi.Maki@Arcadis-us.com
Project Name/Location (City, State): Flint NAD	Project #: B0064410
Sampler's Printed Name: Michael Mathiak	Sampler's Signature: [signature]

Results to:

Preservative	E
Filtered (✓)	
# of Containers	1
Container Information	402

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. [illegible]
G. Other: ___
H. Other: ___

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. [illegible]
4. [illegible]
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass

Matrix Key:
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: ___

PARAMETER ANALYSIS & METHOD

45342	Sample ID	Collection Date	Collection Time	Type (✓) Comp.	Type (✓) Grab	Matrix	SVOCs							REMARKS
.01	SB-09-33 (0-2)	8/19/10	0830	✓			X							24-hour TAT
.02	SB-09-34 (0-2)	8/19/10	0840	✓			X							24-hour TAT
.03	SB-09-35 (0-2)	8/19/10	0935	✓			X							24-hour TAT
.04	SB-09-36 (0-2)	8/19/10	0945	✓			X							24-hour TAT

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name:	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Michael Mathiak	Printed Name: Chris Gauthier	Printed Name: Chris Gauthier	Printed Name: Paula Shaw
☐ Cooler packed with ice (✓)		Signature: [signature]	Signature: [signature]	Signature: [signature]	Signature: [signature]
Specify Turnaround Requirements:	Sample Receipt:	Firm: Arcadis	Firm/Courier: Merit	Firm/Courier: Merit	Firm: Merit
Shipping Tracking #:	Condition/Cooler Temp: 4.4	Date/Time: 8/19/10 1530	Date/Time: 8-19-10 1330	Date/Time: 8-19-10 1430	Date/Time: 8-19-10 1430

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by ARCADIS

Analytical Laboratory Report

Supplemental Report

Report ID: S45343.01(01)
Generated on 08/31/2010

Report to

Attention: Micki Maki/ Tony Maffeo
Arcadis
10559 Citation Drive
Suite 100
Brighton, MI 48116

Phone: 810-229-8594 FAX: 810-229-8837
Email: micki.maki@ARCADIS-us.com

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S45343.01-S45343.04
Project: Flint NAO Flint, MI
Collected Date: 08/19/2010
Submitted Date/Time: 08/19/2010 14:30
Sampled by: Michael Mathiah
P.O. #: B0064410

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Laboratory Certifications:
Michigan DNRE (#9956), Ohio EPA (#CL0002), NELAC NY (#11814), NELAC FL (#E871045), WBENC (#2005110032)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director

Sample Summary (4 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S45343.01	SB-09-33 (2-4)	Soil	08/19/2010 08:35
S45343.02	SB-09-34 (2-4)	Soil	08/19/2010 08:45
S45343.03	SB-09-35 (2-4)	Soil	08/19/2010 09:40
S45343.04	SB-09-36 (2-4)	Soil	08/19/2010 09:55

Lab Sample ID: S45343.01
Sample Tag: SB-09-33 (2-4)
Collected Date/Time: 08/19/2010 08:35
Matrix: Soil
COC Reference: 16198

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Other / Misc.								
Hold until notified	Completed				08/20/10 10:00	PCS		

Lab Sample ID: S45343.02
Sample Tag: SB-09-34 (2-4)
Collected Date/Time: 08/19/2010 08:45
Matrix: Soil
COC Reference: 16198

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Other / Misc.								
Hold until notified	Completed				08/20/10 10:00	PCS		

Lab Sample ID: S45343.03
Sample Tag: SB-09-35 (2-4)
Collected Date/Time: 08/19/2010 09:40
Matrix: Soil
COC Reference: 16198

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Other / Misc.								
Hold until notified	Completed				08/20/10 10:00	PCS		

Lab Sample ID: S45343.04
Sample Tag: SB-09-36 (2-4)
Collected Date/Time: 08/19/2010 09:55
Matrix: Soil
COC Reference: 16198

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3550B	08/27/10 17:49	EMR		
Inorganics								
Total Solids	92	%	1	Std M 2540 B	08/26/10 17:00	DJS		
Organics - Semi-Volatiles								
Semi-Volatile Organics - MDEQ								
Acenaphthene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	7005-72-3	
Chrysene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	218-01-9	
p,m-Cresol	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	8270C	08/30/10 03:40	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	800	8270C	08/30/10 03:40	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	800	8270C	08/30/10 03:40	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	121-14-2	

Lab Sample ID: S45343.04 (continued)
Sample Tag: SB-09-36 (2-4)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
2,6-Dinitrotoluene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	117-84-0	
Fluoranthene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	193-39-5	
Isophorone	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	91-57-6	
Naphthalene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	800	8270C	08/30/10 03:40	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	800	8270C	08/30/10 03:40	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	800	8270C	08/30/10 03:40	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	800	8270C	08/30/10 03:40	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	87-86-5	
Phenanthrene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	85-01-8	
Phenol	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	108-95-2	
Pyrene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	300	8270C	08/30/10 03:40	PL	88-06-2	

ARCADIS
Infrastructure, environment, buildings

ID#: 16198

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page ___ of ___

Lab Work Order #

Send Results to:

Contact & Company Name: Micki Mahi Arcadis	Telephone:
Address: 10559 Citation Dr	Fax: 810-229-8837
City: Brighton State: MI Zip: 48116	E-mail Address: Micki.Mahi@Arcadis-us.com
Project Name/Location (City, State): Flint NAC Flint, MI	Project #: B0064410
Sampler's Printed Name: Michael Mathiah	Sampler's Signature: [signature]

Preservative	E													
Filtered (Y)														
# of Containers	1													
Container Information	4oz													

Keys

Preservation Key:
A. [illegible]
B. [illegible]
C. [illegible]
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. [illegible]

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. [illegible]
5. [illegible]
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil, W - Water, SL - Sludge, SW - Sample Wipe, A - Air, Other: _____

PARAMETER ANALYSIS & METHOD

45343	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	SVOCs							REMARKS
.01	SB-09-33 (2-4)	8/19/10	0835	✓		SO	X							HOLD
.02	SB-09-34 (2-4)	8/19/10	0845	✓		SO	X							HOLD
.03	SB-09-35 (2-4)	8/19/10	0940	✓		SO	X							HOLD
.04	SB-09-36 (2-4)	8/19/10	0955	✓		SO	X							HOLD

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name:	Cooler Custody Seal (✓)	Printed Name: Michael Mathiah	Printed Name: Chris Gauthier	Printed Name: Chris Gauthier	Printed Name: Paula Shaw
☐ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature: [signature]	Signature: [signature]	Signature: [signature]	Signature: [signature]
Specify Turnaround Requirements:	Sample Receipt:	Firm: Arcadis	Firm/Courier: Merit	Firm/Courier: Merit	Firm: Merit
Shipping Tracking #:	Condition/Cooler Temp: 4.4	Date/Time: 8/19/10 1530	Date/Time: 8-19-10 1330	Date/Time: 8-19-10 1430	Date/Time: 8-19-10 1430

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by ARCADIS

Analytical Laboratory Report

Supplemental Report

Report ID: S45430.01(02)
Generated on 09/02/2010
Replaces report S45430.01(01) generated on 08/30/2010

Report to

Attention: Micki Maki/ Tony Maffeo
Arcadis
10559 Citation Drive
Suite 100
Brighton, MI 48116

Phone: 810-229-8594 FAX: 810-229-8837
Email: micki.maki@ARCADIS-us.com

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S45430.01-S45430.26
Project: B0064410.2010.01101
Collected Date: 08/19/2010 - 08/20/2010
Submitted Date/Time: 08/25/2010 16:30
Sampled by: Michael Mathiah
P.O. #: B0064410.2010.0

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Laboratory Certifications:
Michigan DNRE (#9956), Ohio EPA (#CL0002), NELAC NY (#11814), NELAC FL (#E871045), WBENC (#2005110032)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director

Sample Summary (26 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S45430.01	SB-09-08 (1.5-2.5)	Soil	08/19/2010 14:00
S45430.02	SB-09-39 (1-2)	Soil	08/19/2010 13:45
S45430.03	SB-09-39 (2-3)	Soil	08/19/2010 14:00
S45430.04	SB-09-49 (1-2)	Soil	08/20/2010 12:00
S45430.05	SB-09-49 (2-3)	Soil	08/20/2010 12:00
S45430.06	SB-09-50 (1-2)	Soil	08/20/2010 11:35
S45430.07	SB-09-50 (2-3)	Soil	08/20/2010 11:35
S45430.08	SB-09-52 (1-2)	Soil	08/20/2010 14:15
S45430.09	SB-09-52 (2-3)	Soil	08/20/2010 14:15
S45430.10	SB-09-53 (1-2)	Soil	08/20/2010 14:45
S45430.11	SB-09-53 (2-3)	Soil	08/20/2010 14:45
S45430.12	SB-09-53 (3-4)	Soil	08/20/2010 14:45
S45430.13	SB-09-53 (4-5)	Soil	08/20/2010 14:45
S45430.14	SB-09-54 (1-2)	Soil	08/20/2010 15:30
S45430.15	SB-09-54 (2-3)	Soil	08/20/2010 15:30
S45430.16	SB-09-49 (1-2)	Soil	08/20/2010 12:00
S45430.17	SB-09-49 (2-3)	Soil	08/20/2010 12:00
S45430.18	SB-09-50 (1-2)	Soil	08/20/2010 11:35
S45430.19	SB-09-50 (2-3)	Soil	08/20/2010 11:35
S45430.20	SB-09-52 (1-2)	Soil	08/20/2010 14:15
S45430.21	SB-09-52 (2-3)	Soil	08/20/2010 14:15
S45430.22	SB-09-53 (2-3)	Soil	08/20/2010 14:45
S45430.23	SB-09-53 (3-4)	Soil	08/20/2010 14:45
S45430.24	SB-09-53 (4-5)	Soil	08/20/2010 14:45
S45430.25	SB-09-54 (1-2)	Soil	08/20/2010 15:30
S45430.26	SB-09-54 (2-3)	Soil	08/20/2010 15:30

Lab Sample ID: S45430.01
Sample Tag: SB-09-08 (1.5-2.5)
Collected Date/Time: 08/19/2010 14:00
Matrix: Soil
COC Reference: 53347

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/29/10 12:00	PER		
Metal Digestion (Replicate 01)	Completed			3050B	09/01/10 12:00	SLS		
Metal Digestion	Completed			3015A	08/27/10 12:00	PER		
TCLP Extraction								
Inital Sample pH	N/A			1311	08/26/10 17:00	WAR		
pH after 3.5 ml HCl	N/A			1311	08/26/10 17:00	WAR		
% Solids	100			1311	08/26/10 17:00	WAR		
Sample Used g	100			1311	08/26/10 17:00	WAR		
Final Volume mL	2,000			1311	08/26/10 17:00	WAR		
TCLP Extraction Fluid	2			1311	08/26/10 17:00	WAR		
Final Extract pH	4.46			1311	08/26/10 17:00	WAR		
Inorganics								
Total Solids	89	%	1	Std M 2540 B	08/26/10 17:00	DJS		
Metals								
Lead	4,880	mg/kg	1.0	6020	08/29/10 14:25	PER		
Lead (Replicate 01)	4,870	mg/kg	0.30	6020	09/01/10 18:05	SLS		
Lead, TCLP	91.4	mg/L	0.03	6020	08/27/10 15:58	PER	5.0	!

!-Result is outside of stated limit criteria

Lab Sample ID: S45430.02
Sample Tag: SB-09-39 (1-2)
Collected Date/Time: 08/19/2010 13:45
Matrix: Soil
COC Reference: 53347

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/29/10 12:00	PER		
Metal Digestion (Replicate 01)	Completed			3050B	09/01/10 12:00	SLS		
Metal Digestion	Completed			3015A	08/27/10 12:00	PER		
TCLP Extraction								
Inital Sample pH	N/A			1311	08/26/10 17:00	WAR		
pH after 3.5 ml HCl	N/A			1311	08/26/10 17:00	WAR		
% Solids	100			1311	08/26/10 17:00	WAR		
Sample Used g	100			1311	08/26/10 17:00	WAR		
Final Volume mL	2,000			1311	08/26/10 17:00	WAR		
TCLP Extraction Fluid	2			1311	08/26/10 17:00	WAR		
Final Extract pH	4.58			1311	08/26/10 17:00	WAR		
Inorganics								
Total Solids	90	%	1	Std M 2540 B	08/26/10 17:00	DJS		
Metals								
Lead	32,900	mg/kg	25.0	6020	08/29/10 14:35	PER		
Lead (Replicate 01)	34,700	mg/kg	0.51	6020	09/01/10 18:07	SLS		
Lead, TCLP	569	mg/L	0.03	6020	08/27/10 16:00	PER	5.0	!

!-Result is outside of stated limit criteria

Lab Sample ID: S45430.03
Sample Tag: SB-09-39 (2-3)
Collected Date/Time: 08/19/2010 14:00
Matrix: Soil
COC Reference: 53347

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/29/10 12:00	PER		
Metal Digestion (Replicate 01)	Completed			3050B	09/01/10 12:00	SLS		
Metal Digestion	Completed			3015A	08/27/10 12:00	PER		
TCLP Extraction								
Inital Sample pH	N/A			1311	08/26/10 17:00	WAR		
pH after 3.5 ml HCl	N/A			1311	08/26/10 17:00	WAR		
% Solids	100			1311	08/26/10 17:00	WAR		
Sample Used g	100			1311	08/26/10 17:00	WAR		
Final Volume mL	2,000			1311	08/26/10 17:00	WAR		
TCLP Extraction Fluid	2			1311	08/26/10 17:00	WAR		
Final Extract pH	5.34			1311	08/26/10 17:00	WAR		
Inorganics								
Total Solids	86	%	1	Std M 2540 B	08/26/10 17:00	DJS		
Metals								
Lead	5,320	mg/kg	3.0	6020	08/29/10 14:38	PER		
Lead (Replicate 01)	628	mg/kg	0.30	6020	09/01/10 18:09	SLS		
Lead, TCLP	71.9	mg/L	0.03	6020	08/27/10 16:02	PER	5.0	!

!-Result is outside of stated limit criteria

Lab Sample ID: S45430.04
Sample Tag: SB-09-49 (1-2)
Collected Date/Time: 08/20/2010 12:00
Matrix: Soil
COC Reference: 53347

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/29/10 12:00	PER		
Inorganics								
Total Solids	91	%	1	Std M 2540 B	08/26/10 17:00	DJS		
Metals								
Lead	949	mg/kg	0.30	6020	08/29/10 14:39	PER		

Lab Sample ID: S45430.05
Sample Tag: SB-09-49 (2-3)
Collected Date/Time: 08/20/2010 12:00
Matrix: Soil
COC Reference: 53347

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/29/10 12:00	PER		
Inorganics								
Total Solids	88	%	1	Std M 2540 B	08/26/10 17:00	DJS		
Metals								
Lead	959	mg/kg	0.30	6020	08/29/10 14:41	PER		

Lab Sample ID: S45430.06
Sample Tag: SB-09-50 (1-2)
Collected Date/Time: 08/20/2010 11:35
Matrix: Soil
COC Reference: 53347

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/29/10 12:00	PER		
Inorganics								
Total Solids	88	%	1	Std M 2540 B	08/26/10 17:00	DJS		
Metals								
Lead	909	mg/kg	0.30	6020	08/29/10 14:42	PER		

Lab Sample ID: S45430.07
Sample Tag: SB-09-50 (2-3)
Collected Date/Time: 08/20/2010 11:35
Matrix: Soil
COC Reference: 53347

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/29/10 12:00	PER		
Inorganics								
Total Solids	89	%	1	Std M 2540 B	08/26/10 17:00	DJS		
Metals								
Lead	125	mg/kg	0.30	6020	08/29/10 14:43	PER		

Lab Sample ID: S45430.08
Sample Tag: SB-09-52 (1-2)
Collected Date/Time: 08/20/2010 14:15
Matrix: Soil
COC Reference: 53347

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/29/10 12:00	PER		
Inorganics								
Total Solids	69	%	1	Std M 2540 B	08/26/10 17:00	DJS		
Metals								
Lead	4,200	mg/kg	3.0	6020	08/29/10 14:49	PER		

Lab Sample ID: S45430.09
Sample Tag: SB-09-52 (2-3)
Collected Date/Time: 08/20/2010 14:15
Matrix: Soil
COC Reference: 53347

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/29/10 12:00	PER		
Inorganics								
Total Solids	86	%	1	Std M 2540 B	08/26/10 17:00	DJS		
Metals								
Lead	32.8	mg/kg	0.30	6020	08/29/10 14:50	PER		

Lab Sample ID: S45430.10
Sample Tag: SB-09-53 (1-2)
Collected Date/Time: 08/20/2010 14:45
Matrix: Soil
COC Reference: 53347

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
3	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/29/10 12:00	PER		
Metal Digestion (Replicate 01)	Completed			3050B	09/01/10 12:00	SLS		
Metal Digestion	Completed			3015A	08/27/10 12:00	PER		
TCLP Extraction								
Inital Sample pH	N/A			1311	08/26/10 17:00	WAR		
pH after 3.5 ml HCl	N/A			1311	08/26/10 17:00	WAR		
% Solids	100			1311	08/26/10 17:00	WAR		
Sample Used g	100			1311	08/26/10 17:00	WAR		
Final Volume mL	2,000			1311	08/26/10 17:00	WAR		
TCLP Extraction Fluid	1			1311	08/26/10 17:00	WAR		
Final Extract pH	4.52			1311	08/26/10 17:00	WAR		
Inorganics								
Total Solids	87	%	1	Std M 2540 B	08/26/10 17:00	DJS		
Metals								
Lead	9,670	mg/kg	5.0	6020	08/29/10 15:25	PER		
Lead (Replicate 01)	19,000	mg/kg	0.30	6020	09/01/10 18:11	SLS		
Lead, TCLP	473	mg/L	0.03	6020	08/27/10 16:10	PER	5.0	!

