ARCADIS Design & Consultancy for natural and built assets

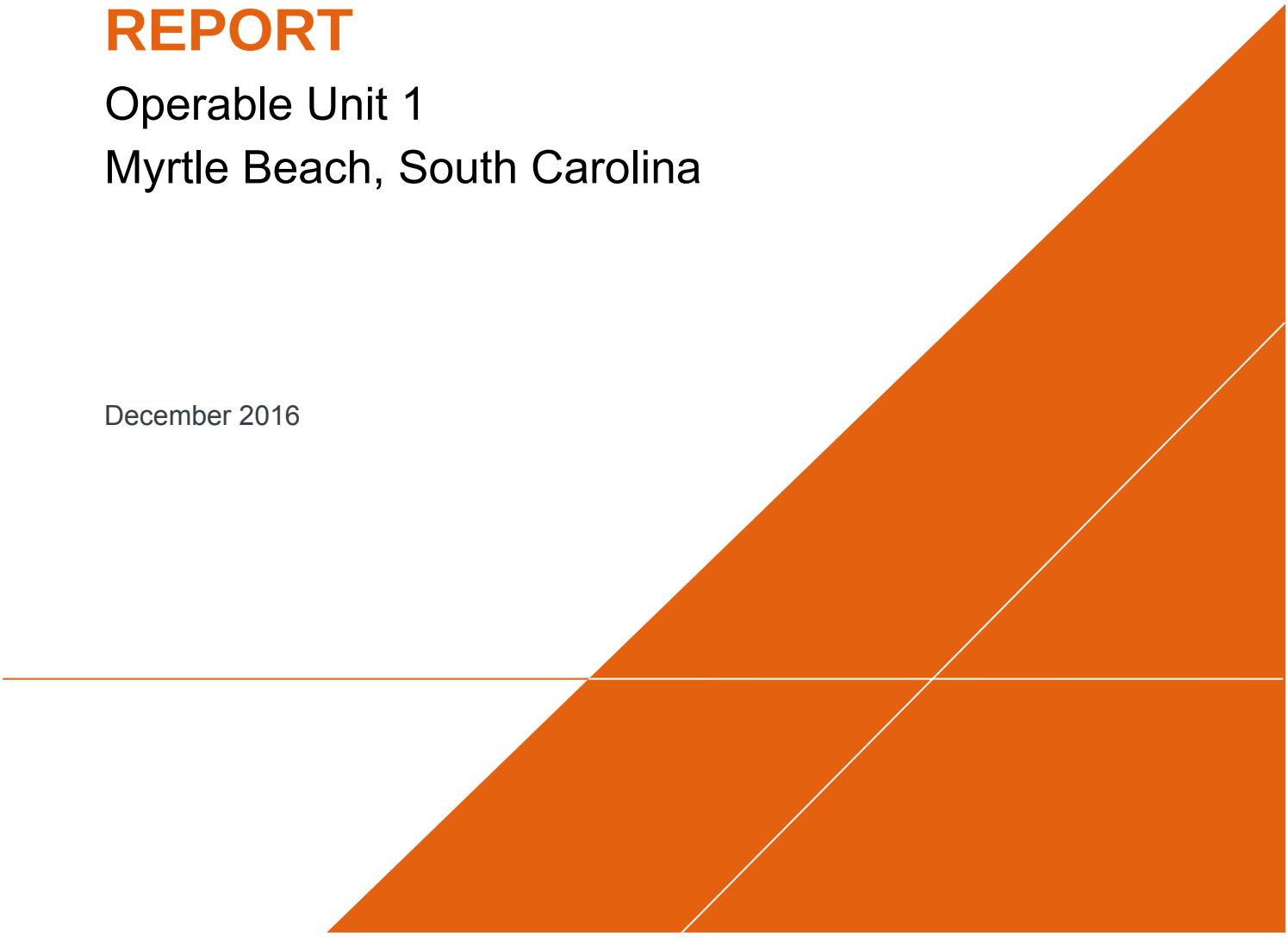
AVX Corporation

FEASIBILITY STUDY INVESTIGATION REPORT

Operable Unit 1

Myrtle Beach, South Carolina

December 2016



FEASIBILITY STUDY INVESTIGATION REPORT

Operable Unit 1
Myrtle Beach, South Carolina

Mark B. Hanish
Project Manager

William B. Popham
Senior Vice President

Thomas H. Darby II, P.G.
License Number 2537
Senior Hydrogeologist

THOMAS H. DARBY, II REGISTERED No. 2537 SOUTH CAROLINA PROFESSIONAL GEOLOGIST 12/7/16

Prepared for:
AVX Corporation

Prepared by:
Arcadis U.S., Inc.
6041 Wallace Road Extension
Suite 300
Wexford
Pennsylvania 15090
Tel 724 742 9180
Fax 724 742 9189

Our Ref.:
B0007393.0002

Date:
December 2016

CONTENTS

IN-TEXT TABLES

TABLES

FIGURES

APPENDICES

ACRONYMS AND ABBREVIATIONS

1,1,1-TCA	1,1,1-trichloroethane
Arcadis	Arcadis U.S., Inc.
AST	aboveground storage tank
AVX	AVX Corporation
bgs	below ground surface
CPT	cone penetrometer test
CSM	conceptual site model
CVOC	chlorinated volatile organic compound
CWIT	clean water injection test
DNAPL	dense non-aqueous phase liquid
DPT	direct-push technology
ERD	enhanced reductive dechlorination
EVS	Environmental Visualization System
FS	Feasibility Study
FSIR	*Feasibility Study Investigation Report*
FSWP	*Feasibility Study Work Plan for Operable Unit 1*
ft/d	feet per day
gpm	gallons per minute
HPT	hydraulic profiling tool
ID	inside diameter
mg/kg	milligrams per kilogram
NAPL	non-aqueous phase liquid
OU-1	Operable Unit 1
OU-2	Operable Unit 2
PID	photoionization detector
psi	pounds per square inch
PVC	polyvinyl chloride
QA/QC	quality assurance/quality control
RSL	Regional Screening Level

SCDHEC	South Carolina Department of Health and Environmental Control
SGS	SGS Environmental Services Laboratory
site	AVX Corporation on 2200 AVX Drive located in Myrtle Beach, South Carolina
SVE	soil vapor extraction
TCE	trichloroethene
µg/L	micrograms per liter
UIC	Underground Injection Control
USEPA	United States Environmental Protection Agency
UST	underground storage tank
VAP	vertical aquifer profile
VOC	volatile organic compound
WCSS	whole core soil sample

1 INTRODUCTION

On behalf of AVX Corporation (AVX), Arcadis U.S., Inc. (Arcadis) has prepared this *Feasibility Study Investigation Report* (FSIR) for Operable Unit 1 (OU-1). This FSIR covers the subsurface investigation and injection testing activities completed at the AVX facility on 2200 AVX Drive located in Myrtle Beach, South Carolina (site; **Figure 1-1**). The work described herein represents a component of the scope of work outlined in the *Feasibility Study Work Plan for Operable Unit 1* (FSWP; Arcadis 2015a), submitted to the South Carolina Department of Health and Environmental Control (SCDHEC) and approved on October 20, 2015.

The FSWP (Arcadis 2015a) provides the proposed road map for evaluation of remedial technologies, that when implemented, will be designed to address the constituents of potential concern. Specifically, the FSWP focuses on OU-1 within the older portion of the AVX facility and sometimes referred to as “MB-1” or “onsite”. Large areas of OU-1 were inaccessible during past subsurface investigation activities because of existing facility structures. The demolition of multiple buildings in late 2014/early 2015 provided access to areas where previous investigation activities could not be completed.

The FSWP (Arcadis 2015a) also identifies specific data gaps whereby additional feasibility testing was needed to complete the evaluation of remedial technologies. The additional data needs included:

- Identification and characterization of the sources
- High resolution characterization of the hydrostratigraphy and mass distribution within OU-1
- Tracer and injection testing to evaluate the feasibility of potential in-situ, injection-based remedies

As described in Section 3 of this FSIR, the subsurface investigations were completed using multiple investigation techniques that included use of the hydraulic profiling tool (HPT), vertical aquifer profiling (VAP), and whole core soil sampling (WCSS). Section 4 presents injection testing details. All data collected as part of the field effort was used to update the existing conceptual site model (CSM), which is presented in Section 5. The CSM provides a basis for evaluating remedial technologies included in the Feasibility Study (FS) for OU-1.

2 BACKGROUND

The Aerovox Corporation, predecessor to AVX, began its Myrtle Beach operations in 1953 on land that was formerly part of the Myrtle Beach Air Force Base. AVX used chlorinated volatile organic compounds (CVOCs) at the facility up until 1993 in the manufacturing of ceramic capacitors. In 1981, AVX discovered that shallow groundwater beneath the OU-1 area contained CVOCs, notably the solvents trichloroethene (TCE) and 1,1,1-trichloroethane (1,1,1-TCA). The layout of site features and the monitoring/pumping well network is shown on **Figure 2-1**.

Virgin and spent TCE had been stored in underground storage tanks (USTs) on the western side of the OU-1 site until 1983 (**Figure 2-2**), when they were removed in 1983 prior to construction of an addition to the main building that covered that area. After the USTs were removed, TCE was stored in aboveground storage tanks (ASTs) adjacent to the western side of the manufacturing building (**Figure 2-2**). In 1986, AVX transitioned from using TCE to 1,1,1-TCA, continuing to use the former ASTs for storage of 1,1,1-TCA. Use of 1,1,1-TCA was discontinued in 1993.

In 1981, AVX began investigation and remediation of what later became designated as the OU-1 portion of the site (**Figure 1-1**). The following provides details for some of the activities:

- Installation and regular sampling of groundwater monitoring wells, from 1981 to the present. This was initiated within OU-1 and expanded to Operable Unit 2 (OU-2) (offsite areas) in 2007.
- Removal of USTs in 1983.
- Installation of pumping wells in 1985 to provide water for use as non-contact cooling water, and soon after, began operating these pumping wells to remediate groundwater.
- Discontinuation of TCE use in 1986.
- Installation of nine pumping and production wells (identified with a prefix of PW or DPW) from 1985 through 1987 (**Figure 2-2**). Six pumping wells (PW-1S, PW-2S, PW-3S, PW-4S, PW-5S, and PW-6S) were screened in the Upper Terrace Deposits aquifer, one production well (DPW-1D) was screened in the Lower Terrace Deposits aquifer, and two pumping wells (DPW-2SD and DPW-3SD) were screened in the Upper and Lower Terrace Deposits aquifer.
- Sampling and analysis of soil from locations on the western side of the former main building (MB-1) in 1984 and 1989.
- Performance of an enhanced in-situ bioremediation pilot study in 1989 that focused on the western side of MB-1.
- Excavation of volatile organic compound- (VOC-) containing soils discovered during the MB-1 building expansion in 1992. Two abandoned pipes were found to contain a viscous liquid with elevated concentrations of TCE, 1,1,1-TCA, tetrachloroethene, methylene chloride, and toluene. Approximately 66 cubic yards of soils were removed from the excavation. Soil analyses indicated that TCE concentrations in the soil were between 500 milligrams per kilogram (mg/kg) and 10,000 mg/kg. These soils were removed and transported to an offsite treatment, storage, and disposal facility.
- Completed a soil-gas investigation in 1992.
- Discontinued 1,1,1-TCA use in 1993.

- AVX signed a Consent Order (96-43-HW and 96-71-DWP) with the SCDHEC in 1996.
- Installed a soil vapor extraction (SVE) well (SVE-1) in June 1997, as part of a pilot test to evaluate the feasibility of remediation by a dual-phase extraction system. Due to high groundwater levels in the area, high groundwater recovery rates, and limited vadose zone soils available for the system, a dual-phase extraction system was not installed (Geraghty & Miller, Inc. 1997b). SVE-1 is presently used as a monitoring well.
- Groundwater was sampled across the site using both direct-push borings and temporary wells in 1997.
- Installed two induced draft air stripper systems for the treatment of groundwater produced by pumping wells PW-1 and PW-7 (Area 1) in 1997. Both air stripping units were designed to achieve removal efficiencies for all constituents of 99% prior to discharge via gravity to the City of Myrtle Beach Water Treatment Facility, a publicly owned treatment works (Geraghty & Miller, Inc. 1997a).
- Geraghty & Miller, Inc. performed an analysis to assess the zone of capture for pumping well DPW-4 in 1998. Conclusions of that analysis indicated that capture extended to at least 17th Avenue South, and likely across 17th Avenue South (to the northeast).
- Direct-push boring and temporary well groundwater sampling within the southern portion of OU-1 was performed in 1999.
- Discharge of treated groundwater from the DPW-4 system was directed to a new surface-water outfall in accordance with the National Pollutant Discharge Elimination System permit issued in September 1999.
- Completion of five phases of offsite investigation initiated in 2007, including investigation of groundwater, surface water, and soil vapor.
- AVX met with the SCDHEC in September 2010 to have a pre-submission discussion regarding the draft FS for the entire AVX site (both onsite and offsite portions). During that meeting, it was discussed that there were tentative plans for the demolition of additional onsite buildings. At that time, the SCDHEC and AVX agreed to split the FS into an offsite groundwater portion (OU-2) that would be finalized soon after that meeting, and delay preparation of the FS for the onsite portion (OU-1) until after additional onsite buildings were demolished. This would allow access to investigate beneath the footprint of the demolished buildings, which, in turn, would provide for improved information in the preparation of an FS for OU-1.
- Completed a data gap investigation within OU-1 and OU-2 that included using a membrane interface probe, cone penetrometer testing (CPT), soil borings, and groundwater sampling to evaluate the current conditions at the site. Results from this investigation are summarized in the data from the *Feasibility Study Data Gap Investigation Report* (Arcadis 2010). The OU-1 portion of this investigation only included areas outside the footprint of the buildings present (i.e., prior to demolition) at that time.
- In 2012, the eastern portion of the primary manufacturing building within OU-1 (commonly referred to as the MB-1 building) was demolished and the slab was removed. Following demolition, the soil was screened using a photoionization detector (PID) and sampled to evaluate soil quality beneath the building (Arcadis 2012a). Based on this soil characterization work, two small areas containing VOCs

were identified. As a result, soil from these two areas were removed and disposed at a permitted facility. Confirmation samples were collected after excavation was completed (Arcadis 2012b).

- In February 2013, the onsite groundwater containment system was expanded to include new pumping well DPW-5SD. Similar to existing pumping well DPW-4SD, this well was screened across both the Upper and Lower Terrace Deposits and was designed to expand the area of hydraulic capture within OU-1. Currently, groundwater is being pumped from the Upper and Lower Terrace Deposits at both DPW-4SD and DPW-5SD. The operation of these wells is maintaining groundwater capture across OU-1, operating at a combined pumping rate of approximately 43 gallons per minute.
- In late 2014, demolition of four buildings in OU-1 was initiated. The demolition targets included the Corporate building, M&E, MIS, and the remainder of the MB-1 building (**Figure 2-2**). Demolition continued through June 2015 and included removal of all aboveground structures and concrete pads. Following removal of the pads, post-demolition sub-slab sampling was completed, patterned after the post-demolition assessment activities completed in 2012.
- In early May 2015, soil was screened beneath the former foundation of the MIS, M&E, and Corporate buildings. Work was completed after a remobilization in July 2015 to complete soil screening and sampling at the MB-1 building. The soil screening beneath the footprint of MB-1 showed an area with concentrations of trimethylbenzene exceeding the United States Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs). The *Post-Demolition Soil Investigation Report and Vadose Zone Subsurface Soil Sampling Work Plan* (Arcadis 2015b) summarizes the results of the soil screening.
- As a result of the May and July 2015 work, a targeted soil removal action was proposed (Arcadis 2015c) and completed in January 2016, whereby a total of 123 tons of soil was removed and disposed offsite. The *Soil Removal Report – Trimethylbenzene Area* (Arcadis 2016) presents details of the excavation, confirmation sampling, offsite disposal, and regrading activities.

2.1 Operable Unit Description

As referenced above, the onsite and offsite portions of the AVX facility have been separated into two adjacent operable units, as shown on **Figure 1-1**. The units are defined as follows:

- OU-1 or MB-1 is the older manufacturing portion of the facility that contained several buildings, most which have been demolished, including a main manufacturing building, which was approximately 300,000 square feet.
- OU-2 comprises an area of undeveloped, residential, and commercial properties located immediately northeast of OU-1 and extending to the stormwater control pond on Withers Swash. The largest single property in OU-2 is an undeveloped and partially wooded parcel located on 17th Avenue South owned by AVX. A portion of the AVX property is open space, formerly used as a parking lot. The remaining land in OU-2 comprises residential properties and a few undeveloped parcels.

The areas north, south, and east of OU-1 and OU-2 are primarily residential or commercial properties, with a few undeveloped properties intermixed. A parcel immediately south of OU-1 belongs to the City of Myrtle Beach and contains an unused deep water supply well and large water storage tank. AVX owns additional property to the south and west, including a parcel referred to as AVX-2 or MB-2 (currently

active manufacturing operations) and a vacant parcel formerly occupied by a Carmike Theater. OU-1 is bordered directly to the west by a golf course.

2.2 Recent Site Activities

Recent site activities were performed in accordance with the FSWP (Arcadis 2015a). Subsurface investigations were completed to fill data gaps, with respect to the presence or absence of VOCs, which could be accessed after demolition of the MIS, M&E, Corporate, and MB-1 buildings (**Figure 2-2**). These additional investigations were proposed to further evaluate the extent of potential VOC source areas in OU-1, to refine the hydrostratigraphic model, and to further evaluate patterns of groundwater flow, particularly with respect to the hydraulic influence of pumping within OU-1. Tasks completed within and around the footprint of the MIS, M&E, Corporate, and MB-1 buildings included:

- May and July 2015
  - In early May 2015, performed soil screening and sampling at the former MIS, M&E, and Corporate buildings following demolition of these buildings
  - Remobilized in July 2015 to complete soil screening and sampling at the MB-1 building
- October and November 2015
  - WCSS to delineate the source area
  - Hydraulic conductivity assessment utilizing HPT
  - VAP sampling to assess vertical and lateral groundwater concentrations
  - Shelby tube samples for characterizing the physical properties of the soil
- December 2015
  - Completion of the VAP samples along the HPT transects
- March 2016
  - Installation of the tracer test well network and clean water injection test (CWIT) well
- April 2016
  - Injection testing with tracer dye into the Upper Terrace Deposits to evaluate the efficiency of in-situ injection, as well as a volume-to-distribution relationship for the aquifer
  - CWIT in the Lower Terrace Deposits using clean water to assess its injectability

Section 3 summarizes the details on the implementation and results of the additional activities completed.

3 INVESTIGATION ACTIVITIES

Multiple phases of the FS investigation have been completed in OU-1 focusing on the footprint of the former buildings. The investigation was designed to meet the following objectives:

- Define the lateral and vertical extent of the VOC source zone(s)
- Characterize the lateral and vertical VOC mass distribution away from the source
- Characterize the hydrostratigraphic framework to better define the potential VOC transport

The investigation was completed using high resolution sampling techniques and direct-sensing tools to provide a robust investigation dataset. The investigation included data collection using WCSS, HPT, and VAP, completed in two mobilizations. The first mobilization was completed from October 21 to November 3, 2015, with the HPT and WCSS being completed during this mobilization, including approximately 60% of the VAP samples. A second mobilization was completed from November 30 to December 5, 2015 to complete the VAP sampling.

Soil and groundwater samples were analyzed using a combination of an onsite mobile laboratory and a fixed laboratory (SGS Environmental Services [SGS] in Wilmington, North Carolina). The mobile laboratory was used during the initial mobilization, with split samples sent to SGS for quality assurance/quality control (QA/QC). The VAP samples collected during the second mobilization were sent to SGS because using the mobile laboratory was not practical given the limited number of remaining samples that had to be collected.

3.1 Source Characterization

The term source zone, for purposes of the work completed as part of the FS investigation, was defined as any area where historical releases may have resulted in the potential for dense non-aqueous phase liquid (DNAPL) to be present in the subsurface. The potential for DNAPL facilitated the need for a more conservative approach during site characterization. As a result, a WCSS investigation was selected for the following reasons:

- The use of WCSS provides a high-resolution dataset across the entire length of the boring and allows areas of finer-grained soils (i.e., silt and clay) and more permeable intervals (i.e., sand) to be sampled using the same method. The ability to sample the entire stratigraphic profile provides data that can be used to evaluate both the mass stored in the finer-grained units, as well as the mass present in the more permeable intervals that is more representative of the transport zones.
- The collection of core samples at each location allows qualitative non-aqueous phase liquid (NAPL) testing to verify its presence or absence.
- WCSS can be completed using a dual-tube drilling method with direct-push technology (DPT). This allows the boring to be cased off while deeper samples are collected. Abandonment is completed as the tooling is removed, which limits the potential for mobilizing DNAPL, if it is encountered.

The WCSS locations completed are shown on **Figure 3-1**.

3.1.1 Implementation

The WCSS were collected using a piston-style sampler targeting the Upper Terrace Deposits, with each soil boring terminating between 20 to 30 feet below ground surface (bgs) as the confining clay unit was encountered. Twenty-eight WCSS locations, with a total of 373 samples, were sampled during the source characterization.

Samples were collected by initially removing the soil core and screening the entire length of each core using a PID. Soil samples were collected approximately every 2 vertical feet, biased to the specific intervals with the highest PID readings. After the sampling was completed, the core samples were logged for lithology. All logging information was recorded on boring logs, which are included in **Appendix A**.

In addition to the laboratory analytical samples collected, the WCSS were also screened for NAPL using Oil-In-Soil kits. The Oil-In-Soil kits use a hydrophobic dye, which reacts by changing color if NAPL is present. Selection of the soil to be tested with the Oil-In-Soil kits was based on visual observation of a sheen in the water present in the core sample and/or PID readings. Seven soil samples were tested for NAPL with these field kits. The results for each are listed below:

- WCSS-2 at 12 feet bgs tested positive for NAPL and a sheen was detected
- WCSS-9 at 20 feet bgs tested positive for NAPL and a sheen was detected
- WCSS-9 at 24 feet bgs tested positive for NAPL and a sheen was detected
- WCSS-6 at 11 feet bgs, WCSS-6 at 15 feet bgs, WCSS-8 at 10 feet bgs, and WCSS-8 at 14 feet bgs tested negative for NAPL detected

At the completion of each boring, the borehole was abandoned by emplacing neat Portland Type 1 cement from the base of the boring to ground surface. The location of each WCSS boring was marked at ground surface with a stake and surveyed at the completion of the investigation activities.

3.1.2 Results

TCE was the constituent detected most frequently and at the highest concentrations. As a result, the horizontal and vertical extent of TCE can be used to represent the extent of VOCs present in the subsurface, as shown on the figures referenced below. TCE was detected at every WSCC boring, except WCSS-22, WCSS-24, and WCSS-25. The highest concentrations of TCE were found at WCSS-3, WCSS-6, and WCSS-8 at concentrations varying from 2,640 mg/kg [WCSS-3(10)] to 16,900 mg/kg [WCSS-8(14)]. These higher VOC concentration soil samples were collected from 10 to 14 feet bgs, in the saturated zone, in both clayey and sandy soil.

The lateral extent of the TCE detections is illustrated on **Figure 3-2**. The colors associated with each symbol are based off the range of the highest detected concentration at each boring. Additional cross-sections have been included as **Figures 3-3 through 3-6** to illustrate the vertical extent of TCE detected in OU-1. Additional discussion of the soil results is included in Section 5.4.

Laboratory analytical results for the soil samples can be found in **Table 1** (mobile laboratory analytical) and **Table 2** (split samples analyzed by SGS analytical). Laboratory analytical data is included as **Appendix B**.

3.2 Hydrostratigraphy and Mass Distribution

The hydrostratigraphic framework and dissolved-phase mass distribution were characterized using a combination of HPT profiles and VAP samples. The HPT/VAP locations were completed in three primary transects, perpendicular to groundwater flow, with a fourth transect added near the WCSS borings to provide additional data density in areas where the WCSS results did not indicate the presence of source mass. **Figure 3-1** shows the four completed transects.

3.2.1 Hydraulic Profiling Tool

3.2.1.1 Implementation

An HPT was used to assess the hydraulic conductivity across four transects within OU-1. The HPT measures hydraulic pressure and the flow rate of injected water to assess the hydraulic conductivity with respect to vertical depth. The same tool also measures electrical conductivity of the soils, to help map variations in soil type. The HPT contains a transducer, as well as a conductivity probe, and is attached to a trunk-line, containing the line to supply water and communication wiring, which is fed through multiple rods and connected to the HPT surface instruments. The HPT is advanced at a rate of approximately 2 centimeters per second as continuous readings of injection backpressure and conductivity are collected.

The HPT probe directly measures permeability by injecting water into the formation through which the tool is driven. The pressure response of the soil to injection of water is measured to estimate K values. Dissipation tests were completed at each location to estimate the water level and to provide data to complete a hydrostatic pressure plot. The hydrostatic pressure plot was then subtracted from the injection pressure plot to provide injection pressure at essentially zero hydrostatic pressure.

Real-time continuous data can be produced in both fine- and coarse-grained material with saturated or unsaturated conditions. While most soil profiling methods *infer* permeability from parameters like grain size or geotechnical properties, the HPT system can measure continuous data on K values directly by injecting water into the formation. In conjunction with the injection pressure, the electrical conductivity data, together with a soil boring for lithology, is used to strengthen the interpretation of the hydrostratigraphy.

For data QA/QC, the HPT operator calibrated the tool prior to advancing at each location, as well as a calibration check, after completion of each location. The HPT was advanced to refusal at 34 locations using a Geoprobe 7822DT.

As each HPT location was completed, the tooling was removed from the borehole and 1.5-inch DPT tooling with an expendable tip was driven back to the base of the boring. The DPT tooling was retracted back to ground surface as neat Portland Type 1 cement was emplaced in the borehole. After the borehole was abandoned, the location was marked at ground surface and surveyed at the completion of the characterization activities.

3.2.1.2 Results

The hydraulic conductivity estimates from the HPT varied from less than 0.1 foot per day (ft/d) to more than 150 ft/d (i.e., the maximum quantifiable conductivity that can be measured using this method). In addition to the HPT results, a series of soil borings were co-located to the HPT borings to assess the

composition of the hydrostratigraphy responsible for the HPT results. Based on the combined datasets, the lower hydraulic conductivities are associated with a high plasticity clay. The gradual increase in hydraulic conductivity is representative of a transition from clay to a more permeable unit with a higher percentage of sand. The highest hydraulic conductivities observed in the HPT results are associated with medium to coarse sand units with little to no fine-grained materials present. HPT logs are included in **Appendix C**. Boring logs from the co-located soil borings are included in **Appendix A**.

The hydraulic conductivities measured at depths from 0 to 25 feet bgs were commonly higher, often greater than 10 ft/d, indicating that the soil in those zones is composed primarily of sand. Below that depth, there was a broader range of hydraulic conductivities, consistent with layers and/or lenses of soil composed primarily of sand or primarily of clay. A low-permeability zone (less than 0.1 ft/d) was commonly encountered between 40 and 44 feet bgs.

Cross-sections for each transect are presented on **Figures 3-7 through 3-10**. The gradational color scale represents the change in permeability vertically and horizontally along the transects. Additional details on the hydrostratigraphy are discussed in Section 5.2.

3.2.2 Vertical Aquifer Profiling

3.2.2.1 Implementation

VAP was completed at 34 locations, as shown on **Figure 3-1**. Prior to use, each screen point sampler and associated rods were decontaminated using a steam-generating pressure washer. Each VAP location consisted of two to four vertical sample intervals collected using DPT screen point samplers. The HPT response data were used to select each VAP sample depth, targeting the more permeable zones. After completing the HPT, 2-foot intervals were chosen to be sampled with screen point samplers.

After choosing the depth from the HPT data, a screen point was driven to the terminal depth and then retracted approximately 2 feet, exposing the screen to the aquifer. The screen point VAP location was then sampled using a peristaltic pump to first remove three well volumes prior to obtaining groundwater parameters (pH, specific conductivity, oxidation-reduction potential, dissolved oxygen, turbidity, and temperature), then the groundwater was sampled for VOCs. Three volumes of water from the screen sampler point were purged prior to sampling to verify that a well-representative sample was collected from each interval.

The mobile laboratory analyzed the VAP samples via USEPA Method 8265 during the first mobilization. Duplicate samples were collected at a rate of one per 20 and sent to SGS to be analyzed via USEPA Method 8260 for comparison and quality check. All samples collected during the second mobilization were sent to SGS for fixed laboratory analysis in lieu of onsite analysis.

3.2.2.2 Results

TCE was the constituent detected most frequently and at the highest concentration. While other constituents were detected, the presence of TCE can be used to understand the total extent of dissolved VOCs in groundwater, and therefore, is the focus of the discussion on the results and data evaluation. TCE was detected in water samples from every HPT location, except for HPT-1. The highest concentrations of TCE were found at HPT-05, HPT-14, HPT-16, and HPT-23 at concentrations varying from 62,000 micrograms per liter (µg/L) [HPT-14 (40-42)] to 460,000 µg/L [HPT-16(40-42)].

Cross-sections for each transect are presented on **Figures 3-7 through 3-10**. The boxes present along the section represent the VAP intervals sampled. The data is represented at each location with the reported TCE results posted. In addition, a color was applied to the boring location symbol to represent the magnitude of the concentration at each boring and along the transects. The concentration data, paired with the permeability data, provides a detailed understanding of the VOC transport pathways within the hydrostratigraphic transport zones. Additional details on the hydrostratigraphy and mass distribution is discussed in Section 5.2.

Laboratory analytical for the VAP samples are included in **Table 3** (mobile laboratory analytical) and **Table 4** (SGS laboratory analytical). Laboratory analytical data is included in **Appendix B**.

3.3 Data Visualization

Data evaluation was completed daily as data from direct-sensing tools and the mobile laboratory became available. This real-time data evaluation allowed for adjustments of the investigation location, such as offsetting from pre-determined locations or transects, to improve the site characterization and most importantly, meet the investigation objectives. As a result, this investigation generated a large quantity of high quality data near and within the footprint of the former main manufacturing building. Effective management and interpretation of this large quantity of data required use of data visualization software. Arcadis utilized the Environmental Visualization System (EVS) software, developed by C-Tech Development Corporation, for this purpose. The EVS software effectively combines analytical results from the VAP sampling, permeability data from the HPT soundings, and the lithologic data described during the core logging into a comprehensive CSM.

A copy of the EVS model is included in **Appendix D**, which includes the program file to be installed by the viewer and instructions on operating the model.

4 TRACER AND INJECTION TESTING

Injection-based remedial technologies are retained in the FSWP (Arcadis 2015a) and will be fully evaluated as part of the FS. While an injection-based remedy is currently being implemented in OU-2, the lithology observed in OU-1 is more variable and warranted additional testing to verify applicability of the remedy. Two separate tests were completed: a tracer test in the Upper Terrace Deposits and CWIT in the Lower Terrace Deposits. Details on each test are presented below.

4.1.1 Tracer Testing

Tracer testing was implemented along the western side of the former main manufacturing MB-1 building, with the primary objective of this testing being to evaluate the efficacy of an in-situ injection-based remedial technology by establishing relevant injection hydraulics to determine sustainable flow rates and operating pressures. Additionally, the tracer testing was used to establish an injected volume-to-distribution relationship that would provide a basis for evaluating the in-situ-based alternatives in the FS. A summary of the well network, injection implementation, and results are discussed below.

4.1.1.1 Well Installation

In March 2016, an injection well and nine piezometers were installed for the completion of the injection tracer test. Prior to well installation, a soil boring was advanced to determine the bottom of the clay unit to guide screen placement of the injection well (IW-152S) and the shallow well at each of the piezometer locations. Boring logs for the tracer injection well and piezometers are included in **Appendix E**.

Injection well IW-152S was drilled using 6.25-inch inside-diameter (ID) hollow stem augers. After the total depth (29 feet) was reached, the injection well was constructed using 4-inch polyvinyl chloride (PVC) Schedule 40 riser with 20-slot stainless vee-wire screen. The larger 20-slot screen was chosen over the more commonly used 10-slot to minimize friction losses by the well during injections while still restricting the amount of formation materials that may enter the injection well. Similar well construction and materials were used for the active injection wells in the OU-2 area. Well completion details are included in **In-Text Table 4-1**.

Twelve piezometers were installed surrounding injection well IW-152S for monitoring fluorescein dye (dye) breakthrough and water levels during the tracer injection test. Four sets of three piezometers were installed as shown on **Figure 4-1**. All 12 piezometers were installed using 4.25-inch ID hollow stem augers and constructed using 2-inch-diameter PVC Schedule 40 riser with 10-slot PVC screen. Each piezometer cluster was installed as three separate wells spaced approximately 3 to 4 feet apart. As-built construction details can be found in **In-Text Table 4-1** below.

After installation, each well was developed to verify an open connection to the aquifer. Injection well IW-152S was developed using jetting, surging, and purging, whereby each piezometer was developed using a surging and purging technique.

Table 4-1 OU-1 Well Installation Details

Well Type	Well ID	Diameter (inch)	Riser	Screen Type	Screen Slot Size	Screen Interval (feet bgs)	Filter Pack Sand	Sand Seal	Grout Seal
Piezometer Wells	P-6S1	2	PVC Schedule 40	PVC Schedule 40	10 Slot (0.010 inch)	14-19	#1A	Fine Choker Sand (Instead of bentonite)	Neat Grout (No Bentonite)
	P-6S2					19-24			
	P-6S3					24-29			
	P-7S1					12-17			
	P-7S2					17-22			
	P-7S3					22-27			
	P-8S1					12-17			
	P-8S2					17-22			
	P-8S3					22-27			
	P-9S1					13-18			
	P-9S2					18-23			
	P-9S3					23-28			
Injection Wells	IW-152S	4		Stainless	20	14-29	#2		
	IW-153D	4		Stainless	20	33-43	#2		

4.1.1.2 Testing Implementation

An Underground Injection Control (UIC) Permit was issued on March 28, 2016 (#SCHE03020132M5), and the tracer injection testing was performed from April 4 through 7, 2016 for approximately 67 hours of continuous injection. The injection setup consisted of a hydrant, pressure regulator, inline strainer, hydraulically driven dosing pump (SuperDos), batch tank of concentrated dye, static mixer, high- and low-flow gauges, pressure gauges, gate valve, sample port, and associated piping. A photo log of the setup and operation of the tracer test is included in **Appendix F**. The basic operation of the injection system is as follows:

1. Water flows from the hydrant through the pressure regulator powering the SuperDos pump.
2. SuperDos pump dosed incoming water with concentrated fluorescein to achieve a targeted injection concentration of 10 milligrams per liter.
3. Fluorescein and water mixture flow through the static mixer, flow meter, flow controlling gate valve, and into the well.

Prior to starting the tracer injection test, baseline groundwater samples were collected for dye analysis. The samples were collected from each of the 12 piezometers, as well as from active extraction wells DPW-4SD and DPW-5SD. Upon starting the tracer test injection, the SuperDos pump was adjusted to achieve the appropriate injection concentration, and an injectate sample was collected for use in making

visual dye standards. The dye standards were diluted with deionized water at concentrations of 10X, 50X, 100X, and 500X, and were used during monitoring for field comparison of samples collected from the piezometers throughout the injection. The visual dye response at nearby piezometers was used to establish the “dose response” from the injected dye. Dose response is a scalable term that refers to the observed breakthrough of tracer at a targeted monitoring point. The goal of establishing dose response is to achieve an in-situ working strength solution of the injected reagent; in this instance, the injected reagent was dye. In other words, faint detections of dye correspond to a lower concentration of dye and influence the remedial design by either requiring larger volume injections to achieve more pronounced detections of dye or a higher injection concentration. Therefore, dose response herein is referred to as the extent of visual observation of dye at the surrounding piezometers, and by proxy aims to predict the volume-to-distribution relationship of an injected treatment reagent.

Injection monitoring was completed for approximately every 2,000 gallons of dye solution that was injected with some variation during times where the injected dye was suspected to have influenced a piezometer. Injection monitoring consisted of:

1. Recording pressure, cumulative volume injected, and injection flow rate.
2. Recording water levels of each piezometer.
3. Inspecting each piezometer for visual dye confirmation and collecting a sample for potential dye analysis. If dye was detected, the sample was compared to the visual standards and an estimated concentration was recorded.
4. Inspect SuperDos pump for proper dosing of dye.

Each round of monitoring took approximately 15 minutes to complete, with a difference of approximately 150 gallons injected between the first and last piezometer inspection/sampling. A total of 38,550 gallons of dye solution was injected over the course of the tracer test injection event. All dye samples were sent to Ozark Underground Lab, with select samples chosen for analysis (e.g., injection solution confirmation, initial and final breakthrough samples, and other samples that were clearly visibly different from prior samples) and the remainder held by the laboratory, if needed to be analyzed after the first selection. Ozark Underground Lab analytical data is summarized in **Appendix B**. Tracer data are included in **Table 5**. A summary of the piezometers that experienced breakthrough and the volume injected at the time of breakthrough can be seen below in **In-Text Table 4-2**.

Table 4-2 Injection Tracer Test Breakthrough Volume

Well ID		Screened Depths (feet)			Screened Interval (feet)	Distance from IW (feet)	Cumulative Injected Volume at Breakthrough (gallons)	Calculated Mobile Fraction	Well Location with Respect to Groundwater Flow Direction
P7	S1	12	-	17	5	16.49	NA	--	Upgradient
	S2	17	-	22	5	15.70	18,000	0.21	
	S3	22	-	27	5	15.98	12,000	0.13	
P9	S1	13	-	18	5	20.89	NA	--	Sidegradient
	S2	18	-	23	5	20.67	NA	--	

Well ID		Screened Depths (feet)			Screened Interval (feet)	Distance from IW (feet)	Cumulative Injected Volume at Breakthrough (gallons)	Calculated Mobile Fraction	Well Location with Respect to Groundwater Flow Direction
	S3	23	-	28	5	20.79	16,000	0.11	
P6	S1	14	-	19	5	20.59	NA	--	Downgradient
	S2	19	-	24	5	19.88	NA	--	
	S3	24	-	29	5	19.80	14,000	0.10	
P8	S1	12	-	17	5	19.98	NA	--	Sidegradient
	S2	17	-	22	5	20.10	NA	--	
	S3	22	-	27	5	20.29	20,000	0.14	
IW-152S		14	-	29	15	0	NA	NA	

Notes:
-- = not applicable
NA = not analyzed

Data compiled from the tracer injection test were also used to calculate injection capacity. Injection capacity is defined as the relationship of the achievable injection flow rate at an applied injection pressure over the cumulative volume injected. As the cumulative volume increases, the necessary pressure to continue to inject can increase, causing a resultant decrease in injection flow rate. This relationship is important to understand for conceptualizing and costing injection-based remedial designs. The average injection capacity observed during the tracer injection was 1.67 gallons per minute (gpm) per pound per square inch (psi).

4.1.1.3 Results

The goal of the fluorescein injection test was to establish a volume-to-distribution relationship for OU-1. This relationship provides a basis for evaluating the in-situ-based remedies that will be included in the FS. A summary of the key findings is presented below.

The average injection flow rate was 10.5 gpm under an average well head pressure of 3.5 to 4.0 psi. As the injection progressed, breakthrough of dye was observed in some of the piezometers. A summary of the piezometers where breakthrough was observed and the volume injected at the time of breakthrough is shown in **In-Text Table 4-2**. Mobile porosities were calculated where adequate breakthrough of fluorescein dye was observed as shown in **In-Text Table 4-2**. The dye analytical data collected at the dose-response wells are included in **Table 5**.

Working strength solution (greater than 90% of the concentration of the injection solution) arrived in two of the four dose-response wells screened in the deepest interval (i.e., piezometer P-7S3 [upgradient] and piezometer P-6S3 [downgradient]) during the tracer test. Working strength solution arrived in piezometers P-7S3 and P-6S3 after 22,000 to 24,000 gallons had been injected, respectively. Working strength solution did not arrive in the cross-gradient dose-response piezometers screened in the deepest interval (i.e., piezometers P-8S3 and P-9S3). The maximum concentrations observed in these piezometers were 17.4% in piezometer P-8S3 (after 38,000 gallons) and 44.8% in piezometer P-9S3 (after 26,000 gallons).

Fluorescein dye was observed to a lesser extent in the dose-response piezometers screened in the intermediate interval. The maximum concentration of fluorescein was observed in piezometer P-7S2 (35.0%) after 30,330 gallons had been injected. Fluorescein was observed at much lower concentrations in piezometers P-8S2 (0.3%; 38,000 gallons) and P-9S2 (3.3%; 32,000 gallons). Fluorescein was not detected in any of the dose-response piezometers screened in the shallow interval during the injection test.

4.1.2 Injection Testing

In addition to the tracer testing, a CWIT was completed to evaluate the applicability of injecting into the Lower Terrace Deposits. This test was added after the HPT data was evaluated based on the interbedded nature of the sands and clays present in OU-1. A summary of the CWIT is included below.