!-Result is outside of stated limit criteria

Lab Sample ID: S45430.11
Sample Tag: SB-09-53 (2-3)
Collected Date/Time: 08/20/2010 14:45
Matrix: Soil
COC Reference: 53347

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/29/10 12:00	PER		
Inorganics								
Total Solids	83	%	1	Std M 2540 B	08/26/10 17:00	DJS		
Metals								
Lead	285	mg/kg	0.30	6020	08/29/10 15:05	PER		

Lab Sample ID: S45430.12
Sample Tag: SB-09-53 (3-4)
Collected Date/Time: 08/20/2010 14:45
Matrix: Soil
COC Reference: 53347

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/29/10 12:00	PER		
Inorganics								
Total Solids	84	%	1	Std M 2540 B	08/26/10 17:00	DJS		
Metals								
Lead	36.4	mg/kg	0.30	6020	08/29/10 15:06	PER		

Lab Sample ID: S45430.13
Sample Tag: SB-09-53 (4-5)
Collected Date/Time: 08/20/2010 14:45
Matrix: Soil
COC Reference: 53348

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/29/10 12:00	PER		
Inorganics								
Total Solids	85	%	1	Std M 2540 B	08/26/10 17:00	DJS		
Metals								
Lead	5.63	mg/kg	0.30	6020	08/29/10 15:07	PER		

Lab Sample ID: S45430.14
Sample Tag: SB-09-54 (1-2)
Collected Date/Time: 08/20/2010 15:30
Matrix: Soil
COC Reference: 53348

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/29/10 12:00	PER		
Inorganics								
Total Solids	92	%	1	Std M 2540 B	08/26/10 17:00	DJS		
Metals								
Lead	4,370	mg/kg	3.0	6020	08/29/10 15:13	PER		

Lab Sample ID: S45430.15
Sample Tag: SB-09-54 (2-3)
Collected Date/Time: 08/20/2010 15:30
Matrix: Soil
COC Reference: 53348

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Extraction / Prep.								
Metal Digestion	Completed			3050B	08/29/10 12:00	PER		
Inorganics								
Total Solids	94	%	1	Std M 2540 B	08/26/10 17:00	DJS		
Metals								
Lead	363	mg/kg	0.30	6020	08/29/10 15:15	PER		

Lab Sample ID: S45430.16
Sample Tag: SB-09-49 (1-2)
Collected Date/Time: 08/20/2010 12:00
Matrix: Soil
COC Reference: 53349

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Other / Misc.								
Hold until notified	Completed				08/26/10 10:20	PCS		

Lab Sample ID: S45430.17
Sample Tag: SB-09-49 (2-3)
Collected Date/Time: 08/20/2010 12:00
Matrix: Soil
COC Reference: 53349

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Other / Misc.								
Hold until notified	Completed				08/26/10 10:20	PCS		

Lab Sample ID: S45430.18
Sample Tag: SB-09-50 (1-2)
Collected Date/Time: 08/20/2010 11:35
Matrix: Soil
COC Reference: 53349

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Other / Misc.								
Hold until notified	Completed				08/26/10 10:20	PCS		

Lab Sample ID: S45430.19
Sample Tag: SB-09-50 (2-3)
Collected Date/Time: 08/20/2010 11:35
Matrix: Soil
COC Reference: 53349

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Other / Misc.								
Hold until notified	Completed				08/26/10 10:20	PCS		

Lab Sample ID: S45430.20
Sample Tag: SB-09-52 (1-2)
Collected Date/Time: 08/20/2010 14:15
Matrix: Soil
COC Reference: 53349

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Other / Misc.								
Hold until notified	Completed				08/26/10 10:20	PCS		

Lab Sample ID: S45430.21
Sample Tag: SB-09-52 (2-3)
Collected Date/Time: 08/20/2010 14:15
Matrix: Soil
COC Reference: 53349

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Other / Misc.								
Hold until notified	Completed				08/26/10 10:20	PCS		

Lab Sample ID: S45430.22
Sample Tag: SB-09-53 (2-3)
Collected Date/Time: 08/20/2010 14:45
Matrix: Soil
COC Reference: 53349

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Other / Misc.								
Hold until notified	Completed				08/26/10 10:20	PCS		

Lab Sample ID: S45430.23
Sample Tag: SB-09-53 (3-4)
Collected Date/Time: 08/20/2010 14:45
Matrix: Soil
COC Reference: 53349

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Other / Misc.								
Hold until notified	Completed				08/26/10 10:20	PCS		

Lab Sample ID: S45430.24
Sample Tag: SB-09-53 (4-5)
Collected Date/Time: 08/20/2010 14:45
Matrix: Soil
COC Reference: 53349

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Other / Misc.								
Hold until notified	Completed				08/26/10 10:20	PCS		

Lab Sample ID: S45430.25
Sample Tag: SB-09-54 (1-2)
Collected Date/Time: 08/20/2010 15:30
Matrix: Soil
COC Reference: 53349

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Other / Misc.								
Hold until notified	Completed				08/26/10 10:20	PCS		

Lab Sample ID: S45430.26
Sample Tag: SB-09-54 (2-3)
Collected Date/Time: 08/20/2010 15:30
Matrix: Soil
COC Reference: 53349

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	4oz Glass	None	Yes	4.3	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	Limits	Flags
Other / Misc.								
Hold until notified	Completed				08/26/10 10:20	PCS		

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C.O.C. PAGE # 1 OF 3

53347

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: Tony Maffeo / MICKI MAKI
COMPANY: ARCADIS
ADDRESS: 10559 CITATION DR, STE 100
CITY: BRIGHTON STATE: MI ZIP CODE: 48116
PHONE NO.: 810.225.1949 FAX NO.: 810.229.8837 P.O. NO.: B0064410.2010.01101
E-MAIL ADDRESS: Tony.Maffeo@ARCADIS-US.com QUOTE NO.:

INVOICE TO

CONTACT NAME: SEE ~~B064~~ CONTRACT ☐ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: FAX NO.: P.O. NO.:

PROJECT NO./NAME: B0064410.2010.01101
SAMPLER(S) - PLEASE PRINT/SIGN NAME: MIKE MATHIAK /

TURNAROUND TIME REQUIRED ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ STANDARD ☒ OTHER

DELIVERABLES REQUIRED ☒ STANDARD ☐ LEVEL II ☐ LEVEL III ☐ OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE O=OIL A=AIR W=WASTE M=MISC

ANALYSIS (ATTACH LIST IF MORE SPACE REQUIRED)

MERIT LAB NO.	YEAR 10 DATE	TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCl	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	TOTAL LEAD	TCLP LEAD	SPECIAL INSTRUCTIONS/NOTES
45430.01	8/19	1400	SB-09-08 (1.5-2.5)	S	3	X							1	2	5 DAY TURN
.02	8/19	1345	SB-09-39 (1-2)	S	3	X							1	2	
.03	8/19	1400	SB-09-39 (2-3)	S	3	X							1	2	
.04	8/20	1200	SB-09-49 (1-2)	S	1	X							1		
.05	8/20	1200	SB-09-49 (2-3)	S	1	X							1		
.06	8/20	1135	SB-09-50 (1-2)	S	1	X							1		
.07	8/20	1135	SB-09-50 (2-3)	S	1	X							1		
.08	8/20	1415	SB-09-52 (1-2)	S	1	X							1		
.09	8/20	1415	SB-09-52 (2-3)	S	1	X							1		
.10	8/20	1445	SB-09-53 (1-2)	S	3	X							1	2	
.11	8/20	1445	SB-09-53 (2-3)	S	1	X							1		
.12	8/20	1445	SB-09-53 (3-4)	S	1	X							1		

		DATE	TIME
RELINQUISHED BY: SIGNATURE/ORGANIZATION	ARCADIS	8/25/10	900
RECEIVED BY: SIGNATURE/ORGANIZATION	Arcadis Refrigerator	8/25/10	900
RELINQUISHED BY: SIGNATURE/ORGANIZATION	Arcadis Refrigerator	8/25/10	1130
RECEIVED BY: SIGNATURE/ORGANIZATION		8/25/10	1130

		DATE	TIME
RELINQUISHED BY: SIGNATURE/ORGANIZATION		8/25/10	1630
RECEIVED BY: SIGNATURE/ORGANIZATION		8-25-10	1630

SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	NOTES: TEMP. ON ARRIVAL
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	

PLEASE NOTE: SIGNING ACKNOWLEDGES ACCEPTANCE OF TERMS & CONDITIONS ON REVERSE SIDE

Merit Laboratories, Inc.
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C.O.C. PAGE # 2 OF 3

53348

CHAIN OF CUSTODY RECORD

REPORT TO				INVOICE TO			
CONTACT NAME				CONTACT NAME		☐ SAME	
COMPANY				COMPANY			
ADDRESS				ADDRESS			
CITY	STATE	ZIP CODE		CITY	STATE	ZIP CODE	
PHONE NO.	FAX NO.	P.O. NO.		PHONE NO.	FAX NO.	P.O. NO.	
E-MAIL ADDRESS		QUOTE NO.					

PROJECT NO./NAME: B0064410, 2010, 01101

SAMPLER(S) - PLEASE PRINT/SIGN NAME: MIKE MATHIAK

TURNAROUND TIME REQUIRED ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ STANDARD ☒ OTHER

DELIVERABLES REQUIRED ☒ STANDARD ☐ LEVEL II ☐ LEVEL III ☐ OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE O=OIL A=AIR W=WASTE M=MISC

ANALYSIS (ATTACH LIST IF MORE SPACE REQUIRED)

MERIT LAB NO.	YEAR 10 DATE	TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCL	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	TOTAL LEAD	SPECIAL INSTRUCTIONS/NOTES
45430.13	8/20	1445	SB-09-53(4-5)	S	1	X							1	5 DAY TURN
.14	8/20	1530	SB-09-54(1-2)	S	1	X							1	↓
.15	8/20	1530	SB-09-54(2-3)	S	1	X							1	

		DATE	TIME
RELINQUISHED BY: SIGNATURE/ORGANIZATION	ARCADIS	8/25/10	900
RECEIVED BY: SIGNATURE/ORGANIZATION		8/25/10	900
RELINQUISHED BY: SIGNATURE/ORGANIZATION		8/25/10	1130
RECEIVED BY: SIGNATURE/ORGANIZATION		8/25/10	1130

		DATE	TIME
RELINQUISHED BY: SIGNATURE/ORGANIZATION		8/25/10	1630
RECEIVED BY: SIGNATURE/ORGANIZATION		8-25-10	1630

SEAL NO. | SEAL INTACT YES ☐ NO ☐ | INITIALS

SEAL NO. | SEAL INTACT YES ☐ NO ☐ | INITIALS

NOTES: TEMP. ON ARRIVAL _____

PLEASE NOTE: SIGNING ACKNOWLEDGES ACCEPTANCE OF TERMS & CONDITIONS ON REVERSE SIDE

Merit Laboratories, Inc.

2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-6333
www.meritlabs.com

C.O.C. PAGE # 3 OF 3

53349

CHAIN OF CUSTODY RECORD

REPORT TO

CONTACT NAME: TONY MAFFEO / MICKI MAKI
COMPANY: ARCADIS
ADDRESS: 10559 CITATION DR., STE 100
CITY: BRIGHTON STATE: MI ZIP CODE: 48116
PHONE NO.: 810.225.1949 FAX NO.: 810.229.8837 P.O. NO.: B0064410.2010.01101
E-MAIL ADDRESS: Tony.Maffeo@ARCADIS-US.com QUOTE NO.:

INVOICE TO

CONTACT NAME: SEE CONTRACT ☐ SAME
COMPANY:
ADDRESS:
CITY: STATE: ZIP CODE:
PHONE NO.: FAX NO.: P.O. NO.:

PROJECT NO./NAME: B0064410.2010.01101
SAMPLER(S) - PLEASE PRINT/SIGN NAME: MIKE MATHIAK /

TURNAROUND TIME REQUIRED ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ STANDARD ☒ OTHER

DELIVERABLES REQUIRED ☒ STANDARD ☐ LEVEL II ☐ LEVEL III ☐ OTHER

MATRIX CODE: GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID SL=SLUDGE O=OIL A=AIR W=WASTE M=MISC

ANALYSIS (ATTACH LIST IF MORE SPACE REQUIRED)

MERIT LAB NO.	YEAR 10 DATE	TIME	SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives: NONE	HCL	HNO_3	H_2SO_4	NaOH	MeOH	OTHER	TCLP LEAD	SPECIAL INSTRUCTIONS/NOTES
454316	8/20	1200	SB-09-49 (1-2)	S	2	X							2	HOLD
.17	8/20	1200	SB-09-49 (2-3)	S	2	X							2	
.18	8/20	1135	SB-09-50 (1-2)	S	2	X							2	
.19	8/20	1135	SB-09-50 (2-3)	S	2	X							2	
.20	8/20	1415	SB-09-52 (1-2)	S	2	X							2	
.21	8/20	1415	SB-09-52 (2-3)	S	2	X							2	
.22	8/20	1445	SB-09-53 (2-3)	S	2	X							2	
.23	8/20	1445	SB-09-53 (3-4)	S	2	X							2	
.24	8/20	1445	SB-09-53 (4-5)	S	2	X							2	
.25	8/20	1530	SB-09-54 (1-2)	S	2	X							2	
.26	8/20	1530	SB-09-54 (2-3)	S	2	X							2	

		DATE	TIME
RELINQUISHED BY: SIGNATURE/ORGANIZATION	ARCADIS	8/25/10	900
RECEIVED BY: SIGNATURE/ORGANIZATION	Arcadis Refrigerator	8/25/10	900
RELINQUISHED BY: SIGNATURE/ORGANIZATION	Arcadis Refrigerator	8/25/10	1630
RECEIVED BY: SIGNATURE/ORGANIZATION		8/25/10	1630

		DATE	TIME
RELINQUISHED BY: SIGNATURE/ORGANIZATION		8/25/10	1630
RECEIVED BY: SIGNATURE/ORGANIZATION		8-25-10	1630

SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
SEAL NO. SEAL INTACT YES ☐ NO ☐ INITIALS
NOTES: TEMP. ON ARRIVAL _____

PLEASE NOTE: SIGNING ACKNOWLEDGES ACCEPTANCE OF TERMS & CONDITIONS ON REVERSE SIDE

ARCADIS

Appendix D

Maintenance of Select Surface Cover Areas – 2010 Inspection Logs

MAINTENANCE OF SELECT SURFACE COVERS
INSPECTION LOG SHEET

NAO FLINT NORTH (OTHERWISE KNOWN AS BUICK CITY) – SOUTHEND
FLINT, MICHIGAN

DATE: 7-22-10 TIME: 1400

Quarterly Inspection		
Is the Surface Cover Consistent with Existing Conditions?		
Item	**Condition Satisfactory (X)**	**Condition Unsatisfactory (X)**
AOI Group 12-A	☒	☐
AOI Group 2-C	☒	☐
AOI-Group 29-A	☒	☐
AOI Group 09-B (Area 1)E	☒	☐
AOI Group 09-B (Area 2)F	☒	☐
AOI Group 09-B (Area 3)I	☒	☐

Comments*
All AREAS CONSISTENT WITH PHOTOS.

Print Name (Inspector): **Deborah Newcom**

Inspector's Signature:

*** Comments and photos required is condition is unsatisfactory**

MAINATANENCE OF SELECT SURFACE COVERS
NAO FLINT NORTH (OTHERWISE KNOWN AS BUICK CITY)
JULY 2010
FLINT, MICHIGAN



AOI Group 29-A: Facing North



AOI Group 29-A: Facing North



AOI Group 12-A: Facing Southeast



AOI Group 02-C: Facing Northwest



AOI Group 09-B: Facing Northwest (Area 1)



AOI Group 09-B: Facing Northwest (Area 1)



AOI Group 09-B: Facing North (Area 2)



AOI Group 09-B: Facing South (Area 3)



AOI Group 09-B: Facing South (Area 3)



AOI Group 09-B: Facing South (Area 3)

Nanzer, Bethany

From: Newcom, Deborah
Sent: Thursday, July 22, 2010 5:44 PM
To: Nanzer, Bethany
Subject: remaining photos
Attachments: Area E.JPG; Area F.JPG; Area G.JPG; Area H.JPG; Area I-1.JPG; Area I-2.JPG; Area I-3.JPG

Beth,
Here are my notes.

Area	Groundcover	Condition	Photo Notes	Corresponding AOI
A	Mix of concrete, vegetation, building debris, soil and stone	Concrete is fair	Taken facing north	AOI 29-A
B	Mix of concrete, vegetation, building debris, soil and stone	Concrete is fair	Taken facing southeast	AOI 12-A
C	Mix of concrete and vegetation	Concrete is fair to poor	Taken facing northwest	AOI 02-C
D	Area includes Division Street; Mix of concrete vegetation, building debris and stone	Concrete is poor to fair	Taken facing north in succession from west to east	AOI 40 -B
E	Mostly concrete, vegetation growing in expansion joints, two areas with trees	Concrete is good to fair	Taken facing northwest	AOI 09-B - Area 1
F	Mostly concrete, vegetation growing in expansion joints	Concrete is good to fair	Taken facing north	AOI 09-B - Area 1
G	Concrete and broken asphalt, with vegetation	Concrete in good in some locations, poor in others	Taken facing southeast	AOI 09-A
H	Mainly asphalt with vegetation growing in larger cracks	Asphalt fair to poor	Taken facing southeast	AOI 09-A
I	Mix of vegetation and soil with some areas of broken asphalt and concrete	Area overall in fair condition	Taken facing south	AOI 09-B - Area 2

I hope this is what you are looking for.
Thanks.
Deb

Deborah Newcom | Field Technician 2 |Deborah.Newcom@arcadis-us.com

ARCADIS U.S., Inc. | 10559 Citation Drive, Suite 100 | Brighton, MI 48116
T. 810.229.8594 | M. 810.623.6438 | F. 810.229.8837
www.arcadis-us.com

ARCADIS, Imagine the result
Please consider the environment before printing this email.

MAINTENANCE OF SELECT SURFACE COVERS
INSPECTION LOG SHEET

NAO FLINT NORTH (OTHERWISE KNOWN AS BUICK CITY) – SOUTHEND
FLINT, MICHIGAN

DATE: 10/26/10 - 10/27/10 TIME: VARIES

Quarterly Inspection Is the Surface Cover Consistent with Existing Conditions?		
Item	**Condition Satisfactory (X)**	**Condition Unsatisfactory (X)**
AOI Group 12-A	☒	☐
AOI Group 2-C	☒	☐
AOI Group 29-A	☒	☐
AOI Group 09-A	☒	☐
AOI Group 09-B (Area 1)	☒	☐
AOI Group 09-B (Area 2)	☒	☐

Comments*

ALL AREAS APPEAR IN SAME CONDITION AS PREVIOUS INSPECTION.

Print Name (Inspector): D. NEWCOM

Inspector's Signature: D. Newcom

*** Comments and photos attached**

MAINTENANCE OF SELECT SURFACE COVERS
INSPECTION LOG SHEET

NAO FLINT NORTH (OTHERWISE KNOWN AS BUICK CITY) – SOUTHEND
FLINT, MICHIGAN

Item	Groundcover	Condition	Photo Notes
AOI Group 12-A	• CONCRETE • RANDOM VEGETATION • BROKEN CONCRETE	FAIR NO CHANGES	1. CORNER 1 2. 2 3. 3 4. 4
AOI Group 2-C	• CONCRETE • VEGETATION • MIX SOIL / BROKEN CONCRETE/ASPHALT	FAIR NO CHANGES	1. CORNER 1 2. 2 3. 3 4. 4
AOI Group 29-A	• CONCRETE • RANDOM VEGETATION • BROKEN CONCRETE	FAIR NO CHANGES	1. CORNER 1 2. 2 3. 3 4. 4
AOI Group 09-A	• CONCRETE • VEGETATION • BROKEN CONCRETE/ GRAVEL	FAIR NO CHANGES	1. CORNER 1 2. 2 3. 3 4. 4 5. 5
AOI Group 09-B (Area 1)	• CONCRETE • RANDOM VEGETATION	FAIR NO CHANGES	1. NO 2. CORNERS (FROM FENCE) 3. CORNER 3 4. 4 5. 5

MAINTENANCE OF SELECT SURFACE COVERS
INSPECTION LOG SHEET

NAO FLINT NORTH (OTHERWISE KNOWN AS BUICK CITY) – SOUTHEND
FLINT, MICHIGAN

Item	Groundcover	Condition	Photo Notes
AOI Group 09-B (Area 2)	• VEGITATION • CONCRETE • ASPHALT	FAIR NO CHANGES	1. CORNER 1 2. 2 3. 3 4. 4 5. 5 6. 6

* EXTRA SURVEY LOCATIONS CORNERS 1+2 APPROX. LOCATIONS.

NOTE

ADDITIONAL PHOTO NOTES INCLUDED IN ATTACHED WORD DOCUMENT (PHOTOS WITH CAPTIONS)

AOI Group 12 – A



Facing north east, corner B-3



Facing south east, corner B-4



Facing south west, corner B-1



Facing north west, corner B-2

AOI Group 2 – C



Facing north east, corner C-3



Facing south west, corner C-1



Facing north west, corner C-2

*When downloading the corner C-4 photo, repeated error messages came up that the file was damaged.

AOI Group 29 – A



Facing north east, corner A-3



Facing south east, corner A-4



Facing south west, corner A-1



Facing north west, corner A-2

AOI Group 09– A



Facing east, corner G-5



Facing north west, corner G-3



Facing north east, corner G-4

*Remaining photos next page

AOI Group 09 – A (continued)



Facing south east, corner G-2



Facing south west, corner G-1

*No photo for corner G-6, photos from G-4 and G-5 include G-6 area also.

AOI Group B-1



Facing north east, formerly corner F-1/2



Facing north west, formerly corner F-3



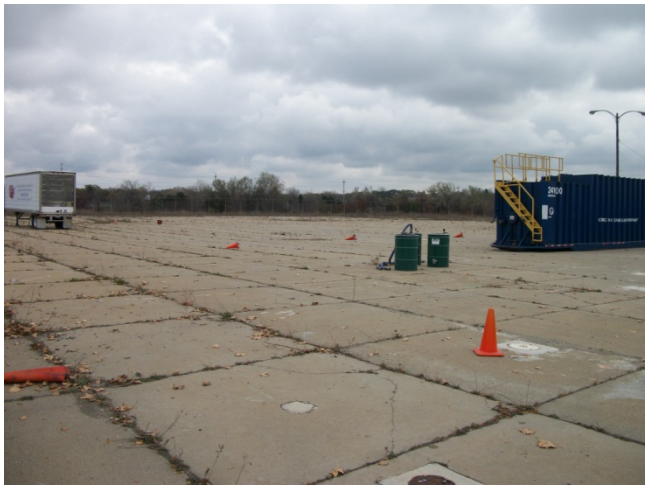
Facing north west, formerly corner E-4

*Used identifications of old E and F areas, which have been combined to make Group B-1, for more accurate reference.

AOI Group B – 1 (continued)



Facing north east, formerly corner F-3



Facing south west, formerly corner E-3

AOI Group B – 2



Facing north east, corner I-5



Facing south west, corner I-2



Facing north west, corner I-6

AOI Group B – 2 (continued)



Facing north east, corner I-3



Facing south west, corner I-2



Facing south west, corner I-1/I-2
(3 additional unknown survey locations)

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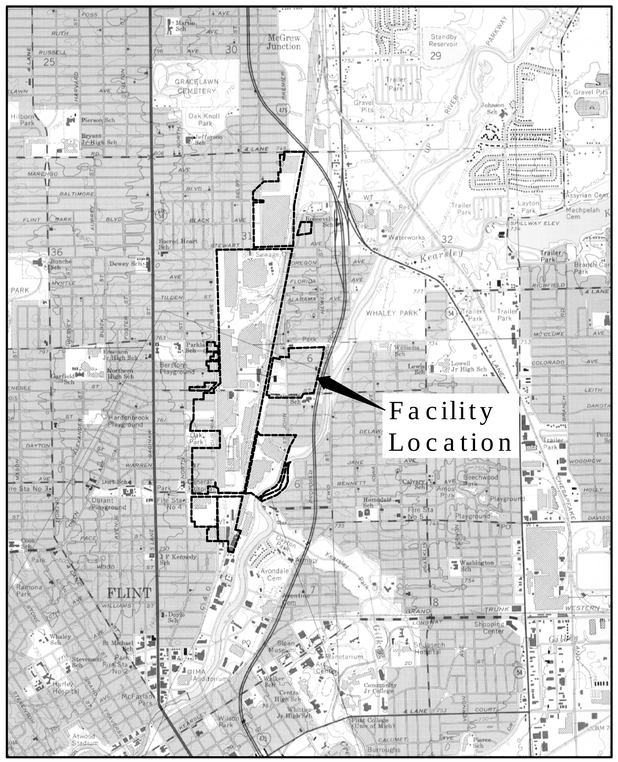
Appendix E

Outfall 003/004 As-Built-Drawings

CITY: SYRACUSE-NY DIV/GROUP: 141 DB: ADF GHS LD: PIC: PM: TM: LYR:ON=*;OFF=*REF*
G:\Aproject\MLCIB00644\Flint Opertions Site\cadd\April 2010 Design\As-Built Dwgs_March 2011\Cover.dwg LAYOUT: COVER SAVED: 3/8/2011 3:50 PM ACADVER: 18.0S (LMS TECH) PAGESETUP: D-SIZE PDF PLOTSTYLETABLE: BLACKGRAY.CTB PLOTTED: 3/16/2011 1:34 PM BY: SEPPANEN, MAIJA

RECORD DRAWINGS

OUTFALL 003/004 STORM WATER DIVERSION AND TREATMENT SYSTEM



CITY: SYRACUSE-NY DIV/GROUP: 141 DB: ADF LD: ADF PM: LYR:ON=*;OFF=REF*
G:\Arpoject\MLC\B0064\Flint Opertions Site\cadd\April 2010 Design\As-Built Dwgs_March 2011\G1.DWG LAYOUT: G1 SAVED: 3/8/2011 4:09 PM ACADVER: 18.0S (LMS TECH) PAGESETUP: D-SIZE PDF PLOTSTYLETABLE: BLACKGRAY.CTB PLOTTED: 3/16/2011 1:35 PM BY: SEPPANEN, MAIJA
XREFS: IMAGES: PROJECTNAME: ----
64410XLD

ABBREVIATIONS

ASPH	ASPHALT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
BLDG	BUILDING
BM	BENCHMARK
℄	CENTERLINE
CB	CATCH BASIN
CIP	CAST–IN–PLACE
CLF	CHAIN LINK FENCE
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
CRSI	CONCRETE REINFORCEMENT STEEL INSTITUTE
CY	CUBIC YARD
DIP	DUCTILE IRON PIPE
DWG	DRAWING
E	UNDERGROUND ELECTRIC
EL	ELEVATION
FT	FOOT, FEET
GM	GAS METER
GRS	GAS REGULATOR STATION
GV	GAS VALVE
HASP	HEALTH & SAFETY PLAN
HDPE	HIGH DENSITY POLYETHYLENE
HOA	HAND–OFF–AUTO
HORIZ	HORIZONTAL
HYD	HYDRANT
ID	INSIDE DIAMETER
INV	INVERT
IP	IRON PIPE
LF	LINEAR FEET
LLDPE	LINEAR LOW DENSITY POLYETHYLENE
LOC	LOCATION
MAX	MAXIMUM
MDOT	MICHIGAN DEPARTMENT OF TRANSPORTATION
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MW	MONITORING WELL
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NO.	NUMBER
OC	ON CENTER
OH	OVERHEAD ELECTRIC
OWS	OIL–WATER SEPARATOR
ℙ	PROPERTY LINE
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
REF	REFERENCE
ROW	RIGHT–OF–WAY
S	SLOPE
SAN	SANITARY SEWER
SCH	SCHEDULE
SDR	STANDARD DIMENSIONAL RATIO
SPEC	SPECIFICATIONS
SS	STAINLESS STEEL
ST	STORM SEWER
STA	STATION
TEL	TELEPHONE
TEMP	TEMPORARY
TYP	TYPICAL
UG	UNDERGROUND
VCP	VITRIFIED CLAY PIPE
W	WATER
WE	WATER ELEVATION
WV	WATER VALVE
WWF	WELDED WIRE FABRIC
ø	DIAMETER