4.1.2.1 Well Installation

A single deep injection well screened in the Lower Terrace Deposits was installed for the CWIT. Injection well IW-153D was installed using 6.25-inch ID hollow stem augers. After the total depth was reached, the injection well was constructed using 4-inch PVC Schedule 40 riser with 20-slot stainless steel vee-wire screen. Similar to the shallow injection well (IW-152S), the larger 20-slot screen was chosen over the more commonly used 10-slot to provide a larger surface area across the well screen to improve injection of water into the aquifer. To create a good connection to the aquifer, the injection well was developed aggressively by jetting, surging, and purging. A total of 165 gallons of purge water were removed during the development. The boring and well completion log for injection well IW-153D is included in **Appendix E**.

4.1.2.2 Testing Implementation

The UIC Permit issued on March 28, 2016 (#SCHE03020132M5) covered the CWIT, as well as the tracer injection test. The injection setup consisted of a hydrant, pressure regulator, high- and low-flow gauges, pressure gauges, gate valve, well head, and associated piping. The nearest hydrant was utilized to supply the potable water and pressure needed to complete the injection test.

The CWIT was completed by injecting potable water into the Lower Terrace Deposits aquifer with pressure step increases starting at 0 psi from the ground surface. The pressure increases from ground surface were:

- 0 psi for 250 gallons total injected
- 1 psi for 250 to 500 gallons total injected
- 5 psi for 500 to 1,000 gallons total injected
- 10 psi for 1,016 to 2,000 gallons total injected
- 15 psi for 2,000 to 3,000 gallons total injected
- 20 psi for 3,000 to 5,000 gallons total injected

As the pressure increased, the resulting flow rates were measured and recorded throughout the test. These data were used to assess injection capacity and the resulting injectability of the Lower Terrace Deposits.

Injection capacity (flow rate over pressure) is plotted versus cumulative volume injected on a plot included with data in **Table 6**. An average injection capacity of 0.45 gpm per psi was observed consistently from 0 to 20 psi over the course the CWIT. While a higher injection capacity was observed in the tracer test injection data (average 1.67 gpm per psi), the observed trends in the injection capacity data from both tests are similar. This indicates that the injection pressures required for an in-situ injection-based remedial technology would not damage the aquifer or well construction, and injection-based remedial technologies are implementable in both the Upper and Lower Terrace Deposits. Moreover, the results of the CWIT and tracer test provide a basis for evaluating a conceptual full-scale design that can be used to evaluate the feasibility of the technology.

5 UPDATED CONCEPTUAL SITE MODEL

The data collected as part of the FS investigation provided a robust dataset that was used to supplement the existing dataset available for OU-1 and provides a basis for an updated CSM. The CSM provides the fundamental basis for evaluating the remedial technologies that will be included in the FS. Details on the CSM are presented below.

5.1 Topography and Drainage

The OU-1 and OU-2 area is relatively flat, with a grade elevation of approximately 20 feet above mean sea level (**Figure 1-1**), with a gentle slope to the northeast. A small stream (Withers Swash) lies adjacent to the northern end of OU-1 (**Figure 2-1**). Withers Swash flows northeast, approximately parallel to the beach, passing through several flood control ponds before ultimately discharging to the ocean.

A golf course to the west includes several artificial ponds as water hazards. The nearest is immediately west of OU-1 in an upgradient direction. Construction and surface elevation of this pond is unknown.

5.2 Hydrostratigraphic Framework

Myrtle Beach is within the Atlantic Coastal Plain physiographic province. Bedrock is approximately 1,400 to 1,500 feet below sea level (Zack 1977). Most overlying thickness of unconsolidated sediments is Cretaceous age and older marine deposits; typically alternating beds of sand and clay. Thin beds of calcite-cemented siltstone of fine-grained sandstone are common throughout the section, interbedded with the unconsolidated sediments. The two uppermost units relevant to OU-1 are:

- Terrace Deposits (0 to 45 feet bgs) – A Quaternary-aged sequence of marine terraces consisting of stratified sand, silt, and clay beds reflecting a beach and lagoon depositional environment.
- Peedee Formation (45 to 300 feet bgs) – A Cretaceous-aged marginal marine unit formed generally of stratified sand and clay (similar to the terrace deposits but much older), with thin beds of calcite-cemented siltstone or fine-grained sandstone.

The uppermost Peedee Formation has historically been encountered in borings in OU-1 and is described as a calcite-cemented siltstone. The depth to the top of the Peedee Formation varies from 40 to 45 feet from west to east in OU-1. This lithified zone is interpreted to strongly inhibit vertical flow of groundwater between the Peedee Formation and the terrace deposits. Therefore, site investigations in OU-1 have largely focused on the terrace deposits.

The sequence of sand, silt, and clay beds within the terrace deposits is complex. The cross-sections generated from the HPT results (**Figures 3-7 through 3-10**) and the EVS model in **Appendix D** illustrates the current understanding of the hydrostratigraphic framework. The surficial soil in OU-1 includes a mix of sand and silt that transition into a lower-permeability unit composed of clay at approximately 10 feet bgs. This unit is largely unsaturated, and acts to confine the water present in the more permeable layers beneath the clay. The surficial unit is truncated on the cross-sections because no HPT data were collected in the vadose zone. As a result, the composition of the surficial unit was largely verified by soil borings.

Beneath the clay unit (blue unit on **Figures 3-7 through 3-10**), the soil grades from silt and sand (light blue to green on **Figures 3-7 through 3-10**) at approximately 10 feet bgs, to a coarser, highly permeable sand (orange to red on **Figures 3-7 through 3-10**). The thickness of the sand increases from west to east and is approximately 13 feet thick along the western side of the former MB-1 building (**Figure 3-10**) and up to 20 feet thick along the eastern edge of OU-1 (**Figure 3-9**). The HPT data indicates the presence of lower-permeability intervals (i.e., having a higher percentage of silt) throughout this section, but the higher-permeability sands are commonly present in the lower portion of the interval.

A clay unit is present across OU-1 beneath the shallow sand unit. The thickness of this unit is highly variable and varies from approximately 8 feet thick (**Figure 3-9**) to approximately 1-foot-thick (Transect 1). While the clay unit appears to be present at all locations, the highly variable nature of this unit suggests it may not be providing a connection between the Upper and Lower Terrace Deposits.

The lithology below the clay is composed of an interbedded sequence of sands and clay that varies in all directions across OU-1. The sand units present beneath the clay are commonly lower in permeability compared to the shallower sands; however, localized zones have hydraulic conductivity values in the 100-ft/d range. These more permeable zones will act as groundwater transport pathways and ultimately control the mass flux through the system.

The terrace deposits have previously been divided into an upper and lower section for purposes of defining vertical resolution for the monitoring well network. The Upper Terrace Deposits have been defined as the shallow permeable zone to approximately 25 feet bgs. Based on the data collected as part of the FS investigation, this unit is found to be present across the investigated portions of OU-1. The base of the unit varies from approximately 23 to 30 feet bgs, which is consistent with historical observations. Contact between the Upper and Lower Terrace Deposits is marked by the presence of the clay unit. Historically, the Lower Terrace Deposits have been depicted as a more uniform sand unit beneath the clay, which changes in composition from the interbedded sand silt and clay historically observed in OU-1, to the more uniform sand present in OU-2. The data collected during the investigation has provided additional resolution on the composition and permeability of this unit in OU-1. These data will help focus the FS evaluation of potential remedial technologies that are applicable in this unit. The Lower Terrace Deposits in OU-1 is highly variable in lithology across OU-1.

5.3 Groundwater Flow

Within OU-1, the water table is commonly encountered at an average depth of approximately 5 feet bgs. Potentiometric surfaces for the Upper Terrace Deposits (**Figure 5-1**) and Lower Terrace Deposits (**Figure 5-2**) indicate a predominantly easterly groundwater flow direction converging into the capture zone created by the groundwater extraction system that includes pumping wells DPW-4SD and DPW-5SD. This pair of pumping wells exerts a strong hydraulic influence on water levels in OU-1. In combination, these two pumping wells are interpreted to capture all groundwater flowing through VOC-containing areas of OU-1. Groundwater extraction has operated at the site since 1985; however, prior to that, the flow from OU-1 was to the east towards OU-2.

Groundwater flow in the terrace deposits is influenced by local-scale heterogeneity and anisotropy. The dominant flow paths are in the intervals of highest permeability (i.e., medium- to coarse-grained sand), which are interbedded throughout the stratigraphic section. Under ambient flow conditions, the alignment of the flow paths is parallel to the coast following the long axis of individual beds, but the current operation

of pumping wells DPW-4SD and DPW-5SD has altered these flow paths as groundwater is captured within OU-1 and the western portion of OU-2. Interbedded fines are interpreted to inhibit vertical migration of VOCs to a varying degree depending on the continuity and percentage of fines in such beds. The upper contact of the Peedee Formation is the uppermost laterally continuous confining layer below the terrace deposits.

5.4 Mass Distribution

The identified constituents in soil and groundwater are primarily TCE and its breakdown products. The data collected historically, including the current investigation results, provide a high-resolution picture of the mass present within OU-1. A summary of the identified mass present in the vadose zone and in groundwater are summarized below.

5.4.1 Vadose Zone

Soil sampling completed in OU-1 to date has not identified any areas outside the footprint of the main building where significant concentrations of TCE or other VOCs are present in the vadose zone. **Figure 5-3** summarizes historical soil sampling conducted during several prior investigations (spanning 1989 to 2010). These data reflect soil conditions outside the footprint of the main building, prior to demolition. Note that the displayed data include some samples collected below the water table (e.g., greater than approximately 5 feet bgs) that are more indicative of groundwater conditions. These data indicate:

- Soil samples collected from locations outside the footprint of the former main building most commonly show there are no detectable VOCs in the vadose zone. Moreover, no samples collected from the vadose zone contained TCE at concentrations above the USEPA Industrial Soil RSL.
- All samples containing higher concentrations of TCE were collected at the water table or deeper. These sample results (i.e., CPT-02 and CPT-08) confirm the presence of VOCs in shallow groundwater on the western side of the building footprint.

After each MB-1 demolition phase, sub-slab soil characterization efforts were completed across the footprint of the respective demolition areas. The initial demolition of the eastern portion of the building resulted in the identification of two areas with elevated concentrations of TCE. The identified areas containing VOCs in the vadose zone were excavated and disposed offsite following completion of characterization. A summary of the analytical results and excavation extents are included on **Figure 5-4** and summarized in the *Soil Removal Report – Operable Unit 1* (Arcadis 2012b).

Investigations following the more recent phase of demolition identified two additional areas of elevated concentrations in the vadose zone (**Figure 5-5**). A small area with elevated concentrations of trimethylbenzene was identified beneath the footprint of the former MB-1 building. The soils in this area were further delineated, excavated, and properly disposed at an offsite facility. Details regarding the trimethylbenzene area are shown on **Figure 5-6**. A summary of the analytical data and excavation extent is included in the *Soil Removal Report – Trimethylbenzene Area* (Arcadis 2016).

Elevated VOC concentrations in soil were also observed in other areas along the western portion of the former MB-1 building. Concentrations of TCE were detected above the USEPA Industrial Soil RSL at multiple locations along the western edge of the building. Therefore, these results were used to focus the WCSS investigation to provide additional delineation of this portion of OU-1. The combination of the two

datasets provides both a horizontal and vertical representation of the VOCs in the vadose zone. Four areas of elevated TCE concentrations were identified along the western edge of MB-1. These areas are listed below:

- Near the former TCE AST. Characterized by borings MB1-37, SB-209, SB-303, SB-304, and SB-308 (**Figure 5-5**) and WCSS-1 (**Figures 3-2 and 3-4**).
- East of the former TCE UST. Characterized by borings SB-211, SB-212, and SB-311 (**Figure 5-5**) and WCSS-3 (**Figures 3-2 and 3-4**).
- Near the Cold Storage Building. Characterized by borings SB-216 (**Figure 5-5**) and WCSS-8 and WCSS-26 (**Figures 3-2 and 3-5**).
- Southwestern building addition. Characterized by borings SB-207 (**Figure 5-5**) and WCSS-6 (**Figures 3-2 and 3-4**).

5.4.2 Groundwater

The distribution of VOCs in groundwater in OU-1 has historically been interpreted through the data collected from sampling of groundwater from the monitoring wells. A summary of the VOC distribution in groundwater within OU-1 is provided below.

The groundwater data collected during VAP sampling was limited near the source zone because WCSS was predominantly used to define the potential sources. While the data collected represents the total mass present in the mobile and immobile fractions in the Upper Terrace Deposits, the concentrations with respect to lithology can be used to infer groundwater quality conditions. The elevated concentrations observed in the WCSS results in the higher permeability units, which are more representative of the mobile mass of VOCs (**Figures 3-3-through 3-6**), as these VOCs migrate from the clay into the groundwater system. The observed concentrations of VOCs in the saturated soil matrix within the clay unit at the base of the Upper Terrace Deposits represents VOC mass stored in the system that will, if not remediated, continue to diffuse back into groundwater. Additional VAP samples collected from Transect 4 (**Figure 3-10**) show that the mass of VOCs in groundwater is present primarily in the Upper Terrace Deposits; however, the VAP sampling was limited along Transect 4 to reduce the potential interconnection between the Upper and Lower Terrace Deposits that could be caused by drilling. As a result, only select locations were evaluated with HPT and VAP after the WCSS had been completed.

Downgradient along Transect 1 (**Figure 3-7**), the highest TCE concentrations are observed along the central portion of the transect, consistent with the identified source zones discussed in the previous section. The highest concentrations are found in the lower portion of the Upper Terrace Deposits in the intervals with higher permeability. In the Lower Terrace Deposits, elevated concentrations are present, but are commonly one to two orders of magnitude lower than those observed in the Upper Terrace Deposits. Laterally, the extent of dissolved TCE is bounded by the extent of Transect 1 in the Upper Terrace Deposits. In the Lower Terrace Deposits, the lateral extent is defined to the south. To the north, elevated concentrations are still present at the northern edge of Transect 1; however, this extent was previously defined during the 2008 data gap investigation and does not represent an additional data gap (Arcadis 2010). Additional lateral delineation is discussed in the description of subsequent transects.

Along Transect 2 (**Figure 3-8**), the dissolved VOCs in groundwater are present throughout the terrace deposits, but most of the mass observed has migrated deeper and is present in the Lower Terrace Deposits. The transect defines the lateral extent in both the Upper and Lower Terrace Deposits.

The downgradient transect (Transect 3; **Figure 3-9**) changes considerably compared to the upgradient Transects 1 and 2. While elevated concentrations of VOCs and associated mass are still present in the Lower Terrace Deposits (HPT-23 and HTP-24), elevated concentrations are present in the Upper Terrace Deposits (HPT-21 to HPT-24). These concentrations in groundwater are likely derived from the previously excavated source zones removed following demolition of the eastern portion of MB-1, but within the capture zone of DPW-4SD. Near the northern end of Transect 3, the concentrations of TCE are below detection at most locations. This portion of the transect is downgradient of DPW-5SD, but within the capture zone. While TCE is not present, the total VOCs included in the EVS model (**Appendix D**) indicate elevated concentrations of daughter products along the transect. This distribution suggests that the enhanced reductive dechlorination (ERD) implementation in OU-2 is potentially influencing OU-1, as water treated by the ERD system is captured and pulled back to OU-1.

6 SUMMARY AND SCHEDULE

The data collected as part of the FS investigation was successful in addressing the remaining data gaps present in OU-1. The identification of the source areas along the western edge of the building and a detailed understanding of the distribution of TCE in groundwater will provide the basis for evaluating remedial technologies as part of the FS. In addition, the injection and tracer testing provides additional data that can be used to assess implementability of the potential remedies.

Based on the results of this FS investigation, AVX is now prepared to initiate preparation of the FS and Risk Assessment for OU-1 and expects to largely complete it in the fourth quarter of 2016 with submittal in early 2017.

7 REFERENCES

Arcadis. 2010. *Feasibility Study Data Gap Investigation Report.* AVX Corporation Facility, Myrtle Beach, South Carolina.

Arcadis. 2012a. *MB-1 Post-Demolition Soil Investigation Report and Soil Removal Work Plan.* AVX Corporation Facility, Myrtle Beach, South Carolina. April 2012.

Arcadis. 2012b. *Soil Removal Report – Operable Unit 1.* AVX Corporation Facility, Myrtle Beach, South Carolina. July 2012.

Arcadis. 2015a. *Feasibility Study Work Plan for Operable Unit 1.* AVX Corporation Facility, Myrtle Beach, South Carolina. July 2015.

Arcadis. 2015b. *Post-Demolition Soil Investigation Report and Vadose Zone Subsurface Soil Sampling Work Plan.* AVX Corporation Facility, Myrtle Beach, South Carolina. August 2015.

Arcadis. 2015c. *MB-1 Post-Demolition Vadose Zone Soil Sampling Report and Soil Removal Work Plan for Trimethylbenzene Area.* AVX Corporation Facility, Myrtle Beach, South Carolina. December 3, 2015.

Arcadis. 2016. *Soil Removal Report – Trimethylbenzene Area.* AVX Corporation, Myrtle Beach Facility. April 6, 2016.

Geraghty & Miller, Inc. 1997a. *Engineering Report: Groundwater Air Stripper WorkPlan,* AVX Corporation Facility, Myrtle Beach, South Carolina. March 1997.

Geraghty & Miller, Inc. 1997b. *Remedial Investigation and Pilot Testing Report.* AVX Corporation Facility, Myrtle Beach, South Carolina. September 1997.

Zack, Allen. 1977. *The Occurrence, Availability and Chemical Quality of Ground Water, Grand Strand Area and Surrounding parts of Horry and Georgetown Counties.* South Carolina Water Resources Commission Report No. 8.

TABLES

Table 1
Summary of Mobile Soil Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID:		WCSS-1											
Sample Depth (Feet):		2	3	4	6	8	10	11	12	14	16	18	20
Date Collected:		10/26/15	10/26/15	10/26/15	10/26/15	10/26/15	10/26/15	10/26/15	10/26/15	10/26/15	10/26/15	10/26/15	10/26/15
Volatile Organics													
VC+1,2-DCA	mg/kg	0.103 U	0.0850 U	3.45 U	4.21 U	3.81 U	2.56 U	4.55 U	2.15 U	0.104 U	0.0940 U	0.0970 U	0.204 U
1,1,1-Trichloroethane	mg/kg	**0.753**	**5.81**	**41.0**	4.21 U	3.81 U	**36.7**	**40.0**	**6.67**	0.104 U	0.0940 U	0.0970 U	0.204 U
1,1-Dichloroethene	mg/kg	**1.26**	**1.01**	**33.4**	**34.1**	**13.3**	**87.2**	**94.5**	**323**	**4.31**	**0.434**	**3.34**	**4.29**
Tetrachloroethene	mg/kg	0.103 U	0.0850 U	3.45 U	4.21 U	3.81 U	2.56 U	4.55 U	2.15 U	**0.240**	0.0940 U	0.0970 U	0.204 U
Trichloroethene	mg/kg	**0.402**	**1.69**	**235**	**221**	**81.9**	**559**	**541**	**323**	**23.1**	**0.425**	**5.05**	**10.4**
Total Chlorinated VOCs	mg/kg	**2.41**	**8.50**	**309**	**255**	**95.2**	**683**	**675**	**652**	**27.7**	**0.858**	**8.39**	**14.7**

Location ID:		WCSS-2													
Sample Depth (Feet):		3	6	8	10	12	14	16	18	20	22	24	26	28	30
Date Collected:		10/26/15	10/26/15	10/26/15	10/26/15	10/26/15	10/26/15	10/26/15	10/26/15	10/26/15	10/26/15	10/26/15	10/26/15	10/26/15	10/26/15
Volatile Organics															
VC+1,2-DCA	mg/kg	0.125 U	0.104 U	0.0950 U	0.110 U	0.0950 U	0.0830 U	0.108 U	0.0780 U	0.0970 U	0.0990 U	0.106 U	2.67 U	3.03 U	0.106 U
1,1,1-Trichloroethane	mg/kg	0.125 U	0.104 U	0.0950 U	0.110 U	0.0950 U	0.0950 U	0.108 U	0.0780 U	0.0970 U	0.0990 U	0.106 U	2.67 U	3.30 U	0.106 U
1,1-Dichloroethene	mg/kg	0.125 U	0.104 U	0.0950 U	0.110 U	0.0950 U	0.0830 U	0.108 U	0.0780 U	**0.505**	0.0990 U	0.106 U	**65.9**	**52.1**	**3.79**
Tetrachloroethene	mg/kg	0.125 U	0.104 U	0.0950 U	0.110 U	0.0950 U	0.0830 U	0.108 U	0.0780 U	0.0970 U	0.0990 U	0.106 U	2.67 U	3.03 U	0.106 U
Trichloroethene	mg/kg	0.125 U	0.104 U	0.0950 U	0.110 U	0.0950 U	0.0830 U	0.108 U	0.0780 U	0.0970 U	0.0990 U	0.106 U	**376**	**358**	**9.63**
Total Chlorinated VOCs	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	**0.505**	ND	ND	**442**	**410**	**13.4**

Location ID:		WCSS-3											
Sample Depth (Feet):		2	5	7	8	10	15	17	19	22	24	28	30
Date Collected:		10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15
Volatile Organics													
VC+1,2-DCA	mg/kg	0.103 U	4.82 U	3.92 U	2.00 U	47.6 U	4.00 U	7.55 U	3.81 U	0.374 U	0.0980 U	10.1 U	4.88 U
1,1,1-Trichloroethane	mg/kg	0.103 U	4.82 U	3.92 U	2.00 U	47.6 U	4.00 U	7.55 U	3.81 U	0.374 U	0.0980 U	10.1 U	4.88 U
1,1-Dichloroethene	mg/kg	0.103 U	**39.5**	**62.7**	**46.2**	**205**	**24.0**	7.55 U	3.81 U	**1.64**	**0.667**	10.1 U	4.88 U
Tetrachloroethene	mg/kg	0.103 U	4.82 U	3.92 U	2.00 U	47.6 U	4.00 U	7.55 U	3.81 U	0.374 U	0.0980 U	10.1 U	4.88 U
Trichloroethene	mg/kg	0.103 U	**333**	**133**	**24.8**	**2,640**	**330**	**921**	**41.5**	**20.6**	**6.72**	**1,090**	**268**
Total Chlorinated VOCs	mg/kg	ND	**372**	**196**	**71.0**	**2,840**	**354**	**921**	**41.5**	**22.2**	**7.38**	**1,090**	**268**

Location ID:		WCSS-4													
Sample Depth (Feet):		3	5	7	9	10	11	14	16	18	22	24	27	28	30
Date Collected:		10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15
Volatile Organics															
VC+1,2-DCA	mg/kg	0.0990 U	0.0920 U	**3.15**	**12.4**	**3.07**	**7.21**	0.762 U	0.0780 U	0.0890 U	0.0840 U	0.0970 U	0.188 U	0.128 U	0.102 U
1,1,1-Trichloroethane	mg/kg	0.0990 U	0.0920 U	0.0930 U	0.0970 U	0.748 U	0.721 U	0.762 U	0.0780 U	0.0890 U	0.0840 U	0.0970 U	0.118 U	0.128 U	0.102 U
1,1-Dichloroethene	mg/kg	0.0990 U	0.0920 U	**0.250**	**24.0**	**11.7**	**7.21**	**86.9**	0.0780 U	0.0890 U	**0.361**	**0.369**	**1.62**	**1.77**	**0.459**
Tetrachloroethene	mg/kg	0.0990 U	0.0920 U	0.0930 U	0.0970 U	0.748 U	0.721 U	0.762 U	0.0780 U	0.0890 U	0.0840 U	0.0970 U	0.118 U	0.128 U	0.102 U
Trichloroethene	mg/kg	0.0990 U	0.0920 U	0.0930 U	0.0970 U	0.748 U	**26.4**	**108**	0.0780 U	0.0890 U	**0.235**	**0.243**	**10.5**	**11.6**	**0.837**
Total Chlorinated VOCs	mg/kg	ND	ND	**0.250**	**24.0**	**11.7**	**33.6**	**195**	ND	ND	**0.597**	**0.612**	**12.2**	**13.3**	**1.30**

Table 1
Summary of Mobile Soil Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID:		WCSS-5										
Sample Depth (Feet):		2	4	6	8	10	12	15	18	20	22	24
Date Collected:		10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15
Volatile Organics												
VC+1,2-DCA	mg/kg	0.0930 U	0.100 U	0.0870 U	0.120 U	0.0880 U	0.0990 U	0.0920 U	3.31 U	3.39 U	0.0830 U	8.42 U
1,1,1-Trichloroethane	mg/kg	0.0930 U	0.100 U	0.0870 U	0.120 U	0.0880 U	**0.208**	0.0920 U	3.31 U	3.39 U	0.0830 U	8.42 U
1,1-Dichloroethene	mg/kg	0.0930 U	0.100 U	0.0870 U	0.120 U	0.0880 U	**0.505**	**2.04**	**3.31**	3.39 U	**0.550**	**27.8**
Tetrachloroethene	mg/kg	0.0930 U	0.100 U	0.0870 U	0.120 U	0.0880 U	0.0990 U	0.0920 U	3.31 U	3.39 U	0.0830 U	8.42 U
Trichloroethene	mg/kg	0.0930 U	0.100 U	0.0870 U	0.120 U	0.0880 U	0.0990 U	**2.22**	**14.2**	**11.2**	**0.767**	**370**
Total Chlorinated VOCs	mg/kg	ND	ND	ND	ND	ND	**0.713**	**4.26**	**17.5**	**11.2**	**1.32**	**397**

Location ID:		WCSS-6													
Sample Depth (Feet):		3	5	7	8	10	11	12	14	15	16	18	20	22	24
Date Collected:		10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15
Volatile Organics															
VC+1,2-DCA	mg/kg	0.0930 U	0.0920 U	**24.4**	40.0 U	35.7 U	38.5 U	36.0 U	7.34 U	37.4 U	7.41 U	4.04 U	18.7 U	1.98 U	0.122 U
1,1,1-Trichloroethane	mg/kg	**0.168**	**0.193**	0.879 U	40.0 U	35.7 U	38.5 U	36.0 U	7.34 U	37.4 U	7.41 U	4.04 U	18.7 U	1.98 U	**0.159**
1,1-Dichloroethene	mg/kg	**0.411**	**3.03**	**14.7**	40.0 U	35.7 U	**50.0**	36.0 U	7.34 U	37.4 U	7.41 U	4.04 U	**131**	1.98 U	**1.37**
Tetrachloroethene	mg/kg	0.0930 U	0.0920 U	0.879 U	40.0 U	35.7 U	38.5 U	36.0 U	7.34 U	37.4 U	7.41 U	4.04 U	18.7 U	1.98 U	0.122 U
Trichloroethene	mg/kg	**0.224**	**1.70**	**87.7**	**788**	**2,900**	**1,270**	**281**	**382**	**852**	**724**	**25.9**	**533**	**53.3**	**1.16**
Total Chlorinated VOCs	mg/kg	**0.804**	**4.92**	**102**	**788**	**2,900**	**1,320**	**281**	**382**	**852**	**724**	**25.9**	**664**	**53.3**	**2.68**

Location ID:		WCSS-7									
Sample Depth (Feet):		3	5	7	10	13	15	16	19	22	25
Date Collected:		10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15
Volatile Organics											
VC+1,2-DCA	mg/kg	0.0740 U	0.0750 U	0.0910 U	0.147 U	0.0780 U	**0.880**	0.320 U	0.426 U	0.0840 U	0.100 U
1,1,1-Trichloroethane	mg/kg	0.0740 U	0.0750 U	0.0910 U	0.147 U	0.0780 U	**0.205**	0.320 U	0.426 U	0.0840 U	**0.130**
1,1-Dichloroethene	mg/kg	0.0740 U	**0.299**	0.0910 U	0.147 U	0.0780 U	**3.04**	**11.6**	**4.17**	0.0840 U	**1.00**
Tetrachloroethene	mg/kg	0.0740 U	0.0750 U	0.0910 U	0.147 U	0.0780 U	0.0850 U	0.320 U	0.426 U	0.0840 U	0.100 U
Trichloroethene	mg/kg	0.0740 U	0.0750 U	0.0910 U	0.147 U	0.0780 U	0.0850 U	**9.82**	**4.21**	0.0840 U	**2.78**
Total Chlorinated VOCs	mg/kg	ND	**0.299**	ND	ND	ND	**3.25**	**21.4**	**8.38**	ND	**3.91**

Location ID:		WCSS-8										
Sample Depth (Feet):		3	5	8	10	12	14	17	19	20	22	24
Date Collected:		10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15
Volatile Organics												
VC+1,2-DCA	mg/kg	0.0880 U	0.0930 U	47.1 U	404 U	36.7 U	328 U	0.202 U	0.169 U	1.91 U	0.800 U	0.976 U
1,1,1-Trichloroethane	mg/kg	0.0880 U	0.0930 U	47.1 U	404 U	36.7 U	328 U	0.202 U	0.169 U	1.91 U	0.800 U	0.976 U
1,1-Dichloroethene	mg/kg	0.0880 U	0.0930 U	**155**	404 U	**187**	328 U	**0.808**	**0.712**	1.91 U	**1.92**	**9.76**
Tetrachloroethene	mg/kg	0.0880 U	0.0930 U	47.1 U	404 U	36.7 U	328 U	0.202 U	0.169 U	1.91 U	0.800 U	0.976 U
Trichloroethene	mg/kg	0.0880 U	0.0930 U	**4,070**	**2,340**	**8,260**	**16,900**	**19.3**	**18.0**	**35.4**	**42.4**	**158**
Total Chlorinated VOCs	mg/kg	ND	ND	**4,220**	**2,340**	**8,440**	**16,900**	**20.1**	**18.7**	**35.4**	**44.3**	**168**

Table 1
Summary of Mobile Soil Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID:		WCSS-9											
Sample Depth (Feet):		3	5	8	10	12	14	16	18	20	22	24	25
Date Collected:		10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15
Volatile Organics													
VC+1,2-DCA	mg/kg	0.101 U	0.0980 U	0.0960 U	0.0850 U	0.0910 U	1.94 U	1.74 U	1.72 U	0.0960 U	0.0960 U	0.102 U	11.8 U
1,1,1-Trichloroethane	mg/kg	0.101 U	0.0980 U	0.0960 U	0.0850 U	0.0910 U	**4.85**	1.74 U	1.72 U	0.0960 U	0.0960 U	0.102 U	11.8 U
1,1-Dichloroethene	mg/kg	0.101 U	**0.363**	0.0960 U	0.0850 U	0.0910 U	**41.2**	1.74 U	**10.9**	**1.65**	**0.481**	**0.418**	11.8 U
Tetrachloroethene	mg/kg	0.101 U	0.0980 U	0.0960 U	0.0850 U	0.0910 U	**5.24**	1.74 U	1.72 U	0.0960 U	0.0960 U	0.102 U	11.8 U
Trichloroethene	mg/kg	**0.141**	**0.735**	0.0960 U	0.0850 U	0.0910 U	**423**	**7.13**	**137**	**0.635**	**1.20**	**0.327**	**828**
Total Chlorinated VOCs	mg/kg	**0.141**	**1.10**	ND	ND	ND	**475**	**7.13**	**148**	**2.29**	**1.68**	**0.745**	**828**

Location ID:		WCSS-10											
Sample Depth (Feet):		2	4	6	9	11	14	16	18	20	22	24	25
Date Collected:		10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15
Volatile Organics													
VC+1,2-DCA	mg/kg	0.0980 U	0.0940 U	0.0960 U	0.0950 U	0.0820 U	0.0850 U	0.0870 U	0.0770 U	0.0760 U	0.102 U	0.109 U	0.116 U
1,1,1-Trichloroethane	mg/kg	0.0980 U	0.0940 U	0.0960 U	0.0950 U	0.0820 U	0.0850 U	0.0870 U	0.0770 U	0.0760 U	0.102 U	0.109 U	0.116 U
1,1-Dichloroethene	mg/kg	0.0980 U	**0.142**	**0.212**	**0.457**	**0.656**	**0.195**	**0.183**	**0.308**	**0.348**	0.102 U	0.109 U	**1.88**
Tetrachloroethene	mg/kg	0.0980 U	0.0940 U	0.0960 U	0.0950 U	0.0820 U	0.0850 U	0.0870 U	0.0770 U	0.0760 U	0.102 U	0.109 U	0.116 U
Trichloroethene	mg/kg	0.0980 U	**0.0943**	**0.346**	**0.152**	0.0820 U	0.0850 U	0.0870 U	0.0770 U	0.0760 U	0.102 U	0.109 U	**14.2**
Total Chlorinated VOCs	mg/kg	ND	**0.236**	**0.558**	**0.610**	**0.656**	**0.195**	**0.183**	**0.308**	**0.348**	ND	ND	**16.1**

Location ID:		WCSS-11											
Sample Depth (Feet):		2	4	6	8	10	11	12	16	18	20	22	24
Date Collected:		10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15
Volatile Organics													
VC+1,2-DCA	mg/kg	0.0970 U	0.0970 U	0.0880 U	0.102 U	0.103 U	0.0890 U	0.0890 U	0.943 U	0.100 U	0.0940 U	0.0880 U	0.115 U
1,1,1-Trichloroethane	mg/kg	0.0970 U	0.0970 U	0.0880 U	0.102 U	0.103 U	0.0890 U	0.0890 U	0.943 U	0.100 U	0.0940 U	0.0880 U	0.155 U
1,1-Dichloroethene	mg/kg	**0.107**	0.0970 U	0.0880 U	0.102 U	**0.753**	**0.598**	**2.29**	**6.98**	0.100 U	**0.302**	**0.588**	**1.36**
Tetrachloroethene	mg/kg	0.0970 U	0.0970 U	0.0880 U	0.102 U	0.103 U	0.0890 U	0.0890 U	0.943 U	0.100 U	0.0940 U	0.0880 U	0.115 U
Trichloroethene	mg/kg	**0.243**	0.0970 U	0.0880 U	0.102 U	0.103 U	0.0890 U	**3.25**	**14.7**	0.100 U	**0.472**	**0.772**	**1.29**
Total Chlorinated VOCs	mg/kg	**0.350**	ND	ND	ND	**0.753**	**0.598**	**5.54**	**21.7**	ND	**0.774**	**1.36**	**2.64**

Location ID:		WCSS-12												
Sample Depth (Feet):		2	4	6	8	10	12	14	15	17	19	21	22	24
Date Collected:		10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15
Volatile Organics														
VC+1,2-DCA	mg/kg	0.0910 U	0.0930 U	0.100 U	0.102 U	0.0830 U	0.0920 U	0.0880 U	0.678 U	0.714 U	3.60 U	0.748 U	0.708 U	0.120 U
1,1,1-Trichloroethane	mg/kg	0.0910 U	0.0930 U	0.100 U	0.102 U	0.0830 U	0.0920 U	0.0880 U	0.678 U	0.714 U	3.60 U	0.748 U	0.708 U	0.120 U
1,1-Dichloroethene	mg/kg	0.0910 U	0.0930 U	0.100 U	0.102 U	**0.142**	**0.128**	**0.575**	**7.66**	**3.86**	**6.49**	**1.79**	**1.70**	**6.19**
Tetrachloroethene	mg/kg	0.0910 U	0.0930 U	0.100 U	0.102 U	0.0830 U	0.0920 U	0.0880 U	0.678 U	0.714 U	3.60 U	0.748 U	0.708 U	0.120 U
Trichloroethene	mg/kg	0.0910 U	0.0930 U	0.100 U	0.102 U	**0.183**	**0.147**	**0.858**	**77.3**	**25.9**	**55.5**	**13.2**	**12.6**	**23.1**
Total Chlorinated VOCs	mg/kg	ND	ND	ND	ND	**0.325**	**0.275**	**1.43**	**84.9**	**29.8**	**62.0**	**15.0**	**14.3**	**29.3**

Table 1
Summary of Mobile Soil Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID:		WCSS-13															
Sample Depth (Feet):		2	4	6	8	10	11	13	14	16	17	19	22	24	26	28	30
Date Collected:		10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15
Volatile Organics																	
VC+1,2-DCA	mg/kg	0.0850 U	0.0870 U	0.0940 U	0.0920 U	0.0990 U	0.755 U	0.762 U	0.777 U	0.702 U	1.79 U	3.88 U	0.769 U	0.808 U	0.360 U	0.930 U	0.909 U
1,1,1-Trichloroethane	mg/kg	0.0850 U	0.0870 U	0.0940 U	**0.119**	0.0990 U	0.755 U	0.762 U	0.777 U	0.702 U	1.79 U	**12.8**	**3.38**	0.808 U	**1.19**	0.930 U	0.909 U
1,1-Dichloroethene	mg/kg	0.0850 U	0.0870 U	0.0940 U	**0.440**	**11.8**	**20.7**	**21.4**	**19.9**	**34.2**	**44.3**	**24.9**	**13.4**	0.808 U	**5.08**	**50.0**	**9.55**
Tetrachloroethene	mg/kg	0.0850 U	0.0870 U	0.0940 U	0.0920 U	0.0990 U	0.755 U	0.762 U	0.777 U	0.702 U	1.79 U	3.88 U	0.769 U	0.808 U	0.360 U	0.930 U	0.909 U
Trichloroethene	mg/kg	0.0850 U	0.0870 U	0.0940 U	0.0920 U	**0.228**	0.755 U	0.762 U	0.777 U	**58.7**	**77.0**	**85.4**	**41.8**	**2.34**	**12.8**	**106**	**89.4**
Total Chlorinated VOCs	mg/kg	ND	ND	ND	**0.560**	**12.0**	**20.7**	**21.4**	**19.9**	**92.9**	**121**	**123**	**58.5**	**2.34**	**19.1**	**156**	**98.9**

Location ID:		WCSS-14													
Sample Depth (Feet):		3	5	7	9	11	13	15	17	20	22	24	26	29	30
Date Collected:		10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15
Volatile Organics															
VC+1,2-DCA	mg/kg	0.0880 U	0.0930 U	0.0800 U	0.0840 U	0.111 U	0.0880 U	0.105 U	0.101 U	0.0960 U	0.100 U	0.0960 U	0.0960 U	0.179 U	9.76 U
1,1,1-Trichloroethane	mg/kg	0.0880 U	0.0930 U	0.0800 U	0.0840 U	0.111 U	0.0880 U	0.105 U	**0.222**	**0.308**	**0.260**	0.0960 U	0.0960 U	**0.643**	**12.7**
1,1-Dichloroethene	mg/kg	0.0880 U	0.0930 U	0.0800 U	**0.454**	**0.667**	**0.558**	**2.39**	**2.98**	**1.97**	**2.23**	**0.750**	**0.346**	**1.07**	**40.0**
Tetrachloroethene	mg/kg	0.0880 U	0.0930 U	0.0800 U	0.0840 U	0.111 U	0.0880 U	0.105 U	0.101 U	0.0960 U	0.100 U	0.0960 U	0.0960 U	0.179 U	9.76 U
Trichloroethene	mg/kg	**0.115**	0.0930 U	0.0800 U	0.0840 U	0.111 U	0.0880 U	0.105 U	0.101 U	**0.692**	**0.120**	**0.125**	**0.548**	**5.11**	**386**
Total Chlorinated VOCs	mg/kg	**0.115**	ND	ND	**0.454**	**0.667**	**0.558**	**2.39**	**3.20**	**2.97**	**2.61**	**0.875**	**0.894**	**6.82**	**439**

Location ID:		WCSS-15												
Sample Depth (Feet):		2	4	6	8	10	13	15	18	20	23	25	27	29
Date Collected:		10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15
Volatile Organics														
VC+1,2-DCA	mg/kg	0.0840 U	0.0930 U	0.0850 U	0.0820 U	0.105 U	0.0760 U	0.0790 U	0.157 U	0.826 U	0.0780 U	0.161 U	0.860 U	0.426 U
1,1,1-Trichloroethane	mg/kg	0.0840 U	0.0930 U	0.0850 U	0.0820 U	0.105 U	0.0760 U	**0.173**	0.157 U	0.826 U	0.0780 U	**0.887**	0.860 U	0.426 U
1,1-Dichloroethene	mg/kg	0.0840 U	**0.355**	0.0850 U	0.0820 U	**0.800**	**1.31**	**1.31**	**4.50**	**11.8**	**2.13**	**10.4**	**12.7**	**8.89**
Tetrachloroethene	mg/kg	0.0840 U	0.0930 U	0.0850 U	0.0820 U	0.105 U	0.0760 U	0.0790 U	0.157 U	0.826 U	0.0780 U	0.161 U	0.860 U	0.426 U
Trichloroethene	mg/kg	**0.0840**	0.0930 U	0.0850 U	0.0820 U	0.105 U	0.0760 U	0.0790 U	**0.157**	**56.1**	**7.36**	**14.6**	**63.7**	**27.1**
Total Chlorinated VOCs	mg/kg	**0.0840**	**0.355**	ND	ND	**0.800**	**1.31**	**1.49**	**4.66**	**67.9**	**9.48**	**25.9**	**76.4**	**36.0**