GENERAL NOTES

1. BASE MAP INFORMATION FROM A SURVEY BY BMJ, INC. DATED SEPTEMBER 2001, AT A SCALE OF 1:100.
2. EXISTING FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE PLANS, RECORDS, AND SURVEYS, AND THEREFORE, THEIR LOCATIONS, MATERIALS, AND TYPE OF USE MUST BE CONSIDERED APPROXIMATE ONLY. OTHER UNDERGROUND STRUCTURES AND UTILITIES MAY EXIST, THE LOCATIONS OF WHICH ARE PRESENTLY UNKNOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL STRUCTURES AND UTILITIES.
3. OVERHEAD LINES MAY OR MAY NOT BE DEPICTED ON THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL VERIFY ACTUAL FIELD CONDITIONS.
4. REFER TO THE CONTRACT DOCUMENTS REGARDING APPLICABLE PERMITS, ASSOCIATED REQUIREMENTS, AND CONDITIONS OF WORK.
5. THE ENGINEER/OWNER SHALL BE RESPONSIBLE FOR OBTAINING A NPDES PERMIT, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL OTHER PERMITS (INCLUDING THOSE NOT SPECIFICALLY LISTED IN THE CONTRACT DOCUMENTS), AS REQUIRED FOR COMPLETION OF THE WORK.
6. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE SAFETY OF WORKERS AND OTHERS ON THE PROJECT SITE, AS WELL AS OVERALL SITE SECURITY.
7. AT NO TIME SHALL THE CONTRACTOR'S WORK IMPEDE OR RESTRICT IN ANY WAY, EMERGENCY AND/OR MAINTENANCE VEHICLES. THE CONTRACTOR SHALL FULLY COORDINATE ALL WORK EFFORTS WITH LOCAL EMERGENCY AGENCIES AND REGULARLY UPDATE SUCH AGENCIES AS TO THE PROGRESS OF SUCH WORK.
8. CONTRACTOR SHALL COORDINATE WORK HOURS, UTILIZE FLAG PERSONS, ETC. IN HIGH–TRAFFIC ZONES TO ENABLE MLC TO OPERATE TRUCKS, TRAILERS, ETC., AS NORMAL.
9. UNLESS OTHERWISE SHOWN OR DIRECTED, ALL EXISTING SEWERS, UTILITIES, AND TRANSPORTATION FACILITIES ARE TO REMAIN IN SERVICE AND SHALL BE PROTECTED FROM DAMAGE AS DIRECTED BY THE UTILITY AND/OR FACILITY OWNER.
10. ALL ORGANIC MATERIAL AND TOPSOIL SHALL BE CLEARED, STOCKPILED, AND PROTECTED ON SITE DURING CONSTRUCTION FOR REPLACEMENT ON THE PROJECT SITE, AS APPLICABLE. STOCKPILED SOIL SHALL BE TESTED BY ENGINEER FOR PCBs PRIOR TO REPLACEMENT.
11. EXISTING MATERIAL TO REMAIN AS SUBGRADE FOR PROPOSED FACILITIES SHALL BE PROTECTED FROM DISTURBANCE. IF DISTURBED FOR ANY REASON, SUCH MATERIALS SHALL BE REMOVED AND REPLACED WITH COMPACTED FILL MATERIAL AT NO COST TO THE OWNER.
12. REFER TO SPECIFICATION SECTION FOR DETAILS REGARDING SEDIMENT AND EROSION CONTROL PLAN. THE CONTRACTOR'S ATTENTION IS ALSO DIRECTED TO SPECIFICATION SECTION FOR INFORMATION AND REQUIREMENTS REGARDING STORMWATER POLLUTION PREVENTION. ALL SEDIMENT AND EROSION CONTROL AND STORMWATER POLLUTION PREVENTION CONTROLS SHALL BE PROPERLY INSTALLED AND FULLY FUNCTIONAL PRIOR TO ANY DISTURBANCE OF ADJACENT, UPGRADIENT LANDS.
13. CONTRACTOR SHALL PROTECT ALL OPEN EXCAVATIONS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. NO EXCAVATIONS SHALL BE LEFT UNPROTECTED AT THE END OF THE WORK DAY. BARRICADES, FENCING, ROAD PLATES, ETC. SHALL BE INSTALLED IN ACCORDANCE WITH ALL REQUIREMENTS.
14. ANY TRAFFIC CONTROL, INFORMATIONAL, DIRECTION, OR STREET NAME SIGNS REMOVED BY THE CONTRACTOR TO ALLOW CONSTRUCTION SHALL BE IMMEDIATELY REPLACED, EITHER PERMANENTLY OR TEMPORARILY, AS PRACTICAL, BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER, UNLESS OTHERWISE DIRECTED BY THE OWNER OR ENGINEER.
15. ANY INTRUSIVE WORK SHALL BE PROCEEDED BY PROPER UTILITY LOCATE PROCEDURES PER ARCADIS AND MLC REQUIREMENTS. THE CONTRACTOR SHALL REPAIR ALL EXISTING UTILITIES DAMAGED AS RESULT OF THE CONTRACTOR'S WORK AT NO ADDITIONAL COST TO THE OWNER UNLESS DIRECTED OTHERWISE BY THE OWNER.
16. ALL PREVIOUSLY DEVELOPED AREAS, INCLUDING NATURAL OR MAN–MADE FEATURES OCCURRING THEREIN, SHALL BE RESTORED, REPAIRED, AND/OR REPLACED TO THE SAME OR SUPERIOR CONDITION TO THAT WHICH EXISTED PRIOR TO CONSTRUCTION DISTURBANCE TO THE SATISFACTION OF THE OWNER UNLESS DIRECTED OTHERWISE BY THE OWNER.
17. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ALL PAVEMENTS, INCLUDING DRIVEWAYS AND SIDEWALKS, DAMAGED DURING CONSTRUCTION ACTIVITIES.
18. THE CONTRACTOR SHALL AT ALL TIMES MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL ROADWAYS.
19. THE CONTRACTOR SHALL CONTAIN HIS WORK AND ACTIVITIES WITHIN THE LIMITS OF CONSTRUCTION.
20. THE CONTRACTOR SHALL CONTROL ODORS, DUST, AND VAPORS THAT RESULT FROM THE CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH THE DESIGN DRAWINGS, TECHNICAL SPECIFICATIONS, AND APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS. THE CONTRACTOR SHALL MONITOR AMBIENT AIR AS OUTLINED IN THE CONTRACTOR'S HASP. PERIMETER AIR MONITORING LOCATIONS WILL BE DETERMINED IN THE FIELD BASED ON WIND DIRECTION AND LOCATED WITHIN THE PROJECT LIMITS. THE CONTRACTOR SHALL PERFORM PERIMETER AIR MONITORING AS OUTLINED IN ITS HASP.
21. THE MATERIALS SUBJECT TO HANDLING AS PART OF THE CONSTRUCTION WORK MAY CONTAIN HAZARDOUS CONSTITUENTS OR CHEMICALS AND SHOULD BE HANDLED IN ACCORDANCE WITH APPLICABLE REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING AND IMPLEMENTING APPROPRIATE HEALTH AND SAFETY MEASURES FOR ITS EMPLOYEES, SUBCONTRACTORS, CONSTRUCTION OVERSIGHT PERSONNEL, AND SITE VISITORS, AND FOR PROTECTION OF THE ENVIRONMENT AND SURROUNDING COMMUNITY. THE CONTRACTOR'S HASP SHALL BE DEVELOPED AS SPECIFIED AND IN ACCORDANCE WITH APPLICABLE OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS AS WELL AS NATIONAL GRID'S HEALTH AND SAFETY PROTOCOLS.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOADING, TRANSPORTATION, AND OFFSITE DISPOSAL/TREATMENT OF ALL WASTE MATERIAL GENERATED AS A RESULT OF CONSTRUCTION ACTIVITIES AT APPROPRIATE DISPOSAL/TREATMENT FACILITIES PRE–APPROVED BY THE OWNER, EXCEPT FOR SOILS/GROUNDWATER/SURFACE WATER AS IMPACTED BY HAZARDOUS MATERIALS AS DESCRIBED ABOVE. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING SUSPECTED IMPACTED MATERIALS, NOTIFYING THE OWNER OR DESIGNATED REPRESENTATIVE, AND MANAGING THE SUSPECTED IMPACTED MATERIALS AS DIRECTED.
23. THE CONTRACTOR SHALL COLLECT, CONTAINERIZE, AND APPROPRIATELY DISPOSE/TREAT WATER GENERATED FROM EQUIPMENT, PERSONNEL CLEANING, MATERIAL STAGING, AND DEWATERING ACTIVITIES.
24. THE CONTRACTOR SHALL NOT INITIATE ANY SITE ACTIVITIES THAT COULD POTENTIALLY GENERATE DUST WITHOUT FIRST CONFIRMING THAT THE PERIMETER AIR MONITORING PROGRAM IS ONGOING.
25. ANY DAMAGE TO STRUCTURES/EQUIPMENT CAUSED BY THE CONTRACTOR WILL BE REPAIRED/REPLACED TO MATCH EXISTING SITE CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
26. ANY SOIL FILL OR TOPSOIL BROUGHT ON SITE MUST BE TESTED FOR CONTAMINATION AND APPROVED BY OWNER.
27. CONTRACTOR'S HASP MUST BE REVIEWED BY ENGINEER OR OWNER PRIOR TO COMMENCING WORK.
28. CONTRACTOR SHALL MAINTAIN ALL FLOWS THROUGH EXISTING SEWERS THROUGHOUT CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH SPECIFICATIONS.

LEGEND:

	PROPERTY BOUNDARY
	PRIMARY CABLE
OWS	OIL–WATER SEPARATOR
	EXISTING CATCH BASIN
S	EXISTING SANITARY MANHOLE
	EXISTING CURB BOX
754	EXISTING ELEVATION CONTOUR
	EXISTING EDGE OF PAVEMENT
S	EXISTING SANITARY SEWER
OH	EXISTING OVERHEAD ELECTRIC LINE
E	EXISTING UNDERGROUND ELECTRIC LINE
F	EXISTING FIRE PIPING
P	EXISTING PROCESS PIPING
G	EXISTING GAS LINE
X X	EXISTING FENCE
	EXISTING TREE LINE
WV M	EXISTING WATER VALVE
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING TREE (4–INCH DIAMETER AND LARGER)
X 756.8	EXISTING SPOT ELEVATION
X 726.5	NEW SPOT ELEVATION

NOT TO SCALE

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING: USE TO VERIFY FIGURE REPRODUCTION SCALE

No.	Date	Revisions	By	Ckd
3	3/14/2011	RECORD DRAWINGS	MS	KA
2	9/27/2010	ISSUED FOR CONSTRUCTION	MS	KA
1	8/6/2010	ADDENDUM #2 - WEIR WALL REVISIONS	MS	KA
0	7/23/2010	ISSUED FOR BID	MS	KA
0	7/20/2010	ISSUED FOR PERMITS	MS	KA

THIS DRAWING IS THE PROPERTY OF THE ARCADIS ENTITY IDENTIFIED IN THE TITLE BLOCK AND MAY NOT BE REPRODUCED OR ALTERED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF SAME.

Professional Engineer's Name: KENNETH W. ARNOLD
Professional Engineer's No.: 030719

State	Date Signed	Project Mgr.
MI		CP
Designed by	Drawn by	Checked by
JF	MS	KA

ARCADIS G&M OF MICHIGAN, LLC.

MOTORS LIQUIDATION COMPANY • NAO FLINT OPERATIONS SITE FLINT, MICHIGAN
OUTFALLS 003/004 STORM WATER DIVERSION AND TREATMENT SYSTEM

GENERAL NOTES, LEGENDS, AND ABBREVIATIONS

ARCADIS Project No.
B0064410.2011.00100

Date
MARCH 2011

ARCADIS
10559 CITATION DRIVE
SUITE 100
BRIGHTON, MICHIGAN 48116
TEL. 810-229-8594

G1

CITY: SYRACUSE-NY DIV/GROUP: 141 DB: ADF LD: ADF PM: LYR:ON=*;OFF=REF* PROJECTNAME: ---
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XREFS: IMAGES:
64410X01
64410X18
64410X16
64410XLD

66"
66"
66"
SAN 2
22" SAN UNDER COAL PILE
12" RETURN WATER TO STEAM PLANT
MODIFY EXISTING INTERCEPTOR #1 VAULT TO INSTALL OUTFALL 003 DIVERSION STRUCTURE
CLEANOUT (TYP. OF 4)
OUTFALL 003 DIVERSION STRUCTURE (EXISTING MH 3-6)
RIM ELEVATION = 732.13
66" INVERT NW = 719.48
66" INVERT S = 719.48
12" INVERT W = 719.48
BOTTOM ELEV = 719.48
732.13
719.48
718.86
718.85
718.61
717.80
BOLLARD (TYP.)
OFFSET BELOW SEWERS IN STREET
INSTALL NEW 12" HDPE PIPING (360 FT @ 1.20% SLOPE)
717.15
716.46
STORM WATER PIPING SHALL CROSS UNDER EXISTING ACTIVE SANITARY SEWER PIPING ESTIMATED INVERTS AT CROSSING POINT (SEE NOTE 8)
22" SANITARY INVERT = 718.34
12" STORM WATER INVERT = 715.80
TOP OF 12" PIPING = 716.80
DEPTH BETWEEN PIPES = 18.5"
66"
EXISTING MANHOLE (MH 3-5A)
RIM ELEVATION = 725.50
66" INVERT NW = 714.20
66" INVERT E = 714.20
EXISTING MANHOLE (MH 3-4)
RIM ELEVATION = 725.44
66" INVERT NW = 714.02
66" INVERT E = 714.02
10" INVERT NW = 720.50
SAN 6
3' PERSONNEL GATE (TYP.)
BOLLARD (TYP.)
715.14
726.41
714.66
INSTALL BAYSAVER SEPARATION SYSTEM
CLEANOUT (TYP. OF 4)
726.41
719.60
719.89
INSTALL NEW 16" HDPE PIPING (70 FT @ 0.75% SLOPE)
INSTALL NEW 8" HDPE PIPING (257 FT @ 1% SLOPE)
720.68
721.15
721.87
CLEANOUT (TYP. OF 4)
722.27
722.33
BOLLARD (TYP.)
MODIFY EXISTING VAULT TO INSTALL OUTFALL 004 DIVERSION STRUCTURE
60"
OUTFALL 004 DIVERSION STRUCTURE (EXISTING MANHOLE MH 4-6)
RIM ELEVATION = 729.73
60" INVERT W (ABANDONED) = 721.63
60" INVERT E = 722.33
8" INVERT N = 722.33
12" SWING GATE (TYP.)
714.10
714.12
713.94
713.71
713.37
713.00
712.85
712.44
714.10
CLEANOUT (TYP. OF 2)
INSTALL NEW OIL/WATER SEPARATOR
INSTALL NEW FENCING
INSTALL NEW 16" HDPE PIPING (405 FT @ 0.5% SLOPE)
STORM WATER PIPING SHALL CROSS UNDER EXISTING ACTIVE SANITARY SEWER
ESTIMATED INVERTS AT CROSSING POINT (SEE NOTE 8)
24" SANITARY INVERT N/S = 718.04
16" STORM WATER INVERT E/W = 714.50
TOP OF 12" PIPING = 715.80
DEPTH BETWEEN PIPES = 26.8"
66"ø CLAY TILE SEWER PIPE GRAVITY FLOW (EXISTING)
711.79
CLEANOUT (TYP. OF 2)
712.40
TIE 16" HDPE PIPING INTO 66" CLAY TILE SEWER OUTFALL
EXISTING MANHOLE (MH 3-3)
RIM ELEVATION = 724.17
66" INVERT W = 709.92
66" INVERT E = 709.92
AREA OF CONSTRUCTION IS LOCATED IN A FORMER RESIDENTIAL SUBDIVISION. EXISTING FOUNDATIONS WERE LEFT IN PLACE, BUT LOCATIONS ARE NOT KNOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING LOCATIONS.
4" PERFORATED DRAIN PIPE (EXISTING)
60"ø CLAY TILE SEWER PIPE GRAVITY FLOW (EXISTING)
60"
18" STORM DRAIN
1 INLET PIPE
715
720
725
BLVD
REVISE ELEVATIONS, EQUIPMENT LOCATIONS, ROUTING OF PIPING, AND LENGTH OF PIPE RUNS PER SURVEY COMPLETED JANUARY 12, 2011. REFER TO NOTE 2 ON THIS PAGE.

LEGEND:

- PROPERTY BOUNDARY
- PROPOSED HDPE STORM SEWER PIPING
- EXISTING CLAY TILE STORM SEWER PIPING
- EXISTING SANITARY SEWER LINE
- EXISTING GAS LINE
- EXISTING PROCESS WATER
- EXISTING FIRE WATER LINE
- EXISTING OVERHEAD ELECTRIC
- 10" C.W. EXISTING CITY WATER LINE
- NEW FENCING
- FLOW DIRECTION
- X 719.48 NEW SPOT ELEVATION

NOTES:

1. BASE MAP INFORMATION FROM A SURVEY BY BMJ, INC. DATED SEPTEMBER 2001, AT A SCALE OF 1:100.
2. NEW EQUIPMENT AND PIPING INFORMATION FROM A SURVEY BY HOLLAND ENGINEERING DATED JANUARY 12, 2011. ELEVATIONS OF EXISTING UTILITIES NOT SHOWN FOR CLARITY. REFER TO SURVEY DATA FOR INFORMATION.
3. ELEVATIONS FOR EXISTING MANHOLES SHOWN FOR CLARITY. REFER TO SHEET C3 FOR ELEVATIONS OF PROPOSED STRUCTURES.
4. ALL ELEVATIONS SHOWN IN NAD88, MICHIGAN SOUTH ZONE DATUM.
5. ALL HORIZONTAL COORDINATES SHOWN IN NAD83, MICHIGAN SOUTH ZONE DATUM.
6. SWEEP HDPE PIPING AS MUCH AS POSSIBLE. ONE 45° ELBOW MAY BE USED TO MAKE CONNECTION AS NECESSARY.
7. PVC VENT PIPING ON OIL/WATER SEPARATOR NOT SHOWN FOR CLARITY.
8. THE LOCATION OF EXISTING UTILITIES IS APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING THE LOCATION OF ALL EXISTING UTILITIES. ANY CHANGES IN PIPE ROUTING DUE TO THE LOCATION OF EXISTING UTILITIES SHALL BE APPROVED BY ENGINEER.

0 40' 80' 120'
1"=40'

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3	3/14/2011	RECORD DRAWINGS	MS	KA
2	9/27/2010	ISSUED FOR CONSTRUCTION	MS	KA
1	8/6/2010	ADDENDUM #2 - WEIR WALL REVISIONS	MS	KA
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Professional Engineer's Name: KENNETH W. ARNOLD
Professional Engineer's No.: 030719
State: MI | Date Signed: | Project Mgr.: CP
Designed by: JF | Drawn by: MS | Checked by: KA

ARCADIS
ARCADIS G&M OF MICHIGAN, LLC.