Location ID:		WCSS-16											
Sample Depth (Feet):		1	3	5	7	10	13	15	17	19	20	23	25
Date Collected:		10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15
Volatile Organics													
VC+1,2-DCA	mg/kg	0.0910 U	0.0860 U	0.105 U	0.0930 U	0.144 U	0.0900 U	0.0870 U	0.0910 U	0.333 U	0.678 U	0.400 U	0.0920 U
1,1,1-Trichloroethane	mg/kg	0.0910 U	0.0860 U	0.105 U	0.0930 U	0.114 U	0.0900 U	**0.165**	0.0910 U	0.333 U	0.678 U	**0.600**	0.0920 U
1,1-Dichloroethene	mg/kg	0.0910 U	0.0860 U	**0.232**	**0.194**	0.144 U	**0.162**	**1.52**	**4.08**	**7.67**	**7.59**	**5.24**	**1.40**
Tetrachloroethene	mg/kg	0.0910 U	0.0860 U	0.105 U	0.0930 U	0.114 U	0.0900 U	0.0870 U	0.0910 U	0.333 U	0.678 U	0.400 U	0.0920 U
Trichloroethene	mg/kg	0.0910 U	0.0860 U	0.105 U	0.0930 U	0.144 U	0.0900 U	**0.513**	**0.991**	**29.7**	**53.0**	**27.8**	**1.61**
Total Chlorinated VOCs	mg/kg	ND	ND	**0.232**	**0.194**	ND	**0.162**	**2.20**	**5.07**	**37.4**	**60.6**	**33.7**	**3.01**

Table 1
Summary of Mobile Soil Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID:		WCSS-17													
Sample Depth (Feet):		2	4	6	8	10	12	14	17	19	22	24	27	29	30
Date Collected:		10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15
Volatile Organics															
VC+1,2-DCA	mg/kg	0.0990 U	0.0830 U	0.0820 U	0.0790 U	0.0870 U	0.357 U	0.661 U	0.696 U	0.702 U	3.70 U	0.870 U	0.388 U	0.762 U	0.465 U
1,1,1-Trichloroethane	mg/kg	0.0990 U	0.0830 U	0.0820 U	0.0790 U	0.0870 U	0.357 U	0.661 U	0.696 U	0.702 U	3.70 U	0.870 U	0.388 U	0.762 U	0.465 U
1,1-Dichloroethene	mg/kg	0.0990 U	0.0830 U	0.0820 U	0.0790 U	**0.209**	**6.96**	**13.9**	**18.3**	**40.5**	**16.7**	**6.52**	**1.83**	**2.51**	**15.4**
Tetrachloroethene	mg/kg	0.0990 U	0.0830 U	0.0820 U	0.0790 U	0.0870 U	0.357 U	0.661 U	0.696 U	0.702 U	3.70 U	0.870 U	0.388 U	0.762 U	0.465 U
Trichloroethene	mg/kg	0.0990 U	0.0830 U	0.0820 U	0.0790 U	0.0870 U	0.357 U	0.661 U	0.696 U	**47.4**	**39.6**	**15.9**	**5.94**	**8.15**	**77.2**
Total Chlorinated VOCs	mg/kg	ND	ND	ND	ND	**0.209**	**6.96**	**13.9**	**18.3**	**87.9**	**56.3**	**22.4**	**7.77**	**10.7**	**92.7**

Location ID:		WCSS-18											
Sample Depth (Feet):		2	4	6	9	12	14	16	18	20	26	28	30
Date Collected:		10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15
Volatile Organics													
VC+1,2-DCA	mg/kg	0.103 U	0.115 U	0.0910 U	0.0920 U	0.104 U	0.0990 U	0.0950 U	0.0870 U	0.0880 U	0.0920 U	0.0860 U	0.348 U
1,1,1-Trichloroethane	mg/kg	0.103 U	0.115 U	0.0910 U	0.0920 U	0.104 U	0.0990 U	0.0950 U	0.0870 U	0.0880 U	0.0920 U	0.0860 U	0.348 U
1,1-Dichloroethene	mg/kg	0.103 U	0.155 U	0.0910 U	0.0920 U	0.104 U	0.0990 U	0.0950 U	**0.278**	0.0880 U	0.0920 U	**0.698**	**7.23**
Tetrachloroethene	mg/kg	0.103 U	0.115 U	0.0910 U	0.0920 U	0.104 U	0.0990 U	0.0950 U	0.0870 U	0.0880 U	0.0920 U	0.0860 U	0.348 U
Trichloroethene	mg/kg	0.103 U	0.115 U	0.0910 U	0.0920 U	0.104 U	0.0990 U	0.0950 U	0.0870 U	0.0880 U	0.0920 U	**2.00**	**32.9**
Total Chlorinated VOCs	mg/kg	ND	ND	ND	ND	ND	ND	ND	**0.278**	ND	ND	**2.70**	**40.1**

Location ID:		WCSS-19									
Sample Depth (Feet):		6	8	10	12	14	16	18	20	22	24
Date Collected:		10/31/15	10/31/15	10/31/15	10/31/15	10/31/15	10/31/15	10/31/15	10/31/15	10/31/15	10/31/15
Volatile Organics											
VC+1,2-DCA	mg/kg	0.109 U	0.0900 U	0.204 U	0.0940 U	0.0760 U	0.0900 U	0.0990 U	0.0850 U	0.108 U	0.106 U
1,1,1-Trichloroethane	mg/kg	**0.315**	**0.288**	0.204 U	0.0940 U	0.0760 U	0.0900 U	0.0990 U	0.0850 U	0.108 U	0.106 U
1,1-Dichloroethene	mg/kg	**8.65**	**6.63**	**0.510**	**0.198**	0.0760 U	0.0900 U	0.0990 U	0.0850 U	0.108 U	0.106 U
Tetrachloroethene	mg/kg	0.109 U	0.0900 U	0.204 U	0.0940 U	0.0760 U	0.0900 U	0.0990 U	0.0850 U	0.108 U	0.106 U
Trichloroethene	mg/kg	**0.989**	**7.62**	**0.367**	0.0940 U	0.0760 U	0.0900 U	0.0990 U	0.0850 U	0.108 U	0.106 U
Total Chlorinated VOCs	mg/kg	**9.96**	**14.5**	**0.878**	**0.198**	ND	ND	ND	ND	ND	ND

Location ID:		WCSS-20											
Sample Depth (Feet):		2	4	6	8	10	12	14	16	18	20	22	24
Date Collected:		11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15
Volatile Organics													
VC+1,2-DCA	mg/kg	0.0850 U	0.0920 U	0.116 U	0.101 U	0.0950 U	0.0940 U	0.0930 U	0.0950 U	0.0930 U	0.0970 U	0.102 U	0.110 U
1,1,1-Trichloroethane	mg/kg	0.0850 U	0.0920 U	0.116 U	0.101 U	0.0950 U	0.0940 U	0.0930 U	0.0950 U	0.0930 U	0.0970 U	0.102 U	0.110 U
1,1-Dichloroethene	mg/kg	0.0850 U	**0.339**	**1.05**	**2.34**	**1.41**	**0.774**	**0.411**	0.0950 U	0.0930 U	0.0970 U	0.102 U	0.110 U
Tetrachloroethene	mg/kg	0.0850 U	0.0920 U	0.116 U	0.101 U	0.0950 U	0.0940 U	0.0930 U	0.0950 U	0.0930 U	0.0970 U	0.102 U	0.110 U
Trichloroethene	mg/kg	0.0850 U	0.0920 U	**1.81**	**8.32**	**0.438**	**0.104**	**4.63**	0.0950 U	0.0930 U	0.0970 U	0.102 U	0.110 U
Total Chlorinated VOCs	mg/kg	ND	**0.339**	**2.86**	**10.7**	**1.85**	**0.877**	**5.04**	ND	ND	ND	ND	ND

Table 1
Summary of Mobile Soil Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID:		WCSS-21											
Sample Depth (Feet):		2	6	8	10	11	14	16	18	20	21	23	25
Date Collected:		11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15
Volatile Organics													
VC+1,2-DCA	mg/kg	0.0900 U	0.0930 U	0.0940 U	0.0890 U	0.328 U	0.0850 U	0.102 U	0.0910 U	0.102 U	0.0920 U	0.128 U	0.115 U
1,1,1-Trichloroethane	mg/kg	0.0900 U	0.0930 U	0.0940 U	0.0890 U	**0.656**	**0.171**	0.102 U	0.0910 U	0.102 U	0.0920 U	0.128 U	0.115 U
1,1-Dichloroethene	mg/kg	0.0900 U	0.0930 U	**0.943**	**3.09**	**34.1**	0.0850 U	0.102 U	0.0910 U	0.102 U	0.0920 U	**1.04**	**0.782**
Tetrachloroethene	mg/kg	0.0900 U	0.0930 U	0.0940 U	0.0890 U	0.328 U	0.0850 U	0.102 U	0.0910 U	0.102 U	0.0920 U	0.128 U	0.115 U
Trichloroethene	mg/kg	0.0900 U	0.0930 U	**0.330**	0.0890 U	**2.23**	**5.05**	**1.31**	0.0910 U	0.102 U	**0.927**	**5.38**	**2.69**
Total Chlorinated VOCs	mg/kg	ND	ND	**1.27**	**3.09**	**37.0**	**5.22**	**1.31**	ND	ND	**0.927**	**6.42**	**3.47**

Location ID:		WCSS-22								
Sample Depth (Feet):		2	6	8	10	12	14	16	18	20
Date Collected:		11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15
Volatile Organics										
VC+1,2-DCA	mg/kg	0.0930 U	0.115 U	0.0940 U	0.0970 U	0.102 U	0.0910 U	0.0990 U	0.0980 U	0.128 U
1,1,1-Trichloroethane	mg/kg	0.0930 U	0.115 U	0.0940 U	0.0970 U	0.102 U	0.0910 U	0.0990 U	0.0980 U	0.128 U
1,1-Dichloroethene	mg/kg	0.0930 U	0.115 U	0.0940 U	0.0970 U	0.102 U	0.0910 U	0.0990 U	0.0980 U	0.128 U
Tetrachloroethene	mg/kg	0.0930 U	0.115 U	0.0940 U	0.0970 U	0.102 U	0.0910 U	0.0990 U	0.0980 U	0.128 U
Trichloroethene	mg/kg	0.0930 U	0.115 U	0.0940 U	0.0970 U	0.102 U	0.0910 U	0.0990 U	0.0980 U	0.128 U
Total Chlorinated VOCs	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND

Location ID:		WCSS-23											
Sample Depth (Feet):		2	4	6	8	10	12	14	16	18	20	21	24
Date Collected:		11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15
Volatile Organics													
VC+1,2-DCA	mg/kg	0.0890 U	0.0880 U	0.103 U	0.118 U	0.0880 U	0.0900 U	0.0940 U	0.0830 U	0.0970 U	0.0960 U	0.0910 U	0.122 U
1,1,1-Trichloroethane	mg/kg	0.0890 U	0.0880 U	0.103 U	0.118 U	0.0880 U	0.0900 U	**0.528**	0.0830 U	0.0970 U	0.0960 U	0.0910 U	0.122 U
1,1-Dichloroethene	mg/kg	0.0890 U	0.0880 U	0.103 U	**0.518**	**0.789**	**1.57**	**6.58**	**0.876**	0.0970 U	0.0960 U	**0.318**	0.122 U
Tetrachloroethene	mg/kg	0.0890 U	0.0880 U	0.103 U	0.118 U	0.0880 U	0.0900 U	0.0940 U	0.0830 U	0.0970 U	0.0960 U	0.0910 U	0.122 U
Trichloroethene	mg/kg	0.0890 U	0.0880 U	0.103 U	**0.176**	0.0880 U	0.0900 U	**12.0**	**3.85**	0.0970 U	0.0960 U	**0.336**	0.122 U
Total Chlorinated VOCs	mg/kg	ND	ND	ND	**0.694**	**0.789**	**1.57**	**19.1**	**4.73**	ND	ND	**0.655**	ND

Location ID:		WCSS-24									
Sample Depth (Feet):		4	6	8	10	12	14	16	20	22	24
Date Collected:		11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15
Volatile Organics											
VC+1,2-DCA	mg/kg	0.0870 U	0.105 U	0.102 U	0.0890 U	0.0960 U	0.0960 U	0.0930 U	0.125 U	0.118 U	0.123 U
1,1,1-Trichloroethane	mg/kg	0.0870 U	0.105 U	0.102 U	0.0890 U	0.0960 U	0.0960 U	0.0930 U	0.125 U	0.118 U	0.123 U
1,1-Dichloroethene	mg/kg	0.0870 U	0.105 U	**0.520**	**0.795**	**0.625**	**0.221**	0.0930 U	0.125 U	0.118 U	**0.284**
Tetrachloroethene	mg/kg	0.0870 U	0.105 U	0.102 U	0.0890 U	0.0960 U	0.0960 U	0.0930 U	0.125 U	0.118 U	0.123 U
Trichloroethene	mg/kg	0.0870 U	0.105 U	0.102 U	0.0890 U	0.0960 U	0.0960 U	0.0930 U	0.125 U	0.118 U	0.123 U
Total Chlorinated VOCs	mg/kg	ND	ND	**0.520**	**0.795**	**0.625**	**0.221**	ND	ND	ND	**0.284**

Table 1
Summary of Mobile Soil Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID:		WCSS-25								
Sample Depth (Feet):		2	4	6	8	10	12	14	16	20
Date Collected:		11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15
Volatile Organics										
VC+1,2-DCA	mg/kg	0.0940 U	0.0890 U	0.105 U	0.135 U	0.100 U	0.0940 U	0.0900 U	0.0940 U	0.133 U
1,1,1-Trichloroethane	mg/kg	0.0940 U	0.0890 U	0.105 U	0.135 U	0.100 U	0.0940 U	0.0900 U	0.0940 U	0.133 U
1,1-Dichloroethene	mg/kg	0.0940 U	0.0890 U	0.105 U	0.135 U	0.100 U	0.0940 U	0.0900 U	0.0940 U	0.133 U
Tetrachloroethene	mg/kg	0.0940 U	0.0890 U	0.105 U	0.135 U	0.100 U	0.0940 U	0.0900 U	0.0940 U	0.133 U
Trichloroethene	mg/kg	0.0940 U	0.0890 U	0.105 U	0.135 U	0.100 U	0.0940 U	0.0900 U	0.0940 U	0.133 U
Total Chlorinated VOCs	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND

Location ID:		WCSS-26											
Sample Depth (Feet):		2	4	6	8	10	12	15	17	19	21	23	25
Date Collected:		11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15
Volatile Organics													
VC+1,2-DCA	mg/kg	0.702 U	0.374 U	0.741 U	2.44 U	1.91 U	0.177 U	0.727 U	0.0900 U	0.0840 U	0.0970 U	0.808 U	0.476 U
1,1,1-Trichloroethane	mg/kg	**2.11**	**5.20**	0.741 U	**9.51**	1.91 U	0.177 U	0.727 U	0.0900 U	0.0840 U	0.0970 U	0.808 U	0.476 U
1,1-Dichloroethene	mg/kg	**47.0**	**53.1**	**69.6**	**81.7**	**12.4**	**15.8**	**7.35**	0.0900 U	0.0840 U	0.0970 U	**5.09**	**3.00**
Tetrachloroethene	mg/kg	0.702 U	0.374 U	0.741 U	2.44 U	1.91 U	0.177 U	0.727 U	0.0900 U	0.0840 U	0.0970 U	0.808 U	0.476 U
Trichloroethene	mg/kg	0.702 U	**75.9**	**141**	**351**	**4.95**	0.177 U	**52.6**	0.0900 U	0.0840 U	0.0970 U	**81.6**	**49.5**
Total Chlorinated VOCs	mg/kg	**49.1**	**134**	**210**	**442**	**17.3**	**15.8**	**59.9**	ND	ND	ND	**86.7**	**52.5**

Location ID:		WCSS-27										
Sample Depth (Feet):		4	6	8	10	11	13	15	17	21	23	25
Date Collected:		11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15
Volatile Organics												
VC+1,2-DCA	mg/kg	0.0880 U	0.0880 U	0.115 U	0.684 U	0.727 U	7.08 U	0.0990 U	0.0880 U	0.0950 U	0.0950 U	1.27 U
1,1,1-Trichloroethane	mg/kg	0.0880 U	0.0880 U	0.115 U	0.684 U	0.727 U	7.08 U	0.0990 U	0.0880 U	**0.210**	0.0950 U	1.27 U
1,1-Dichloroethene	mg/kg	0.0880 U	0.0880 U	0.115 U	**16.5**	**56.8**	**34.0**	**2.43**	**1.11**	**4.30**	**3.41**	**23.4**
Tetrachloroethene	mg/kg	0.0880 U	0.0880 U	0.115 U	0.684 U	0.727 U	7.08 U	0.0990 U	0.0880 U	0.0950 U	0.0950 U	1.27 U
Trichloroethene	mg/kg	0.0880 U	0.0880 U	0.115 U	**7.04**	**21.3**	**13.5**	**4.36**	0.0880 U	**4.10**	**2.78**	**214**
Total Chlorinated VOCs	mg/kg	ND	ND	ND	**23.5**	**78.1**	**47.4**	**6.78**	**1.11**	**8.61**	**6.19**	**237**

Location ID:		WCSS-28										
Sample Depth (Feet):		6	8	10	13	15	16	18	20	21	23	25
Date Collected:		11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15	11/03/15
Volatile Organics												
VC+1,2-DCA	mg/kg	0.112 U	0.0940 U	0.0970 U	0.0920 U	0.392 U	0.784 U	0.404 U	0.0940 U	0.0960 U	0.0990 U	1.11 U
1,1,1-Trichloroethane	mg/kg	0.112 U	0.0940 U	0.0970 U	0.0920 U	0.392 U	0.784 U	0.404 U	0.0940 U	0.0960 U	0.0990 U	1.11 U
1,1-Dichloroethene	mg/kg	0.112 U	0.0940 U	0.0970 U	**1.24**	**4.94**	**3.53**	**0.444**	**0.679**	**0.154**	**0.198**	**14.6**
Tetrachloroethene	mg/kg	0.112 U	0.0940 U	0.0970 U	0.0920 U	0.392 U	0.784 U	0.404 U	0.0940 U	0.0960 U	0.0990 U	1.11 U
Trichloroethene	mg/kg	0.112 U	0.0940 U	0.0970 U	0.0920 U	**53.7**	**33.6**	**3.19**	**5.40**	0.0960 U	0.0990 U	**149**
Total Chlorinated VOCs	mg/kg	ND	ND	ND	**1.24**	**58.7**	**37.1**	**3.64**	**6.08**	**0.154**	**0.198**	**163**

Table 1
Summary of Mobile Soil Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID:		HPT-5					HPT-8						
Sample Depth (Feet):		10	30	31	35	36	10	29	31	36	39	41	44
Date Collected:		10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15
Volatile Organics													
VC+1,2-DCA	mg/kg	0.0850 U	0.816 U	0.244 U	0.188 U	0.0850 U	0.0940 U	1.03 U	0.171 U	0.0970 U	0.108 U	0.0850 U	0.0920 U
1,1,1-Trichloroethane	mg/kg	0.0850 U	0.816 U	0.224 U	0.118 U	0.0850 U	0.0940 U	1.03 U	0.171 U	**0.126**	0.108 U	0.0850 U	0.0920 U
1,1-Dichloroethene	mg/kg	0.0850 U	**17.1**	**2.68**	**0.824**	0.0850 U	**0.179**	**12.7**	**3.56**	**0.515**	**0.151**	**0.398**	0.0920 U
Tetrachloroethene	mg/kg	0.0850 U	0.816 U	0.244 U	0.118 U	0.0850 U	0.0940 U	1.03 U	0.171 U	0.0970 U	0.108 U	0.0850 U	0.0920 U
Trichloroethene	mg/kg	0.0850 U	**83.3**	**16.4**	**2.96**	0.0850 U	**0.283**	**16.7**	**2.05**	**0.592**	0.108 U	**1.85**	0.0920 U
Total Chlorinated VOCs	mg/kg	ND	**100**	**19.1**	**3.79**	ND	**0.462**	**29.4**	**5.61**	**1.23**	**0.151**	**2.25**	ND

Location ID:		HPT-10							HPT-13					
Sample Depth (Feet):		6	9	25	28	30	40	41	5	10	28	32	34	45
Date Collected:		10/31/15	10/31/15	10/31/15	10/31/15	10/31/15	10/31/15	10/31/15	10/31/15	10/31/15	10/31/15	10/31/15	10/31/15	10/31/15
Volatile Organics														
VC+1,2-DCA	mg/kg	0.105 U	0.0930 U	0.0920 U	0.101 U	0.100 U	0.792 U	0.198 U	0.0930 U	0.0980 U	0.119 U	0.0980 U	0.115 U	0.0840 U
1,1,1-Trichloroethane	mg/kg	0.105 U	0.0930 U	0.0920 U	0.101 U	0.100 U	0.792 U	0.198 U	0.0930 U	0.0980 U	**0.500**	0.0980 U	0.115 U	0.0840 U
1,1-Dichloroethene	mg/kg	0.105 U	0.0930 U	**1.10**	**0.848**	**1.14**	**7.60**	**0.752**	**0.159**	0.0980 U	**12.0**	**4.08**	**1.01**	**0.193**
Tetrachloroethene	mg/kg	0.105 U	0.0930 U	0.0920 U	0.101 U	0.100 U	0.792 U	0.198 U	0.0930 U	0.0980 U	0.119 U	0.0980 U	0.115 U	0.0840 U
Trichloroethene	mg/kg	0.105 U	0.0930 U	**2.49**	**3.08**	**1.26**	**115**	**3.27**	0.0930 U	0.0980 U	**16.1**	**0.882**	**0.356**	0.0840 U
Total Chlorinated VOCs	mg/kg	ND	ND	**3.59**	**3.93**	**2.40**	**122**	**4.02**	**0.159**	ND	**28.6**	**4.96**	**1.37**	**0.193**

Location ID:		HPT-17					HPT-18						
Sample Depth (Feet):		16	32	34	35	37	30	32	35	36	38	40	44
Date Collected:		10/31/15	10/31/15	10/31/15	10/31/15	10/31/15	11/01/15	11/01/15	11/01/15	11/01/15	11/01/15	11/01/15	11/01/15
Sample Name:	Units	HPT-17 (16)	HPT-17 (32)	HPT-17 (34)	HPT-17 (35)	HPT-17 (37)	HPT-18 (30)	HPT-18 (32)	HPT-18 (35)	HPT-18 (36)	HPT-18 (38)	HPT-18 (40)	HPT-18 (44)
Volatile Organics													
VC+1,2-DCA	mg/kg	0.0890 U	44.0 U	4.40 U	2.04 U	0.0880 U	0.440 U	0.476 U	0.0940 U	0.108 U	0.0950 U	0.0800 U	0.0880 U
1,1,1-Trichloroethane	mg/kg	0.0890 U	44.0 U	4.40 U	2.04 U	0.0880 U	0.440 U	0.476 U	0.0940 U	0.108 U	0.0950 U	0.0800 U	0.0880 U
1,1-Dichloroethene	mg/kg	**0.161**	44.0 U	**14.9**	**12.2**	**1.87**	**9.67**	**9.90**	**1.07**	**1.86**	0.0950 U	0.0800 U	0.0880 U
Tetrachloroethene	mg/kg	0.0890 U	44.0 U	4.40 U	2.04 U	0.0880 U	0.440 U	0.476 U	0.0940 U	0.108 U	0.0950 U	0.0800 U	0.0880 U
Trichloroethene	mg/kg	**0.214**	**338**	**244**	**152**	**2.60**	**73.4**	**13.1**	0.0940 U	**4.19**	0.0950 U	0.0800 U	0.0880 U
Total Chlorinated VOCs	mg/kg	**0.375**	**338**	**259**	**164**	**4.46**	**83.1**	**23.0**	**1.07**	**6.05**	ND	ND	ND

Notes:
Bold results indicate a detection.
1,2-DCA = 1,2-dichloroethane
ID = identification
mg/kg = milligrams per kilogram
ND = non-detect
U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
VC = vinyl chloride
VOC = volatile organic compound

Table 2
Summary of Soil Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID:		WCCS-3	WCCS-3	WCCS-4	WCCS-4	WCCS-4	WCCS-5	WCCS-5	WCCS-6	WCCS-8	WCCS-8	WCCS-9	WCCS-10	WCCS-12	WCCS-13	WCCS-14	WCCS-16	WCSS-1	WCSS-1	WCSS-1
Sample Depth (Feet):		8	13	11	22	27	15	24	10	8	10	24	9	15	28	30	20	2	10	20
Date Collected:		10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/27/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15	10/29/15	10/29/15	10/29/15	10/26/15	10/26/15	10/26/15
Sample Name:	Units	WCCS-3 (8)	WCCS-3 (13)	WCCS-4 (11)	WCCS-4 (22)	WCCS-4 (27)	WCCS-5 (15)	WCCS-5 (24)	WCCS-6 (10)	WCCS-8 (8)	WCCS-8 (10)	WCCS-9 (24)	WCCS-10 (9)	WCCS-12 (15)	WCCS-13 (28)	WCCS-14 (30)	WCCS-16 (20)	WCSS-1 (2)	WCSS-1 (10)	WCSS-1 (20)
Volatile Organics																				
1,1,1,2-Tetrachloroethane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
1,1-Dichloropropene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
1,2,3-Trichlorobenzene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
1,2,3-Trichloropropane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
1,2,4-Trimethylbenzene	µg/kg	4,000 U	492	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
1,2-Dibromoethane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
1,3,5-Trimethylbenzene	µg/kg	4,000 U	254	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
1,3-Dichloropropane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
2,2-Dichloropropane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
2-Butanone	µg/kg	100,000 U	404 J	90,100 U	371 J	14,700 U	324 J	526,000 U	2,230,000 U	5,880,000 U	2,530,000 U	590 J	439 J	106,000 U	145,000 U	610,000 U	84,700 U	445 J	641,000 U	459 J
2-Chlorotoluene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
2-Hexanone	µg/kg	20,000 U	248 U	18,000 U	210 U	2,940 U	459 U	105,000 U	446,000 U	1,180,000 U	505,000 U	255 U	238 U	21,200 U	29,100 U	122,000 U	16,900 U	515 U	128,000 U	1,020 U
4-Chlorotoluene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
4-Methyl-2-pentanone	µg/kg	20,000 U	248 U	18,000 U	210 U	2,940 U	459 U	105,000 U	446,000 U	1,180,000 U	505,000 U	255 U	238 U	21,200 U	29,100 U	122,000 U	16,900 U	515 U	128,000 U	1,020 U
Acetone	µg/kg	100,000 U	93.6 J	90,100 U	1,050 U	14,700 U	2,290 U	526,000 U	2,230,000 U	5,880,000 U	2,530,000 U	1,280 U	1,190 U	106,000 U	145,000 U	610,000 U	84,700 U	2,580 U	641,000 U	5,100 U
Benzene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Bromobenzene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Bromochloromethane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Bromoform	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Bromomethane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Carbon Disulfide	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Dibromomethane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Diisopropyl ether (DIPE)	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Ethylbenzene	µg/kg	4,000 U	93.1	3,600 U	91.6	588 U	82.6 J	21,100 U	89,300 U	235,000 U	101,000 U	106	99.5	4,240 U	5,810 U	24,400 U	3,390 U	105	25,600 U	95.9 J
Hexachlorobutadiene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Iodomethane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Isopropylbenzene	µg/kg	4,000 U	51.0	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
m-,p-Xylene	µg/kg	8,000 U	78.2 J	7,210 U	84.0 U	1,180 U	183 U	42,100 U	179,000 U	471,000 U	202,000 U	102 U	10.0 J	8,470 U	11,600 U	48,800 U	6,780 U	206 U	51,300 U	408 U
Methyl tert-butyl ether	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Naphthalene	µg/kg	4,000 U	30.2 J	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
n-Butylbenzene	µg/kg	4,000 U	26.2 J	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
n-Propylbenzene	µg/kg	4,000 U	256	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
o-Xylene	µg/kg	4,000 U	87.6	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
p-Isopropyltoluene	µg/kg	4,000 U	1,490	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
sec-Butylbenzene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Styrene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
tert-Butylbenzene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Toluene	µg/kg	1,040 J	205	1,080 J	49.2	588 U	44.0 J	21,100 U	89,300 U	235,000 U	101,000 U	52.6	51.9	4,240 U	5,810 U	24,400 U	3,390 U	55.7 J	25,600 U	143 J
trans-1,4-Dichloro-2-butene	µg/kg	20,000 U	248 U	18,000 U	210 U	2,940 U	459 U	105,000 U	446,000 U	1,180,000 U	505,000 U	255 U	238 U	21,200 U	29,100 U	122,000 U	16,900 U	515 U	128,000 U	1,020 U
Xylenes (total)	µg/kg	8,000 U	166	7,210 U	84.0 U	1,180 U	183 U	42,100 U	179,000 U	471,000 U	202,000 U	102 U	10.0 J	8,470 U	11,600 U	48,800 U	6,780 U	206 U	51,300 U	408 U
1,1,1-Trichloroethane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	13,200 J	3,390 U	2,730	66,900	327
1,1,2,2-Tetrachloroethane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
1,1,2-Trichloroethane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
1,1-Dichloroethane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	49.5 J	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	10.5 J	4,240 U	5,810 U	24,400 U	3,390 U	405	25,600 U	65.3 J
1,1-Dichloroethene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	165	31,300	204 U
1,2,4-Trichlorobenzene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
1,2-Dibromo-3-chloropropane	µg/kg	20,000 U	248 U	18,000 U	210 U	2,940 U	459 U	105,000 U	446,000 U	1,180,000 U	505,000 U	255 U	238 U	21,200 U	29,100 U	122,000 U	16,900 U	515 U	128,000 U	1,020 U
1,2-Dichlorobenzene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
1,2-Dichloroethane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
1,2-Dichloropropane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
1,3-Dichlorobenzene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
1,4-Dichlorobenzene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Bromodichloromethane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Carbon Tetrachloride	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Chlorobenzene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Chloroethane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Chloroform	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Chloromethane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
cis-1,3-Dichloropropene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Dibromochloromethane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Dichlorodifluoromethane	µg/kg	20,000 U	248 U	18,000 U	210 U	2,940 U	459 U	105,000 U	446,000 U	1,180,000 U	505,000 U	255 U	238 U	21,200 U	29,100 U	122,000 U	16,900 U	515 U	128,000 U	1,020 U
Methylene Chloride	µg/kg	20,000 U	248 U	18,000 U	210 U	2,940 U	459 U	105,000 U	446,000 U	1,180,000 U	505,000 U	255 U	238 U	21,200 U	29,100 U	122,000 U	16,900 U	515 U	128,000 U	1,020 U
trans-1,3-Dichloropropene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Trichlorofluoromethane	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
cis-1,2-Dichloroethene	µg/kg	69,700	373	50,500	642	2,540	2,680	21,500	89,300 U	148,000 J	62,600 J	301	482	12,500	76,600	22,000 J	8,540	1,660	58,500	6,670
Tetrachloroethene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
trans-1,2-Dichloroethene	µg/kg	4,000 U	49.5 U	3,600 U	42.0 U	588 U	91.7 U	21,100 U	89,300 U	235,000 U	101,000 U	51.0 U	47.6 U	4,240 U	5,810 U	24,400 U	3,390 U	103 U	25,600 U	204 U
Trichloroethene	µg/kg	24,000	1,230	3,600 U	271	12,700	2,270	298,000	2,790,000	4,380,000	2,430,000	360	192	87,800	115,000	400,000	53,200	458	617,000	11,400
Vinyl Chloride	µg/kg	1,320 J	49.5 U	7,280	34.9 J	588 U	139	21,100 U	89,300 U	235,000 U	101,000 U	26.5 J	64.3	4,240 U	5,810 U	24,400 U	3,390 U	87.6 J	25,600 U	147 J
Total Chlorinated VOCs	µg/kg	95,000 J	1,600	57,800	948 J	15,200	5,140 J	320,000	2,790,000	4,530,000 J	2,490,000 J	688 J	749 J	100,000	192,000	435,000 J	61,700	5,510 J	774,000	18,600 J

Notes:
J = Indicates an estimated value.
U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
µg/kg = micrograms per kilogram
VOC = volatile organic compound

Table 3
Summary of Mobile Groundwater Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID:		HPT-01	HPT-01	HPT-01	HPT-01	HPT-02	HPT-02	HPT-03	HPT-03	HPT-04	HPT-04	HPT-04	HPT-04
Sample Depth (Feet):		10 - 12	12 - 14	16 - 18	18 - 20	21 - 23	32 - 34	22 - 24	38 - 40	16 - 18	24 - 26	35 - 37	42 - 44
Date Collected:		10/27/15	10/26/15	10/27/15	10/26/15	10/27/15	10/27/15	10/27/15	10/28/15	10/28/15	10/28/15	10/28/15	10/28/15
Sample Name:	Units	HPT-01 (10-12)	HPT-01 (12-14)	HPT-01 (16-18)	HPT-01 (18-20)	HPT-02 (21-23)	HPT-02 (32-34)	HPT-03 (22-24)	HPT-03 (38-40)	HPT-04 (16-18)	HPT-04 (24-26)	HPT-04 (35-37)	HPT-04 (42-44)
Volatile Organics													
VC+1,2-DCA	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	10.0 U	1.00 U	100 U	1.00 U	990	1,000 U	100 U	100 U
1,1,1-Trichloroethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	10.0 U	1.00 U	100 U	1.00 U	100 U	1,000 U	100 U	100 U
1,1-Dichloroethene	µg/L	1.00 U	1.00 U	24.8	19.7	610	1.00 U	1,440	1.00 U	3,000	20,000	300	630
Tetrachloroethene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	10.0 U	1.00 U	100 U	1.00 U	100 U	1,000 U	100 U	100 U
Trichloroethene	µg/L	1.00 U	1.00 U	65.6	1.00 U	36.0	1.00 U	750	1.00 U	360	38,000	8,500	1,200
Total Chlorinated VOCs	µg/L	ND	ND	90.4	19.7	646	ND	2,190	ND	3,360	58,000	8,800	1,830

Location ID:		HPT-05	HPT-05	HPT-05	HPT-05	HPT-05	HPT-06	HPT-06	HPT-06	HPT-06	HPT-06	HPT-07	HPT-07	HPT-07	HPT-07
Sample Depth (Feet):		12 - 14	17 - 21	25 - 29	36 - 38	42 - 44	13 - 15	19 - 21	26 - 28	32 - 34	38 - 40	18 - 20	26 - 28	32 - 34	40 - 42
Date Collected:		10/29/15	10/28/15	10/28/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15	10/29/15
Sample Name:	Units	HPT-05 (12-14)	HPT-05 (17-21)	HPT-05 (25-29)	HPT-05 (36-38)	HPT-05 (42-44)	HPT-06 (13-15)	HPT-06 (19-21)	HPT-06 (26-28)	HPT-06 (32-34)	HPT-06 (38-40)	HPT-07 (18-20)	HPT-07 (26-28)	HPT-07 (32-34)	HPT-07 (40-42)
Volatile Organics															
VC+1,2-DCA	µg/L	10.0 U	100 U	1,000 U	10.0 U	100 U	10.0 U	1,000 U	1,000 U	100 U	100 U	10.0 U	100 U	100 U	100 U
1,1,1-Trichloroethane	µg/L	10.0 U	100 U	1,100	10.0 U	100 U	10.0 U	1,000 U	5,000	100 U	100 U	10.0 U	100 U	100 U	100 U
1,1-Dichloroethene	µg/L	120	100 U	24,000	30.0	1,400	10.0 U	60,000	16,000	1,500	100 U	150	12,000	2,700	1,600
Tetrachloroethene	µg/L	10.0 U	100 U	1,000 U	10.0 U	100 U	10.0 U	1,000 U	1,000 U	100 U	100 U	10.0 U	100 U	100 U	100 U
Trichloroethene	µg/L	280	610	88,000	120	4,100	120	20,000	26,000	5,100	1,900	330	19,000	1,400	100
Total Chlorinated VOCs	µg/L	400	610	113,000	150	5,500	120	80,000	47,000	6,600	1,900	480	31,000	4,100	1,700

Location ID:		HPT-08	HPT-08	HPT-08	HPT-08	HPT-08	HPT-09	HPT-09	HPT-10	HPT-10	HPT-10	HPT-10
Sample Depth (Feet):		12 - 14	18 - 20	24 - 26	32 - 34	40 - 42	32 - 34	41 - 43	13 - 15	22 - 24	32 - 34	41 - 43
Date Collected:		10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15	10/30/15
Sample Name:	Units	HPT-08 (12-14)	HPT-08 (18-20)	HPT-08 (24-26)	HPT-08 (32-34)	HPT-08 (40-42)	HPT-09 (32-34)	HPT-09 (41-43)	HPT-10 (13-15)	HPT-10 (22-24)	HPT-10 (32-34)	HPT-10 (41-43)
Volatile Organics												
VC+1,2-DCA	µg/L	1.00 U	1,000 U	100 U	100 U	1,000 U	10.0 U	100 U	1.00 U	16.2	10.0 U	10.0 U
1,1,1-Trichloroethane	µg/L	1.00 U	1,000 U	100 U	100 U	1,000 U	10.0 U	100 U	1.00 U	1.00 U	10.0 U	10.0 U
1,1-Dichloroethene	µg/L	27.5	41,000	1,300	3,600	2,400	390	16,000	1.00 U	13.0	600	180
Tetrachloroethene	µg/L	1.00 U	1,000 U	100 U	100 U	1,000 U	10.0 U	100 U	1.00 U	1.00 U	10.0 U	10.0 U
Trichloroethene	µg/L	174	1,000 U	140	2,400	5,500	80.0	15,000	1.40	1.30	76.0	350
Total Chlorinated VOCs	µg/L	202	41,000	1,440	6,000	7,900	470	31,000	1.40	14.3	676	530

Location ID:		HPT-11	HPT-11	HPT-11	HPT-11	HPT-12	HPT-12	HPT-12	HPT-12	HPT-13	HPT-13	HPT-13	HPT-13	HPT-13
Sample Depth (Feet):		18 - 20	24 - 26	32 - 34	39 - 41	19 - 21	24 - 26	33 - 35	37 - 39	18 - 20	25 - 27	30 - 32	38 - 40	42 - 44
Date Collected:		10/30/15	10/30/15	10/30/15	10/30/15	10/31/15	10/31/15	10/31/15	10/31/15	10/31/15	10/31/15	10/31/15	10/31/15	10/31/15
Sample Name:	Units	HPT-11 (18-20)	HPT-11 (24-26)	HPT-11 (32-34)	HPT-11 (39-41)	HPT-12 (19-21)	HPT-12 (24-26)	HPT-12 (33-35)	HPT-12 (37-39)	HPT-13 (18-20)	HPT-13 (25-27)	HPT-13 (30-32)	HPT-13 (38-40)	HPT-13 (42-44)
Volatile Organics														
VC+1,2-DCA	µg/L	12.0	10.0 U	100 U	10.0 U	100 U	100 U	100 U	100 U	100 U	1,000 U	100 U	10.0 U	100 U
1,1,1-Trichloroethane	µg/L	1.00 U	10.0 U	100 U	10.0 U	100 U	100 U	100 U	100 U	100 U	1,400	100 U	10.0 U	100 U
1,1-Dichloroethene	µg/L	16.5	270	2,100	29.0	1,300	23,000	14,000	1,800	1,000	24,000	3,600	220	400
Tetrachloroethene	µg/L	2.00	10.0 U	100 U	10.0 U	100 U	100 U	100 U	100 U	100 U	1,000 U	100 U	10.0 U	100 U
Trichloroethene	µg/L	18.4	30.0	18,000	110	550	3,700	100 U	380	200	40,000	100 U	60.0	240
Total Chlorinated VOCs	µg/L	36.9	300	20,100	139	1,850	26,700	14,000	2,180	1,200	65,400	3,600	280	640

Table 3
Summary of Mobile Groundwater Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID:		HPT-14	HPT-14	HPT-14	HPT-14	HPT-15	HPT-15	HPT-15	HPT-15	HPT-15	HPT-16	HPT-16	HPT-16	HPT-16	HPT-16
Sample Depth (Feet):		19 - 21	25 - 27	35 - 37	40 - 42	18 - 20	26 - 28	33 - 35	37 - 39	42 - 44	12 - 14	18 - 20	26 - 28	36 - 38	40 - 42
Date Collected:		10/31/15	10/31/15	10/31/15	10/31/15	11/01/15	11/01/15	11/01/15	11/01/15	11/01/15	11/01/15	11/01/15	11/01/15	11/01/15	11/01/15
Sample Name:	Units	HPT-14 (19-21)	HPT-14 (25-27)	HPT-14 (35-37)	HPT-14 (40-42)	HPT-15 (18-20)	HPT-15 (26-28)	HPT-15 (33-35)	HPT-15 (37-39)	HPT-15 (42-44)	HPT-16 (12-14)	HPT-16 (18-20)	HPT-16 (26-28)	HPT-16 (36-38)	HPT-16 (40-42)
Volatile Organics															
VC+1,2-DCA	µg/L	100 U	100 U	1,000 U	1,000 U	1.00 U	100 U	100 U	100 U	1,000 U	1.00 U	100 U	100 U	10,000 U	10,000 U
1,1,1-Trichloroethane	µg/L	100 U	350	1,000 U	1,000 U	1.00 U	310	100 U	100 U	1,000 U	1.00 U	100 U	100 U	10,000 U	10,000 U
1,1-Dichloroethene	µg/L	430	20,000	12,000	13,000	1.00 U	15,000	6,400	2,800	47,000	4.30	660	6,400	10,000 U	14,000
Tetrachloroethene	µg/L	100 U	100 U	1,000 U	1,000 U	1.00 U	100 U	100 U	100 U	1,000 U	1.00 U	100 U	100 U	10,000 U	10,000 U
Trichloroethene	µg/L	150	6,300	84,000	62,000	1.10	16,000	10,000	5,900	18,000	11.8	270	1,000	220,000	460,000
Total Chlorinated VOCs	µg/L	580	26,700	96,000	75,000	1.10	31,300	16,400	8,700	65,000	16.1	930	7,400	220,000	474,000

Location ID:		HPT-17	HPT-17	HPT-17	HPT-17	HPT-17	HPT-18	HPT-18	HPT-18	HPT-18	HPT-18	HPT-19	HPT-19	HPT-19	HPT-19	HPT-19
Sample Depth (Feet):		10 - 12	16 - 18	22 - 24	27 - 29	41 - 43	10 - 12	17 - 19	22 - 24	26 - 28	39 - 41	10 - 12	17 - 19	21 - 23	28 - 30	38 - 40
Date Collected:		11/01/15	11/01/15	11/01/15	11/01/15	11/01/15	11/01/15	11/01/15	11/01/15	11/01/15	11/01/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15
Sample Name:	Units	HPT-17 (10-12)	HPT-17 (16-18)	HPT-17 (22-24)	HPT-17 (27-29)	HPT-17 (41-43)	HPT-18 (10-12)	HPT-18 (17-19)	HPT-18 (22-24)	HPT-18 (26-28)	HPT-18 (39-41)	HPT-19 (10-12)	HPT-19 (17-19)	HPT-19 (21-23)	HPT-19 (28-30)	HPT-19 (38-40)
Volatile Organics																
VC+1,2-DCA	µg/L	1.00 U	1.00 U	10.0 U	100 U	1.00 U	1.00 U	100 U	1.00 U	1,000 U	1.00 U	1.00 U	1,000 U	1,000 U	1.00 U	1.00 U
1,1,1-Trichloroethane	µg/L	1.00 U	1.00 U	10.0 U	100 U	1.00 U	1.00 U	100 U	1.80	1,000 U	1.00 U	1.00 U	1,000 U	1,000 U	1.00 U	1.00 U
1,1-Dichloroethene	µg/L	2.90	5.80	540	770	23.2	82.0	200	10.6	12,000	10.1	1.00 U	9,100	5,400	99.1	4.10
Tetrachloroethene	µg/L	1.00 U	1.00 U	10.0 U	100 U	1.00 U	1.00 U	100 U	1.00 U	1,000 U	1.00 U	1.00 U	1,000 U	1,000 U	1.00 U	1.00 U
Trichloroethene	µg/L	6.00	18.3	31.0	2,400	39.8	95.5	2,700	30.4	21,000	35.5	1.00 U	10,000	5,200	4.20	3.60
Total Chlorinated VOCs	µg/L	8.90	24.1	571	3,170	63.0	178	2,900	42.8	33,000	45.6	ND	19,100	10,600	103	7.70

Location ID:		HPT-20	HPT-20	HPT-20	HPT-20	HPT-21	HPT-21	HPT-21	HPT-21	HPT-22	HPT-22	HPT-23	HPT-23	HPT-23	HPT-23	HPT-23
Sample Depth (Feet):		14 - 16	20 - 22	26 - 28	41 - 44	12 - 14	20 - 22	27 - 29	41 - 44	20 - 22	24 - 26	14 - 16	19 - 21	24 - 26	38 - 40	42 - 44
Date Collected:		11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/02/15	11/03/15	11/03/15	11/04/15	11/04/15	11/04/15
Sample Name:	Units	HPT-20 (14-16)	HPT-20 (20-22)	HPT-20 (26-28)	HPT-20 (41-44)	HPT-21 (12-14)	HPT-21 (20-22)	HPT-21 (27-29)	HPT-21 (41-44)	HPT-22 (20-22)	HPT-22 (24-26)	HPT-23 (14-16)	HPT-23 (19-21)	HPT-23 (24-26)	HPT-23 (38-40)	HPT-23 (42-44)
Volatile Organics																
VC+1,2-DCA	µg/L	1.00 U	1.00 U	100 U	1.00 U	1,000 U	100 U	100 U	100 U	100 U	1.00 U	100 U	1,000 U	1.00 U	1,000 U	1,000 U
1,1,1-Trichloroethane	µg/L	1.00 U	1.00 U	100 U	1.00 U	1,000 U	100 U	100 U	100 U	100 U	1.00 U	100 U	1,000 U	3.10	3,100	4,600
1,1-Dichloroethene	µg/L	1.60	2.60	4,900	19.7	3,700	1,200	100 U	3,100	580	6.60	33,000	5,300	67.4	52,000	74,000
Tetrachloroethene	µg/L	1.00 U	1.00 U	100 U	1.00 U	1,000 U	100 U	100 U	100 U	100 U	1.00 U	100 U	1,000 U	1.00 U	1,000 U	1,000 U
Trichloroethene	µg/L	1.40	2.10	100 U	1.80	22,000	250	100	130	5,200	47.3	141,000	8,500	118	160,000	140,000
Total Chlorinated VOCs	µg/L	3.00	4.70	4,900	21.5	25,700	1,450	100	3,230	5,780	53.9	174,000	13,800	189	215,000	219,000

Notes:
1,2-DCA = 1,2-dichloroethane
ND = not detected
U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
VC = vinyl chloride
µg/L = micrograms per liter
VOC = volatile organic compound

Table 4
Summary of Groundwater Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID:		HPT-01	HPT-02	HPT-02	HPT-02	HPT-03	HPT-03	HPT-03	HPT-03	HPT-04	HPT-05	HPT-22	HPT-22
Sample Depth(Feet):		18 - 20	10 - 12	16 - 18	16 - 18	9 - 11	16 - 18	22 - 24	30 - 32	16 - 18	17 - 21	16 - 18	27 - 29
Date Collected:		10/26/15	12/05/15	10/27/15	12/05/15	12/05/15	12/05/15	10/27/15	12/05/15	10/28/15	10/28/15	12/03/15	12/03/15
Sample Name:	Units	HPT-01 (18-20)	HPT-02 (10-12)	HPT-02 (16-18)	HPT-02 (16-18)	HPT-03 (9-11)	HPT-03 (16-18)	HPT-03 (22-24)	HPT-03 (30-32)	HPT-04 (16-18)	HPT-05 (17-21)	HPT-22 (16-18)	HPT-22 (27-29)
Volatile Organics													
1,1,1,2-Tetrachloroethane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
1,1-Dichloropropene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
1,2,3-Trichlorobenzene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
1,2,3-Trichloropropane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
1,2,4-Trimethylbenzene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
1,2-Dibromoethane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
1,3,5-Trimethylbenzene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
1,3-Dichloropropane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
2,2-Dichloropropane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
2-Butanone	µg/L	25.0 U	25.0 U	125 U	400 U	125 U	2,000 U	2,500 U	125 U	5,000 U	1,000 U	25,000 U [25,000 U]	5,000 U [5,000 U]
2-Chlorotoluene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
2-Hexanone	µg/L	5.00 U	5.00 U	25.0 U	80.0 U	25.0 U	400 U	500 U	25.0 U	1,000 U	200 U	5,000 U [5,000 U]	1,000 U [1,000 U]
4-Chlorotoluene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
4-Methyl-2-pentanone	µg/L	5.00 U	5.00 U	25.0 U	80.0 U	25.0 U	400 U	500 U	25.0 U	1,000 U	200 U	5,000 U [5,000 U]	1,000 U [1,000 U]
Acetone	µg/L	25.0 U	25.0 U	125 U	400 U	125 U	2,000 U	2,500 U	125 U	5,000 U	1,000 U	25,000 U [25,000 U]	5,000 U [5,000 U]
Benzene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Bromobenzene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Bromochloromethane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Bromoform	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Bromomethane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Carbon Disulfide	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Dibromomethane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Diisopropyl ether (DIPE)	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Ethylbenzene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Hexachlorobutadiene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Iodomethane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Isopropylbenzene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
m-,p-Xylene	µg/L	2.00 U	2.00 U	10.0 U	32.0 U	10.0 U	160 U	200 U	10.0 U	400 U	80.0 U	2,000 U [2,000 U]	400 U [400 U]
Methyl tert-butyl ether	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Naphthalene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
n-Butylbenzene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
n-Propylbenzene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
o-Xylene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
p-Isopropyltoluene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
sec-Butylbenzene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Styrene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
tert-Butylbenzene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Toluene	µg/L	1.00 U	0.260 J	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
trans-1,4-Dichloro-2-butene	µg/L	5.00 U	5.00 U	25.0 U	80.0 U	25.0 U	400 U	500 U	25.0 U	1,000 U	200 U	5,000 U [5,000 U]	1,000 U [1,000 U]
1,1,1-Trichloroethane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
1,1,2,2-Tetrachloroethane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
1,1,2-Trichloroethane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]

Table 4
Summary of Groundwater Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID: Sample Depth(Feet): Date Collected: Sample Name:	Units	HPT-01 18 - 20 10/26/15 HPT-01 (18-20)	HPT-02 10 - 12 12/05/15 HPT-02 (10-12)	HPT-02 16 - 18 10/27/15 HPT-02 (16-18)	HPT-02 16 - 18 12/05/15 HPT-02 (16-18)	HPT-03 9 - 11 12/05/15 HPT-03 (9-11)	HPT-03 16 - 18 12/05/15 HPT-03 (16-18)	HPT-03 22 - 24 10/27/15 HPT-03 (22-24)	HPT-03 30 - 32 12/05/15 HPT-03 (30-32)	HPT-04 16 - 18 10/28/15 HPT-04 (16-18)	HPT-05 17 - 21 10/28/15 HPT-05 (17-21)	HPT-22 16 - 18 12/03/15 HPT-22 (16-18)	HPT-22 27 - 29 12/03/15 HPT-22 (27-29)
1,1-Dichloroethane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	800 J [810 J]	200 U [200 U]
1,1-Dichloroethene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	42.0 J	5.00 U	200 U	40.0 U	920 J [1,030]	200 U [200 U]
1,2,4-Trichlorobenzene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
1,2-Dibromo-3-chloropropane	µg/L	5.00 U	5.00 U	25.0 U	80.0 U	25.0 U	400 U	500 U	25.0 U	1,000 U	200 U	5,000 U [5,000 U]	1,000 U [1,000 U]
1,2-Dichlorobenzene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
1,2-Dichloroethane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
1,2-Dichloropropane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
1,3-Dichlorobenzene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
1,4-Dichlorobenzene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Bromodichloromethane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Carbon Tetrachloride	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Chlorobenzene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Chloroethane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Chloroform	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Chloromethane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
cis-1,3-Dichloropropene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Dibromochloromethane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Dichlorodifluoromethane	µg/L	5.00 U	5.00 U	25.0 U	80.0 U	25.0 U	400 U	500 U	25.0 U	1,000 U	200 U	5,000 U [5,000 U]	1,000 U [1,000 U]
Methylene Chloride	µg/L	5.00 U	5.00 U	25.0 U	80.0 U	25.0 U	400 U	500 U	25.0 U	1,000 U	200 U	5,000 U [5,000 U]	1,000 U [1,000 U]
trans-1,3-Dichloropropene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
Trichlorofluoromethane	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
cis-1,2-Dichloroethene	µg/L	26.2	1.00 U	33.0	331	124	1,560	1,190	123	4,150	40.0 U	4,910 [5,120]	200 U [40.0 J]
Tetrachloroethene	µg/L	1.00 U	1.00 U	5.00 U	16.0 U	5.00 U	80.0 U	100 U	5.00 U	200 U	40.0 U	1,000 U [1,000 U]	200 U [200 U]
trans-1,2-Dichloroethene	µg/L	0.620 J	1.00 U	1.55 J	30.9	9.75	43.2 J	100 U	5.00 U	142 J	40.0 U	1,000 U [1,000 U]	24.0 J [200 U]
Trichloroethene	µg/L	1.00 U	0.850 J	57.9	38.7	61.0	259	375	6.20	286	484	28,600 [34,600]	200 U [68.0 J]
Vinyl Chloride	µg/L	0.550 J	1.00 U	5.00 U	19.7	5.00 U	175	239	6.70	1,540	40.0 U	240 J [250 J]	4,240 [4,200]
Total Chlorinated VOCs	µg/L	27.4 J	0.850 J	92.5 J	420	195	2,040 J	1,850 J	136	6,120 J	484	35,500 J [41,800 J]	4,260 J [4,310 J]

Table 4
Summary of Groundwater Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID:		HPT-22	HPT-24	HPT-24	HPT-24	HPT-24	HPT-25	HPT-25	HPT-25	HPT-25	HPT-25	HPT-26	HPT-26
Sample Depth(Feet):		38 - 40	12 - 14	18 - 20	24 - 26	40 - 42	13 - 15	20 - 22	24 - 26	27 - 29	40 - 42	14 - 16	19 - 21
Date Collected:		12/03/15	12/02/15	12/02/15	12/03/15	12/03/15	12/02/15	12/02/15	12/02/15	12/03/15	12/03/15	12/02/15	12/02/15
Sample Name:	Units	HPT-22 (38-40)	HPT-24 (12-14)	HPT-24 (18-20)	HPT-24 (24-26)	HPT-24 (40-42)	HPT-25 (13-15)	HPT-25 (20-22)	HPT-25 (24-26)	HPT-25 (27-29)	HPT-25 (40-42)	HPT-26 (14-16)	HPT-26 (19-21)
Volatile Organics													
1,1,1,2-Tetrachloroethane	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
1,1-Dichloropropene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
1,2,3-Trichlorobenzene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
1,2,3-Trichloropropane	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
1,2,4-Trimethylbenzene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
1,2-Dibromoethane	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
1,3,5-Trimethylbenzene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
1,3-Dichloropropane	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
2,2-Dichloropropane	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
2-Butanone	µg/L	10,000 U	125,000 U	5,000 U	125 U	50,000 U	1,000 U	500 U	25.0 U	5,000 U	1,250 U	25.0 U	25.0 U
2-Chlorotoluene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
2-Hexanone	µg/L	2,000 U	25,000 U	1,000 U	25.0 U	10,000 U	200 U	100 U	5.00 U	1,000 U	250 U	5.00 U	5.00 U
4-Chlorotoluene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
4-Methyl-2-pentanone	µg/L	2,000 U	25,000 U	1,000 U	25.0 U	10,000 U	200 U	100 U	5.00 U	1,000 U	250 U	5.00 U	5.00 U
Acetone	µg/L	10,000 U	125,000 U	5,000 U	125 U	50,000 U	1,000 U	500 U	3.40 J	5,000 U	1,250 U	25.0 U	2.62 J
Benzene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	0.210 J	200 U	50.0 U	1.00 U	1.00 U
Bromobenzene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Bromochloromethane	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Bromoform	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Bromomethane	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Carbon Disulfide	µg/L	400 U	5,000 U	200 U	3.75 J	2,000 U	40.0 U	20.0 U	0.630 J	200 U	50.0 U	1.00 U	1.14
Dibromomethane	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Diisopropyl ether (DIPE)	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Ethylbenzene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Hexachlorobutadiene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Iodomethane	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Isopropylbenzene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
m-,p-Xylene	µg/L	800 U	10,000 U	400 U	10.0 U	4,000 U	80.0 U	40.0 U	2.00 U	400 U	100 U	2.00 U	0.150 J
Methyl tert-butyl ether	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	0.670 J	200 U	50.0 U	1.00 U	1.00 U
Naphthalene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
n-Butylbenzene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
n-Propylbenzene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
o-Xylene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
p-Isopropyltoluene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
sec-Butylbenzene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Styrene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
tert-Butylbenzene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Toluene	µg/L	400 U	5,000 U	200 U	0.550 J	2,000 U	40.0 U	20.0 U	0.210 J	200 U	50.0 U	1.00 U	0.340 J
trans-1,4-Dichloro-2-butene	µg/L	2,000 U	25,000 U	1,000 U	25.0 U	10,000 U	200 U	100 U	5.00 U	1,000 U	250 U	5.00 U	5.00 U
1,1,1-Trichloroethane	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
1,1,2,2-Tetrachloroethane	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
1,1,2-Trichloroethane	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U

Table 4
Summary of Groundwater Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID: Sample Depth(Feet): Date Collected: Sample Name:	Units	HPT-22 38 - 40 12/03/15 HPT-22 (38-40)	HPT-24 12 - 14 12/02/15 HPT-24 (12-14)	HPT-24 18 - 20 12/02/15 HPT-24 (18-20)	HPT-24 24 - 26 12/03/15 HPT-24 (24-26)	HPT-24 40 - 42 12/03/15 HPT-24 (40-42)	HPT-25 13 - 15 12/02/15 HPT-25 (13-15)	HPT-25 20 - 22 12/02/15 HPT-25 (20-22)	HPT-25 24 - 26 12/02/15 HPT-25 (24-26)	HPT-25 27 - 29 12/03/15 HPT-25 (27-29)	HPT-25 40 - 42 12/03/15 HPT-25 (40-42)	HPT-26 14 - 16 12/02/15 HPT-26 (14-16)	HPT-26 19 - 21 12/02/15 HPT-26 (19-21)
1,1-Dichloroethane	µg/L	400 U	2,100 J	164 J	1.05 J	2,000 U	11.2 J	12.8 J	1.85	200 U	50.0 U	1.00 U	0.260 J
1,1-Dichloroethene	µg/L	76.0 J	1,950 J	60.0 J	0.650 J	280 J	40.0 U	20.0 U	0.400 J	200 U	7.50 J	1.00 U	0.250 J
1,2,4-Trichlorobenzene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
1,2-Dibromo-3-chloropropane	µg/L	2,000 U	25,000 U	1,000 U	25.0 U	10,000 U	200 U	100 U	5.00 U	1,000 U	250 U	5.00 U	5.00 U
1,2-Dichlorobenzene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
1,2-Dichloroethane	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
1,2-Dichloropropane	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
1,3-Dichlorobenzene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
1,4-Dichlorobenzene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Bromodichloromethane	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Carbon Tetrachloride	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Chlorobenzene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Chloroethane	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Chloroform	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Chloromethane	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
cis-1,3-Dichloropropene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Dibromochloromethane	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Dichlorodifluoromethane	µg/L	2,000 U	25,000 U	1,000 U	25.0 U	10,000 U	200 U	100 U	5.00 U	1,000 U	250 U	5.00 U	5.00 U
Methylene Chloride	µg/L	2,000 U	25,000 U	1,000 U	25.0 U	10,000 U	200 U	100 U	5.00 U	1,000 U	250 U	5.00 U	5.00 U
trans-1,3-Dichloropropene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
Trichlorofluoromethane	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
cis-1,2-Dichloroethene	µg/L	8,960	11,600	4,080	26.0	20,300	770	607	12.3	200 U	1,640	1.00 U	1.00 U
Tetrachloroethene	µg/L	400 U	5,000 U	200 U	5.00 U	2,000 U	40.0 U	20.0 U	1.00 U	200 U	50.0 U	1.00 U	1.00 U
trans-1,2-Dichloroethene	µg/L	72.0 J	5,000 U	200 U	0.850 J	2,000 U	13.6 J	9.00 J	0.910 J	200 U	50.0 U	1.00 U	1.00 U
Trichloroethene	µg/L	464	261,000	3,030	41.3	41,700	54.4	46.8	7.74	200 U	50.0 U	1.00 U	1.00 U
Vinyl Chloride	µg/L	1,740	5,000 U	200 U	8.60	1,800 J	40.0 U	20.0 U	8.50	4,250	749	1.00 U	1.00 U
Total Chlorinated VOCs	µg/L	11,300 J	277,000 J	7,330 J	78.5 J	64,100 J	849 J	676 J	31.7 J	4,250	2,400 J	ND	0.510 J

Table 4
Summary of Groundwater Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID:		HPT-26	HPT-26	HPT-26	HPT-26	HPT-27	HPT-27	HPT-27	HPT-27	HPT-27	HPT-28	HPT-28	HPT-28
Sample Depth(Feet):		24 - 26	27 - 29	41 - 43	44 - 46	12 - 14	18 - 20	22 - 24	27 - 29	41 - 44	13 - 15	18 - 20	24 - 26
Date Collected:		12/02/15	12/02/15	12/02/15	12/02/15	12/02/15	12/02/15	12/02/15	12/02/15	12/02/15	12/01/15	12/01/15	12/01/15
Sample Name:	Units	HPT-26 (24-26)	HPT-26 (27-29)	HPT-26 (41-43)	HPT-26 (44-46)	HPT-27 (12-14)	HPT-27 (18-20)	HPT-27 (22-24)	HPT-27 (27-29)	HPT-27 (41-44)	HPT-28 (13-15)	HPT-28 (18-20)	HPT-28 (24-26)
Volatile Organics													
1,1,1,2-Tetrachloroethane	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,1-Dichloropropene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,3-Trichlorobenzene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,3-Trichloropropane	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,4-Trimethylbenzene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dibromoethane	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,3,5-Trimethylbenzene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,3-Dichloropropane	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2,2-Dichloropropane	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2-Butanone	µg/L	0.940 J	12,500 U	500 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	12.3 J	25.0 U	25.0 U	25.0 U
2-Chlorotoluene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2-Hexanone	µg/L	5.00 U	2,500 U	100 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
4-Chlorotoluene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
4-Methyl-2-pentanone	µg/L	5.00 U	2,500 U	100 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Acetone	µg/L	2.13 J	12,500 U	500 U	2.09 J	3.90 J	2.49 J	25.0 U	25.0 U	38.4	8.16 J	3.59 J	25.0 U
Benzene	µg/L	0.270 J	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.05	0.300 J	1.00 U	1.00 U	0.620 J
Bromobenzene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Bromochloromethane	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Bromoform	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Bromomethane	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Carbon Disulfide	µg/L	2.92	500 U	2.60 J	0.520 J	1.00 U	1.00 U	0.450 J	1.00 U	0.510 J	1.00 U	1.00 U	2.00
Dibromomethane	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Diisopropyl ether (DIPE)	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Ethylbenzene	µg/L	1.00 U	500 U	20.0 U	0.160 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	0.430 J
Hexachlorobutadiene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Iodomethane	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Isopropylbenzene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
m-,p-Xylene	µg/L	0.130 J	1,000 U	40.0 U	0.370 J	2.00 U	2.00 U	2.00 U	2.00 U	0.160 J	0.550 J	2.00 U	2.00 U
Methyl tert-butyl ether	µg/L	0.320 J	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	0.370 J	1.00 U	1.00 U	1.00 U	1.02
Naphthalene	µg/L	1.04	500 U	20.0 U	0.120 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
n-Butylbenzene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
n-Propylbenzene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	0.290 J
o-Xylene	µg/L	1.00 U	500 U	20.0 U	0.180 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
p-Isopropyltoluene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
sec-Butylbenzene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Styrene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
tert-Butylbenzene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Toluene	µg/L	0.450 J	500 U	20.0 U	0.680 J	1.00 U	0.220 J	1.00 U	0.490 J	0.420 J	0.150 J	1.00 U	0.650 J
trans-1,4-Dichloro-2-butene	µg/L	5.00 U	2,500 U	100 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
1,1,1-Trichloroethane	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,1,2,2-Tetrachloroethane	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,1,2-Trichloroethane	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U

Table 4
Summary of Groundwater Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID: Sample Depth(Feet): Date Collected: Sample Name:	Units	HPT-26 24 - 26 12/02/15 HPT-26 (24-26)	HPT-26 27 - 29 12/02/15 HPT-26 (27-29)	HPT-26 41 - 43 12/02/15 HPT-26 (41-43)	HPT-26 44 - 46 12/02/15 HPT-26 (44-46)	HPT-27 12 - 14 12/02/15 HPT-27 (12-14)	HPT-27 18 - 20 12/02/15 HPT-27 (18-20)	HPT-27 22 - 24 12/02/15 HPT-27 (22-24)	HPT-27 27 - 29 12/02/15 HPT-27 (27-29)	HPT-27 41 - 44 12/02/15 HPT-27 (41-44)	HPT-28 13 - 15 12/01/15 HPT-28 (13-15)	HPT-28 18 - 20 12/01/15 HPT-28 (18-20)	HPT-28 24 - 26 12/01/15 HPT-28 (24-26)
1,1-Dichloroethane	µg/L	3.13	500 U	20.0 U	1.00 U	1.00 U	1.00 U	0.440 J	1.06	3.99	1.00 U	1.00 U	0.720 J
1,1-Dichloroethene	µg/L	1.12	500 U	5.00 J	0.480 J	1.00 U	0.320 J	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,4-Trichlorobenzene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dibromo-3-chloropropane	µg/L	5.00 U	2,500 U	100 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
1,2-Dichlorobenzene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichloroethane	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichloropropane	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,3-Dichlorobenzene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,4-Dichlorobenzene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Bromodichloromethane	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Carbon Tetrachloride	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Chlorobenzene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Chloroethane	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Chloroform	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Chloromethane	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
cis-1,3-Dichloropropene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Dibromochloromethane	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Dichlorodifluoromethane	µg/L	5.00 U	2,500 U	100 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Methylene Chloride	µg/L	5.00 U	2,500 U	100 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
trans-1,3-Dichloropropene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Trichlorofluoromethane	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
cis-1,2-Dichloroethene	µg/L	5.85	500 U	533	34.3	1.00 U	1.00 U	1.75	0.110 J	30.0	1.00 U	1.00 U	1.00 U
Tetrachloroethene	µg/L	1.00 U	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
trans-1,2-Dichloroethene	µg/L	0.460 J	500 U	20.0 U	0.240 J	1.00 U	1.00 U	0.140 J	0.200 J	1.00 U	1.00 U	1.00 U	1.00 U
Trichloroethene	µg/L	0.620 J	500 U	20.0 U	1.00 U	1.00 U	1.00 U	1.54	1.00 U	0.790 J	1.00 U	0.630 J	1.00 U
Vinyl Chloride	µg/L	0.590 J	7,000	161	54.9	1.00 U	1.00 U	0.250 J	1.00 U	32.1	1.00 U	1.00 U	7.27
Total Chlorinated VOCs	µg/L	11.8 J	7,000	699 J	89.9 J	ND	0.320 J	4.12 J	1.37 J	66.9 J	ND	0.630 J	7.99 J

Table 4
Summary of Groundwater Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID:		HPT-28	HPT-28	HPT-29	HPT-29	HPT-29	HPT-29	HPT-29	HPT-29	HPT-30	HPT-30	HPT-30	HPT-30
Sample Depth(Feet):		30 - 33	37 - 40	13 - 15	19 - 21	25 - 27	29 - 31	36 - 38	39 - 41	13 - 15	17 - 19	24 - 26	30 - 32
Date Collected:		12/01/15	12/01/15	12/01/15	12/01/15	12/01/15	12/01/15	12/01/15	12/01/15	11/30/15	11/30/15	12/01/15	12/01/15
Sample Name:	Units	HPT-28 (30-33)	HPT-28 (37-40)	HPT-29 (13-15)	HPT-29 (19-21)	HPT-29 (25-27)	HPT-29 (29-31)	HPT-29 (36-38)	HPT-29 (39-41)	HPT-30 (13-15)	HPT-30 (17-19)	HPT-30 (24-26)	HPT-30 (30-32)
Volatile Organics													
1,1,1,2-Tetrachloroethane	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
1,1-Dichloropropene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
1,2,3-Trichlorobenzene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
1,2,3-Trichloropropane	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
1,2,4-Trimethylbenzene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	0.420 J	1.00 U	1.00 U	0.420 J	125 U
1,2-Dibromoethane	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
1,3,5-Trimethylbenzene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
1,3-Dichloropropane	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
2,2-Dichloropropane	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
2-Butanone	µg/L	20,000 U	14.6 J	25.0 U	25.0 U	25.0 U	500 U	125 U	36.4	25.0 U	25.0 U	25.0 U	3,130 U
2-Chlorotoluene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
2-Hexanone	µg/L	4,000 U	5.00 U	5.00 U	5.00 U	5.00 U	100 U	25.0 U	5.00 U	5.00 U	5.00 U	5.00 U	625 U
4-Chlorotoluene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
4-Methyl-2-pentanone	µg/L	4,000 U	5.00 U	5.00 U	5.00 U	5.00 U	100 U	25.0 U	5.00 U	5.00 U	5.00 U	5.00 U	625 U
Acetone	µg/L	20,000 U	9.86 J	25.0 U	25.0 U	25.0 U	500 U	125 U	49.6	25.0 U	25.0 U	25.0 U	3,130 U
Benzene	µg/L	800 U	0.180 J	1.00 U	1.00 U	0.820 J	20.0 U	0.750 J	0.450 J	1.00 U	1.00 U	0.750 J	125 U
Bromobenzene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Bromochloromethane	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Bromoform	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Bromomethane	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Carbon Disulfide	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Dibromomethane	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Diisopropyl ether (DIPE)	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Ethylbenzene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Hexachlorobutadiene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Iodomethane	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Isopropylbenzene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
m-,p-Xylene	µg/L	1,600 U	2.00 U	2.00 U	0.620 J	0.560 J	40.0 U	10.0 U	0.640 J	2.00 U	2.00 U	0.670 J	250 U
Methyl tert-butyl ether	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Naphthalene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	0.690 J	1.00 U	1.00 U	1.00 U	125 U
n-Butylbenzene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
n-Propylbenzene	µg/L	800 U	1.00 U	1.00 U	1.00 U	0.300 J	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
o-Xylene	µg/L	800 U	1.00 U	1.00 U	1.00 U	0.450 J	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	0.480 J	125 U
p-Isopropyltoluene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
sec-Butylbenzene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Styrene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
tert-Butylbenzene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Toluene	µg/L	800 U	13.4	1.00 U	0.190 J	2.18	88.8	110	43.6	1.00 U	1.00 U	0.270 J	125 U
trans-1,4-Dichloro-2-butene	µg/L	4,000 U	5.00 U	5.00 U	5.00 U	5.00 U	100 U	25.0 U	5.00 U	5.00 U	5.00 U	5.00 U	625 U
1,1,1-Trichloroethane	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
1,1,2,2-Tetrachloroethane	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
1,1,2-Trichloroethane	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U

Table 4
Summary of Groundwater Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID: Sample Depth(Feet): Date Collected: Sample Name:	Units	HPT-28 30 - 33 12/01/15 HPT-28 (30-33)	HPT-28 37 - 40 12/01/15 HPT-28 (37-40)	HPT-29 13 - 15 12/01/15 HPT-29 (13-15)	HPT-29 19 - 21 12/01/15 HPT-29 (19-21)	HPT-29 25 - 27 12/01/15 HPT-29 (25-27)	HPT-29 29 - 31 12/01/15 HPT-29 (29-31)	HPT-29 36 - 38 12/01/15 HPT-29 (36-38)	HPT-29 39 - 41 12/01/15 HPT-29 (39-41)	HPT-30 13 - 15 11/30/15 HPT-30 (13-15)	HPT-30 17 - 19 11/30/15 HPT-30 (17-19)	HPT-30 24 - 26 12/01/15 HPT-30 (24-26)	HPT-30 30 - 32 12/01/15 HPT-30 (30-32)
1,1-Dichloroethane	µg/L	800 U	1.36	1.00 U	1.00 U	1.78	20.0 U	5.00 U	0.370 J	1.00 U	0.280 J	3.84	125 U
1,1-Dichloroethene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	0.750 J	1.00 U	125 U
1,2,4-Trichlorobenzene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
1,2-Dibromo-3-chloropropane	µg/L	4,000 U	5.00 U	5.00 U	5.00 U	5.00 U	100 U	25.0 U	5.00 U	5.00 U	5.00 U	5.00 U	625 U
1,2-Dichlorobenzene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
1,2-Dichloroethane	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
1,2-Dichloropropane	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
1,3-Dichlorobenzene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
1,4-Dichlorobenzene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Bromodichloromethane	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Carbon Tetrachloride	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Chlorobenzene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Chloroethane	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Chloroform	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Chloromethane	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
cis-1,3-Dichloropropene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Dibromochloromethane	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Dichlorodifluoromethane	µg/L	4,000 U	5.00 U	5.00 U	5.00 U	5.00 U	100 U	25.0 U	5.00 U	5.00 U	5.00 U	5.00 U	625 U
Methylene Chloride	µg/L	4,000 U	5.00 U	5.00 U	5.00 U	5.00 U	100 U	25.0 U	5.00 U	5.00 U	5.00 U	5.00 U	625 U
trans-1,3-Dichloropropene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Trichlorofluoromethane	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
cis-1,2-Dichloroethene	µg/L	11,400	1.11	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	3.34	1.00 U	0.930 J	3.66	2,270
Tetrachloroethene	µg/L	800 U	1.00 U	1.00 U	1.00 U	1.00 U	20.0 U	5.00 U	2.88	1.00 U	1.00 U	1.00 U	125 U
trans-1,2-Dichloroethene	µg/L	800 U	1.00 U	1.00 U	1.00 U	2.98	20.0 U	5.00 U	1.00 U	1.00 U	1.00 U	1.00 U	125 U
Trichloroethene	µg/L	800 U	1.00 U	1.00 U	0.250 J	1.00 U	20.0 U	5.00 U	1.39	1.00 U	0.960 J	0.320 J	125 U
Vinyl Chloride	µg/L	14,900	2.02	1.00 U	1.00 U	1.04	426	3.40 J	2.27	1.00 U	1.00 U	2.54	125 U
Total Chlorinated VOCs	µg/L	26,300	4.49	ND	0.250 J	5.80	426	3.40 J	10.3 J	ND	2.92 J	10.4 J	2,270

Table 4
Summary of Groundwater Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID: Sample Depth(Feet): Date Collected: Sample Name:	Units	HPT-30 33 - 35 12/01/15 HPT-30 (33-35)	HPT-30 40 - 42 12/01/15 HPT-30 (40-42)	HPT-31 12 - 14 12/03/15 HPT-31 (12-14)	HPT-31 18 - 20 12/03/15 HPT-31 (18-20)	HPT-31 23 - 25 12/03/15 HPT-31 (23-25)	HPT-31 29 - 31 12/03/15 HPT-31 (29-31)	HPT-31 32 - 34 12/03/15 HPT-31 (32-34)	HPT-32 9 - 11 12/04/15 HPT-32 (9-11)	HPT-32 15 - 17 12/04/15 HPT-32 (15-17)	HPT-32 22 - 24 12/04/15 HPT-32 (22-24)	HPT-32 28 - 30 12/04/15 HPT-32 (28-30)	HPT-32 32 - 34 12/04/15 HPT-32 (32-34)
Volatile Organics													
1,1,1,2-Tetrachloroethane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
1,1-Dichloropropene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
1,2,3-Trichlorobenzene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
1,2,3-Trichloropropane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
1,2,4-Trimethylbenzene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	28.8 J	200 U [250 U]	10.0 U	40.0 U	1.00 U
1,2-Dibromoethane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
1,3,5-Trimethylbenzene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
1,3-Dichloropropane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
2,2-Dichloropropane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
2-Butanone	µg/L	500 U	25.0 U	2.26 J [1.38 J]	500 U	100 U	2,000 U	1,000 U	4,000 U	5,000 U [6,250 U]	250 U	1,000 U	25.0 U
2-Chlorotoluene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
2-Hexanone	µg/L	100 U	5.00 U	5.00 U [5.00 U]	100 U	20.0 U	400 U	200 U	800 U	1,000 U [1,250 U]	50.0 U	200 U	5.00 U
4-Chlorotoluene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
4-Methyl-2-pentanone	µg/L	100 U	5.00 U	5.00 U [5.00 U]	100 U	20.0 U	400 U	200 U	800 U	1,000 U [1,250 U]	50.0 U	200 U	5.00 U
Acetone	µg/L	500 U	25.0 U	4.06 J [2.19 J]	500 U	100 U	2,000 U	1,000 U	4,000 U	5,000 U [6,250 U]	250 U	1,000 U	25.0 U
Benzene	µg/L	20.0 U	0.200 J	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	0.300 J
Bromobenzene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Bromochloromethane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Bromoform	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Bromomethane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Carbon Disulfide	µg/L	20.0 U	1.00 U	0.510 J [0.160 J]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Dibromomethane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Diisopropyl ether (DIPE)	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Ethylbenzene	µg/L	20.0 U	0.500 J	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Hexachlorobutadiene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Iodomethane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Isopropylbenzene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
m-,p-Xylene	µg/L	40.0 U	0.830 J	2.00 U [2.00 U]	40.0 U	8.00 U	160 U	80.0 U	320 U	400 U [500 U]	20.0 U	80.0 U	2.00 U
Methyl tert-butyl ether	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Naphthalene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	1,140	200 U [250 U]	10.0 U	40.0 U	0.700 J
n-Butylbenzene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
n-Propylbenzene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
o-Xylene	µg/L	20.0 U	0.540 J	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
p-Isopropyltoluene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
sec-Butylbenzene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Styrene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
tert-Butylbenzene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.89
Toluene	µg/L	20.0 U	1.30	0.330 J [0.250 J]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	0.330 J
trans-1,4-Dichloro-2-butene	µg/L	100 U	5.00 U	5.00 U [5.00 U]	100 U	20.0 U	400 U	200 U	800 U	1,000 U [1,250 U]	50.0 U	200 U	5.00 U
1,1,1-Trichloroethane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
1,1,2,2-Tetrachloroethane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
1,1,2-Trichloroethane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U

Table 4
Summary of Groundwater Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID: Sample Depth(Feet): Date Collected: Sample Name:	Units	HPT-30 33 - 35 12/01/15 HPT-30 (33-35)	HPT-30 40 - 42 12/01/15 HPT-30 (40-42)	HPT-31 12 - 14 12/03/15 HPT-31 (12-14)	HPT-31 18 - 20 12/03/15 HPT-31 (18-20)	HPT-31 23 - 25 12/03/15 HPT-31 (23-25)	HPT-31 29 - 31 12/03/15 HPT-31 (29-31)	HPT-31 32 - 34 12/03/15 HPT-31 (32-34)	HPT-32 9 - 11 12/04/15 HPT-32 (9-11)	HPT-32 15 - 17 12/04/15 HPT-32 (15-17)	HPT-32 22 - 24 12/04/15 HPT-32 (22-24)	HPT-32 28 - 30 12/04/15 HPT-32 (28-30)	HPT-32 32 - 34 12/04/15 HPT-32 (32-34)
1,1-Dichloroethane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	471	7.24	80.0 U	40.0 U	160 U	78.0 J [95.0 J]	10.0 U	40.0 U	0.170 J
1,1-Dichloroethene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	41.6	11.2	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
1,2,4-Trichlorobenzene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
1,2-Dibromo-3-chloropropane	µg/L	100 U	5.00 U	5.00 U [5.00 U]	100 U	20.0 U	400 U	200 U	800 U	1,000 U [1,250 U]	50.0 U	200 U	5.00 U
1,2-Dichlorobenzene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
1,2-Dichloroethane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
1,2-Dichloropropane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
1,3-Dichlorobenzene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
1,4-Dichlorobenzene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Bromodichloromethane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Carbon Tetrachloride	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Chlorobenzene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Chloroethane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Chloroform	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Chloromethane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
cis-1,3-Dichloropropene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Dibromochloromethane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Dichlorodifluoromethane	µg/L	100 U	5.00 U	5.00 U [5.00 U]	100 U	20.0 U	400 U	200 U	800 U	1,000 U [1,250 U]	50.0 U	200 U	5.00 U
Methylene Chloride	µg/L	100 U	5.00 U	5.00 U [5.00 U]	100 U	20.0 U	400 U	200 U	800 U	1,000 U [1,250 U]	50.0 U	200 U	5.00 U
trans-1,3-Dichloropropene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Trichlorofluoromethane	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
cis-1,2-Dichloroethene	µg/L	381	9.21	1.00 U [1.00 U]	15.2 J	82.6	2,390	801	160 U	4,650 [6,140]	217	1,000	16.5
Tetrachloroethene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	4.00 U	80.0 U	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
trans-1,2-Dichloroethene	µg/L	20.0 U	1.00 U	1.00 U [1.00 U]	20.0 U	2.16 J	12.0 J	40.0 U	160 U	200 U [250 U]	10.0 U	40.0 U	1.00 U
Trichloroethene	µg/L	20.0 U	0.370 J	0.380 J [1.00 U]	20.0 U	18.0	80.0 U	40.0 U	160 U	268 [363]	5.20 J	832	4.95
Vinyl Chloride	µg/L	134	1.68	1.00 U [1.00 U]	20.0 U	3.84 J	80.0 U	40.0 U	160 U	844 [1,130]	33.5	40.0	1.19
Total Chlorinated VOCs	µg/L	515	11.3 J	0.380 J [ND]	528 J	125 J	2,400 J	801	ND	5,840 J [7,730 J]	256 J	1,870	22.8 J