MOTORS LIQUIDATION COMPANY • NAO FLINT OPERATIONS SITE FLINT, MICHIGAN
OUTFALLS 003/004 STORM WATER DIVERSION AND TREATMENT SYSTEM

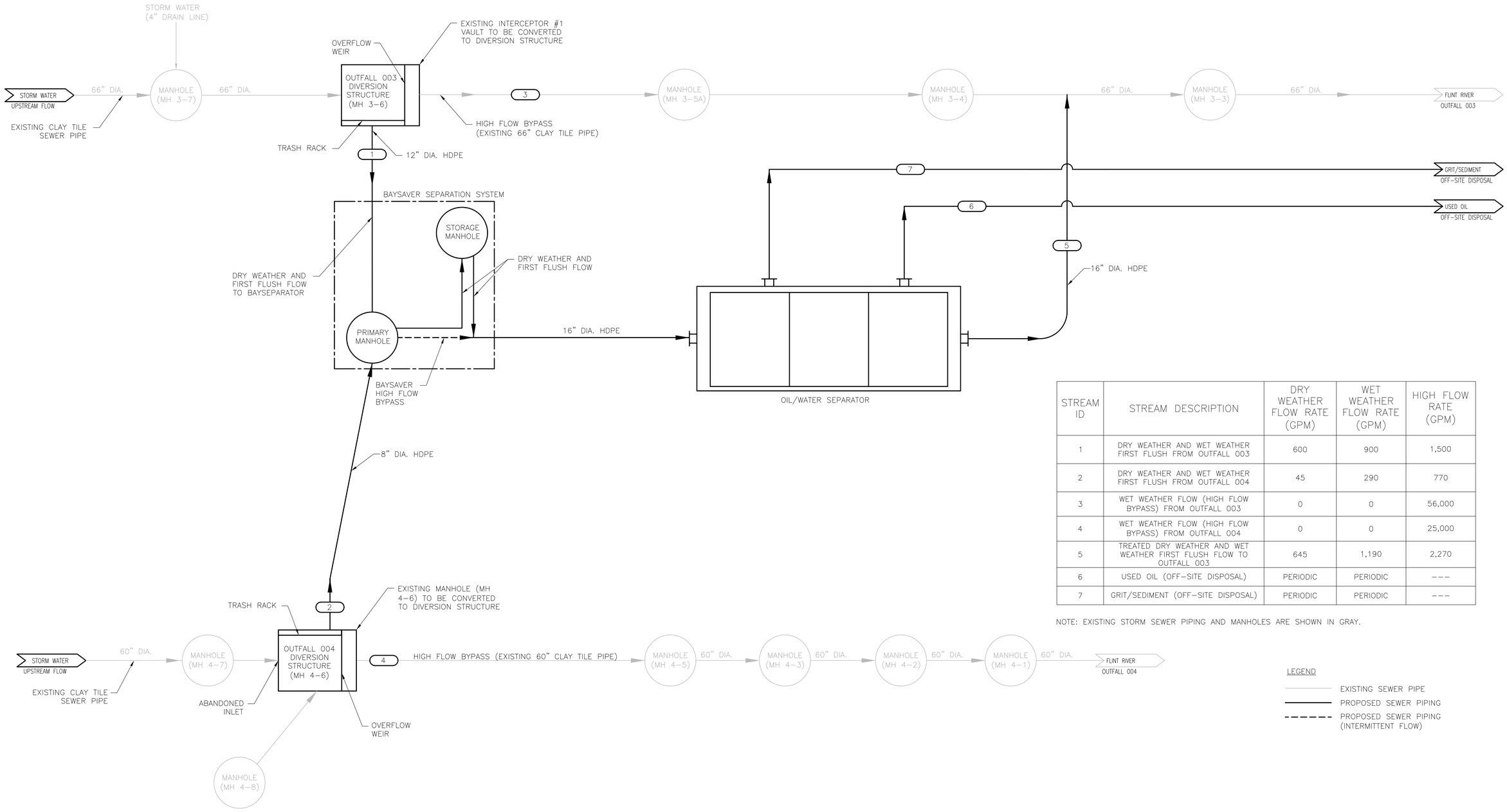
SITE PLAN

ARCADIS Project No.
B0064410.2011.00100

Date
MARCH 2011

ARCADIS
10559 CITATION DRIVE
SUITE 100
BRIGHTON, MICHIGAN 48116
TEL. 810-229-8594

C1



STREAM ID	STREAM DESCRIPTION	DRY WEATHER FLOW RATE (GPM)	WET WEATHER FLOW RATE (GPM)	HIGH FLOW RATE (GPM)
1	DRY WEATHER AND WET WEATHER FIRST FLUSH FROM OUTFALL 003	600	900	1,500
2	DRY WEATHER AND WET WEATHER FIRST FLUSH FROM OUTFALL 004	45	290	770
3	WET WEATHER FLOW (HIGH FLOW BYPASS) FROM OUTFALL 003	0	0	56,000
4	WET WEATHER FLOW (HIGH FLOW BYPASS) FROM OUTFALL 004	0	0	25,000
5	TREATED DRY WEATHER AND WET WEATHER FIRST FLUSH FLOW TO OUTFALL 003	645	1,190	2,270
6	USED OIL (OFF-SITE DISPOSAL)	PERIODIC	PERIODIC	---
7	GRIT/SEDIMENT (OFF-SITE DISPOSAL)	PERIODIC	PERIODIC	---

NOTE: EXISTING STORM SEWER PIPING AND MANHOLES ARE SHOWN IN GRAY.

LEGEND

- EXISTING SEWER PIPE
- PROPOSED SEWER PIPING
- PROPOSED SEWER PIPING (INTERMITTENT FLOW)

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Professional Engineer's Name: KENNETH W. ARNOLD
Professional Engineer's No.: 030719
State: MI | Date Signed | Project Mgr.: CP
Designed by: JF | Drawn by: MS | Checked by: KA

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MOTORS LIQUIDATION COMPANY • NAO FLINT OPERATIONS SITE FLINT, MICHIGAN
OUTFALLS 003/004 STORM WATER DIVERSION AND TREATMENT SYSTEM

PROCESS FLOW DIAGRAM

ARCADIS Project No.
B0064410.2011.00100

Date
MARCH 2011

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C2

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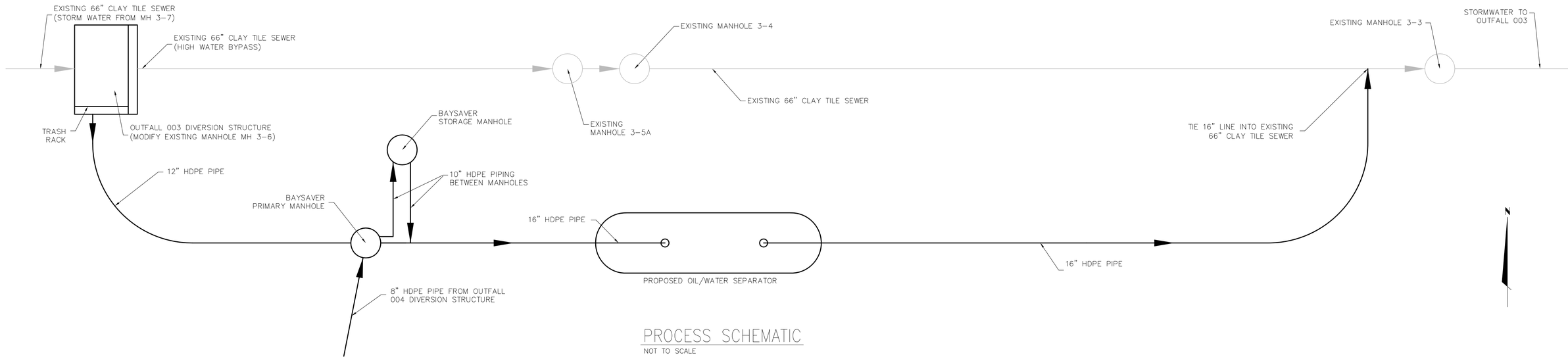
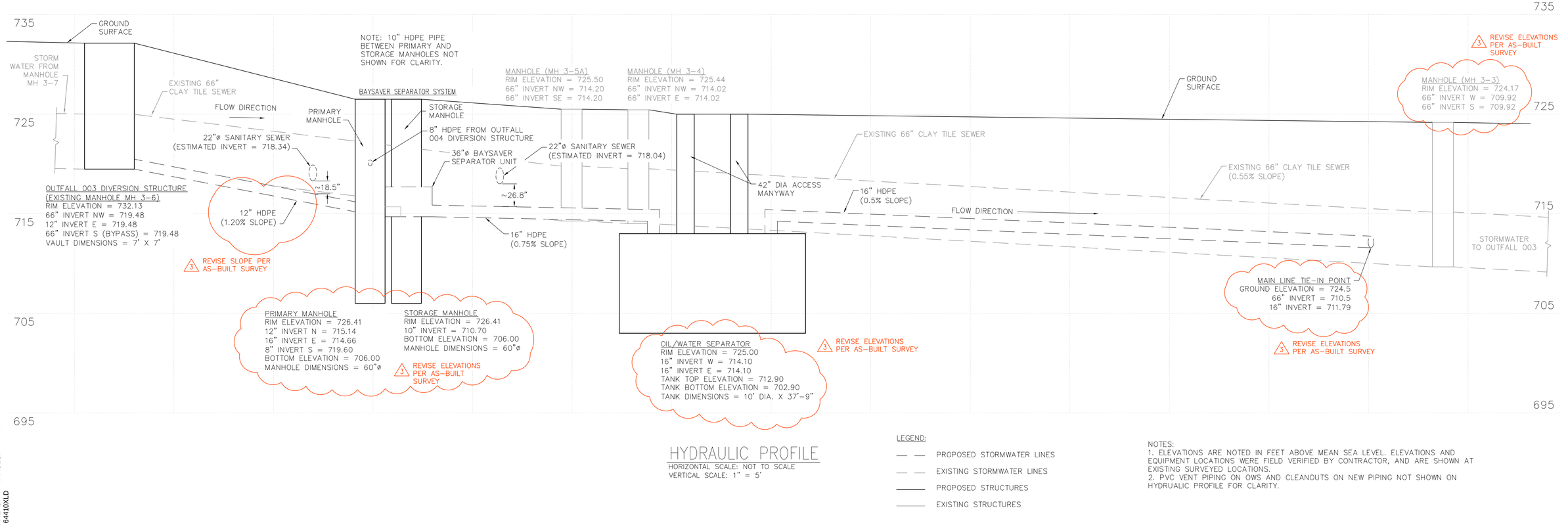


PROCESS SCHEMATIC

NOT TO SCALE



HYDRAULIC PROFILE

HORIZONTAL SCALE: NOT TO SCALE
VERTICAL SCALE: 1" = 5'

LEGEND:

- PROPOSED STORMWATER LINES
- EXISTING STORMWATER LINES
- PROPOSED STRUCTURES
- EXISTING STRUCTURES

NOTES:
1. ELEVATIONS ARE NOTED IN FEET ABOVE MEAN SEA LEVEL. ELEVATIONS AND EQUIPMENT LOCATIONS WERE FIELD VERIFIED BY CONTRACTOR, AND ARE SHOWN AT EXISTING SURVEYED LOCATIONS.
2. PVC VENT PIPING ON OWS AND CLEANOUTS ON NEW PIPING NOT SHOWN ON HYDRUALIC PROFILE FOR CLARITY.

SCALE AS NOTED

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0	7/20/2010	ISSUED FOR PERMITS	MS	KA

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Professional Engineer's Name		
KENNETH W. ARNOLD		
Professional Engineer's No.		
030719		
State	Date Signed	Project Mgr.
MI		CP
Designed by	Drawn by	Checked by
JF	MS	KA

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MOTORS LIQUIDATION COMPANY • NAO FLINT OPERATIONS SITE FLINT, MICHIGAN

OUTFALLS 003/004 STORM WATER DIVERSION AND TREATMENT SYSTEM

OUTFALL 003 PLAN AND PROFILE

ARCADIS Project No.
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MARCH 2011

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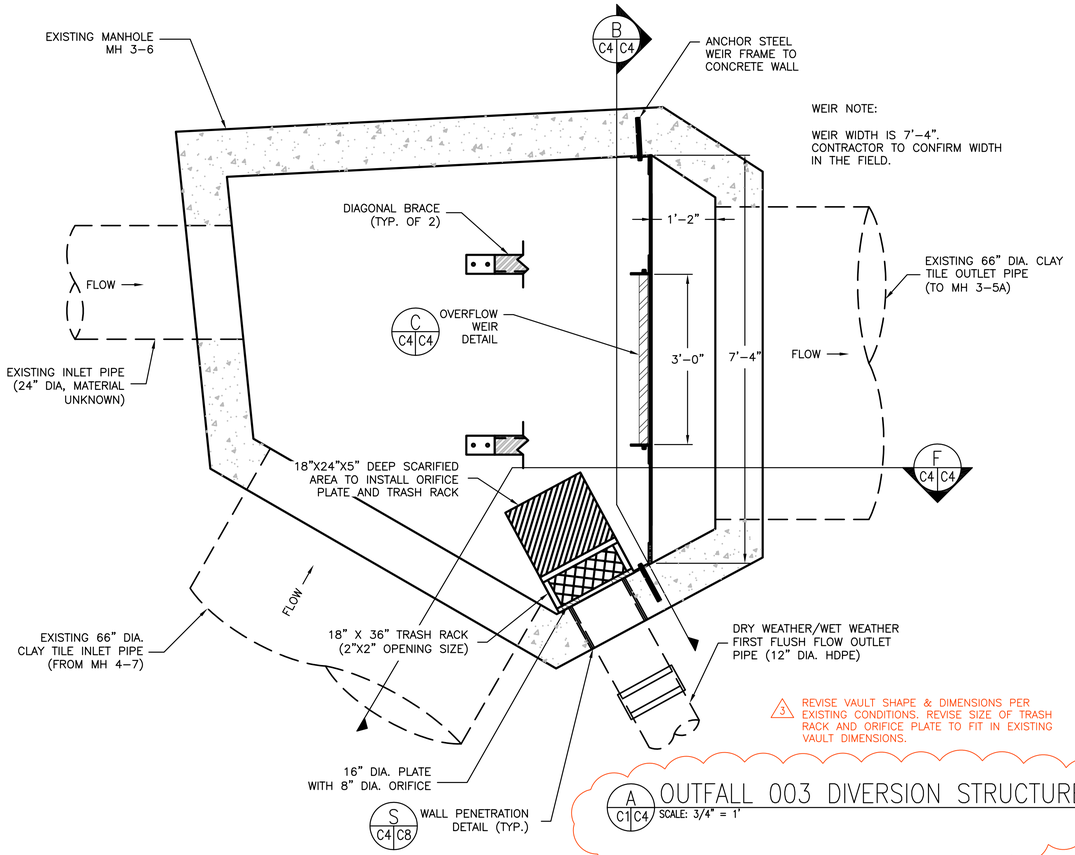
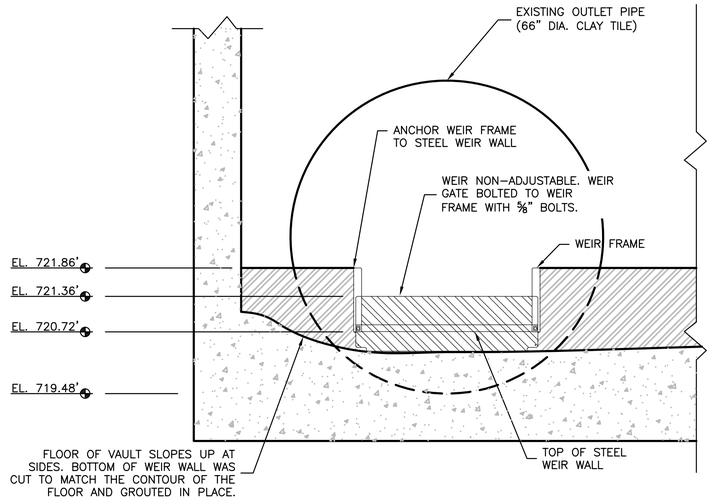


3 REVISE VAULT SHAPE & DIMENSIONS PER EXISTING CONDITIONS. REVISE SIZE OF TRASH RACK AND ORIFICE PLATE TO FIT IN EXISTING VAULT DIMENSIONS.