Table 4
Summary of Groundwater Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID:		HPT-33	HPT-33	HPT-33	HPT-33	HPT-33	HPT-34	HPT-34	HPT-34	HPT-34	HPT-34	HPT-34	HPT-34	HPT-34
Sample Depth(Feet):		8 - 10	14 - 16	20 - 22	28 - 30	32 - 34	11 - 13	17 - 19	21 - 23	30 - 32	37 - 39	38 - 40	39 - 41	42 - 44
Date Collected:		12/04/15	12/04/15	12/04/15	12/04/15	12/04/15	12/04/15	12/04/15	12/04/15	12/04/15	12/04/15	12/04/15	12/04/15	12/04/15
Sample Name:	Units	HPT-33 (8-10)	HPT-33 (14-16)	HPT-33 (20-22)	HPT-33 (28-30)	HPT-33 (32-34)	HPT-34 (11-13)	HPT-34 (17-19)	HPT-34 (21-23)	HPT-34 (30-32)	HPT-34 (37-39)	HPT-34 (38-40)	HPT-34 (39-41)	HPT-34 (42-44)
Volatile Organics														
1,1,1,2-Tetrachloroethane	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
1,1-Dichloropropene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
1,2,3-Trichlorobenzene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
1,2,3-Trichloropropane	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
1,2,4-Trimethylbenzene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	0.460 J	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	0.410 J
1,2-Dibromoethane	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
1,3,5-Trimethylbenzene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	0.420 J	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
1,3-Dichloropropane	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
2,2-Dichloropropane	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
2-Butanone	µg/L	5,000 U	125,000 U	1,250 U	1,000 U	25.0 U	25.0 U	50,000 U	1,000 U	1,000 U	25.0 U	1,000 U	10,000 U	25.0 U
2-Chlorotoluene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
2-Hexanone	µg/L	1,000 U	25,000 U	250 U	200 U	5.00 U	5.00 U	10,000 U	200 U	200 U	5.00 U	200 U	2,000 U	5.00 U
4-Chlorotoluene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
4-Methyl-2-pentanone	µg/L	1,000 U	25,000 U	250 U	200 U	5.00 U	5.00 U	10,000 U	200 U	200 U	5.00 U	200 U	2,000 U	5.00 U
Acetone	µg/L	5,000 U	125,000 U	1,250 U	1,000 U	25.0 U	25.0 U	50,000 U	1,000 U	1,000 U	25.0 U	1,000 U	10,000 U	25.0 U
Benzene	µg/L	200 U	5,000 U	50.0 U	40.0 U	0.540 J	0.280 J	2,000 U	40.0 U	40.0 U	0.260 J	40.0 U	400 U	0.170 J
Bromobenzene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Bromochloromethane	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Bromoform	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Bromomethane	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Carbon Disulfide	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	0.700 J	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Dibromomethane	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Diisopropyl ether (DIPE)	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Ethylbenzene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	0.520 J	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	0.500 J
Hexachlorobutadiene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Iodomethane	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Isopropylbenzene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	0.560 J	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
m-,p-Xylene	µg/L	400 U	10,000 U	100 U	80.0 U	0.560 J	0.980 J	4,000 U	80.0 U	80.0 U	0.550 J	80.0 U	800 U	0.690 J
Methyl tert-butyl ether	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Naphthalene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	383	1.00 U	31.2 J	400 U	0.710 J
n-Butylbenzene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
n-Propylbenzene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	0.240 J	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
o-Xylene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	0.850 J	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
p-Isopropyltoluene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
sec-Butylbenzene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Styrene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
tert-Butylbenzene	µg/L	200 U	5,000 U	50.0 U	40.0 U	0.810 J	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Toluene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	0.730 J	2,000 U	40.0 U	40.0 U	0.160 J	40.0 U	400 U	0.820 J
trans-1,4-Dichloro-2-butene	µg/L	1,000 U	25,000 U	250 U	200 U	5.00 U	5.00 U	10,000 U	200 U	200 U	5.00 U	200 U	2,000 U	5.00 U
1,1,1-Trichloroethane	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
1,1,2,2-Tetrachloroethane	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
1,1,2-Trichloroethane	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U

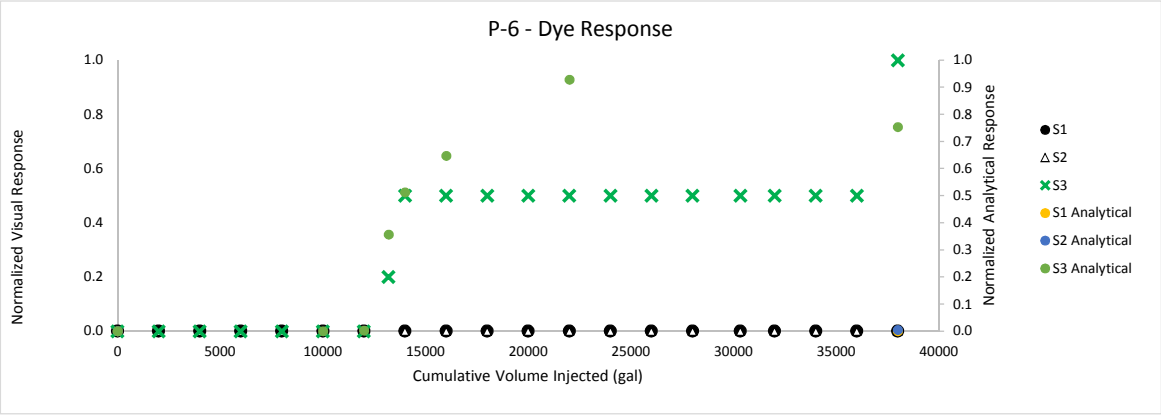
Table 4
Summary of Groundwater Sample Analytical Results
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Location ID:		HPT-33	HPT-33	HPT-33	HPT-33	HPT-33	HPT-34	HPT-34	HPT-34	HPT-34	HPT-34	HPT-34	HPT-34	HPT-34
Sample Depth(Feet):		8 - 10	14 - 16	20 - 22	28 - 30	32 - 34	11 - 13	17 - 19	21 - 23	30 - 32	37 - 39	38 - 40	39 - 41	42 - 44
Date Collected:		12/04/15	12/04/15	12/04/15	12/04/15	12/04/15	12/04/15	12/04/15	12/04/15	12/04/15	12/04/15	12/04/15	12/04/15	12/04/15
Sample Name:	Units	HPT-33 (8-10)	HPT-33 (14-16)	HPT-33 (20-22)	HPT-33 (28-30)	HPT-33 (32-34)	HPT-34 (11-13)	HPT-34 (17-19)	HPT-34 (21-23)	HPT-34 (30-32)	HPT-34 (37-39)	HPT-34 (38-40)	HPT-34 (39-41)	HPT-34 (42-44)
1,1-Dichloroethane	µg/L	1,090	5,000 U	50.0 U	40.0 U	1.00 U	1.77	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
1,1-Dichloroethene	µg/L	1,070	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
1,2,4-Trichlorobenzene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
1,2-Dibromo-3-chloropropane	µg/L	1,000 U	25,000 U	250 U	200 U	5.00 U	5.00 U	10,000 U	200 U	200 U	5.00 U	200 U	2,000 U	5.00 U
1,2-Dichlorobenzene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
1,2-Dichloroethane	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
1,2-Dichloropropane	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
1,3-Dichlorobenzene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
1,4-Dichlorobenzene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Bromodichloromethane	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Carbon Tetrachloride	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Chlorobenzene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Chloroethane	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Chloroform	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Chloromethane	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
cis-1,3-Dichloropropene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Dibromochloromethane	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Dichlorodifluoromethane	µg/L	1,000 U	25,000 U	250 U	200 U	5.00 U	5.00 U	10,000 U	200 U	200 U	5.00 U	200 U	2,000 U	5.00 U
Methylene Chloride	µg/L	1,000 U	25,000 U	250 U	200 U	5.00 U	5.00 U	10,000 U	200 U	200 U	5.00 U	200 U	2,000 U	5.00 U
trans-1,3-Dichloropropene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Trichlorofluoromethane	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
cis-1,2-Dichloroethene	µg/L	1,780	109,000	1,090	494	1.83	0.840 J	52,700	1,080	90.8	2.39	578	576	22.9
Tetrachloroethene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
trans-1,2-Dichloroethene	µg/L	200 U	5,000 U	50.0 U	40.0 U	1.00 U	1.00 U	2,000 U	40.0 U	40.0 U	1.00 U	40.0 U	400 U	1.00 U
Trichloroethene	µg/L	200 U	164,000	473	908	1.74	1.00 U	64,200	114	79.6	5.42	685	7,400	46.8
Vinyl Chloride	µg/L	4,620	3,200 J	55.5	42.8	1.00 U	6.69	2,640	83.2	40.0 U	1.00 U	40.0 U	400 U	0.670 J
Total Chlorinated VOCs	µg/L	8,560	276,000 J	1,620	1,440	3.57	9.30 J	120,000	1,280	170	7.81	1,260	7,980	70.4 J

Notes:
J = Indicates an estimated value.
ND = not detected
U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
µg/L = micrograms per liter
VOC = volatile organic compound

Table 5
Tracer Response Injection Test
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Cumulative Injected Volume (gal)	P-6											
	S1				S2				S3			
	DTW (ft-btoc)	Visual Conc.		Analytical Normalized Conc.	DTW (ft-btoc)	Visual Conc.		Analytical Normalized Conc.	DTW (ft-btoc)	Visual Conc.		Analytical Normalized Conc.
		Dye	NC			Dye	NC			Dye	NC	
0	6.28	0	0.00	0.000	6.35	0	0.00	0.000	6.27	0	0.00	0.000
2,000	3.33	0	0.00		3.5	0	0.00		3.66	0	0.00	
4,000	3.3	0	0.00		3.51	0	0.00		3.64	0	0.00	
6,000	3.23	0	0.00		3.42	0	0.00		3.57	0	0.00	
8,000	3.2	0	0.00		3.4	0	0.00		3.54	0	0.00	
10,000	3.23	0	0.00		3.42	0	0.00		3.59	0	0.00	0.000
12,000	3.64	0	0.00		3.81	0	0.00		3.95	0	0.00	0.002
13,200										0.2	0.20	0.356
14,000	3.12	0	0.00		3.31	0	0.00		3.47	0.5	0.50	0.513
15,620												
16,000	2.77	0	0.00		2.98	0	0.00		3.11	0.5	0.50	0.648
18,000	3.31	0	0.00		3.5	0	0.00		3.58	0.5	0.50	
19,600												
20,000	3.25	0	0.00		3.43	0	0.00		3.52	0.5	0.50	
22,000	3.2	0	0.00		3.37	0	0.00		3.47	0.5	0.50	0.928
24,000	2.97	0	0.00		3.16	0	0.00		3.3	0.5	0.50	
26,000	2.98	0	0.00		3.18	0	0.00		3.32	0.5	0.50	
28,000	2.99	0	0.00		3.18	0	0.00		3.33	0.5	0.50	
30,329	3.03	0	0.00		3.23	0	0.00		3.35	0.5	0.50	
32,000	3.03	0	0.00		3.25	0	0.00		3.37	0.5	0.50	
34,000	3	0	0.00		3.22	0	0.00		3.35	0.5	0.50	
36,000	2.95	0	0.00		3.16	0	0.00		3.3	0.5	0.50	
38,000	2.94	0	0.00	0.000	3.15	0	0.00	0.005	3.28	1	1.00	0.753



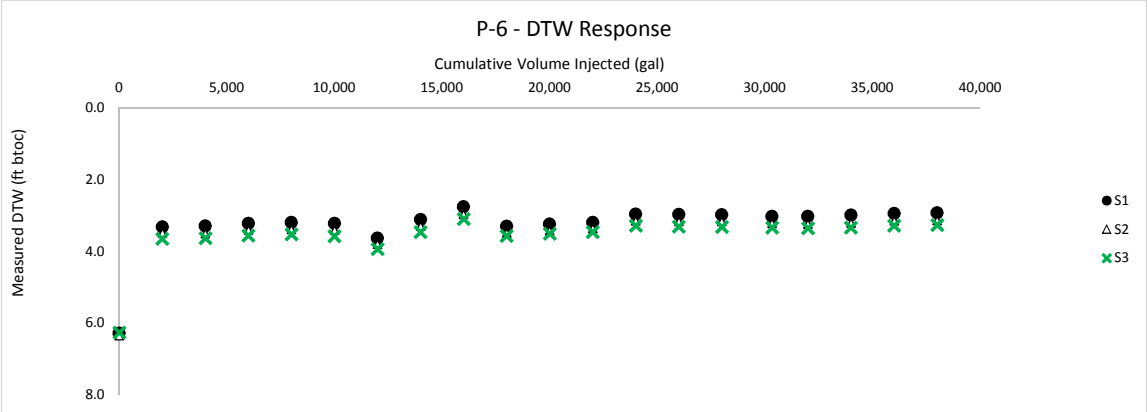
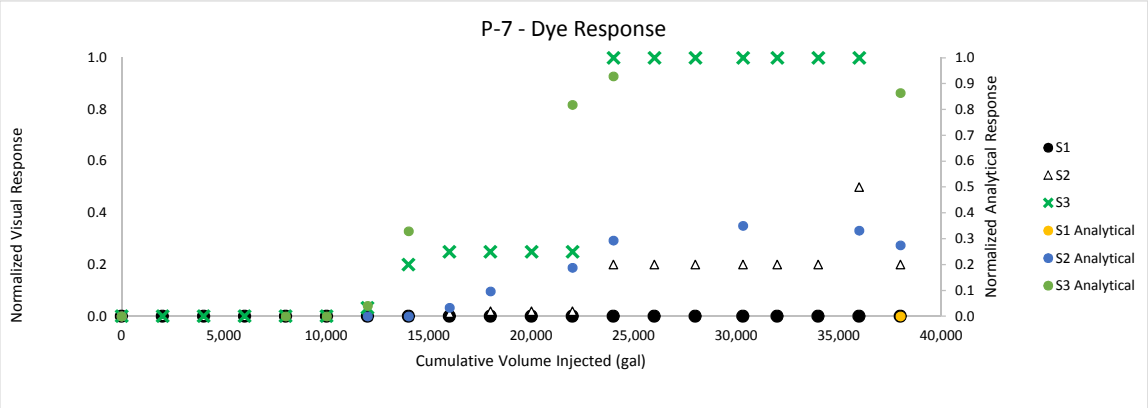


Table 5
Tracer Response Injection Test
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Cumulative Injected Volume (gal)	P-7											
	S1				S2				S3			
	DTW (ft-btoc)	Visual Conc.		Analytical Normalized Conc.	DTW (ft-btoc)	Visual Conc.		Analytical Normalized Conc.	DTW (ft-btoc)	Visual Conc.		Analytical Normalized Conc.
		Dye	NC			Dye	NC			Dye	NC	
0	5.66	0	0.00	0.000	5.68	0	0.00	0.000	5.66	0	0.00	0.000
2,000	2.24	0	0.00		2.18	0	0.00		2.18	0	0.00	
4,000	2.19	0	0.00		2.14	0	0.00		2.17	0	0.00	
6,000	2.1	0	0.00		2.06	0	0.00		2.07	0	0.00	
8,000	2.05	0	0.00		2.02	0	0.00		2.04	0	0.00	0.000
10,000	2.09	0	0.00		2.05	0	0.00		2.07	0	0.00	0.000
12,000	2.52	0	0.00		2.49	0	0.00	0.000	2.5	0.033	0.03	0.040
13,200												
14,000	1.97	0	0.00		1.93	0	0.00	0.000	1.94	0.2	0.20	0.329
15,620												
16,000	1.7	0	0.00		1.66	0.013	0.01	0.033	1.66	0.25	0.25	
18,000	2.37	0	0.00		2.3	0.02	0.02	0.096	2.3	0.25	0.25	
19,600												
20,000	2.28	0	0.00		2.23	0.02	0.02		2.24	0.25	0.25	
22,000	2.25	0	0.00		2.2	0.02	0.02	0.188	2.2	0.25	0.25	0.819
24,000	1.79	0	0.00		1.76	0.2	0.20	0.294	1.77	1	1.00	0.928
26,000	1.78	0	0.00		1.74	0.2	0.20		1.78	1	1.00	
28,000	1.8	0	0.00		1.78	0.2	0.20		1.79	1	1.00	
30,329	1.82	0	0.00		1.83	0.2	0.20	0.350	1.83	1	1.00	
32,000	1.84	0	0.00		1.82	0.2	0.20		1.82	1	1.00	
34,000	1.82	0	0.00		1.78	0.2	0.20		1.8	1	1.00	
36,000	1.76	0	0.00		1.73	0.5	0.50	0.332	1.74	1	1.00	
38,000	1.76	0	0.00	0.000	1.75	0.2	0.20	0.275	1.77	1	1.00	0.864



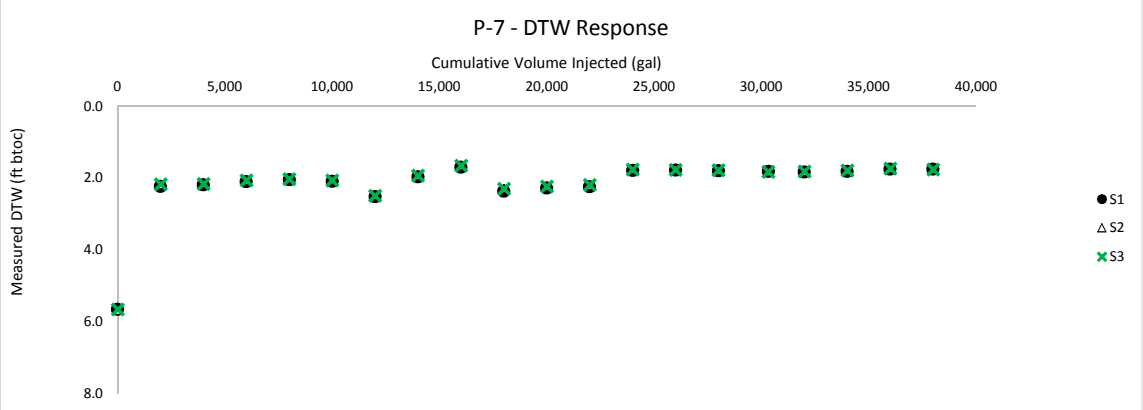
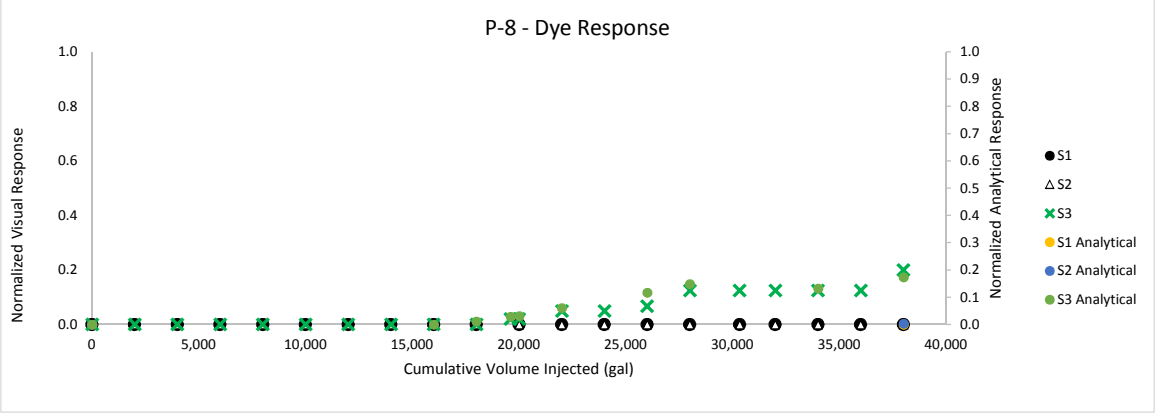


Table 5
Tracer Response Injection Test
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Cumulative Injected Volume (gal)	P-8											
	S1				S2				S3			
	DTW (ft-btoc)	Visual Conc.		Analytical Normalized Conc.	DTW (ft-btoc)	Visual Conc.		Analytical Normalized Conc.	DTW (ft-btoc)	Visual Conc.		Analytical Normalized Conc.
		Dye	NC			Dye	NC			Dye	NC	
0	5.9	0	0.00	0.000	6.01	0	0.00	0.000	5.91	0	0.00	0.000
2,000	2.71	0	0.00		2.9	0	0.00		2.99	0	0.00	
4,000	2.68	0	0.00		2.85	0	0.00		2.95	0	0.00	
6,000	2.6	0	0.00		2.77	0	0.00		2.87	0	0.00	
8,000	2.55	0	0.00		2.74	0	0.00		2.85	0	0.00	
10,000	2.59	0	0.00		2.78	0	0.00		2.89	0	0.00	
12,000	3	0	0.00		3.18	0	0.00		3.26	0	0.00	
13,200												
14,000	2.47	0	0.00		2.66	0	0.00		2.79	0	0.00	
15,620												
16,000	2.18	0	0.00		2.37	0	0.00		2.47	0	0.00	0.000
18,000	2.78	0	0.00		2.95	0	0.00		3.02	0	0.00	0.012
19,600										0.02	0.02	0.029
20,000	2.72	0	0.00		2.88	0	0.00		2.93	0.02	0.02	0.032
22,000	2.66	0	0.00		2.84	0	0.00		2.58	0.05	0.05	0.060
24,000	2.31	0	0.00		2.52	0	0.00		2.61	0.05	0.05	
26,000	2.31	0	0.00		2.52	0	0.00		2.61	0.067	0.07	0.118
28,000	2.34	0	0.00		2.54	0	0.00		2.63	0.125	0.13	0.149
30,329	2.36	0	0.00		2.57	0	0.00		2.65	0.125	0.13	
32,000	2.37	0	0.00		2.57	0	0.00		2.67	0.125	0.13	
34,000	2.34	0	0.00		2.55	0	0.00		2.65	0.125	0.13	0.132
36,000	2.3	0	0.00		2.5	0	0.00		2.57	0.125	0.13	
38,000	2.3	0	0.00	0.000	2.39	0	0.00	0.003	2.59	0.2	0.20	0.174



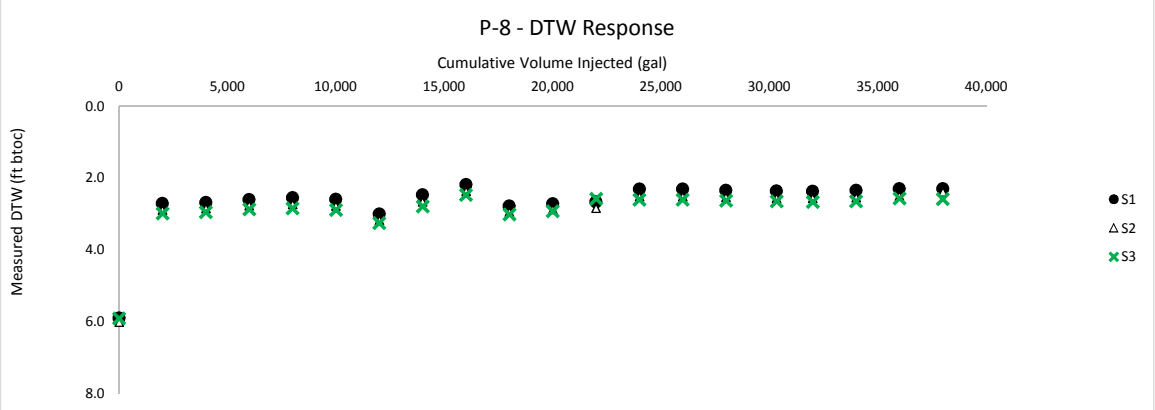
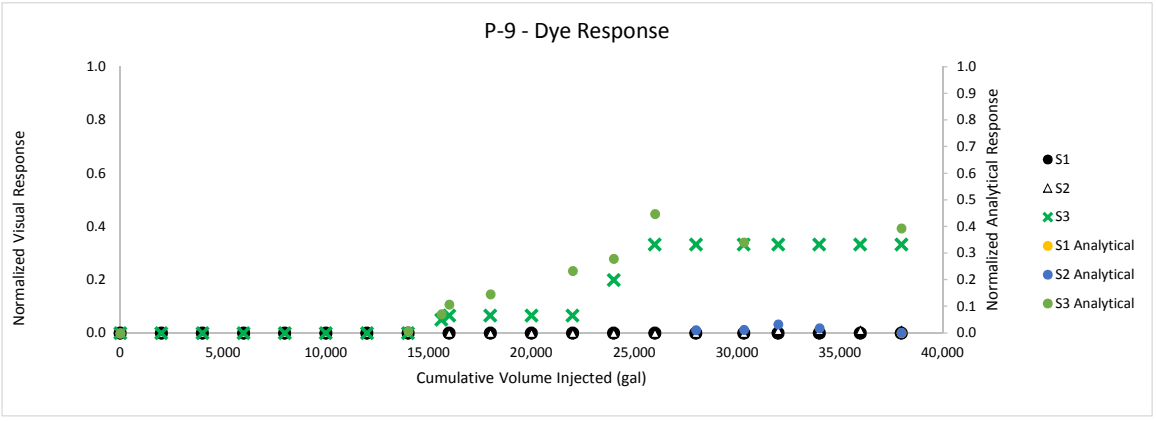


Table 5
Tracer Response Injection Test
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Cumulative Injected Volume (gal)	P-9											
	S1				S2				S3			
	DTW (ft-btoc)	Visual Conc.		Analytical Normalized Conc.	DTW (ft-btoc)	Visual Conc.		Analytical Normalized Conc.	DTW (ft-btoc)	Visual Conc.		Analytical Normalized Conc.
		Dye	NC			Dye	NC			Dye	NC	
0	5.78	0	0.00	0.000	5.89	0	0.00	0.000	5.57	0	0.00	0.000
2,000	2.73	0	0.00		2.83	0	0.00		2.86	0	0.00	
4,000	2.69	0	0.00		2.81	0	0.00		2.82	0	0.00	
6,000	2.62	0	0.00		2.74	0	0.00		2.76	0	0.00	
8,000	2.58	0	0.00		2.7	0	0.00		2.73	0	0.00	
10,000	2.62	0	0.00		2.73	0	0.00		2.77	0	0.00	
12,000	2.99	0	0.00		3.11	0	0.00		3.12	0	0.00	
13,200												
14,000	2.49	0	0.00		2.61	0	0.00		2.66	0	0.00	0.006
15,620										0.05	0.05	0.071
16,000	2.18	0	0.00		2.31	0	0.00		2.36	0.067	0.07	0.107
18,000	2.75	0	0.00		2.88	0	0.00		2.85	0.067	0.07	0.146
19,600												
20,000	2.7	0	0.00		2.81	0	0.00		2.8	0.067	0.07	
22,000	2.63	0	0.00		2.76	0	0.00		2.73	0.067	0.07	0.234
24,000	2.34	0	0.00		2.47	0	0.00		2.49	0.2	0.20	0.280
26,000	2.35	0	0.00		2.48	0	0.00		2.5	0.333	0.33	0.448
28,000	2.36	0	0.00		2.48	0	0.00	0.011	2.51	0.333	0.33	
30,329	2.4	0	0.00		2.52	0	0.00	0.012	2.53	0.333	0.33	0.341
32,000	2.4	0	0.00		2.53	0.01	0.01	0.033	2.54	0.333	0.33	
34,000	2.38	0	0.00		2.48	0.01	0.01	0.018	2.52	0.333	0.33	
36,000	2.32	0	0.00		2.45	0.01	0.01		2.47	0.333	0.33	
38,000	2.32	0	0.00	0.001	2.45	0.01	0.01	0.002	2.48	0.333	0.33	0.394



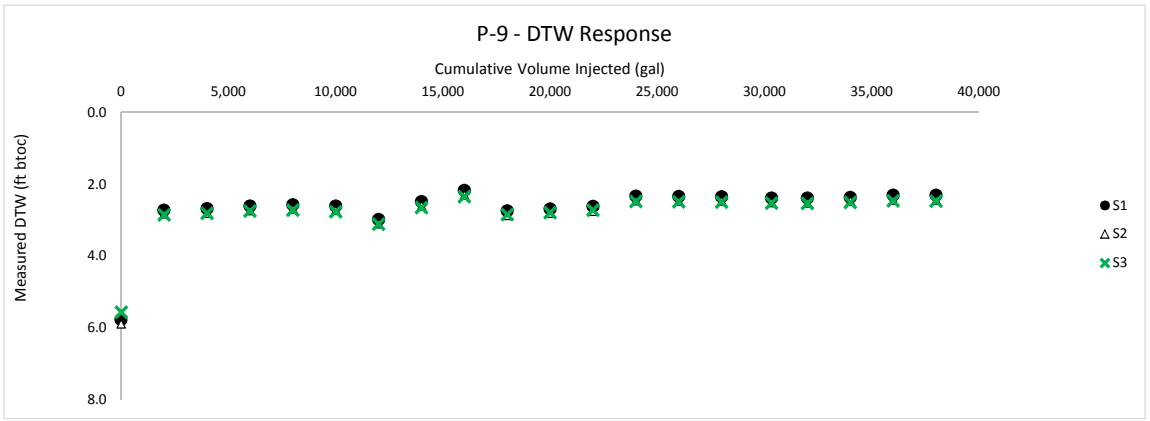
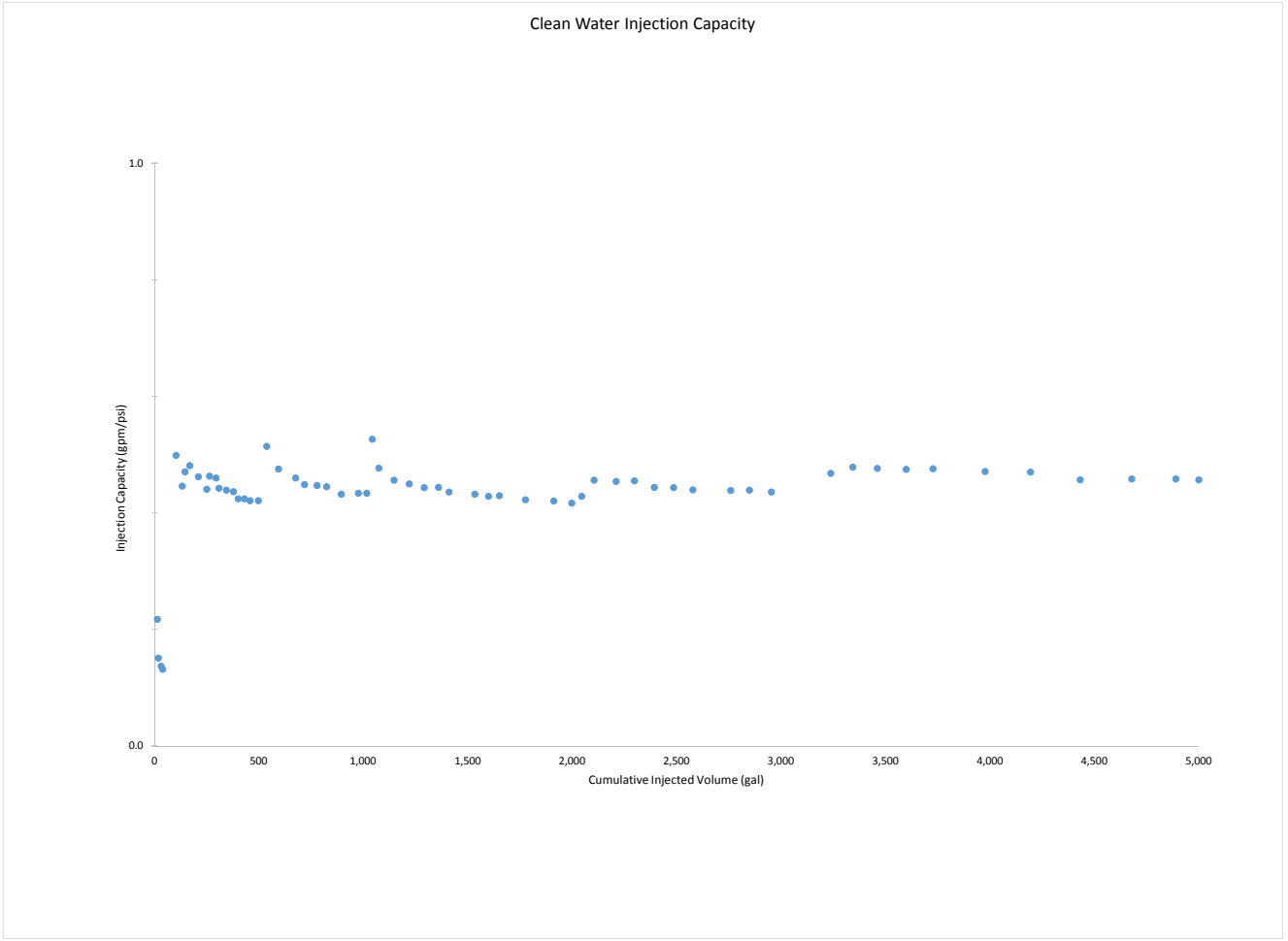


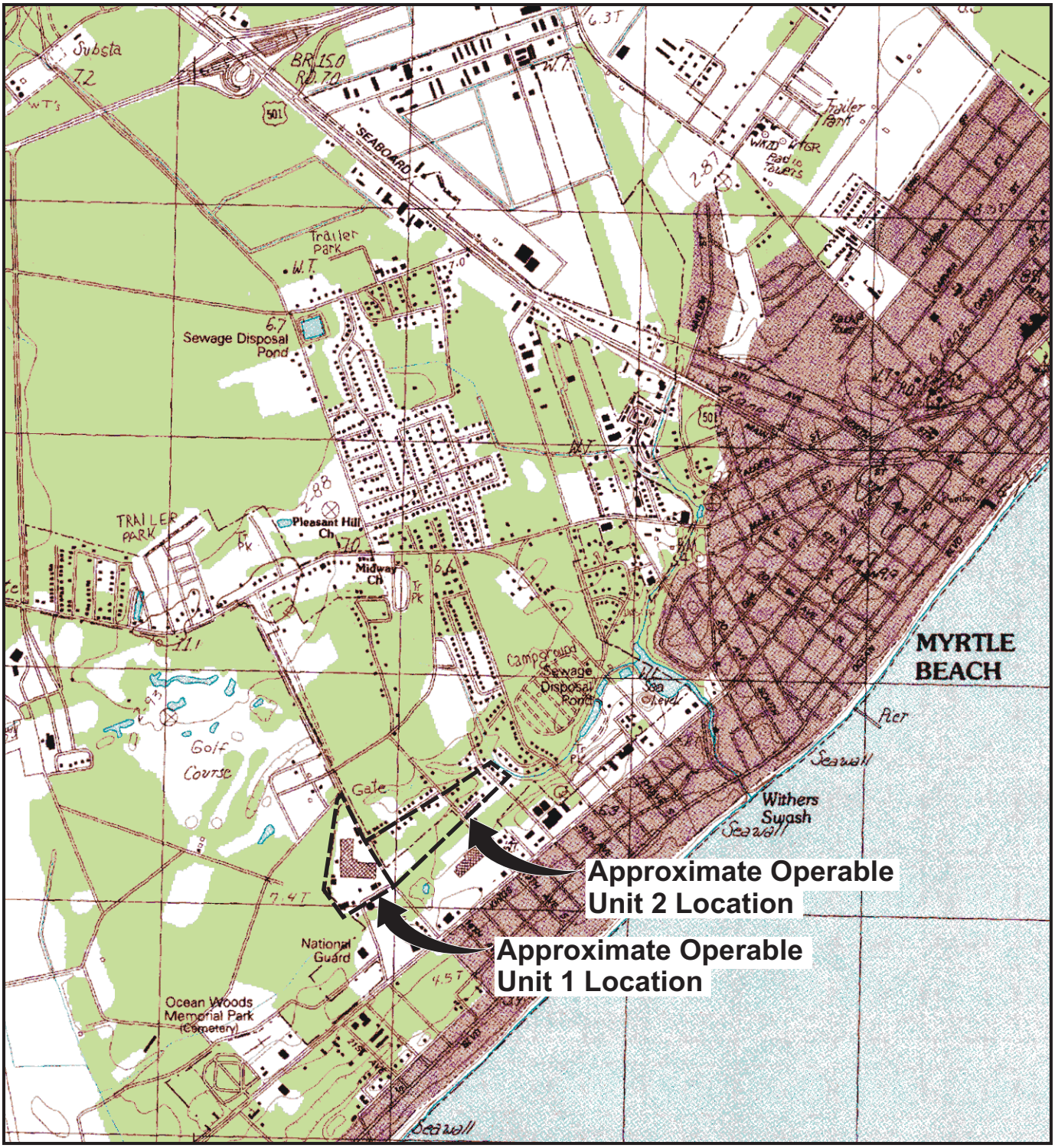
Table 6
Clean Water Injection Test Data
Feasibility Study Investigation Report
Operable Unit 1
Myrtle Beach, South Carolina

Cumulative Volume Injected (gal)	Injection Pressure		Injection Flow Rate (gpm)	Injection Capacity (gpm/psi)
	Wellhead (psi)	Top of screen (psi)		
13	0	5.70	1.24	0.22
18	0	5.70	0.86	0.15
31	0	5.70	0.78	0.14
38	0	5.70	0.75	0.13
102	0	5.70	2.84	0.50
132	0	5.70	2.54	0.45
146	0	5.70	2.68	0.47
168	0	5.70	2.74	0.48
209	0	5.70	2.63	0.46
250	0	5.70	2.51	0.44
263	1	6.70	3.1	0.46
294	1	6.70	3.08	0.46
307	1	6.70	2.96	0.44
344	1	6.70	2.94	0.44
377	1	6.70	2.92	0.44
400	1	6.70	2.84	0.42
430	1	6.70	2.84	0.42
457	1	6.70	2.82	0.42
496	1	6.70	2.82	0.42
537	5	10.70	5.5	0.51
593	5	10.70	5.08	0.47
675	5	10.70	4.92	0.46
718	5	10.70	4.8	0.45
778	5	10.70	4.78	0.45
823	5	10.70	4.76	0.45
893	5	10.70	4.62	0.43
975	5	10.70	4.64	0.43
1016	5	10.70	4.64	0.43
1042	10	15.70	8.26	0.53
1074	10	15.70	7.48	0.48
1146	10	15.70	7.16	0.46
1219	10	15.70	7.06	0.45
1290	10	15.70	6.96	0.44
1359	10	15.70	6.97	0.44
1410	10	15.70	6.84	0.44
1533	10	15.70	6.78	0.43
1598	10	15.70	6.72	0.43
1651	10	15.70	6.74	0.43
1776	10	15.70	6.63	0.42
1911	10	15.70	6.6	0.42
1997	10	15.70	6.54	0.42
2045	15	20.70	8.86	0.43
2104	15	20.70	9.44	0.46
2210	15	20.70	9.39	0.45
2297	15	20.70	9.42	0.46
2393	15	20.70	9.19	0.44
2485	15	20.70	9.17	0.44
2577	15	20.70	9.1	0.44
2758	15	20.70	9.08	0.44
2848	15	20.70	9.09	0.44
2953	15	20.70	9.02	0.44
3237	20	25.70	12.02	0.47
3343	20	25.70	12.3	0.48
3461	20	25.70	12.24	0.48
3598	20	25.70	12.2	0.47
3726	20	25.70	12.22	0.48
3977	20	25.70	12.1	0.47
4194	20	25.70	12.08	0.47
4432	20	25.70	11.73	0.46
4678	20	25.70	11.78	0.46
4890	20	25.70	11.78	0.46
5000	20	25.70	11.73	0.46



Notes:
gal = gallon
gpm = gallons per minute
psi = pounds per square inch

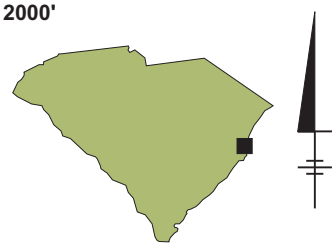
FIGURES



REFERENCE: BASE MAP USGS 7.5 MIN. QUAD., MYRTLE BEACH, SOUTH CAROLINA, PHOTOREVISED 1984.

2000' 0 2000'

Approximate Scale: 1" = 2000'



Area Location

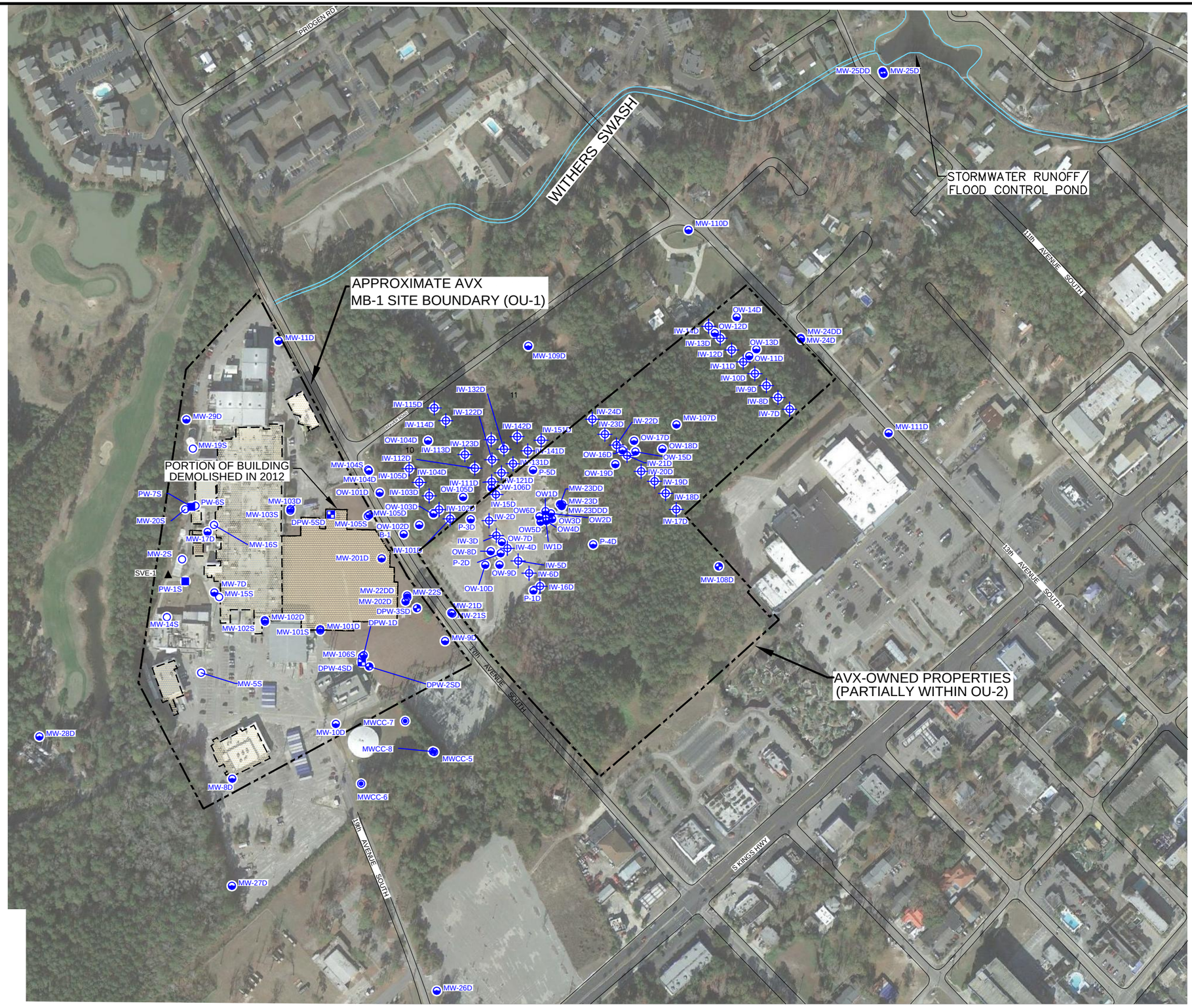
AVX CORPORATION
MYRTLE BEACH FACILITY
MYRTLE BEACH, SOUTH CAROLINA
FEASIBILITY STUDY INVESTIGATION REPORT

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE
1-1

10/13/2016 SYRACUSE, NY-ENV/CAD-141, DJHOWES
B0007393/0002/00015/CDR/07393N03.CDR



LEGEND:

- MONITORING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- MONITORING WELL SCREENED IN THE LOWER TERRACE DEPOSITS
- MONITORING WELL SCREENED IN THE PEEDEE FORMATION
- MONITORING WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
- FORMER PUMPING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- PRODUCTION WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
- INJECTION WELL SCREENED IN THE LOWER TERRACE DEPOSITS
- CARMIKE WELL LOCATION SCREENED IN THE UPPER TERRACE DEPOSITS
- FORMER SOIL VAPOR EXTRACTION WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- 11 NANCE PROPERTY PARCELS 10 & 11

NOTES:

1. AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO.
2. THE RELATIONSHIPS BETWEEN INVESTIGATION LOCATIONS AND OTHER FEATURES LIKE ROADS, BUILDINGS AND WATER FEATURES ARE APPROXIMATE.

0 300' 600'

GRAPHIC SCALE

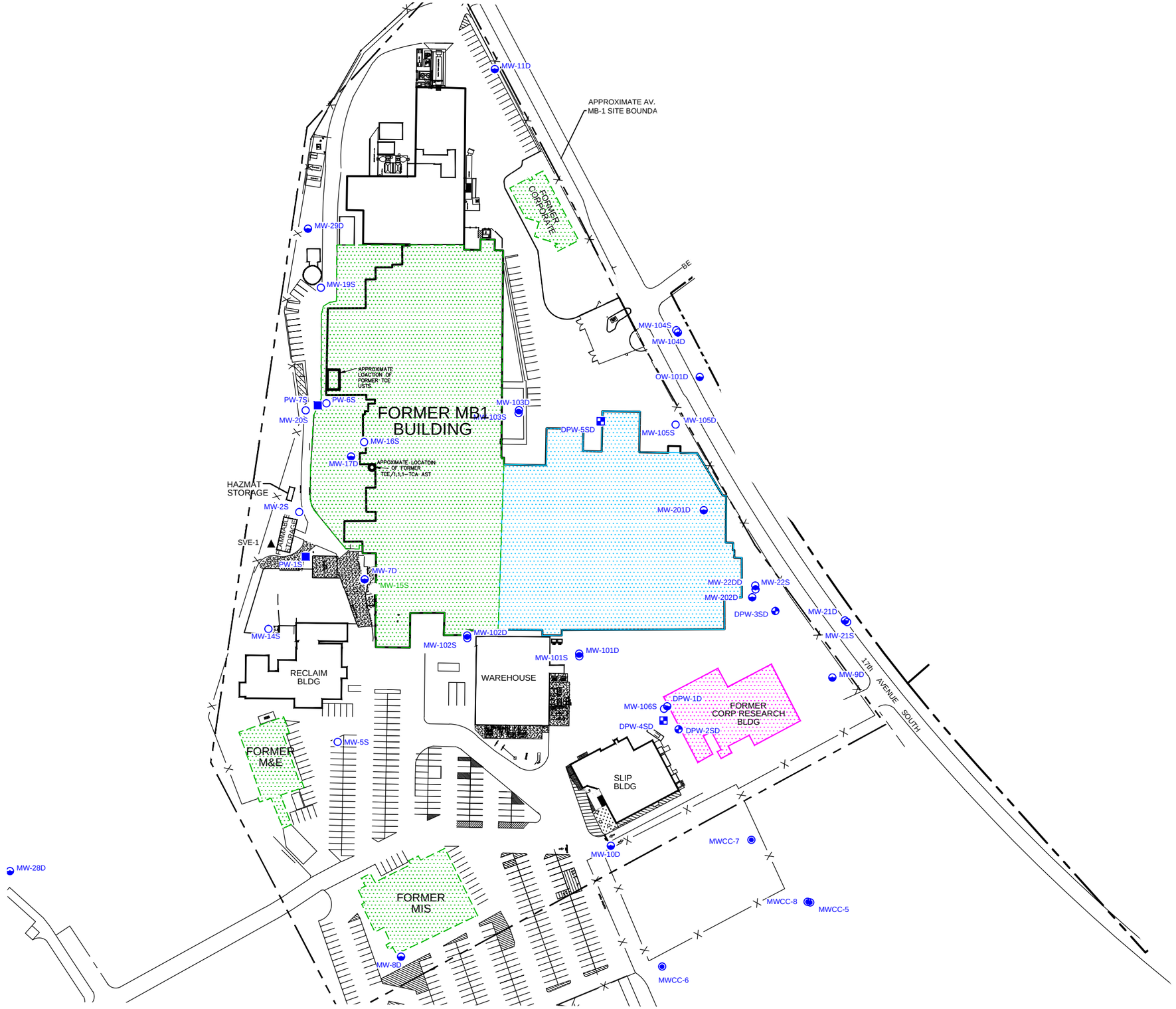
AVX CORPORATION
MYRTLE BEACH FACILITY
MYRTLE BEACH, SOUTH CAROLINA
FEASIBILITY STUDY INVESTIGATION REPORT

AVX-OWNED PROPERTIES

ARCADIS Design & Consultancy for natural and built assets

FIGURE
2-1

CITY: Syracuse DIV/GROUP: Env/CAD DB: A.Schilling, P.LISTER LD: A. Schilling PM/TM: M.Hanish LYR: ON=*;OFF=REF, (FRZ)
G:\ENVCAD\SYRACUSE\ACTIVE\07393X06\002\00002\DWG\FS07393B01.DWG LAYOUT: 2-1 SAVED: 10/14/2016 12:09 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 10/14/2016 12:09 PM BY: SCHILLING, ADAM
XREFS: 07393XBL 07393X01 IMAGES: 07394X06.jp2 PROJECTNAME: ----



LEGEND:

- MONITORING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- MONITORING WELL SCREENED IN THE LOWER TERRACE DEPOSITS
- MONITORING WELL SCREENED IN THE PEEDEE FORMATION
- MONITORING WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
- FORMER PUMPING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- PRODUCTION WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
- CARMIKE WELL LOCATION SCREENED IN THE UPPER TERRACE DEPOSITS
- FORMER SOIL VAPOR EXTRACTION WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- DEMOLISHED BUILDING (2015)
- DEMOLISHED BUILDING (2012)
- DEMOLISHED BUILDING (2009)

NOTES:

1. THE RELATIONSHIPS BETWEEN INVESTIGATION LOCATIONS AND OTHER FEATURES LIKE ROADS, BUILDINGS AND WATER FEATURES ARE APPROXIMATE.

0 150' 300'

GRAPHIC SCALE

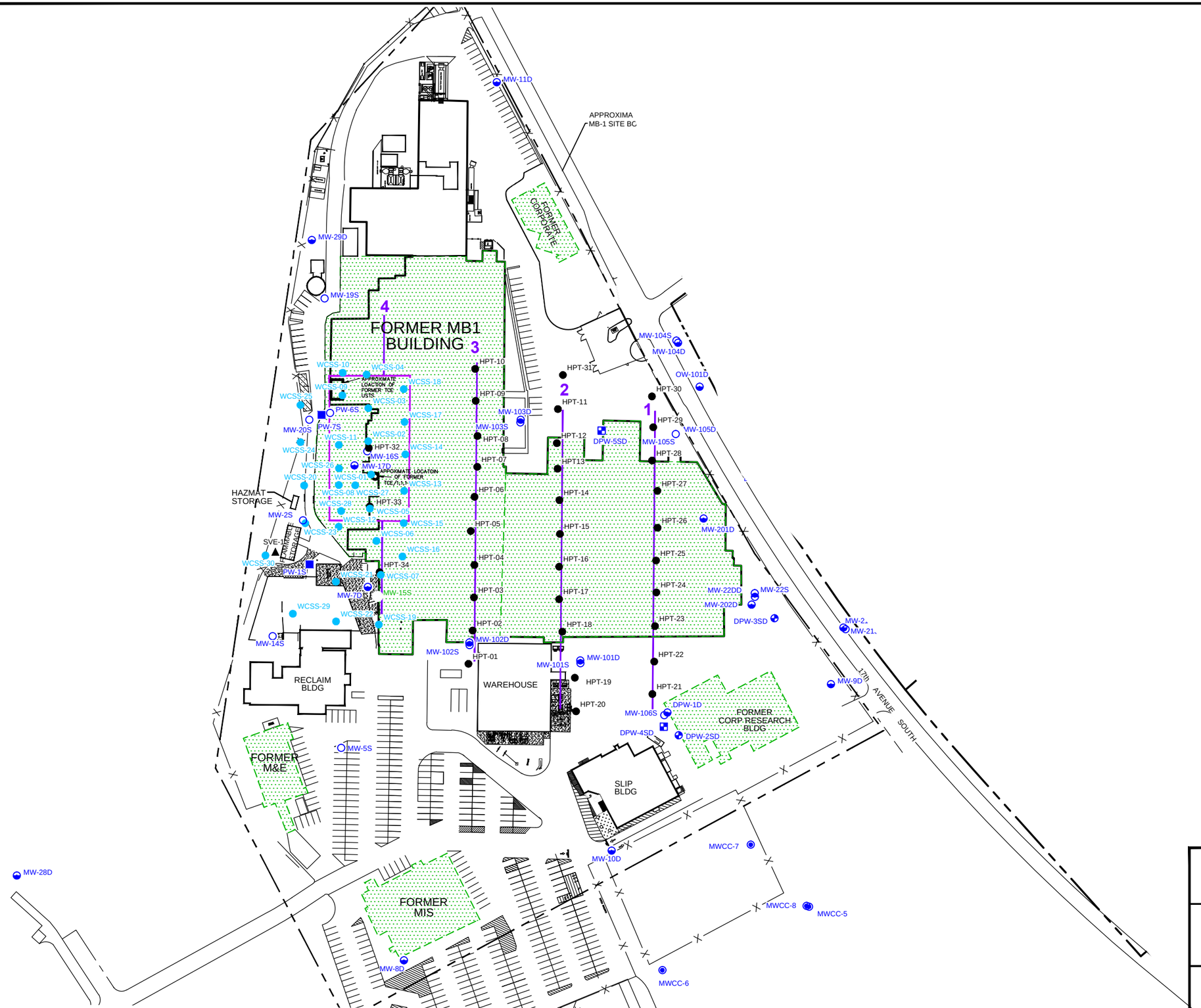
AVX CORPORATION
MYRTLE BEACH FACILITY
MYRTLE BEACH, SOUTH CAROLINA
FEASIBILITY STUDY INVESTIGATION REPORT

OU-1 LAYOUT

ARCADIS Design & Consultancy for natural and built assets.

FIGURE
2-2

CITY: Syracuse DIV/GROUP: EnvCAD DB: A.Schilling, P.LISTER LD: A.Schilling PM/TM: M.Hanish LYR: ON=*;OFF=REF, (FRZ)
G:\ENVCAD\SYRACUSE\ACTIVE\00073930\002\0002\DWG\F5\07393B09.DWG LAYOUT: 2-2 SAVED: 8/1/2016 10:34 AM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 8/23/2016 9:19 AM BY: SCHILLING, ADAM
XREFS: IMAGES:
07393X00 07394X06.jp2
07393X12



LEGEND:

- MONITORING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- MONITORING WELL SCREENED IN THE LOWER TERRACE DEPOSITS
- MONITORING WELL SCREENED IN THE PEEDEE FORMATION
- MONITORING WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
- FORMER PUMPING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- PRODUCTION WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
- CARMIKE WELL LOCATION SCREENED IN THE UPPER TERRACE DEPOSITS
- FORMER SOIL VAPOR EXTRACTION WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- DEMOLISHED BUILDING
- ANTICIPATED EXTENT OF WCSS LOCATION
- ANTICIPATED HPT AND VAP TRANSECT LOCATION

NOTES:

1. AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO.
2. THE RELATIONSHIPS BETWEEN INVESTIGATION LOCATIONS AND OTHER FEATURES LIKE ROADS, BUILDINGS AND WATER FEATURES ARE APPROXIMATE.

0 150' 300'

GRAPHIC SCALE

AVX CORPORATION
MYRTLE BEACH FACILITY
MYRTLE BEACH, SOUTH CAROLINA
FEASIBILITY STUDY INVESTIGATION REPORT

INVESTIGATION LOCATIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE
3-1

CITY: Syracuse DIV/GROUP: Env/CAD DB: A.Schilling, P.LISTER LD: A. Schilling PM/TM: M.Hanish LYR: ON=*;OFF=REF; (FRZ)
G:\ENVCAD\SYRACUSE\ACTIVE\00073930\02\00002\DWG\FS07393B08.DWG LAYOUT: 3-1 SAVED: 8/1/2016 11:40 AM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 8/23/2016 9:18 AM BY: SCHILLING, ADAM
XREFS: IMAGES:
07393X00 07394X06.jp2
07393X01
07393X12

ARCADIS Design & Consultancy for natural and built assets

LEGEND

TCE

- <0.005
- 0.005 - 1.0
- 1.0 - 10
- 10 - 100
- 100 - 1,000
- 1,000 - 5,000
- >5,000

Note: The colors at each location represent the range of the highest detected concentrations. Vertical distribution is not accounted for at these locations.

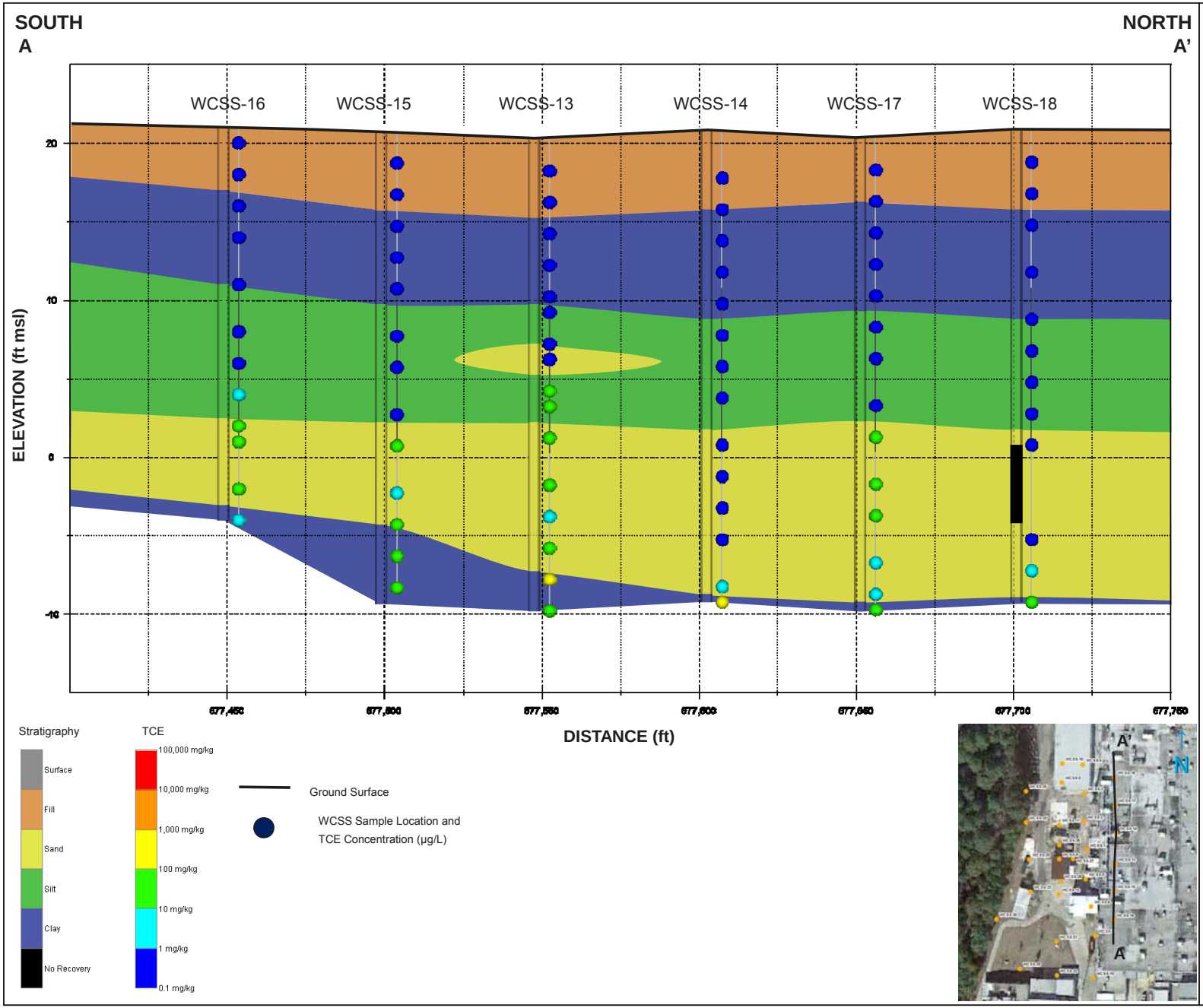
Figure 3-2
Trichloroethene in Soil

Myrtle Beach Facility
AVX Corporation
Myrtle Beach, South Carolina

N

0 220 ft

Source: USGS 7.5-minute Series Topographic Quadrangle, NAME (DATE).



ARCADIS Design & Consultancy for natural and built assets

Figure 3-3
Source Area Section A-A'

AVX Myrtle Beach
Myrtle Beach, South Carolina

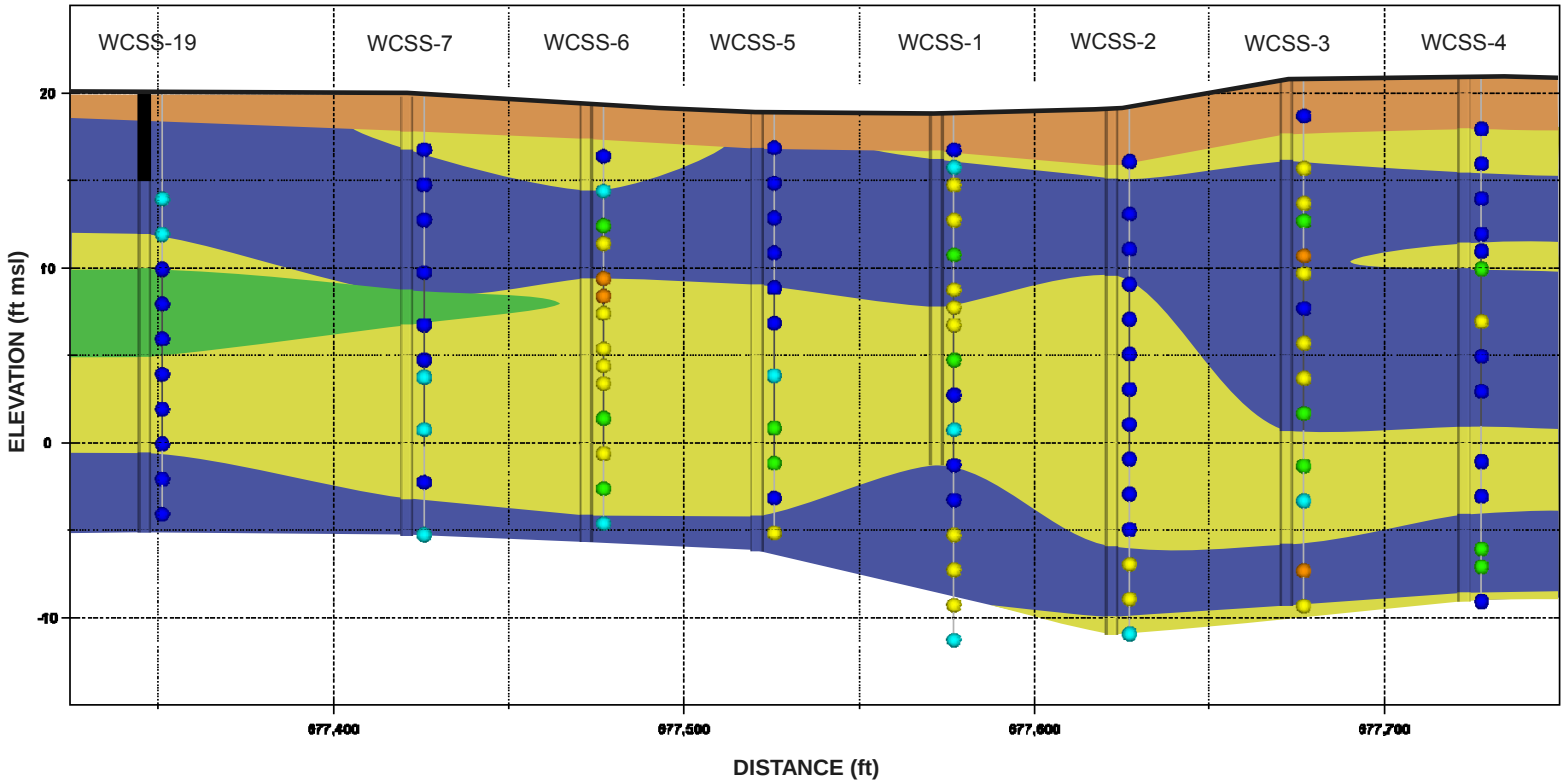
N

0 2,000 ft

Source: USGS 7.5-minute Series Topographic Quadrangle, NAME (DATE).

SOUTH
B

NORTH
B'

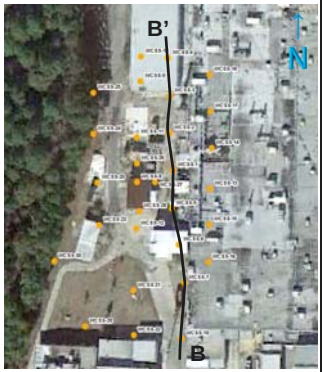


Stratigraphy
- Surface
- Fill
- Sand
- Silt
- Clay
- No Recovery

TCE
- 100,000 mg/kg
- 10,000 mg/kg
- 1,000 mg/kg
- 100 mg/kg
- 10 mg/kg
- 1 mg/kg
- 0.1 mg/kg

Ground Surface

WCSS Sample Location and TCE Concentration (µg/L)



ARCADIS Design & Consultancy for natural and built assets

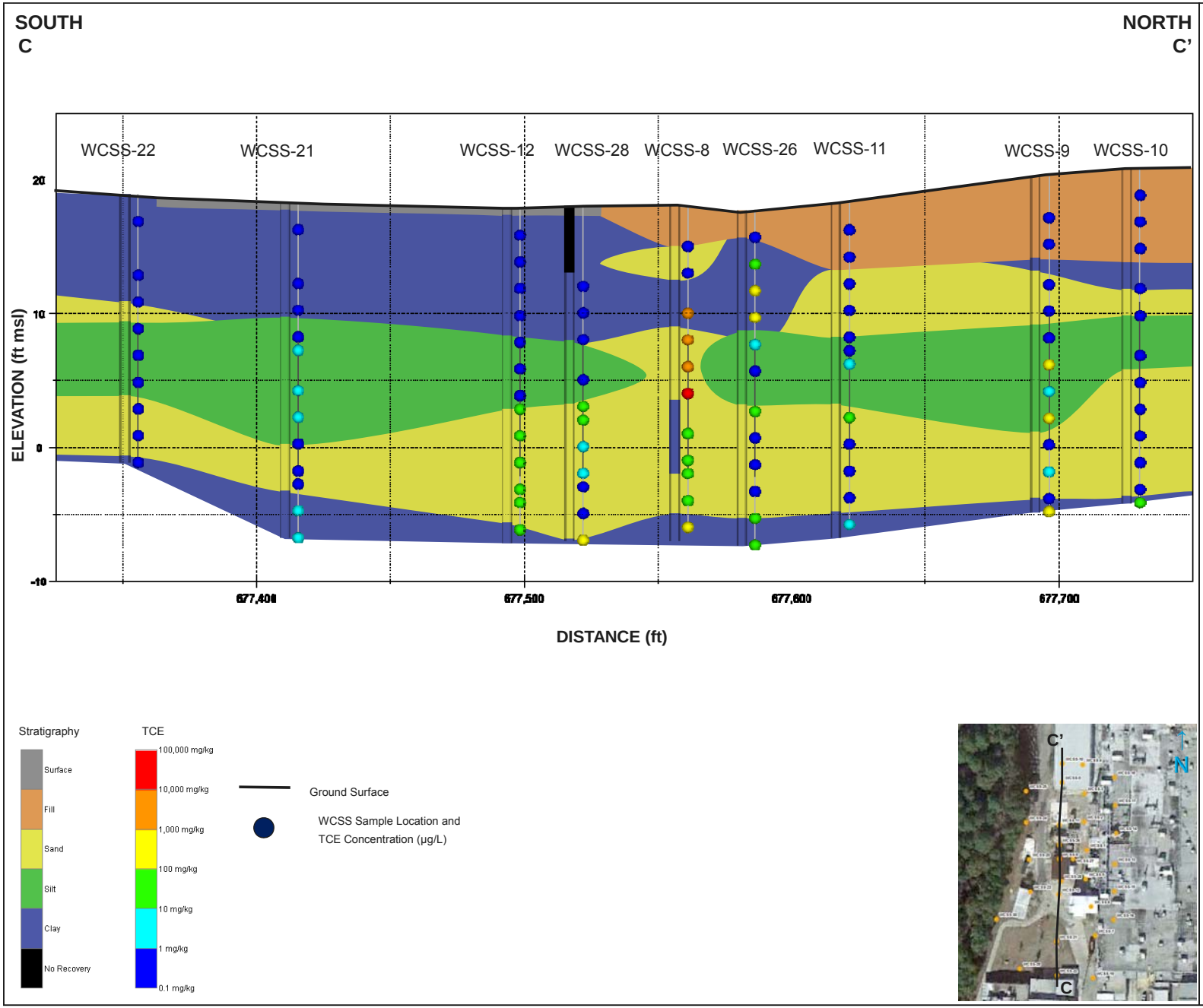
Figure 3-4
Source Area Section B-B'

AVX Myrtle Beach
Myrtle Beach, South Carolina

N

0 2,000 ft

Source: USGS 7.5-minute Series Topographic Quadrangle, NAME (DATE).

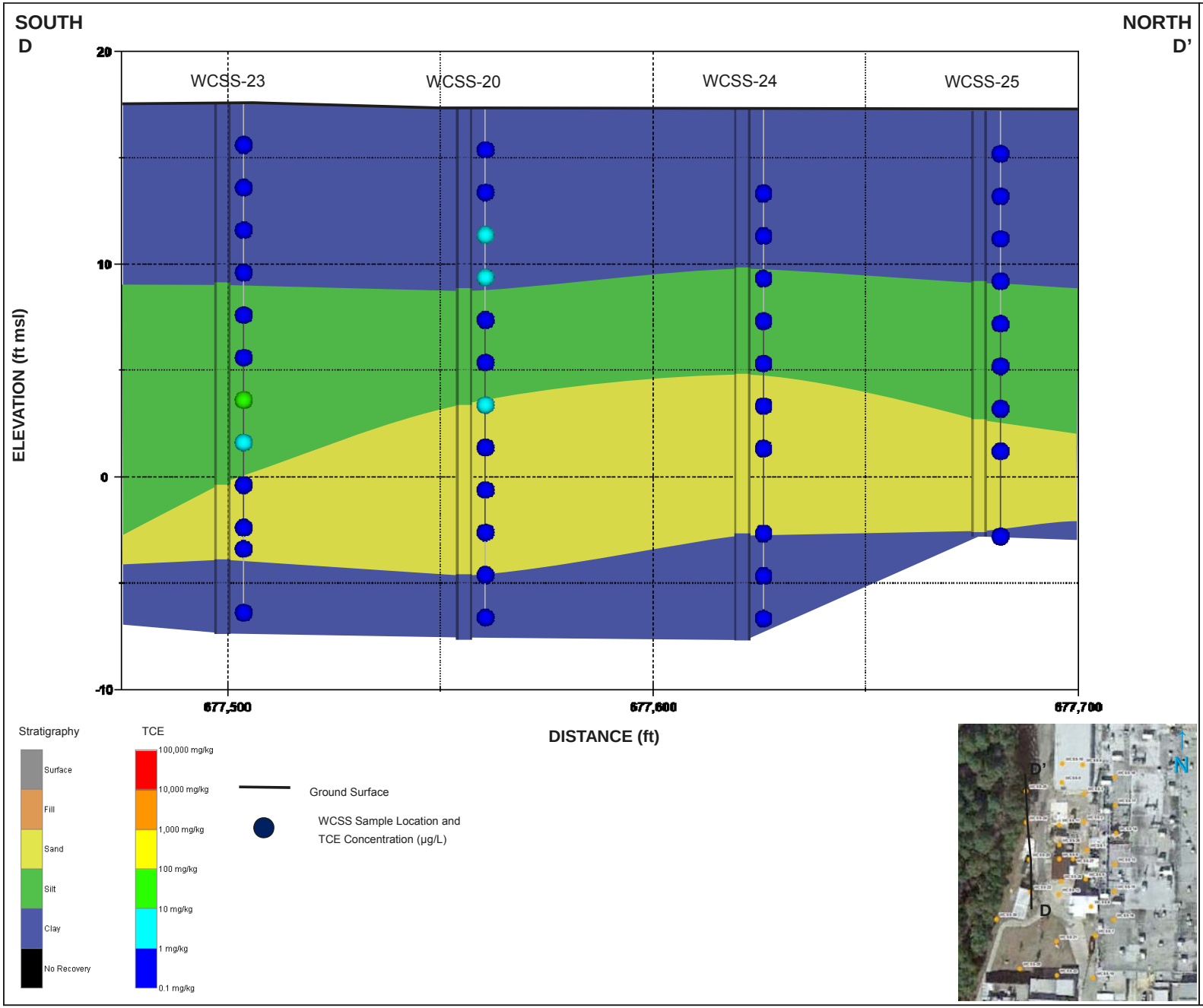


ARCADIS Design & Consultancy for natural and built assets

Figure 3-5
Source Area Section C-C'

AVX Myrtle Beach
Myrtle Beach, South Carolina

Source: USGS 7.5-minute Series Topographic Quadrangle, NAME (DATE).



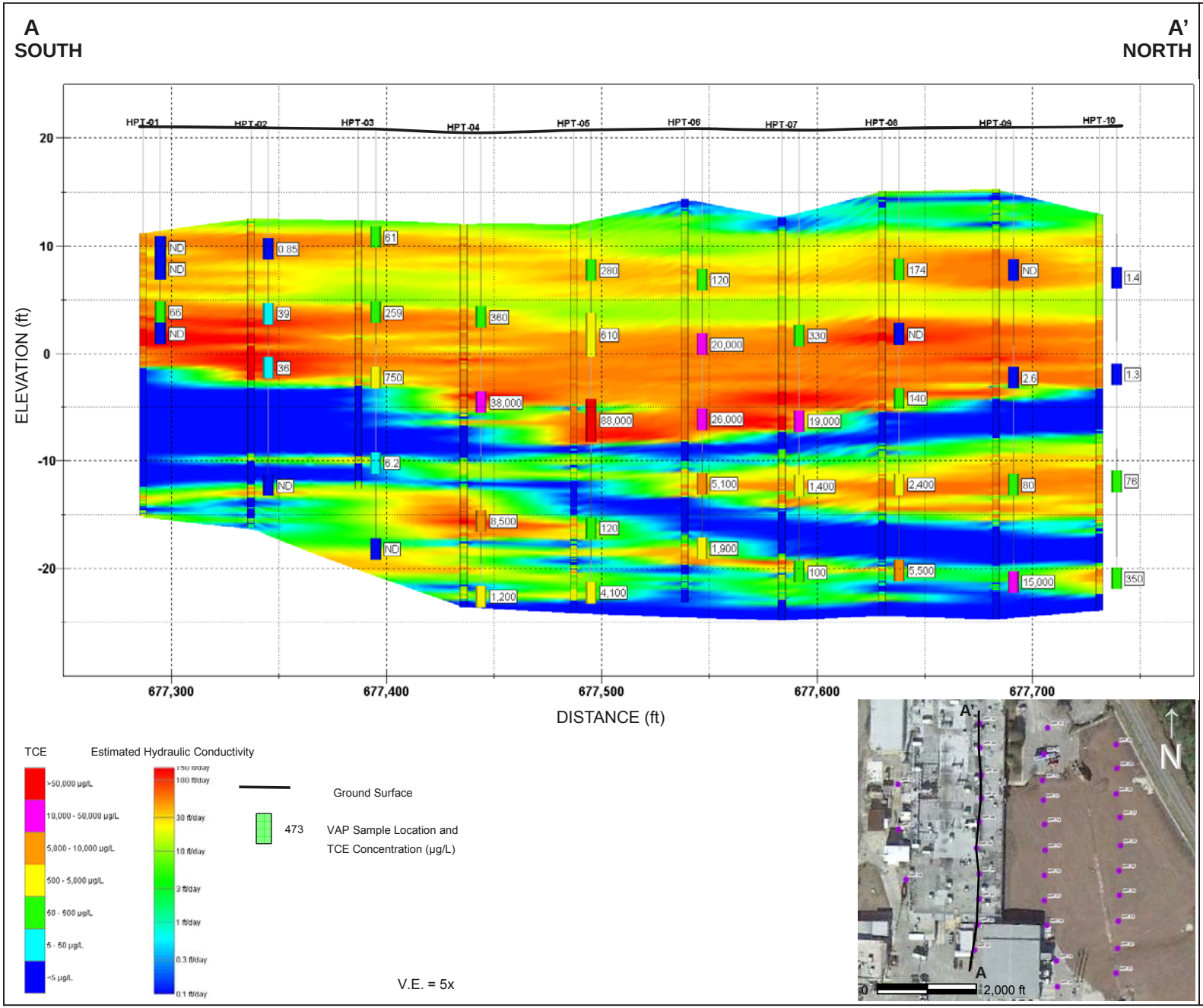
ARCADIS Design & Consultancy for natural and built assets

Figure 3-6
Source Area Section D-D'

AVX Myrtle Beach
Myrtle Beach, South Carolina

N 0 2,000 ft

Source: USGS 7.5-minute Series Topographic Quadrangle, NAME (DATE).



ARCADIS Design & Consultancy for natural and built assets

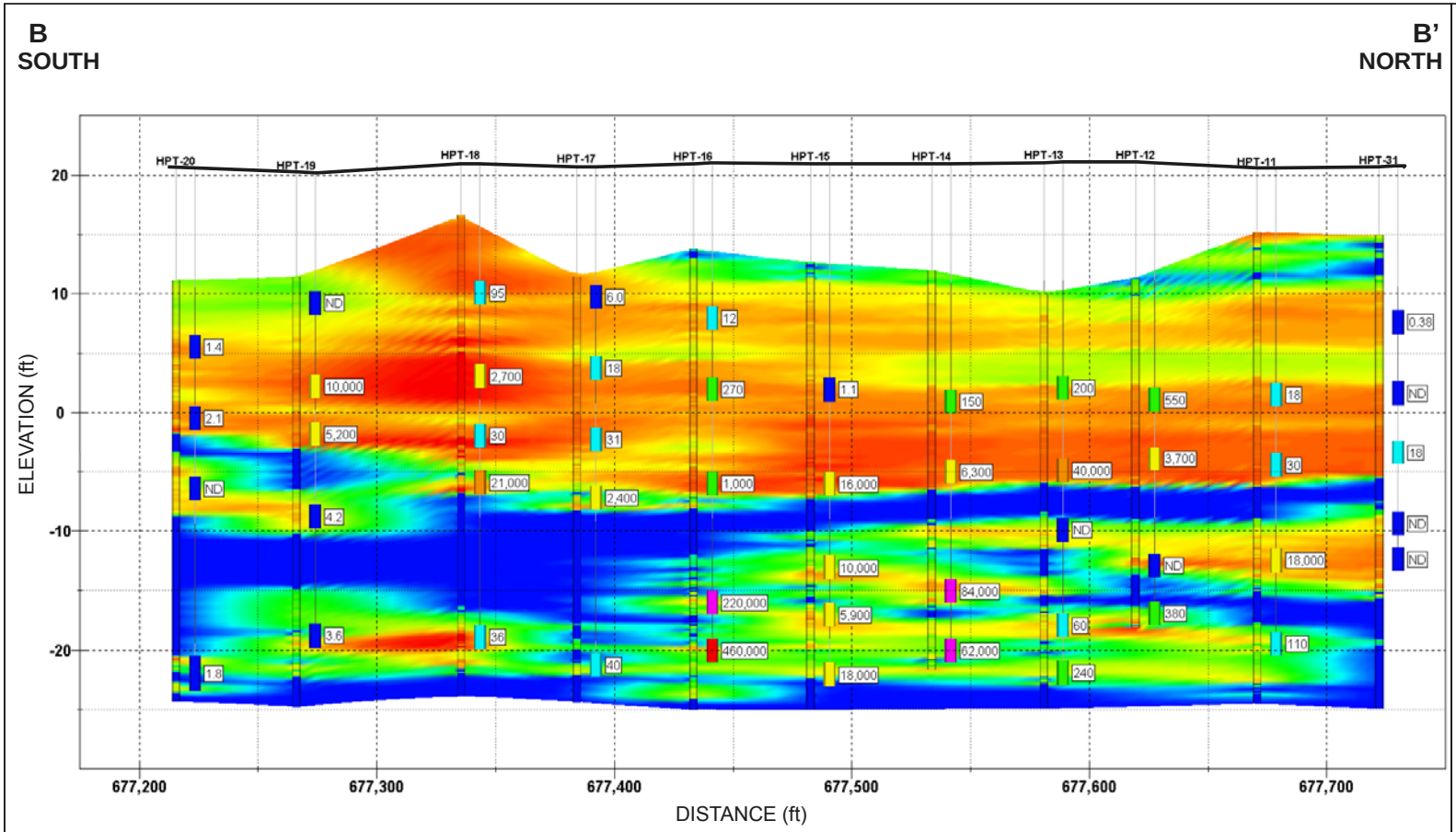
Figure 3-7
Cross-Section A-A'

AVX Myrtle Beach
Myrtle Beach, South Carolina

Note:

- TCE results represent the VAP sampling intervals. Colors associated with each box are based on the observed concentration.
- Estimated hydraulic conductivities were generated from HPT results. Colors associated with the estimated hydraulic conductivity are distributed across the entire section and based off the profile generated at each location.