A C1 C4 OUTFALL 003 DIVERSION STRUCTURE

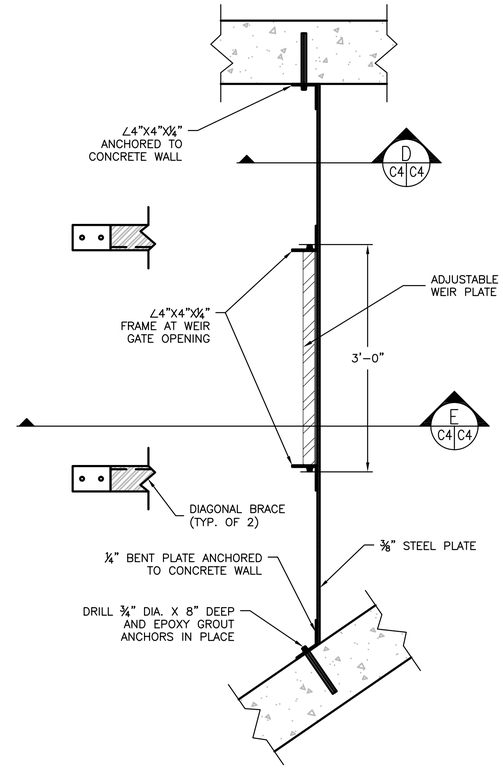
SCALE: 3/4" = 1'



B C4 C4 OUTFALL 003 DIVERSION STRUCTURE SOUTH SECTION

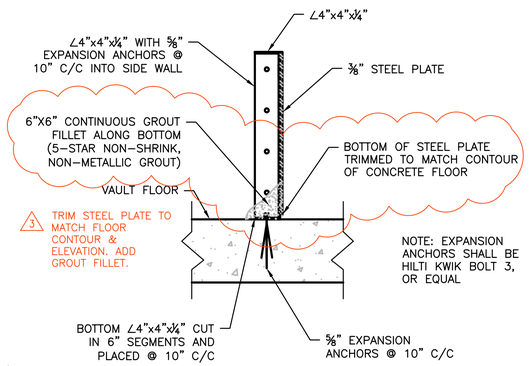
SCALE: 3/4" = 1'

3 REVISE VAULT SECTION TO SHOW EXISTING FLOOR CURVING UP AT EDGES. EXISTING FLOOR ELEVATION RANGED FROM 4" TO 8-¾" HIGHER THAN ORIGINAL AS-BUILT DRAWINGS SHOWED. WEIR FRAME WAS MODIFED TO FIT NEW ELEVATION AND FLOOR CONTOUR. WEIR WAS MODIFIED TO BE NON-ADJUSTABLE.



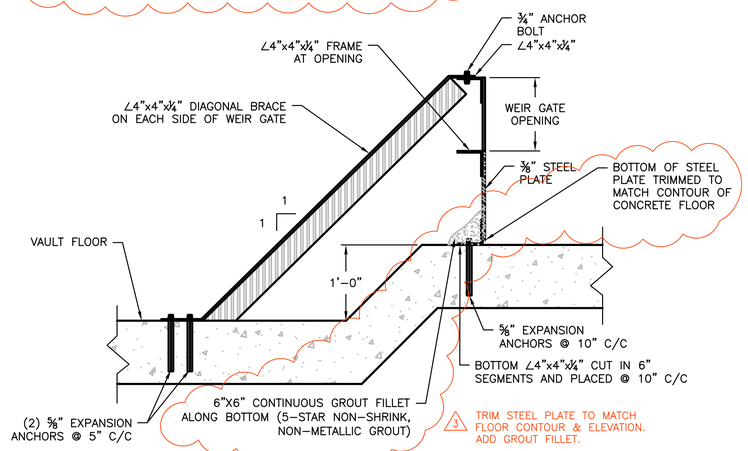
C C4 C4 OVERFLOW WEIR DETAIL

SCALE: 1" = 1'



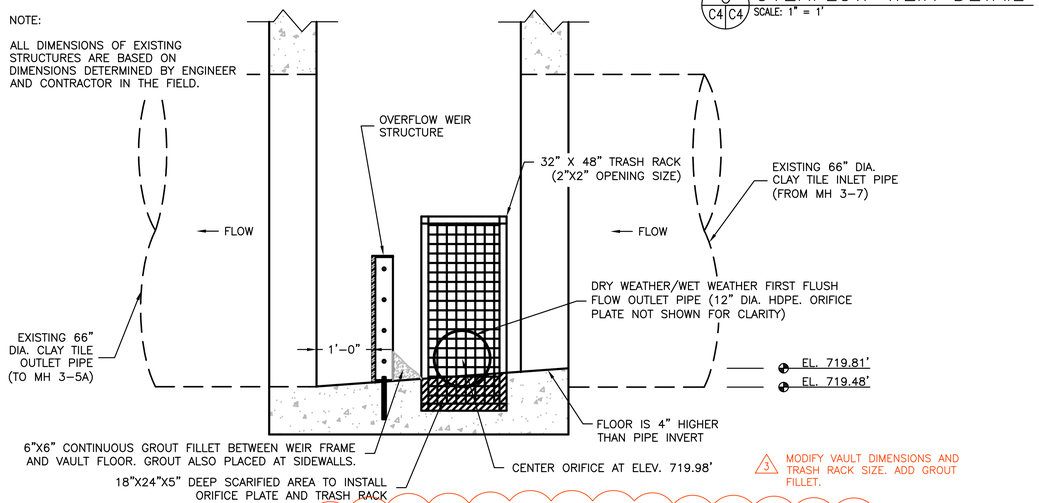
D C4 C4 OVERFLOW WEIR SECTION

SCALE: 1" = 1'



E C4 C4 OVERFLOW WEIR REINFORCEMENT DETAIL

SCALE: 1" = 1'



F C4 C4 OUTFALL 003 DIVERSION STRUCTURE SOUTHWEST SECTION

SCALE: 3/4" = 1'

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0' 1' 2' 3' 4'
3/4"=1'-0"

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Professional Engineer's Name: RONALD A. KOLODZAIKE
Professional Engineer's No.: 36939
State: MI | Date Signed: | Project Mgr.: CP
Designed by: JF | Drawn by: MS | Checked by: RK

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MOTORS LIQUIDATION COMPANY • NAO FLINT OPERATIONS SITE FLINT, MICHIGAN
OUTFALLS 003/004 STORM WATER DIVERSION AND TREATMENT SYSTEM

OUTFALL 003 DIVERSION STRUCTURE DETAILS

ARCADIS Project No. B0064410.2011.00100
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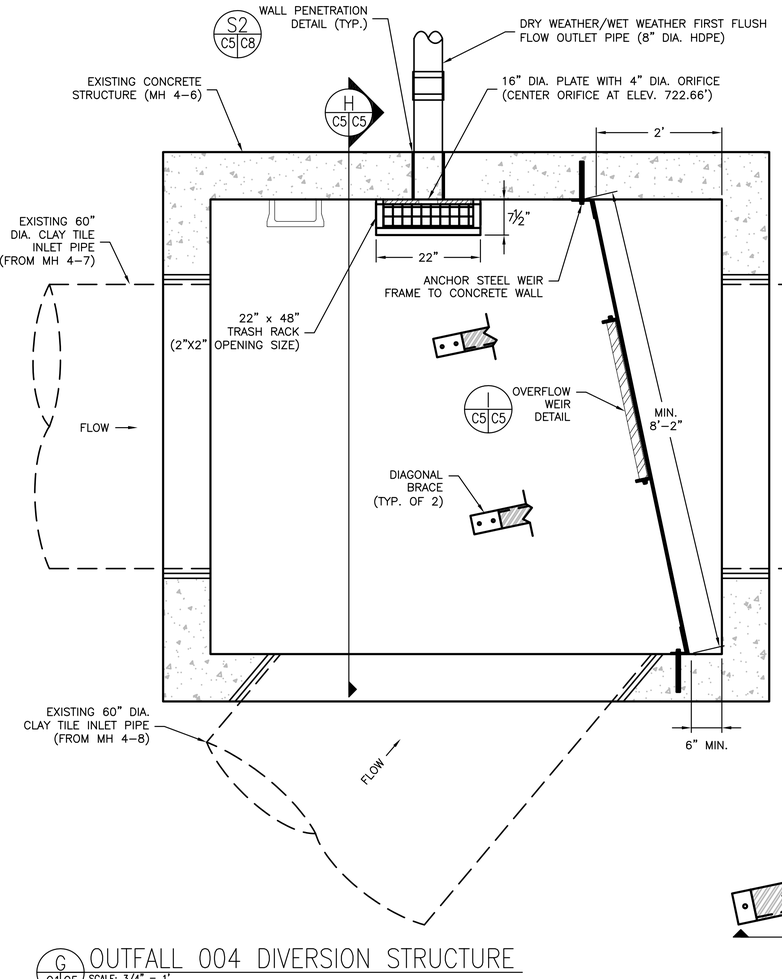
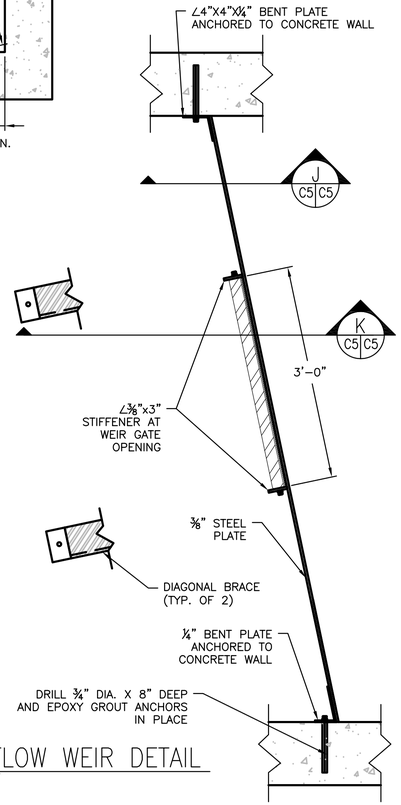
C4



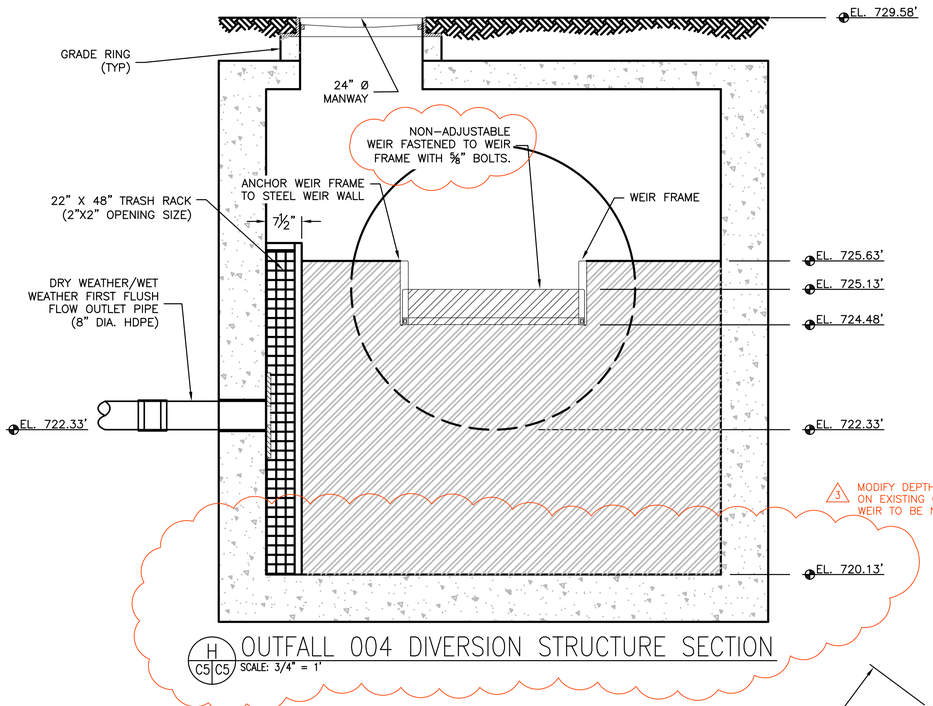
G C1 C5 OUTFALL 004 DIVERSION STRUCTURE
SCALE: 3/4" = 1'

WEIR NOTE:

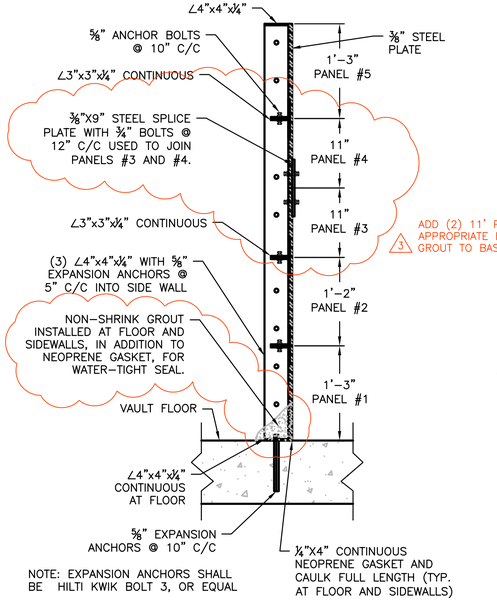
MINIMUM WEIR WIDTH IS 8'–2". CONTRACTOR TO CONFIRM WIDTH IN THE FIELD.



I C5 C5 OVERFLOW WEIR DETAIL
SCALE: 1" = 1'

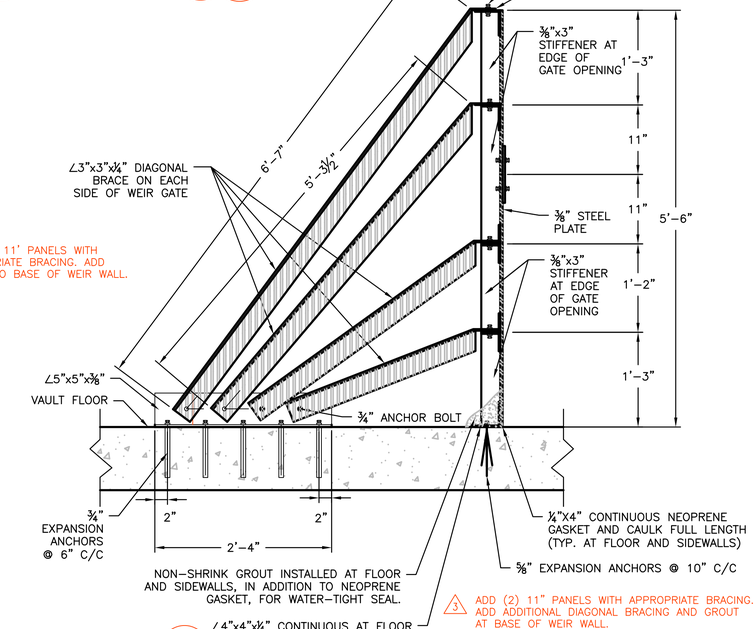


H C5 C5 OUTFALL 004 DIVERSION STRUCTURE SECTION
SCALE: 3/4" = 1'



NOTE: EXPANSION ANCHORS SHALL BE HILTI KWIK BOLT 3, OR EQUAL

J C5 C5 OVERFLOW WEIR SECTION
SCALE: 1" = 1'



K C5 C5 OVERFLOW WEIR REINFORCEMENT DETAIL
SCALE: 1" = 1'

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0' 1' 2' 3' 4'
3/4"=1'–0"

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Professional Engineer's Name: RONALD A. KOLODZAIKE
Professional Engineer's No.: 36939
State: MI | Date Signed: | Project Mgr.: CP
Designed by: JF | Drawn by: MS | Checked by: RK

ARCADIS G&M OF MICHIGAN, LLC.

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OUTFALLS 003/004 STORM WATER DIVERSION AND TREATMENT SYSTEM

OUTFALL 004 DIVERSION STRUCTURE DETAILS

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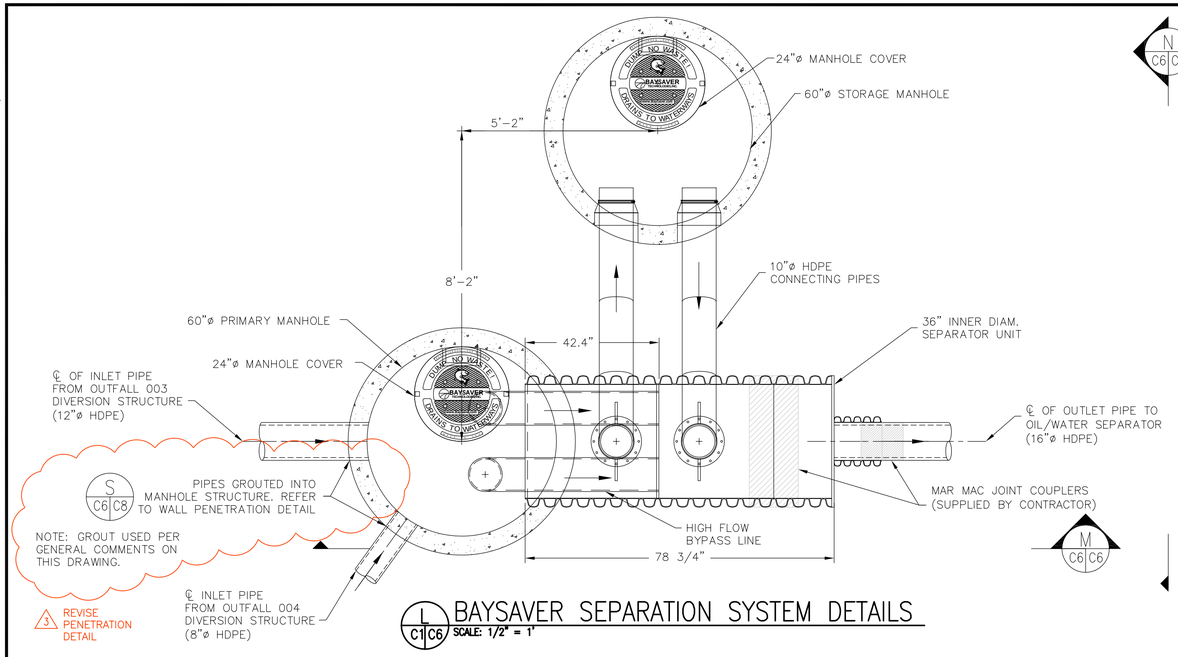
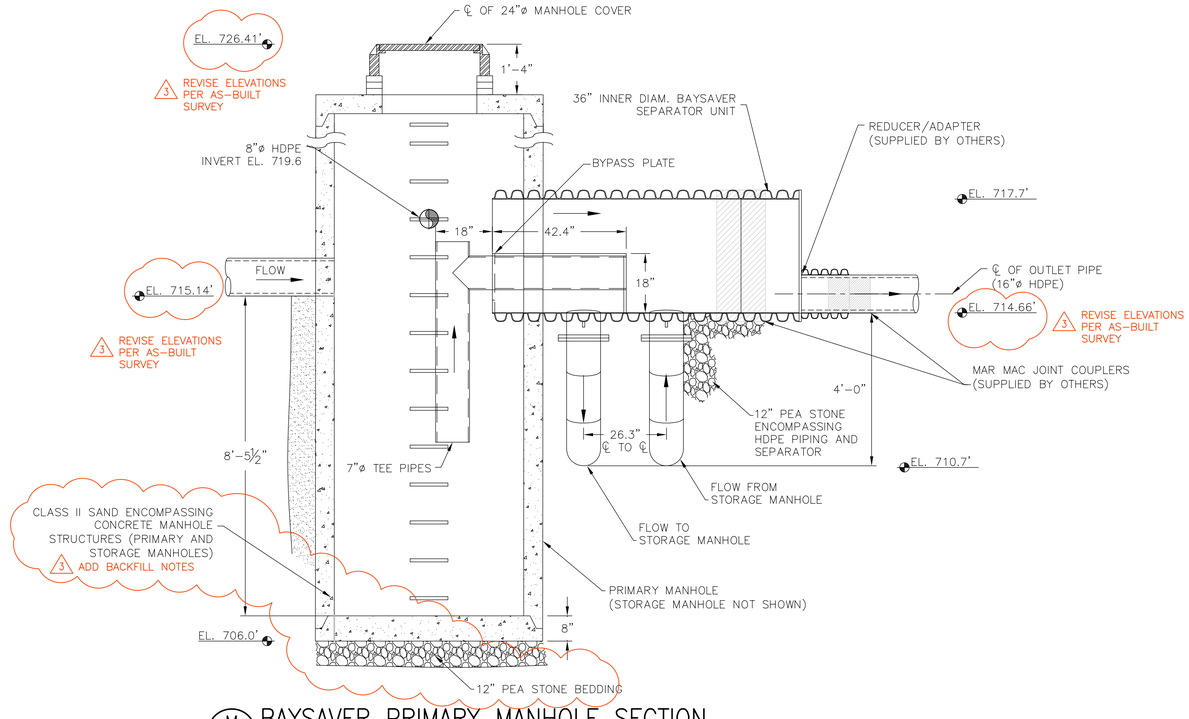


L C1 C6 BAYSAVER SEPARATION SYSTEM DETAILS

SCALE: 1/2" = 1'

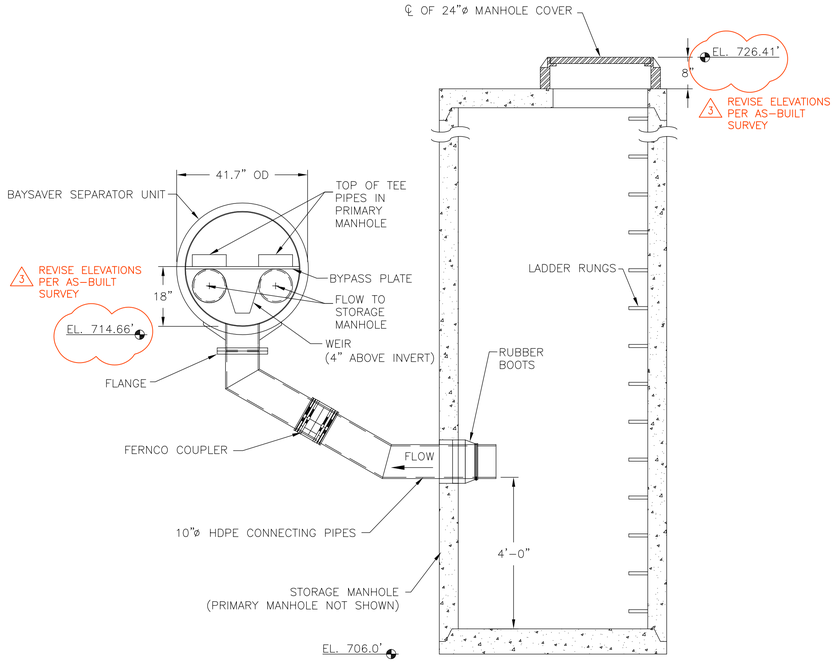


M C6 C6 BAYSAVER PRIMARY MANHOLE SECTION

SCALE: 1/2" = 1'

GENERAL NOTES:

1. BAYSAVER MODEL: 3K.
2. SEAL THE CONNECTING PIPES INTO THE STORAGE MANHOLE USING RUBBER BOOTS/GASKETS.
3. THE BAYSAVER SEPARATION SYSTEM SHOWN INCLUDES THE SEPARATOR UNIT, (2) CONNECTING PIPES AND (2) FERNCO COUPLERS.
4. LEFT HAND ORIENTATION SHOWN. FOR RIGHT HAND ORIENTATION ROTATE STORAGE MANHOLE AND CONNECTING PIPES 180 DEGREES.
5. USE NON-SHRINK GROUT TO SEAL THE INLET PIPE AND BAYSAVER SEPARATOR INTO THE PRIMARY MANHOLE.
6. BACKFILL: CLASS I, II, OR III BACKFILL SHOULD BE USED TO AN ELEVATION OF AT LEAST 6" OVER THE CROWN OF THE SEPARATOR UNIT.
7. 12" COVER REQUIRED FOR THE TRAFFIC RATED SURFACE.
8. CONTRACTOR SHALL INSTALL BAYSAVER SYSTEM PER MANUFACTURER'S REQUIREMENTS.



N C6 C6 BAYSAVER STORAGE MANHOLE SECTION

SCALE: 1/2" = 1'

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SCALES AS NOTED

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1	8/6/2010	ADDENDUM #2 - WEIR WALL REVISIONS	MS	KA
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Professional Engineer's Name: KENNETH W. ARNOLD
Professional Engineer's No.: 030719
State: MI | Date Signed: | Project Mgr.: CP
Designed by: JF | Drawn by: MS | Checked by: KA

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OUTFALLS 003/004 STORM WATER DIVERSION AND TREATMENT SYSTEM

BAYSAVER SEPARATION SYSTEM DETAILS

ARCADIS Project No.
B0064410.2011.00100

Date
MARCH 2011

ARCADIS
10559 CITATION DRIVE
SUITE 100
BRIGHTON, MICHIGAN 48116
TEL. 810-229-8594

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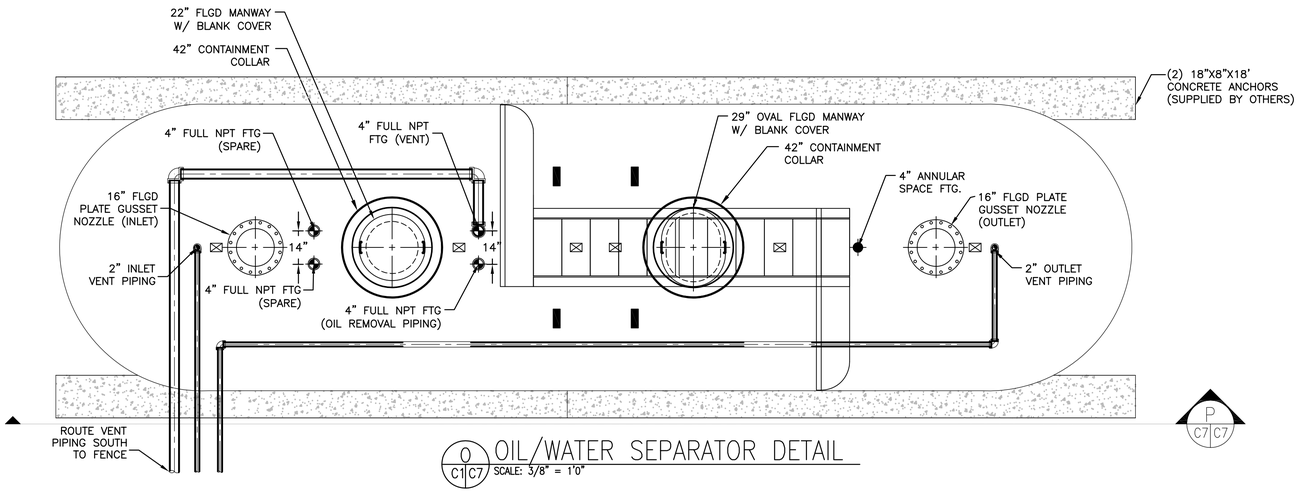
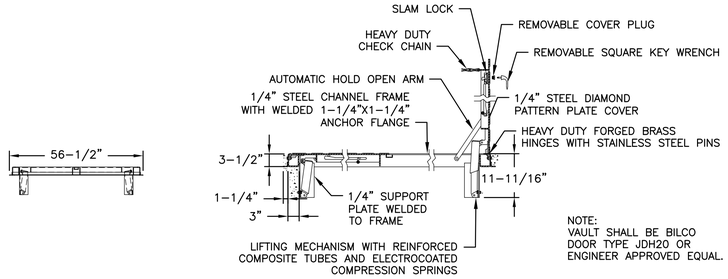
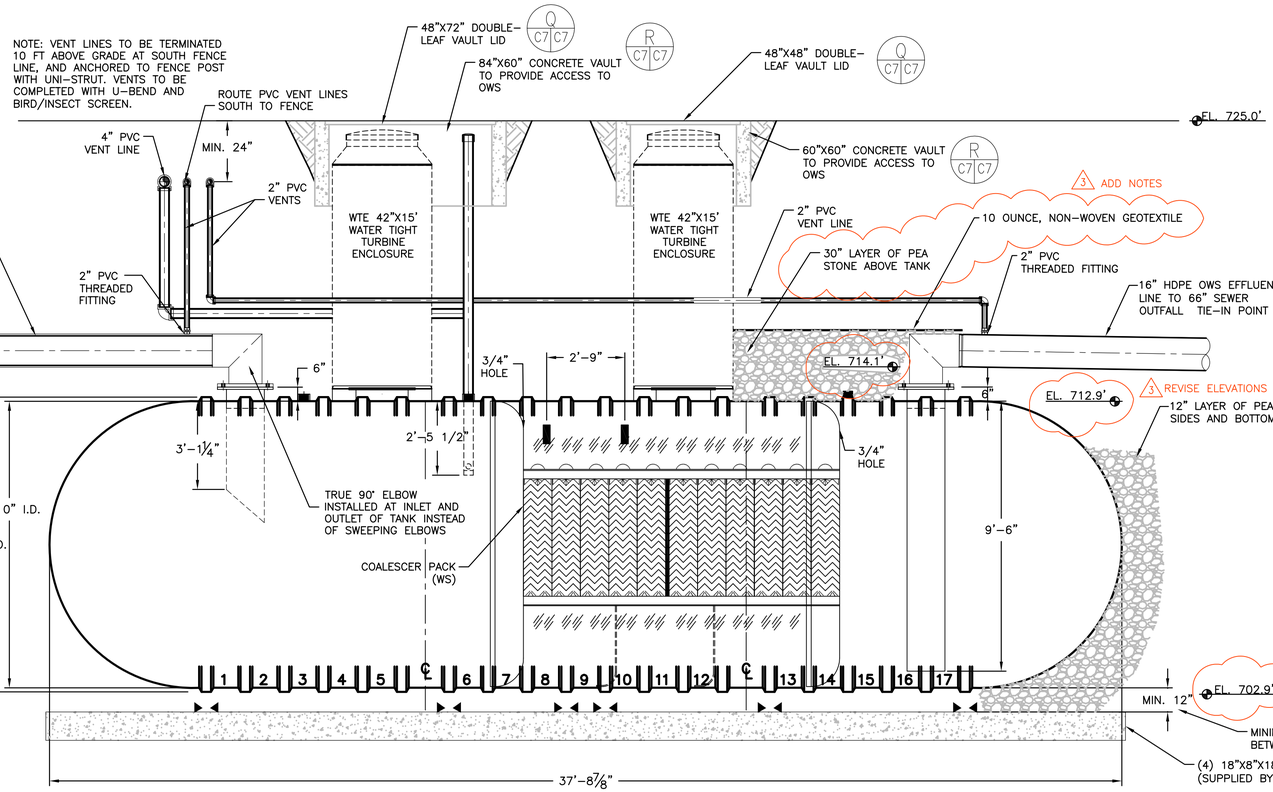


Q C1 C7 OIL/WATER SEPARATOR DETAIL
SCALE: 3/8" = 1'0"



Q C7 C7 DOUBLE LEAF VAULT LID
NOT TO SCALE



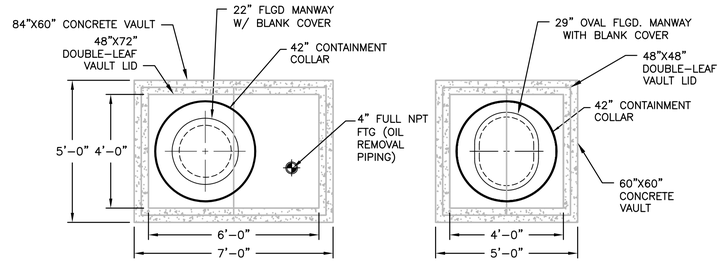
P C7 C7 OIL/WATER SEPARATOR SECTION
SCALE: 3/8" = 1'0"

NOTE:
1. OIL/WATER SEPARATOR TANK, (2) WATER TIGHT TURBINE ENCLOSURES, AND (4) CONCRETE ANCHORS BY OTHERS.
2. CONTRACTOR RESPONSIBLE FOR ALL PVC AND HDPE PIPING AND CONNECTIONS, CONCRETE VAULTS AND VAULT LIDS.
3. OIL/WATER SEPARATOR SHALL BE INSTALLED IN ACCORDANCE WITH INSTALLATION MANUAL SUPPLIED BY CONTAINMENT SOLUTIONS.
4. OIL/WATER SEPARATOR TO BE ANCHORED TO CONCRETE USING HOLD-DOWN STRAPS PROVIDED BY CONTAINMENT SOLUTIONS.
5. DEWATERING OF EXCAVATION SHALL CONTINUE UNTIL OIL/WATER SEPARATOR IS PROPERLY ANCHORED, FILLED WITH WATER, AND BACKFILLED TO TOP OF TANK TO PREVENT DAMAGE TO OIL/WATER SEPARATOR.