Source: USGS 7.5-minute Series Topographic Quadrangle, NAME (DATE).



TCE

>50,000 µg/L

10,000 - 50,000 µg/L

5,000 - 10,000 µg/L

500 - 5,000 µg/L

50 - 500 µg/L

5 - 50 µg/L

<5 µg/L

Estimated Hydraulic Conductivity

150 ft/day

100 ft/day

30 ft/day

10 ft/day

3 ft/day

1 ft/day

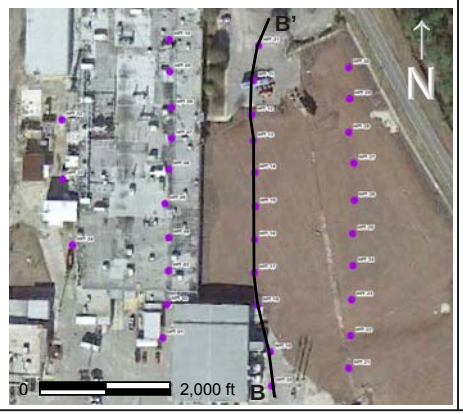
0.3 ft/day

0.1 ft/day

Ground Surface

473 VAP Sample Location and TCE Concentration (µg/L)

V.E. = 5x



ARCADIS Design & Consultancy for natural and built assets

Figure 3-8
Cross-Section B-B'

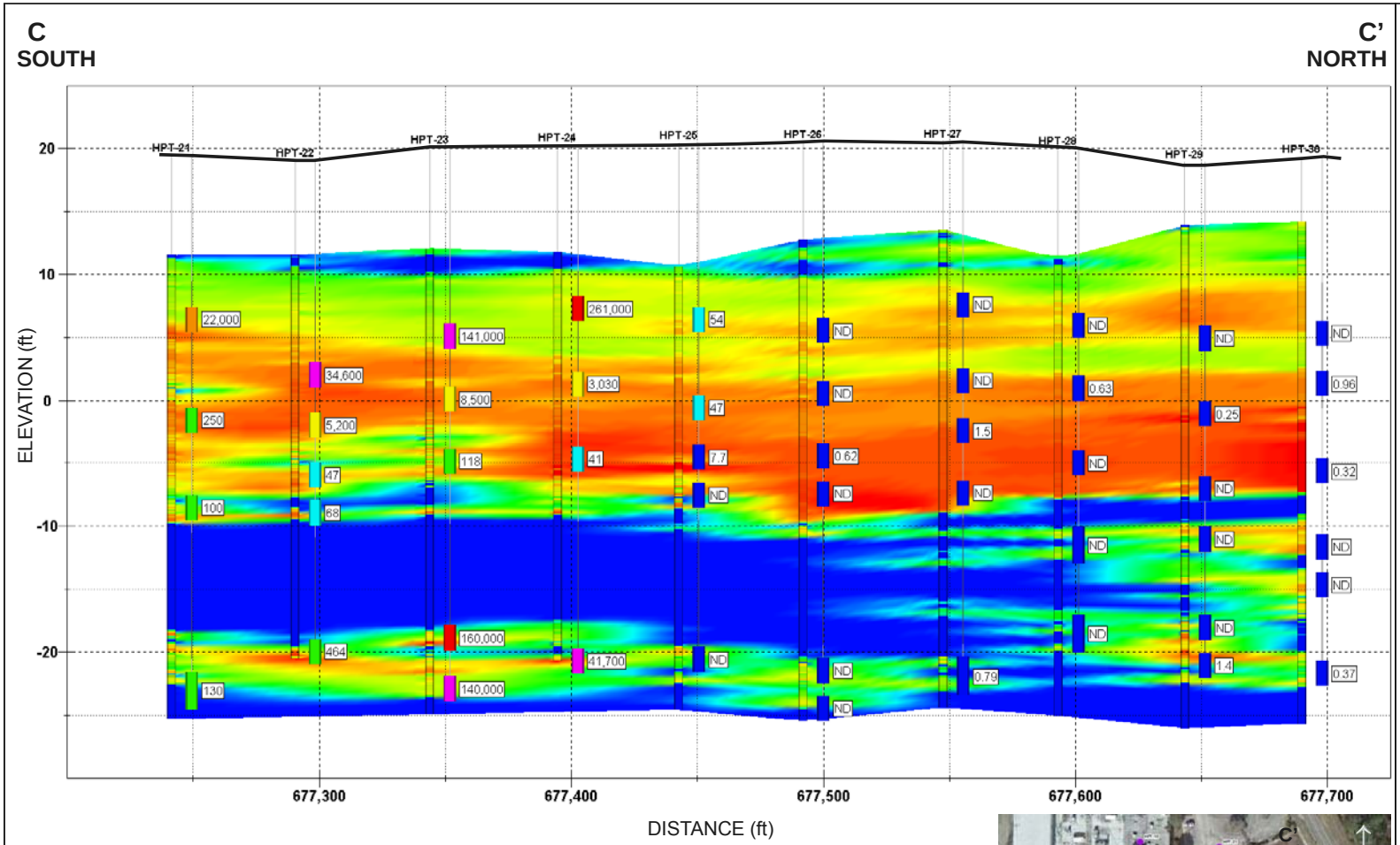
AVX Myrtle Beach
Myrtle Beach, South Carolina

Note:

- TCE results represent the VAP sampling intervals. Colors associated with each box are based on the observed concentration.
- Estimated hydraulic conductivities were generated from HPT results. Colors associated with the estimated hydraulic conductivity are distributed across the entire section and based off the profile generated at each location.

N

Source: USGS 7.5-minute Series Topographic Quadrangle, NAME (DATE).



TCE

Estimated Hydraulic Conductivity

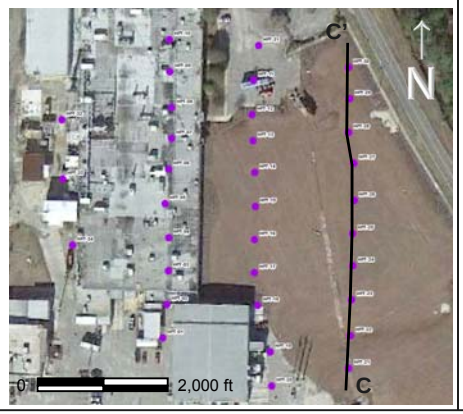
>50,000 µg/L
10,000 - 50,000 µg/L
5,000 - 10,000 µg/L
500 - 5,000 µg/L
50 - 500 µg/L
5 - 50 µg/L
<5 µg/L

150 ft/day
100 ft/day
30 ft/day
10 ft/day
3 ft/day
1 ft/day
0.3 ft/day
0.1 ft/day

Ground Surface

473 VAP Sample Location and TCE Concentration (µg/L)

V.E. = 5x



ARCADIS Design & Consultancy for natural and built assets

Figure 3-9
Cross-Section C-C'

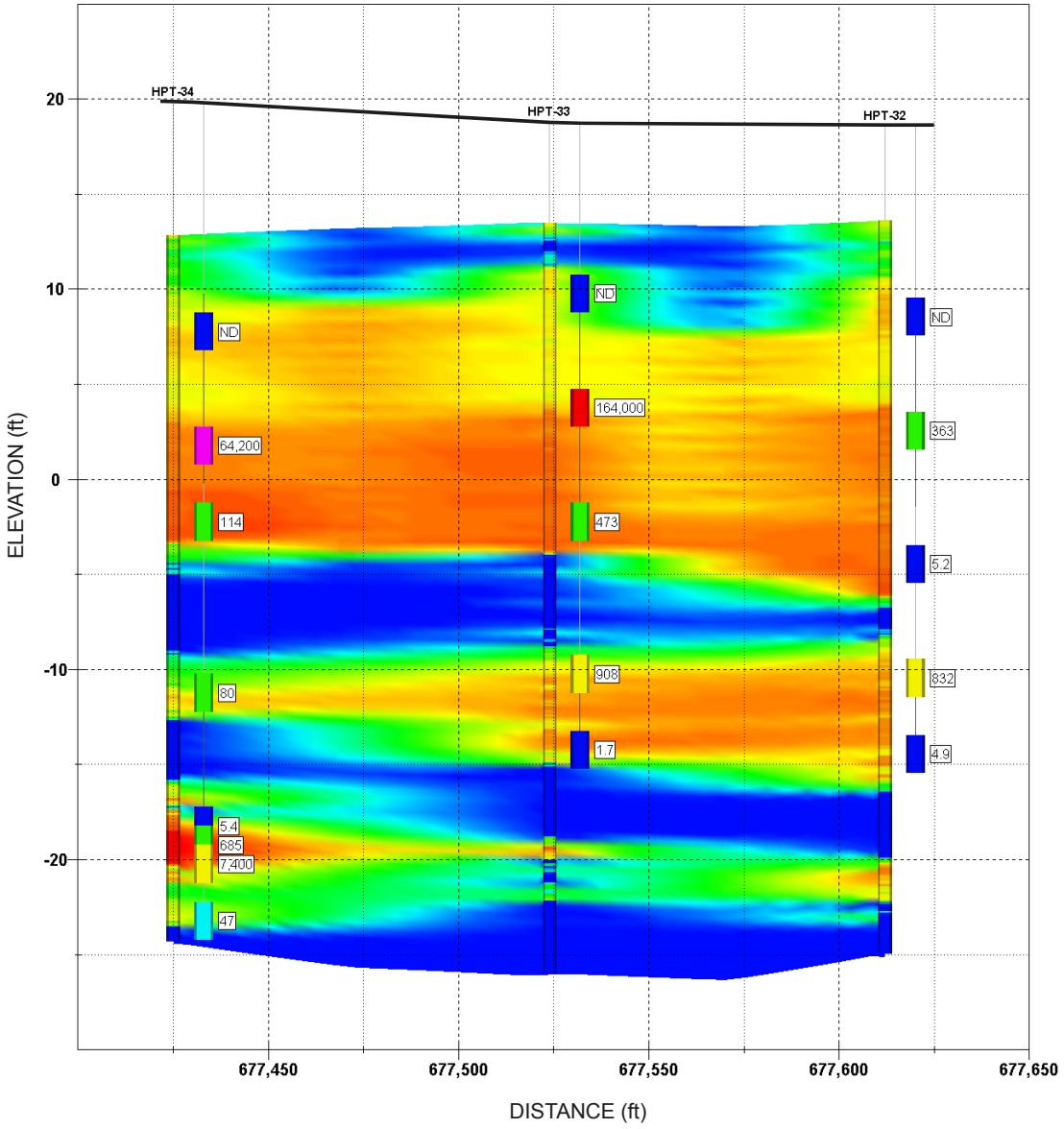
AVX Myrtle Beach
Myrtle Beach, South Carolina

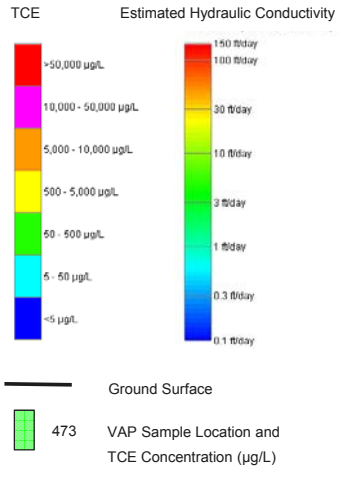
Note:

- TCE results represent the VAP sampling intervals. Colors associated with each box are based on the observed concentration.
- Estimated hydraulic conductivities were generated from HPT results. Colors associated with the estimated hydraulic conductivity are distributed across the entire section and based off the profile generated at each location.

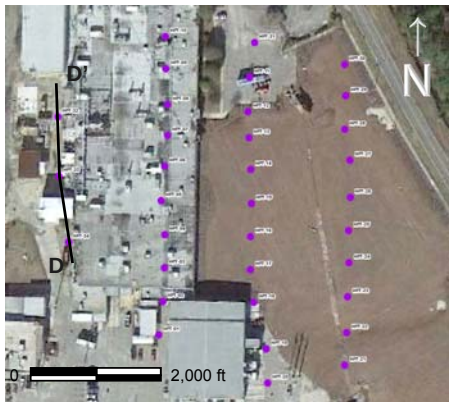
N

Source: USGS 7.5-minute Series Topographic Quadrangle, NAME (DATE).





V.E. = 5x



ARCADIS Design & Consultancy for natural and built assets

Figure 3-10
Cross-Section D-D'

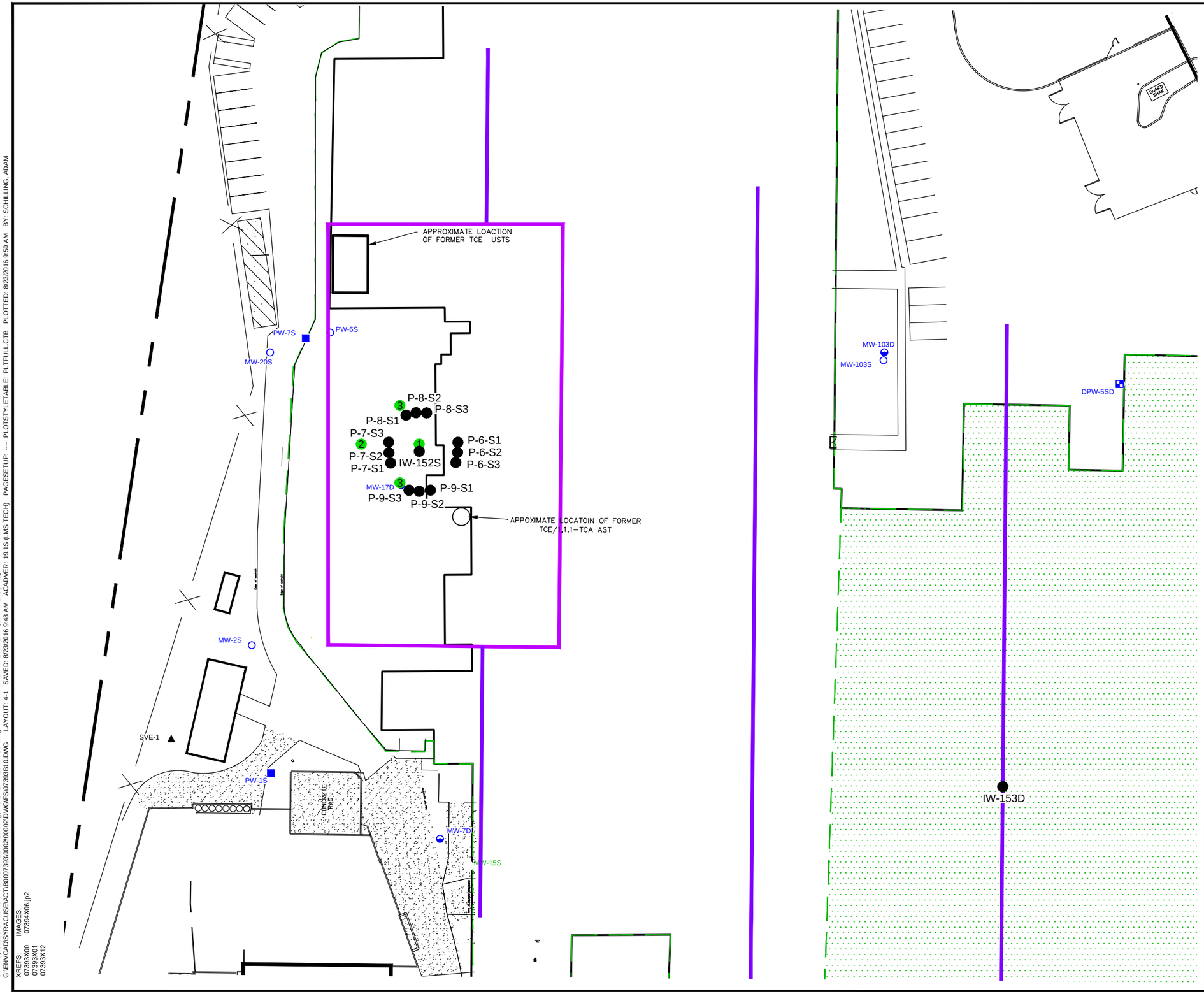
AVX Myrtle Beach
Myrtle Beach, South Carolina

Note:

- TCE results represent the VAP sampling intervals. Colors associated with each box are based on the observed concentration.
- Estimated hydraulic conductivities were generated from HPT results. Colors associated with the estimated hydraulic conductivity are distributed across the entire section and based off the profile generated at each location.
- V.E. = Vertical Exaggeration

N

Source: USGS 7.5-minute Series Topographic Quadrangle, NAME (DATE).



- MONITORING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- MONITORING WELL SCREENED IN THE LOWER TERRACE DEPOSITS
- FORMER PUMPING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- PRODUCTION WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
- FORMER SOIL VAPOR EXTRACTION WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- INJECTION WELL APPROXIMATELY SCREENED 10 TO 25 FT BGS
- 10-FT DOSE RESPONSE WELL (DRW); DOWNGRADIENT
- 20-FT DOSE RESPONSE WELL (DRW); UPGRADIENT
- 20-FT DOSE RESPONSE WELL (DRW); SIDEGRADIENT
- DEMOLISHED BUILDING
- ANTICIPATED EXTENT OF WCSS LOCATION
- ANTICIPATED HPT AND VAP TRANSECT LOCATION

NOTES:

1. AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO.
2. THE RELATIONSHIPS BETWEEN INVESTIGATION LOCATIONS AND OTHER FEATURES LIKE ROADS, BUILDINGS AND WATER FEATURES ARE APPROXIMATE.
3. PROPOSED DRW ARE PIEZOMETER CLUSTERS OF THREE 2-INCH PRE-PACKED 5-FT SCREENS (10-15, 15-20, 20-25).

0 50' 100'

GRAPHIC SCALE

AVX CORPORATION
MYRTLE BEACH FACILITY
MYRTLE BEACH, SOUTH CAROLINA

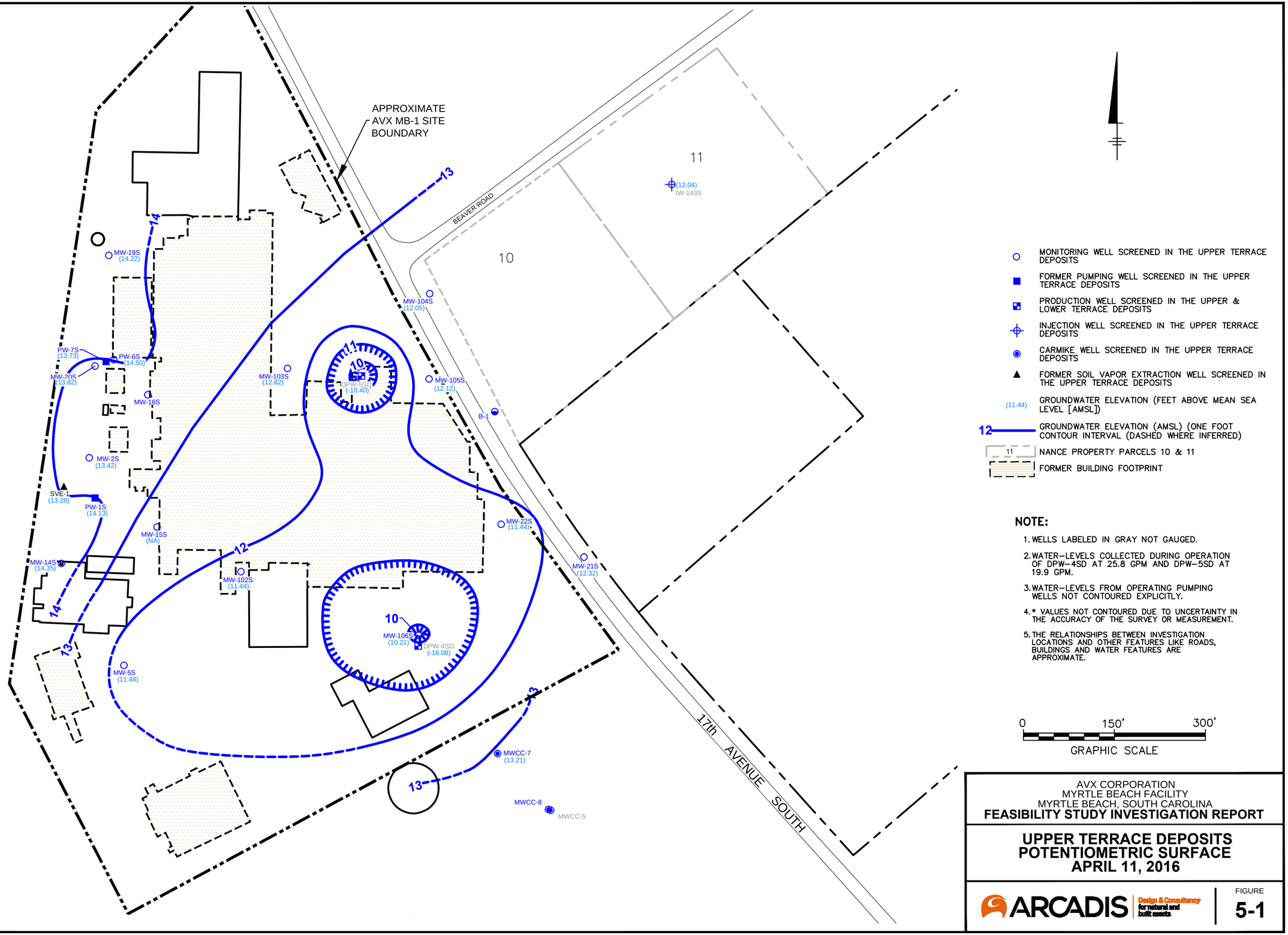
FEASIBILITY STUDY INVESTIGATION REPORT

INJECTION TEST LAYOUT

ARCADIS Design & Consultancy for natural and built assets

FIGURE
4-1

CTTY: Syracuse DIV/GROUP: EnvCAD DB: A.Schilling, P.LISTER LD: A. Schilling PM/TM: M.Hanish LYR: ON=*;OFF=REF; (FR2)
G:\ENVCAD\SYRACUSE\ACTIB\0073930\0002\0000\02\DWG\FS073393B10.DWG LAYOUT: 4-1 SAVED: 9/23/2016 9:48 AM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 8/23/2016 9:50 AM BY: SCHILLING, ADAM
XREFS:
IMAGES:
07393X00 07394X06.jp2
07393X01
07393X12



NOTE:

1. WELLS LABELED IN GRAY NOT GAUGED.
2. WATER-LEVELS COLLECTED DURING OPERATION OF DPW-4SD AT 25.8 GPM AND DPW-5SD AT 19.9 GPM.
3. WATER-LEVELS FROM OPERATING PUMPING WELLS NOT CONTOURED EXPLICITLY.
4. * VALUES NOT CONTOURED DUE TO UNCERTAINTY IN THE ACCURACY OF THE SURVEY OR MEASUREMENT.
5. THE RELATIONSHIPS BETWEEN INVESTIGATION LOCATIONS AND OTHER FEATURES LIKE ROADS, BUILDINGS AND WATER FEATURES ARE APPROXIMATE.

0 150' 300'

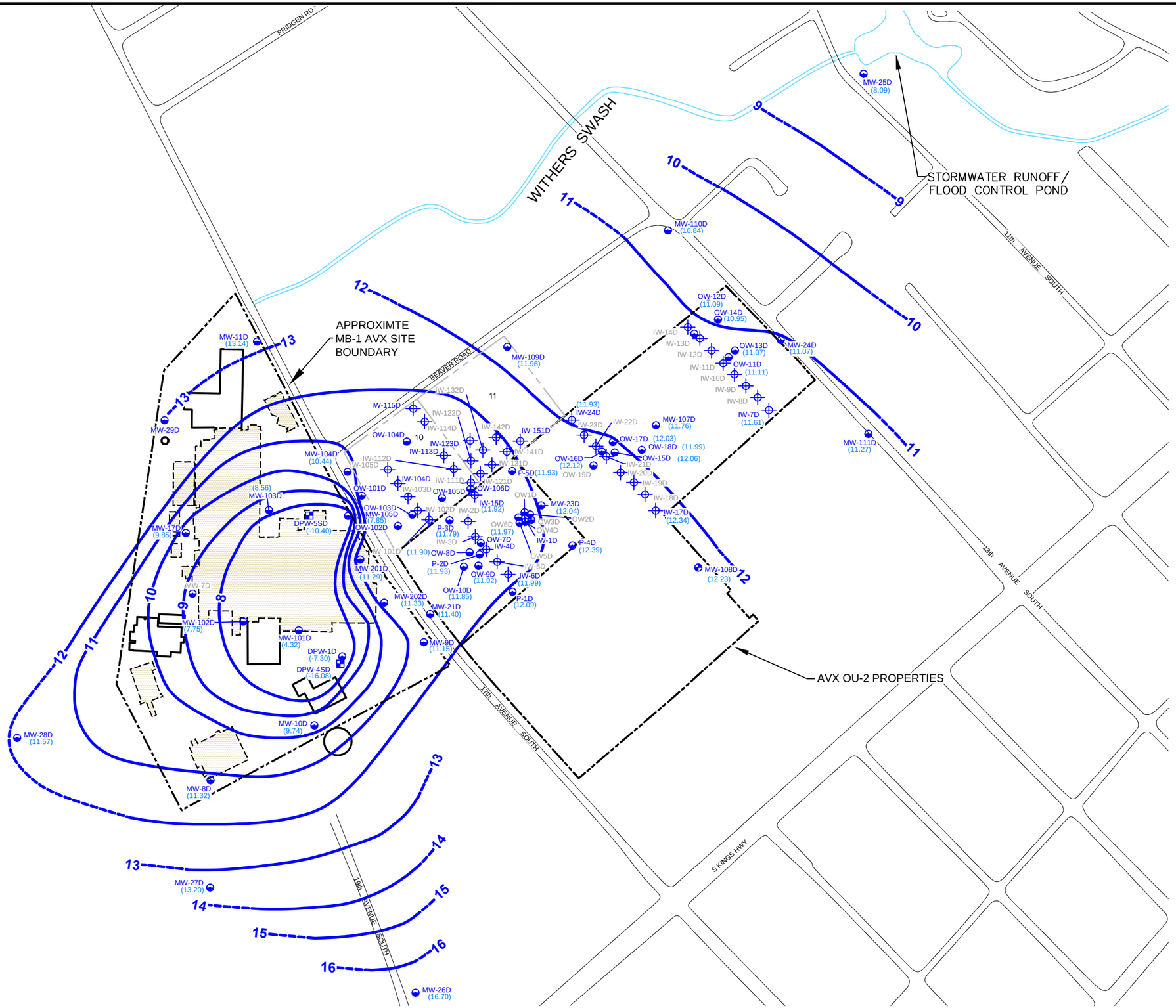
GRAPHIC SCALE

AVX CORPORATION
MYRTLE BEACH FACILITY
MYRTLE BEACH, SOUTH CAROLINA
FEASIBILITY STUDY INVESTIGATION REPORT

UPPER TERRACE DEPOSITS POTENTIOMETRIC SURFACE APRIL 11, 2016

ARCADIS Design & Consultancy for natural and built assets

FIGURE
5-1



LEGEND:

- MONITORING WELL SCREENED IN THE LOWER TERRACE DEPOSITS
- PRODUCTION WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
- INJECTION WELL SCREENED IN THE LOWER TERRACE DEPOSITS
- (10.83) GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL [AMSL])
- 12 GROUNDWATER ELEVATION (AMSL) (ONE FOOT CONTOUR INTERVAL (DASHED WHERE INFERRED))
- NANCE PROPERTY PARCELS 10 & 11
- FORMER BUILDING FOOTPRINT

NOTE:

1. WELLS LABELED IN GRAY NOT GAUGED.
2. WATER-LEVELS COLLECTED DURING OPERATION OF DPW-4SD AT 25.8 GPM AND DPW-5SD AT 19.9 GPM.
3. WATER-LEVELS FROM OPERATING PUMPING WELLS NOT CONTOURED EXPLICITLY.
4. * VALUES NOT CONTOURED DUE TO UNCERTAINTY IN THE ACCURACY OF THE SURVEY OR MEASUREMENT.
5. THE RELATIONSHIPS BETWEEN INVESTIGATION LOCATIONS AND OTHER FEATURES LIKE ROADS, BUILDINGS AND WATER FEATURES ARE APPROXIMATE.

0 300' 600'

GRAPHIC SCALE

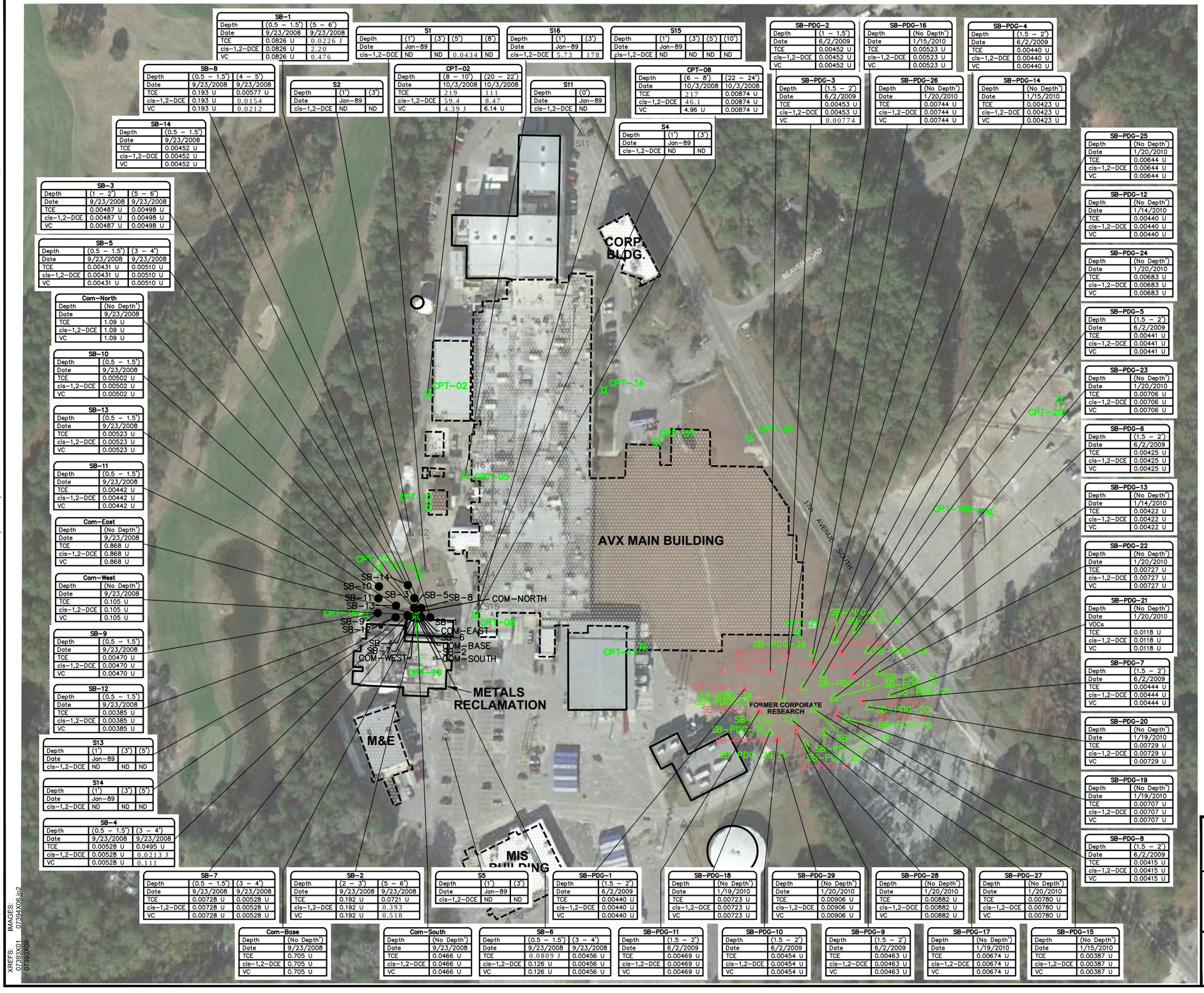
AVX CORPORATION
MYRTLE BEACH FACILITY
MYRTLE BEACH, SOUTH CAROLINA
FEASIBILITY STUDY INVESTIGATION REPORT

LOWER TERRACE DEPOSITS POTENTIOMETRIC SURFACE APRIL 11, 2016

ARCADIS Design & Consultancy for natural and built assets

FIGURE
5-2

CITY: Syracuse DIV/GROUP: Env/CAD DB: A.Schilling, R. BASSETT LD: A. Schilling PM/TM: M.Hanish LYR: ON=*;OFF=REF; (FRZ)
G:\ENVCAD\SYRACUSE\ACTIB\07393\00020\0002\DWG\FS\07393W09.DWG LAYOUT: 5-2 SAVED: 7/11/2016 8:26 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ----
XREFS: 07393X00 07393X01 IMAGES: PROJECTNAME: ----



SB-1

Depth	(0.5 – 1.5')	(5 – 6')
Date	9/23/2008	9/23/2008
TCE	0.0826 U	0.0226 J
cis-1,2-DCE	0.0826 U	2.20
VC	0.0826 U	0.476

S1

Depth	(1')	(3')	(5')	(8')
Date	Jan-89			
cis-1,2-DCE	ND	ND	0.0434	ND

S16

Depth	(1')	(3')
Date	Jan-89	
cis-1,2-DCE	5.73	178

S15

Depth	(1')	(3')	(5')	(10')
Date	Jan-89			
cis-1,2-DCE	ND	ND	ND	ND

SB-PDG-2

Depth	(1 – 1.5')
Date	6/2/2009
TCE	0.00452 U
cis-1,2-DCE	0.00452 U
VC	0.00452 U

SB-PDG-16

Depth	(No Depth')
Date	1/15/2010
TCE	0.00523 U
cis-1,2-DCE	0.00523 U
VC	0.00523 U

SB-PDG-4

Depth	(1.5 – 2')
Date	6/2/2009
TCE	0.00440 U
cis-1,2-DCE	0.00440 U
VC	0.00440 U

SB-8

Depth	(0.5 – 1.5')	(4 – 5')
Date	9/23/2008	9/23/2008
TCE	0.193 U	0.00577 U
cis-1,2-DCE	0.193 U	0.0154
VC	0.193 U	0.0212

S2

Depth	(1')	(3')
Date	Jan-89	
cis-1,2-DCE	ND	ND

CPT-02

Depth	(8 – 10')	(20 – 22')
Date	10/3/2008	10/3/2008
TCE	219	111
cis-1,2-DCE	59.4	8.47
VC	4.39 J	6.14 U

S11

Depth	(0')
Date	Jan-89
cis-1,2-DCE	ND

CPT-08

Depth	(6 – 8')	(22 – 24')
Date	10/3/2008	10/3/2008
TCE	217	0.00874 U
cis-1,2-DCE	46.1	0.00874 U
VC	4.96 U	0.00874 U

SB-PDG-3

Depth	(1.5 – 2')
Date	6/2/2009
TCE	0.00453 U
cis-1,2-DCE	0.00453 U
VC	0.00774

SB-PDG-26

Depth	(No Depth')
Date	1/20/2010
TCE	0.00744 U
cis-1,2-DCE	0.00744 U
VC	0.00744 U

SB-PDG-14

Depth	(No Depth')
Date	1/15/2010
TCE	0.00423 U
cis-1,2-DCE	0.00423 U
VC	0.00423 U

SB-14

Depth	(0.5 – 1.5')
Date	9/23/2008
TCE	0.00452 U
cis-1,2-DCE	0.00452 U
VC	0.00452 U

S4

Depth	(1')	(3')
Date	Jan-89	
cis-1,2-DCE	ND	ND

SB-PDG-25

Depth	(No Depth')
Date	1/20/2010
TCE	0.00644 U
cis-1,2-DCE	0.00644 U
VC	0.00644 U

SB-3

Depth	(1 – 2')	(5 – 6')
Date	9/23/2008	9/23/2008
TCE	0.00487 U	0.00498 U
cis-1,2-DCE	0.00487 U	0.00498 U
VC	0.00487 U	0.00498 U

SB-PDG-12

Depth	(No Depth')
Date	1/14/2010
TCE	0.00440 U
cis-1,2-DCE	0.00440 U
VC	0.00440 U

SB-5

Depth	(0.5 – 1.5')	(3 – 4')
Date	9/23/2008	9/23/2008
TCE	0.00431 U	0.00510 U
cis-1,2-DCE	0.00431 U	0.00510 U
VC	0.00431 U	0.00510 U

SB-PDG-24

Depth	(No Depth')
Date	1/20/2010
TCE	0.00683 U
cis-1,2-DCE	0.00683 U
VC	0.00683 U

Com-North

Depth	(No Depth')
Date	9/23/2008
TCE	1.09 U
cis-1,2-DCE	1.09 U
VC	1.09 U

SB-PDG-5

Depth	(1.5 – 2')
Date	6/2/2009
TCE	0.00441 U
cis-1,2-DCE	0.00441 U
VC	0.00441 U

SB-10

Depth	(0.5 – 1.5')
Date	9/23/2008
TCE	0.00502 U
cis-1,2-DCE	0.00502 U
VC	0.00502 U

SB-PDG-23

Depth	(No Depth')
Date	1/20/2010
TCE	0.00706 U
cis-1,2-DCE	0.00706 U
VC	0.00706 U

SB-13

Depth	(0.5 – 1.5')
Date	9/23/2008
TCE	0.00523 U
cis-1,2-DCE	0.00523 U
VC	0.00523 U

SB-PDG-6

Depth	(1.5 – 2')
Date	6/2/2009
TCE	0.00425 U
cis-1,2-DCE	0.00425 U
VC	0.00425 U

SB-11

Depth	(0.5 – 1.5')
Date	9/23/2008
TCE	0.00442 U
cis-1,2-DCE	0.00442 U
VC	0.00442 U

SB-PDG-13

Depth	(No Depth')
Date	1/14/2010
TCE	0.00422 U
cis-1,2-DCE	0.00422 U
VC	0.00422 U

Com-East

Depth	(No Depth')
Date	9/23/2008
TCE	0.868 U
cis-1,2-DCE	0.868 U
VC	0.868 U

SB-PDG-22

Depth	(No Depth')
Date	1/20/2010
TCE	0.00727 U
cis-1,2-DCE	0.00727 U
VC	0.00727 U

Com-West

Depth	(No Depth')
Date	9/23/2008
TCE	0.105 U
cis-1,2-DCE	0.105 U
VC	0.105 U

SB-PDG-21

Depth	(No Depth')
Date	1/20/2010
VOCs	
TCE	0.0118 U
cis-1,2-DCE	0.0118 U
VC	0.0118 U

SB-9

Depth	(0.5 – 1.5')
Date	9/23/2008
TCE	0.00470 U
cis-1,2-DCE	0.00470 U
VC	0.00470 U

SB-PDG-7

Depth	(1.5 – 2')
Date	6/2/2009
TCE	0.00444 U
cis-1,2-DCE	0.00444 U
VC	0.00444 U

SB-12

Depth	(0.5 – 1.5')
Date	9/23/2008
TCE	0.00385 U
cis-1,2-DCE	0.00385 U
VC	0.00385 U

SB-PDG-20

Depth	(No Depth')
Date	1/19/2010
TCE	0.00729 U
cis-1,2-DCE	0.00729 U
VC	0.00729 U

S13

Depth	(1')	(3')	(5')
Date	Jan-89		
cis-1,2-DCE	ND	ND	ND

SB-PDG-19

Depth	(No Depth')
Date	1/19/2010
TCE	0.00707 U
cis-1,2-DCE	0.00707 U
VC	0.00707 U

S14

Depth	(1')	(3')	(5')
Date	Jan-89		
cis-1,2-DCE	ND	ND	ND

SB-PDG-8

Depth	(1.5 – 2')
Date	6/2/2009
TCE	0.00415 U
cis-1,2-DCE	0.00415 U
VC	0.00415 U

SB-4

Depth	(0.5 – 1.5')	(3 – 4')
Date	9/23/2008	9/23/2008
TCE	0.00528 U	0.0495 U
cis-1,2-DCE	0.00528 U	0.0213 J
VC	0.00528 U	0.111

SB-7

Depth	(0.5 – 1.5')	(3 – 4')
Date	9/23/2008	9/23/2008
TCE	0.00728 U	0.00528 U
cis-1,2-DCE	0.00728 U	0.00528 U
VC	0.00728 U	0.00528 U

SB-2

Depth	(2 – 3')	(5 – 6')
Date	9/23/2008	9/23/2008
TCE	0.192 U	0.0721 U
cis-1,2-DCE	0.192 U	0.393
VC	0.192 U	0.518

S5

Depth	(1')	(3')
Date	Jan-89	
cis-1,2-DCE	ND	ND

SB-PDG-1

Depth	(1.5 – 2')
Date	6/2/2009
TCE	0.00440 U
cis-1,2-DCE	0.00440 U
VC	0.00440 U

SB-PDG-18

Depth	(No Depth')
Date	1/19/2010
TCE	0.00723 U
cis-1,2-DCE	0.00723 U
VC	0.00723 U

SB-PDG-29

Depth	(No Depth')
Date	1/20/2010
TCE	0.00906 U
cis-1,2-DCE	0.00906 U
VC	0.00906 U

SB-PDG-28

Depth	(No Depth')
Date	1/20/2010
TCE	0.00882 U
cis-1,2-DCE	0.00882 U
VC	0.00882 U

SB-PDG-27

Depth	(No Depth')
Date	1/20/2010
TCE	0.00780 U
cis-1,2-DCE	0.00780 U
VC	0.00780 U

Com-Base

Depth	(No Depth')
Date	9/23/2008
TCE	0.705 U
cis-1,2-DCE	0.705 U
VC	0.705 U

Com-South

Depth	(No Depth')
Date	9/23/2008
TCE	0.0466 U
cis-1,2-DCE	0.0466 U
VC	0.0466 U

SB-6

Depth	(0.5 – 1.5')	(3 – 4')
Date	9/23/2008	9/23/2008
TCE	0.0809 J	0.00456 U
cis-1,2-DCE	0.126 U	0.00456 U
VC	0.126 U	0.00456 U

SB-PDG-11

Depth	(1.5 – 2')
Date	6/2/2009
TCE	0.00469 U
cis-1,2-DCE	0.00469 U
VC	0.00469 U

SB-PDG-10

Depth	(1.5 – 2')
Date	6/2/2009
TCE	0.00454 U
cis-1,2-DCE	0.00454 U
VC	0.00454 U

SB-PDG-9

Depth	(1.5 – 2')
Date	6/2/2009
TCE	0.00463 U
cis-1,2-DCE	0.00463 U
VC	0.00463 U

SB-PDG-17

Depth	(No Depth')
Date	1/19/2010
TCE	0.00674 U
cis-1,2-DCE	0.00674 U
VC	0.00674 U

SB-PDG-15

Depth	(No Depth')
Date	1/15/2010
TCE	0.00387 U
cis-1,2-DCE	0.00387 U
VC	0.00387 U

LEGEND:

- LOCATION OF HISTORICAL SOIL BORING
- LOCATION OF WASTE PAD AREA SOIL BORING
- LOCATION OF PRE–DEMOLITION SOIL BORING
- LOCATION OF POST–DEMOLITION SOIL BORING
- LOCATION OF CPT BORING

NOTES:

1. AERIAL PHOTOGRAPH OBTAINED FROM THE SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES WEBSITE (2007).
2. LOCATION OF ROADS ARE APPROXIMATE.
3. THE FORMER CORPORATE RESEARCH BUILDING HAS BEEN DEMOLISHED.
4. DATA PRESENTED IN MILLIGRAM PER KILOGRAM (mg/kg).
5. BOLD VALUES INDICATE COMPOUND DETECTED ABOVE ANALYTICAL METHOD DETECTION LIMIT.
6. J – INDICATES AN ESTIMATED VALUE.
7. U – COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. ASSOCIATED VALUE IS THE COMPOUND QUANTITATION LIMIT.
8. cis–1,2–DCE – cis–1,2–DICHLOROETHENE
9. TCE – TRICHLOROETHENE
10. VC – VINYL CHLORIDE
11. ft.– FEET BELOW GROUND SURFACE
12. ND – COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. HISTORICAL QUANTITATION LIMIT IS UNKNOWN.
13. DATA ORIGINALLY PRESENTED AS FIGURE 4–10 IN THE FEASIBILITY STUDY DATA GAP INVESTIGATION REPORT – NOVEMBER 2010.