OIL/WATER SEPARATOR (OWS)
MODEL: 10'-20,000 Gallon DWT-6
CSI-10 Oil Water Separator

SPILL CAPACITY: 18,000 GALLONS
ACTUAL CAPACITY: 20,122 GALLONS
NOMINAL WEIGHT: 16,475 LBS

PROVIDED BY: CONTAINMENT SOLUTIONS



R C7 C7 CONCRETE VAULT DETAIL (TYP.)
SCALE: 3/8" = 1'0"

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Professional Engineer's Name: KENNETH W. ARNOLD
Professional Engineer's No.: 030719
State: MI | Date Signed: | Project Mgr.: CP
Designed by: JF | Drawn by: MS | Checked by: KA

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OUTFALLS 003/004 STORM WATER DIVERSION AND TREATMENT SYSTEM

OIL/WATER SEPARATOR DETAILS

ARCADIS Project No. B0064410.2011.00100
Date MARCH 2011
ARCADIS
10559 CITATION DRIVE
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BRIGHTON, MICHIGAN 48116
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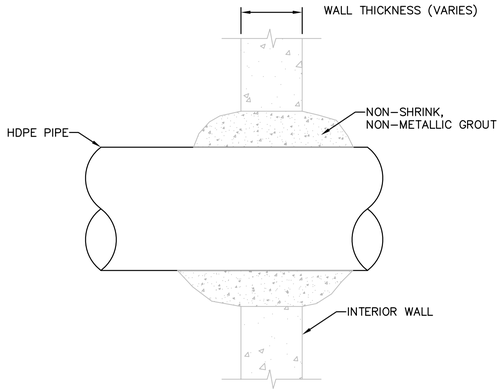
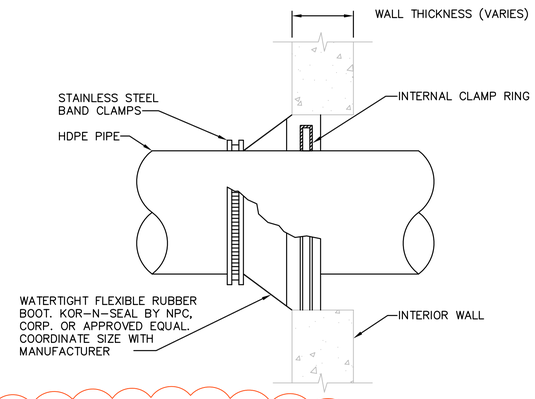
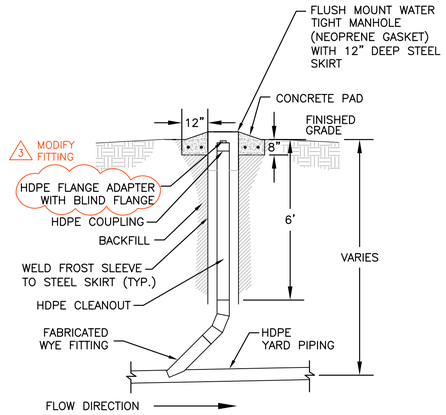


S C4 C8 S C6 C8 TYPICAL WALL PENETRATION DETAIL
NOT TO SCALE

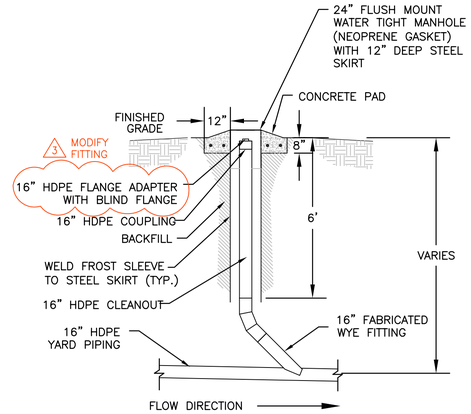


S2 C5 C8 VAULT 4-6 WALL PENETRATION DETAIL
NOT TO SCALE
3 ADD DETAIL



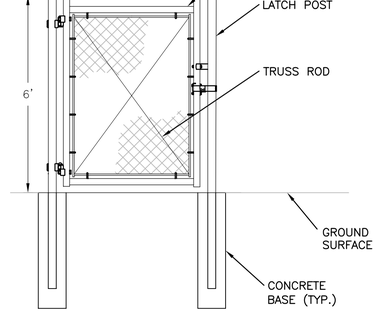
NOTE: CLEANOUT PIPE AND FITTING DIAMETER WILL MATCH THE DIAMETER OF THE PIPING THE CLEANOUT IS INSTALLED ON. FLUSH MOUNT DIAMETER SHALL BE 12" FOR 8" CLEANOUTS AND 16" FOR 12" CLEANOUTS.

T C1 C8 CLEANOUT DETAIL (TYP. OF 4)
NOT TO SCALE



NOTE: WYE FITTING SHALL BE INSTALLED IN THE DIRECTION OF FLOW TOWARDS THE DISCHARGE POINT TO AVOID FLUSHING OIL AND WATER BACK INTO THE OIL/WATER SEPARATOR.

T2 C1 C8 CLEANOUT DETAIL (TYP. OF 2)
NOT TO SCALE



U C1 C8 PERSONNEL GATE FENCE DETAIL
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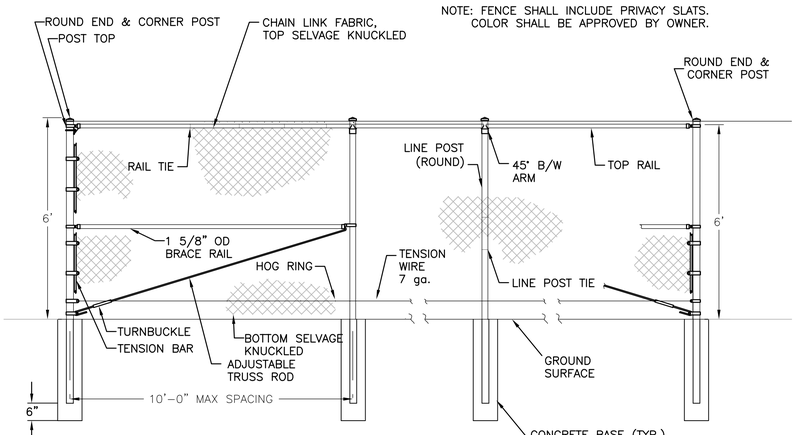

V C1 C8 FENCE DETAIL (TYP.)
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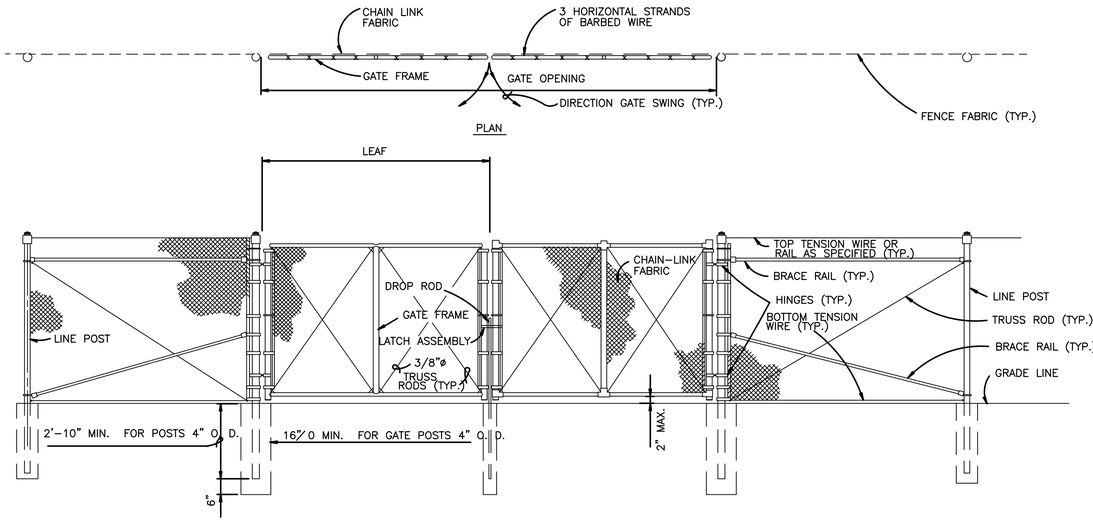

W C1 C8 DOUBLE SWING GATE (TYP.)
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Professional Engineer's Name	KENNETH W. ARNOLD		
Professional Engineer's No.	030719		
State	Date Signed	Project Mgr.	
MI		CP	
Designed by	Drawn by	Checked by	
JF	MS	KA	

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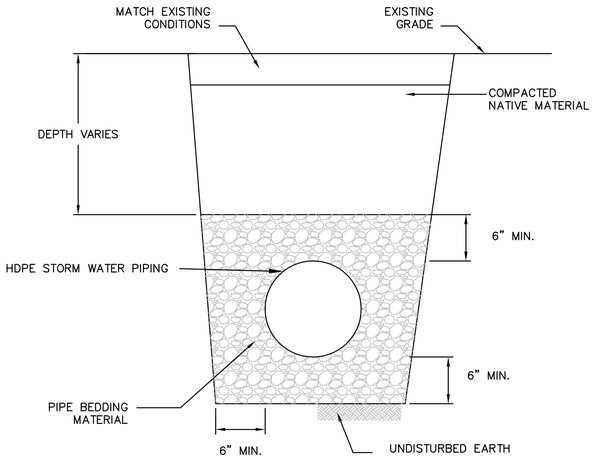

X C1 C9 TYPICAL PIPE TRENCH DETAIL
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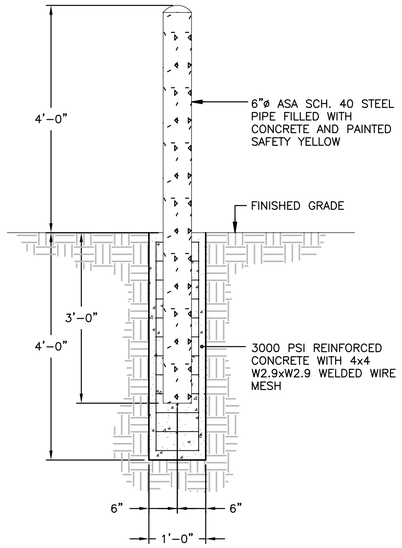

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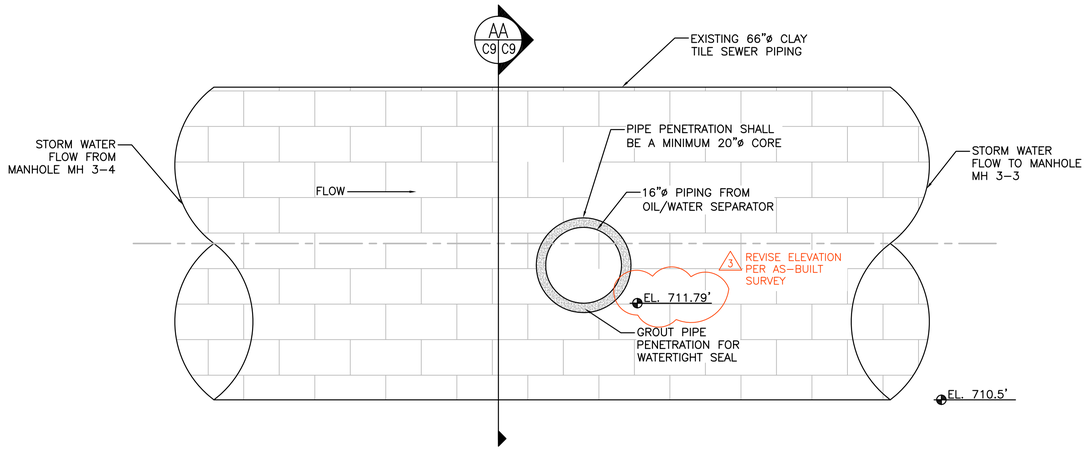
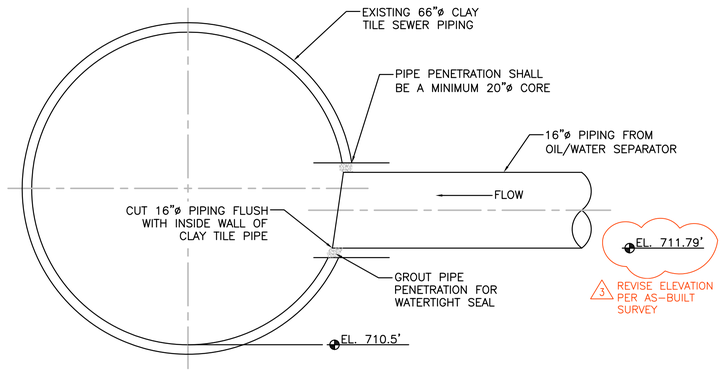
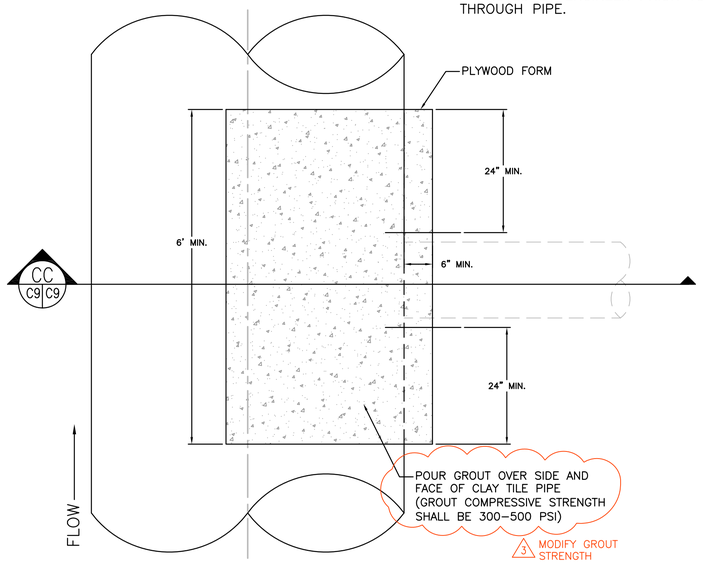


Z C1 C9 DISHARGE LINE TIE-IN POINT DETAIL
NOT TO SCALE

NOTE: CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING CLAY TILE PIPE CONDITION AND USE OF GROUT PRIOR TO CORING THROUGH CLAY TILE PIPE. METHOD OF DISCHARGE PIPE TIE-IN SHALL BE APPROVED BY ENGINEER PRIOR TO CORING THROUGH PIPE.



AA C9 C9 DISHARGE LINE TIE-IN POINT SECTION
NOT TO SCALE



BB C9 C9 DISHARGE LINE TIE-IN POINT GROUT DETAIL
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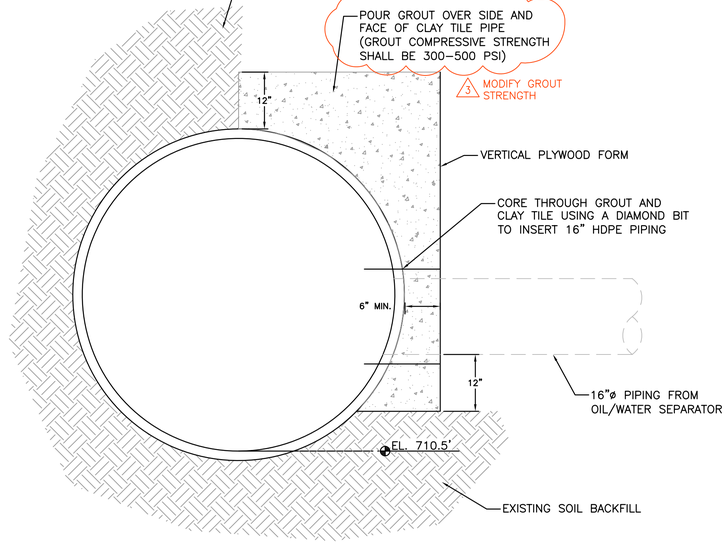

CC C9 C9 DISHARGE LINE TIE-IN POINT GROUT SECTION
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JF	MS	KA

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