0 160' 320'

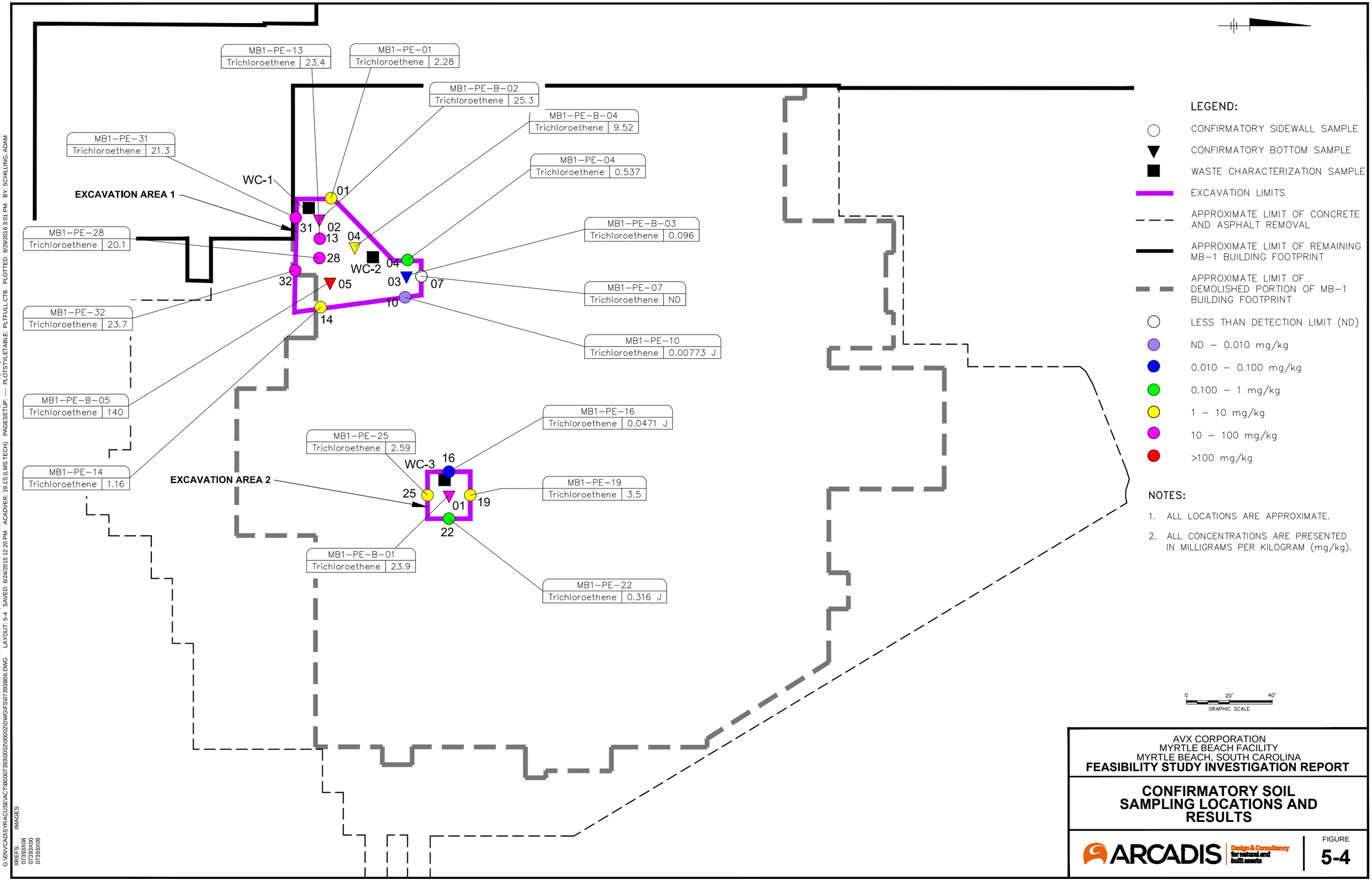
GRAPHIC SCALE

AVX CORPORATION
MYRTLE BEACH FACILITY
MYRTLE BEACH, SOUTH CAROLINA
FEASIBILITY STUDY INVESTIGATION REPORT

SOIL ANALYTICAL DATA

ARCADIS Design & Consultancy for natural and built assets

FIGURE
5-3



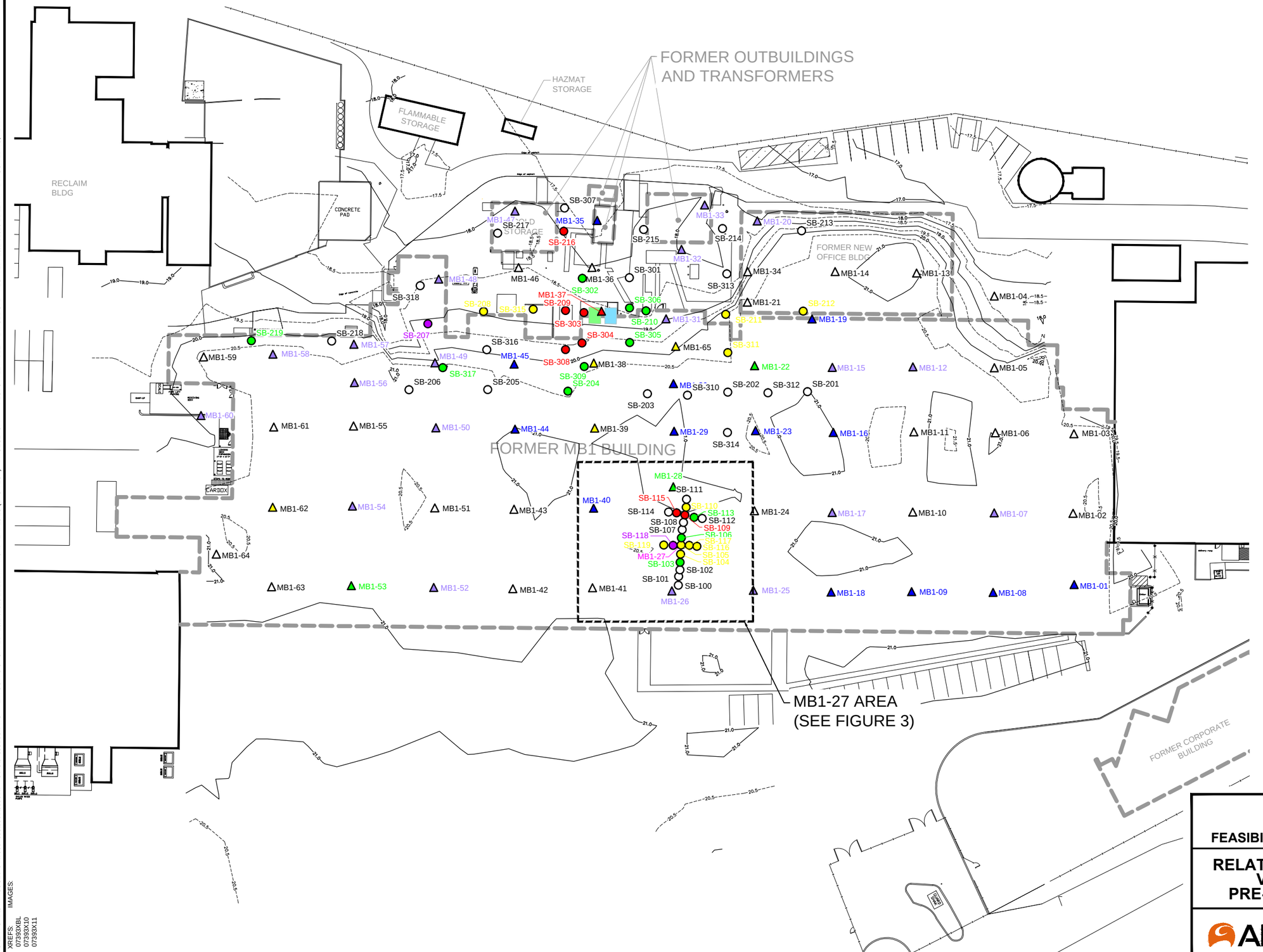
AVX CORPORATION
MYRTLE BEACH FACILITY
MYRTLE BEACH, SOUTH CAROLINA
FEASIBILITY STUDY INVESTIGATION REPORT

CONFIRMATORY SOIL SAMPLING LOCATIONS AND RESULTS

ARCADIS Design & Consultancy for natural and built assets

FIGURE
5-4

CITY: SYRACUSE, NY DIV/GROUP: ENV/M-DV DB: A. SCHILLING, R. BASSETT, P. LISTER LD: A. SCHILLING PM: M. HANISH TR: A. RICHARDSON LYR: ON=*;OFF=REF; (FR2)
G:\ENV\CAD\SYRACUSE\ACTIB\007393\00020\00002\DWG\FS\07393B06.DWG LAYOUT: 5-4 SAVED: 6/24/2015 12:20 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 8/29/2016 3:01 PM BY: SCHILLING, ADAM
XREFS:
07393X08
07393X00
07393X09
IMAGES:



LEGEND:

- SUBSURFACE VADOSE ZONE SAMPLING LOCATION
- SHALLOW SOIL SAMPLE LOCATION
- APPROXIMATE LIMIT OF CONCRETE AND ASPHALT REMOVAL
- APPROXIMATE LIMIT OF FORMER BUILDING FOOTPRINT
- MAJOR TOPOGRAPHIC SURFACE CONTOUR LINE
- MINOR TOPOGRAPHIC SURFACE CONTOUR LINE

SHALLOW SOIL SAMPLING DATA (TOTAL CHLORINATED VOCs)

- NON-DETECTABLE
- ND – 0.010 mg/kg
- 0.010 – 0.100 mg/kg
- 0.100 – 1 mg/kg
- 1 – 10 mg/kg
- 10 – 100 mg/kg
- >100 mg/kg

SUBSURFACE VADOSE ZONE SOIL SAMPLING DATA

- CONCENTRATIONS < RESIDENTIAL RSLs
- CONCENTRATIONS > RESIDENTIAL BUS < INDUSTRIAL RSLs
- CONCENTRATIONS > INDUSTRIAL BUT < 10X INDUSTRIAL RSLs
- CONCENTRATIONS > 10X INDUSTRIAL BUT < 100X INDUSTRIAL RSLs
- CONCENTRATIONS > 100X INDUSTRIAL RSLs

NOTE:

1. ALL SUBSURFACE VADOSE ZONE SAMPLING LOCATIONS WERE SURVEYED BY PEE DEE LAND SURVEYING, LLC. ON OCTOBER 2, 2015. ALL OTHER LOCATIONS ARE APPROXIMATE.
2. PRE-EXCAVATION TOPOGRAPHIC SURVEY CONDUCTED BY PEE DEE LAND SURVEYING, LLC ON DECEMBER 11, 2015.
3. SHALLOW SOIL IS DEFINED AS 0-2 FEET BELOW GROUND SURFACE. SUBSURFACE SOIL IS TO A DEPTH OF 5 FEET BELOW GROUND SURFACE.

0 30' 60'
GRAPHIC SCALE

AVX CORPORATION
MYRTLE BEACH FACILITY
MYRTLE BEACH, SOUTH CAROLINA
FEASIBILITY STUDY INVESTIGATION REPORT

RELATIVE VOC CONCENTRATIONS IN VADOSE ZONE SOILS AND PRE-EXCAVATION TOPOGRAPHY

ARCADIS Design & Consultancy for natural and built assets

FIGURE
5-5

SB-114		
Sample Depth (ft bgs):	3	5
1,2,4-Trimethylbenzene	**1.14**	**0.0153**
1,3,5-Trimethylbenzene	**0.313**	**0.0103**

SB-115		
Sample Depth (ft bgs):	3	6
1,2,4-Trimethylbenzene	**2,990**	**5.62**
1,3,5-Trimethylbenzene	**990**	**2.33**

SB-111		
Sample Depth (ft bgs):	4	6
1,2,4-Trimethylbenzene	**1.38**	**0.00598**
1,3,5-Trimethylbenzene	**0.498**	**0.00426 J**

SB-110		
Sample Depth (ft bgs):	2	5
1,2,4-Trimethylbenzene	**123**	**4.23**
1,3,5-Trimethylbenzene	**36.7**	**1.23**

TMB-109	
Sample Depth (ft bgs):	7
1,2,4-Trimethylbenzene	0.069
1,3,5-Trimethylbenzene	1.19

SB-109		
Sample Depth (ft bgs):	2	5
1,2,4-Trimethylbenzene	**6,800**	**86.4**
1,3,5-Trimethylbenzene	**2,340**	**31.8**

SB-113		
Sample Depth (ft bgs):	4	6
1,2,4-Trimethylbenzene	**10.4 [11.8]**	**7.16**
1,3,5-Trimethylbenzene	**3.49 [4.28]**	**3.81**

SB-112		
Sample Depth (ft bgs):	4	6
1,2,4-Trimethylbenzene	0.00486 U	0.00212 J [0.00611 U]
1,3,5-Trimethylbenzene	0.00486 U	0.000935 J [0.00611 U]

SB-108		
Sample Depth (ft bgs):	4	6
1,2,4-Trimethylbenzene	**0.379**	**0.0612 J**
1,3,5-Trimethylbenzene	**0.469**	**0.943**

SB-107		
Sample Depth (ft bgs):	4	6
1,2,4-Trimethylbenzene	**0.000569 J**	**0.00913**
1,3,5-Trimethylbenzene	**0.000984 J**	0.00434 U

SB-106		
Sample Depth (ft bgs):	4	6
1,2,4-Trimethylbenzene	**0.0153 J**	0.00459 U
1,3,5-Trimethylbenzene	0.0509 U	0.00459 U

SB-119		
Sample Depth (ft bgs):	3	5
1,2,4-Trimethylbenzene	0.0811 U	0.00431 U
1,3,5-Trimethylbenzene	0.0811 U	0.00431 U

SB-117		
Sample Depth (ft bgs):	3	6
1,2,4-Trimethylbenzene	0.399 U	0.0043 U
1,3,5-Trimethylbenzene	0.399 U	0.0043 U

SB-118		
Sample Depth (ft bgs):	3	6
1,2,4-Trimethylbenzene	2.43 U	0.363 U
1,3,5-Trimethylbenzene	2.43 U	0.363 U

SB-116		
Sample Depth (ft bgs):	3	6
1,2,4-Trimethylbenzene	0.189 U	**0.00201 J**
1,3,5-Trimethylbenzene	0.189 U	**0.000760 J**

SB-105		
Sample Depth (ft bgs):	4	6
1,2,4-Trimethylbenzene	0.214 U	0.00456 U
1,3,5-Trimethylbenzene	0.214 U	0.00456 U

SB-104		
Sample Depth (ft bgs):	4	6
1,2,4-Trimethylbenzene	0.444 U	0.0429 U
1,3,5-Trimethylbenzene	0.444 U	0.0429 U

SB-100		
Sample Depth (ft bgs):	5	7
1,2,4-Trimethylbenzene	0.00471 U	0.00499 U
1,3,5-Trimethylbenzene	0.00471 U	0.00499 U

SB-101	
Sample Depth (ft bgs):	4.5
1,2,4-Trimethylbenzene	0.0430 U
1,3,5-Trimethylbenzene	0.0430 U

SB-102		
Sample Depth (ft bgs):	4	6
1,2,4-Trimethylbenzene	0.0387 U	0.0424 U
1,3,5-Trimethylbenzene	0.0387 U	0.0424 U

SB-103		
Sample Depth (ft bgs):	4	7
1,2,4-Trimethylbenzene	0.0483 U	0.0533 U
1,3,5-Trimethylbenzene	0.0483 U	0.0533 U

MB1-44 MB1-39 MB1-29 SB-314 MB1-23 MB1-16 MB1-28 MB1-43 MB1-40 MB1-24 MB1-41 MB1-25 MB1-26 MB1-18

SB-111 SB-110 SB-114 SB-115 SB-109 SB-113 SB-112 SB-108 SB-107 SB-106 SB-118 MB1-27 SB-117 SB-119 SB-116 SB-105 SB-104 SB-103 SB-102 SB-101 SB-100

TMB-SOILS

TMB EXCAVATION AREA (15' X 20')

21.0 20.5

LEGEND:

- SUBSURFACE VADOSE ZONE SAMPLING LOCATION
- SHALLOW SOIL SAMPLE LOCATION
- WASTE CHARACTERIZATION SAMPLING LOCATION
- APPROXIMATE LIMIT OF TMB EXCAVATION
- APPROXIMATE LIMIT OF FORMER MB-1 BUILDING FOOTPRINT

SUBSURFACE VADOSE ZONE SOIL SAMPLING DATA (TMB ONLY)

- CONCENTRATIONS < RESIDENTIAL RSLs
- CONCENTRATIONS > RESIDENTIAL BUT < INDUSTRIAL RSLs
- CONCENTRATIONS > INDUSTRIAL BUT < 10X INDUSTRIAL RSLs
- CONCENTRATIONS > 10X INDUSTRIAL BUT < 100X INDUSTRIAL RSLs
- CONCENTRATIONS > 100X INDUSTRIAL RSLs

NOTE:

1. ALL SUBSURFACE VADOSE ZONE SAMPLING LOCATIONS WERE SURVEYED BY PEE DEE LAND SURVEYING, LLC. ON OCTOBER 2, 2015. ALL OTHER LOCATIONS ARE APPROXIMATE.
2. ONLY TRIMETHYLBENZENE CONCENTRATIONS ARE PRESENTED ON THIS FIGURE.
3. ALL RESULTS ARE PRESENTEING IN mg/kg (MILLIGRAMS PER KILOGRAM).

0 10' 20'
GRAPHIC SCALE

AVX CORPORATION
MYRTLE BEACH FACILITY
MYRTLE BEACH, SOUTH CAROLINA
FEASIBILITY STUDY INVESTIGATION REPORT

TRIMETHYLBENZENE (TMB) EXCAVATION AREA

ARCADIS Design & Consultancy for natural and built assets

FIGURE
5-6

APPENDIX A

Boring Logs

ARCADIS

Sample/Core Log

Boring/Well HPT-10 Project/No. B0007393.0002.00016 Page 1 of 2

Site Location AVX Myrtle Beach Drilling Started 10/31/15 Drilling Completed 10/31/15

Total Depth Drilled 45 Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval 5 feet

☐ None ☐ Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper Richard Mooney

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	1.3	1	0-5'; MINIMAL RECOVERY, FILL
			2 0.0	
			3	
			4 0.0	
			5	
5	10	3	6 - 0.1 ⊗	5-6'; VF SAND W/ LITTLE SILT, TAN/BROWN, RAPID
			7 - 0.1	DILATANCY
			8 - 0.1	
			9 - 0.2 ⊗	6-8.5'; CLAY W/ LITTLE SILT, LIGHT GREY, MED. PLASTICITY
			10 - 0.1	MOIST, M. STIFF
10	15	5	11 0.0	9.5'-10'; VF SAND W/ SILT AND LITTLE CLAY, LIGHT
			12 0.0	BROWN, MOIST, SLOW DILATANCY
			13 0.1	10-11'; SAA
			14 0.0	11-14'; SILT W/ SOME CLAY AND VF SAND, DARK GREY,
			15 0.1	WET
15	20	5	16 0.0	14-15'; VF SAND W/ SOME SILT, GREY, SLOW
			17 0.0	DILATANCY
			18 0.0	15-19'; SILT W/ SOME CLAY AND VF SAND, DARK
			19 0.0	GREY, WET
			20 0.0	19-20'; VF SAND W/ SOME SILT, GREY, SLOW DILATANCY
20	25	4	21 0.4	20-24'; SAA, GRAIN SIZE INCREASES TO MEDIUM W/
			22 0.2	DEPTH (WELL GRADED)
			23 0.2	24-25'; CLAY, DARK GREY, HIGH PLASTICITY,
			24 0.6	MOIST, M. STIFF
			25 1.3 ⊗	25-30'; SAA
25	30	5	26 1.8	
			27 2.6	

⊗ - DISCREET SOIL SAMPLE LOCATION

Boring/Well HPT-10

Page 2 of 2

Prepared by MATT CREEL

From	To	Sample/Core Depth (feet below land surface)	Core Recovery (ft)	PID Reading (ppm)	Sample/Core Description
				28 2.5 ⊗	
				29 0.7	
30	35	3.5		30 2.8 ⊗	F-M SAND W/ LITTLE SILT, LIGHT GREY, RAPID
				31 2.1	DILATANCY
				32 0.5	
				33 0.5	
				34 1.1	
35	40	5		35 1.0	35-39.5'; VF SAND W/ LITTLE SILT, RAPID DILATANCY
				36 - 19.7	LIGHT GREY
				37 - 32.6	
				38 19.1	39.5 - 40'; CLAY, DARK GREY, HIGH PLASTICITY,
				39 34.0	MOIST, MED. STIFF
				40 53.7	
				41 - 5.6 ⊗	40-41'; SAA
				42 - 7.0	41-42.5'; SILT W/ SOME CLAY AND LITTLE FINE SAND,
				42.5 43 - 0.6	DARK GREY, WET
				44	42.5 - 45'; NO RECOVERY
				45	
				46	TERMINATE BORING @ 45' BGS AND ABANDON -
				47	
				48	
				49	
				50	

⊗ - DISCREET SOIL SAMPLE COLLECTED

ARCADIS

Sample/Core Log

Boring/Well HPT-17 Project/No. B0007393.0002.00016 Page 1 of 1

Site Location AVX Myrtle Beach Drilling Started 10/31/15 Drilling Completed 10/31/15

Total Depth Drilled 45 Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval 5 feet

☐ None ☐ Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	2.3	1 - 0.0	0-0.5'; ORGANIC LAYER
			2 - 0.0	0.5-5'; SILT W/ F SAND AND SOME SHELL FRAGMENTS
			3 - 0.0	LIGHT BROWN
			4 - 0.0	
			5 - 0.0	
5	10	1	6 - 0.0	*LITTLE RECOVERY
			7	SAA TO SILT W/ VF SAND AND LITTLE CLAY, ~~DARK~~ BROWN
			8	MOIST TO WET
			9	
			10	
10	15	4	11 - 0.1	10-11'; SAA
			12 - 0.0	11-12'; SILT W/ SOME VF SAND AND CLAY, DARK GREY
			13 - 0.2	WET
			14 - 0.3	12-15'; VF-F SAND W/ SILT AND ORGANIC MATERIAL
			15 - 0.4	15-16'; VF-F SAND W/ LITTLE SILT, LIGHT GREY,
15	20	4	16 - 1.1 ⊗	RAPID DILATANCY
			17 - 0.7	16-18'; ~~INCREASED~~ SILT W/ SOME F SAND AND
			18 - 0.2	CLAY, WET
			19 - 0.7	18-20; FINE SAND W/ LITTLE SILT, ~~SHELL~~ SOME SHELL
			20 - 0.2	FRAGMENTS STARTING @ 19.5
20	25	4	21 - 1.6	20-25; F-C SAND W/ SHELL FRAGMENTS, LITTLE SILT,
			22 - 1.3	GREY, RAPID DILATANCY
			23 - 2.9	
			24 - 2.8	
			25 - 0.5	25'-30'; SAA
25	30		26 0.5	
			27 1.3	

⊗ - DISCREET SOIL SAMPLE COLLECTED

Boring/Well HPT-17

Page 2 of 2

Prepared by M. STEEL

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading (ppm)	Sample/Core Description
			28 - 1.9	
			29 - 2.4	
30	35		30 - 0.7	30-35'; CLAY, GREY, HIGH PLASTICITY, M. STIFF,
			31 - 434.8	MOIST. TRACE SHELL FRAGMENTS
			32 - 1060	SOME F-M SAND FROM 32-32.2
			33 - 657.7	
			34 - 151.2	
			35 - 66.3	
35	40	2	36 - 9.3	~~CLAY~~ 35-40'; CLAY W/ SOME VF-F SAND AND SILT
			37 - 5.1	DARK BROWN, MOIST, LOW PLASTICITY
			38	
			39	
			40 2.7	
40	45	~2'	41 2.6	LITTLE RECOVERY; SILT W/ SOME FINE SAND, DARK
			42 0.5	GREY, LOW DILATANCY, WET
			43	
			44	
			45	TERMINATE BORING @ 45' BGS AND ABANDON
			46	
			47	
			48	
			49	
			50	

ARCADIS

Sample/Core Log

Boring/Well HPT-13 Project/No. B0007393.0002.00016 Page 1 of 2

Site Location AVX Myrtle Beach Drilling Started 10/31/15 Drilling Completed 10/31/15

Total Depth Drilled _____ Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval 5 feet

☐ ☐ None Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper _____

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	4	1 - 0.1	0-2.5'; SILT W/ SOME VF SAND, ~~and~~ BROWN TO DARK
			2 - 0.1	GREY @ 2'
			3 - 0.0	2.5-4'; CLAY W/ SILT AND TRACE F. SAND, DARK
			4 - 0.0	GREY, LOW PLASTICITY, MOIST, SOFT
			5 - 0.0 (B)	4.5'; CLAY W/ TRACE SILT, MED PLASTICITY, STIFF
5	10	3.5	6 - 0.0	MOIST, GREY
			7 - 0.0	5-6'; SAA
			8 - 0.0	6-7'; SILT W/ TRACE CLAY, BROWN, SLOW DILATANCY,
			9 - 0.0	MOIST
			10 - 0.0 (B)	7-10'; CLAY W/ TRACE SILT, HIGH PLASTICITY, BROWN/
10	15	4	11 - 0.0	GREY, MOIST, FIRM
			12 - 0.0	10-12'; VF SAND W/ SILT, ~~TAN~~ TAN, SLOW DILATANCY,
			13 - 0.0	MOIST, SOFT
			14 - 0.0	13-15'; ~~VF~~ VF-F SAND W/ TRACE SILT, GREY, MOIST,
			15 - 0.0	SOFT, RAPID DILATANCY
15	20	4	16 - 0.0	15-17'; VF SAND W/ SILT, DARK GREY, MOIST, SLOW
			17 - 0.0	DILATANCY,
			18 - 0.0	17-19'; SILT W/ SOME VF SAND AND TRACE CLAY,
			19 - 0.0	DARK GREY, WET, SOFT
			20 - 0.3	19-20'; F-M SAND W LITTLE SILT, GREY, RAPID
20	25	3.5	21 - 16.3	DILATANCY
			22 - 30.4	
			23 - 29.7	
			24 - 37.4	20-25; SAA, GRAIN SIZE INCREASES TO M-C W/
			25 - 91.3	DEPTH (WELL GRADED)
25	30	5	26 - 158.2	25-27'; SAA
			27 - 93.9	

Boring/Well HPT-13

Page 2 of 2

Prepared by MATT CREEL

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading (ppm)	Sample/Core Description
			28 - 19.1	27'-30'; CLAY, GREY, HIGH PLASTICITY, M. STIFF,
			29 - 13.5	MOIST, TRACE SHELL FRAGMENTS
			30 - 15.0	30-32'; CLAY W/ SOME F-M SAND AND SILT, DARK
30	35	4.5	31 - 17.0	GREY, WET, SOFT
			32 - 5.3 ⊗	32-33'; F-M SAND W/ CLAY AND SOME SILT, AND
			33 - 2.6	SOME SHELL FRAGMENTS
			34 - 1.3 ⊗	33-35'; CLAY, GREY, HIGH PLASTICITY, M. STIFF,
			35 - 0.5	MOIST
35	40	Ø	36	
			37	35-40'; NO RECOVERY
			38	
			39	
			40	
			41 - 0.6	40-45'; INTERBEDDED SILT W/ CLAY, TRACE FINE SAND,
			42 - 0.1	DARK GREY, WET
			43 - 0.1	
			44 - 0.1	
			45 - 0.1 ⊗	
			46	
			47	
			48	
			49	
			50	

NO RECOVERY

ARCADIS

Sample/Core Log

Boring/Well HPT-18 Project/No. B0007393.0002.00016 Page 1 of 2

Site Location AVX Myrtle Beach Drilling Started 11/1/15 Drilling Completed 11/1/15

Total Depth Drilled 45 Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval ____ feet

☐ ☐ None Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper ____

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	1.5	1 - 0.2	LITTLE RECOVERY ; SILT W/ VF SAND AND LITTLE CLAY , TRACE
			2 - 0.4	SHELL FRAGMENTS. DARK BROWN TO LIGHT BROWN, MOIST, SOFT
			3	
			4	
			5	
5	10	1.5	6 - 1.3	~~SAA~~ 5-10' ; SAA, INCREASED MOISTURE
			7 - 1.1	
			8	
			9	
			10	
10	15	1.5	11 - 0.3	SAA
			12 - 1.0	
			13	
			14	
			15	
15	20	3.0	16 - 5.6	15-20' ; LITTLE RECOVERY, F-M SAND W/ SILT AND
			17 - 3.8	LITTLE CLAY, DARK GREY, WET, SLOW DILATANCY
			18 - 5.4	
			19 - 10.0	
			20	
20	25	3.5	21 3.8	20-25' ; F-M SAND W/ LITTLE SILT AND SOME SHELL
			22 0.7	FRAGMENTS, LIGHT GREY, RAPID DILATANCY
			23 - 0.3	
			24 - 0.2	
			25 - 1.0	
25	30	2.5	26 - 1.0	SAA ; INCREASED GRAIN SIZE TO M-C
			27 - 0.5	

Boring/Well HPT-18

Page 2 of 2

Prepared by MATT GREEL

Sample/Core Depth (feet below land surface)

From	To	Core Recovery (ft)	PID Reading (ppm)		Sample/Core Description
			28	2.6	
			29	1.0	
			30	72.7	(R) 30-35'; CLAY, GREY, HIGH PLASTICITY, MOIST,
30	35	5	31	48.7	M. STIFF
			32	57.6	(R)
			33	22.5	
			34	13.1	
			35	2.9	(R) 35-38' SAA
35	40	4	36	7.0	(R)
			37	1.5	
			38	0.7	(R) 38-40'; CLAY W/ F-M SAND, LITTLE SILT, MED. PLASTICITY
			39	0.4	DARK BROWN, STIFF
			40	0.3	(R)
40	45	3.5	41	0.6	40-43'; F-M SAND W/ SOME SILT ~~AND~~, GREY,
			42	0.1	MOIST, RAPID DILATANCY
			43	0.1	
			44	0.1	(R) 43-45'; SILT W/ CLAY, DARK BROWN, WET
			45	0.1	
			46		- TERMINATE BORING @ 45' BGS AND ABANDON -
			47		
			48		
			49		
			50		

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well: WCSS-1 Project/No. AVX Page 1 of 1

Site Location: MYRTLE BEACH, SC

Drilling Started 10/26/15 Drilling Completed 10/26/15

Drilling Contractor: ZEBRA Driller: _____ Helper: _____

Drilling Fluid Used: NONE Drilling Method: DPT

Length and Diameter of Coring Device: _____ Sampling Interval: 4 feet

Land-Surface Elev.: _____ feet ☐ Surveyed ☐ Estimated Datum: _____

Total Depth Drilled: 20 Feet Hole Diameter ____ Coring Device: MACRO CORE

Prepared By: Mathew Webb Hammer Weight: NA Hammer Drop: NA ins.

Sampling Data:

Depth (feet)	Grab/Composite	Matrix	Time	Laboratory Analysis
SEE	MOBILE	LAB	SAMPLING	LOG

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	OVM Reading (ppm)	Blow Counts per 6 Inches	Sample/Core Description
0	2		64		FILL / DEBRIS (HAND AUGER)
2	3		104		2-2.5': SAND, L. BROWN, FINE GRAINED, NO PLASTICITY, MOIST, SOFT, RAPID DILATANCY
3	4		609		
4	5		137		2.5-4': SANDY CLAY W/ LITTLE SILT AND TRACE FINE SAND, BLACK, HIGH PLASTICITY, M. FIRM,
5	6		555		
6	7		238		4-8': COLOR SAA, COLOR LIGHTENS TO GREY
7	8		740		8-11': SAA, COLOR → L. GREY
8	9		207		
9	10		2000		11-12': SAND, LIGHT → DARK GREY, MED GRAINED, SOME SILT, LOW PLASTICITY, MOIST, SOFT, SOME ORGANICS
10	11		259		
11	12		634		12-16': SAA, MOIST → WET, GRAIN SIZE → FINE
12	13		112		
13	14		20.2		
14	15		1.8		
15	16		5.3		16-20': SAND, COARSE GRAINED, GREY, DECREASED MOISTURE CONTENT
16	17		113		
17	18		29.6		
18	19		91.0		
19	20		129.1		

* BORING ~2' FROM SB-303

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well: WCSS-2 Project/No. AVX Page 1 of 1

Site Location: MYRTLE BEACH, SC

Drilling Started 10/26/15 Drilling Completed 10/26/15

Drilling Contractor: ZEBRA Driller: LEVI Helper:

Drilling Fluid Used: NONE Drilling Method: DPT

Length and Diameter of Coring Device: Sampling Interval: 5 feet

Land-Surface Elev.: feet ☐ Surveyed ☐ Estimated Datum:

Total Depth Drilled: 30 Feet Hole Diameter Coring Device: MACRO CORE

Prepared By: Mathew Webb Hammer Weight: NA Hammer Drop: NA ins.

Sampling Data:

Depth (feet)	Grab/Composite	Matrix	Time	Laboratory Analysis
SEE MOBILE LAB SAMPLING LOG				

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	OVM Reading (ppm)	Blow Counts per 6 Inches	Sample/Core Description
0	5				0-3.2': FILL / DEBRIS
					3.2-4.0': SAND, VF GRAINED, DARK BROWN/BLACK, RAPID DILATENCY, MOIST, SOFT
					4-5': CLAY, DARK BROWN/BLACK, HIGH PLASTICITY, MED. STIFFNESS, MOIST
5	10				5-9.5': SAA, COLOR LIGHTENS W/ DEPTH TO LIGHT GREY
					9.5-10': VF-F GRAINED SAND W/ SOME CLAY, DARK BROWN, MOIST/WET, LOW PLASTICITY
10	15				SAA + SOME ORGANIC MATERIAL
15	20				SAA; GRAIN SIZE INCREASES TO COARSE W/ DEPTH
20	25				20-23': SAA
					23-25': DECREASED GRAIN SIZE TO F-M
25	30				25-29': CLAY, DARK GREY, HIGH PLASTICITY, WET, MED. STIFF
					29-30': SAND, M. GRAINED W/ SOME CALCITE DEPOSITS, RAPID DILATANCY

* BORING 50' NORTH OF WCSS-1 (N12' NORTH OF SB-210)

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well: WCSS-3 Project/No. AVX Page ____ of ____

Site Location: MYRTLE BEACH

Drilling Started 10/27/15 Drilling Completed 10/27/15

Drilling Contractor: ZEBRA Driller: LEVI Helper: ____

Drilling Fluid Used: ____ Drilling Method: ____

Length and Diameter of Coring Device: ____ Sampling Interval: ____ feet

Land-Surface Elev.: ____ feet ☐ Surveyed ☐ Estimated Datum: ____

Total Depth Drilled: 30 Feet Hole Diameter ____ Coring Device: ____

Prepared By: Mathew Webb Hammer Weight: ____ Hammer Drop: ____ ins.

Sampling Data:

Depth (feet)	Grab/Composite	Matrix	Time	Laboratory Analysis

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	OVM Reading (ppm)	Blow Counts per 6 Inches	Sample/Core Description
0	5	3.5			0-3'; FILL / DEBRIS
					3-4.5'; SAND W/ SOME SILT, FINE GRAINED, L. BROWN, RAPID DILATANCY, MOIST, SOFT
					4.5-5; CLAY, DARK BROWN, HIGH PLASTICITY, M. STIFF, MOIST
5	10	3			SAA; COLOR LIGHTENS W/ DEPTH
10	15	5			10-15.5; SAA
15	20				15.5-18; INCREASE MOISTURE AND SAND CONTENT W/ DEPTH
15	20	5			15-18; SAA
					18-20; M-C SAND W/ SOME CLAY, LOW PLASTICITY
20	25				FINE GRAINED SAND
25	30				25-26.5; SAA
					26.5-30; CLAY

* BORING LOCATED 50' NORTH OF WCSS-2 (~15' NORTH OF SB-211)

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well: WCSS-4 Project/No. AVK Page 1 of 2

Site Location: Drilling Started 10/27/15 Drilling Completed 10/27/15

Drilling Contractor: ZEBRA Driller: Helper:

Drilling Fluid Used: Drilling Method:

Length and Diameter of Coring Device: Sampling Interval: feet

Land-Surface Elev.: feet ☐ Surveyed ☐ Estimated Datum:

Total Depth Drilled: Feet Hole Diameter Coring Device:

Prepared By: Mathew Webb Hammer Weight: NA Hammer Drop: NA ins.

Sampling Data:

Depth (feet)	Grab/Composite	Matrix	Time	Laboratory Analysis

Soil Characterization: OVM (PPM) RECOVERY @ (FEET)

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	OVM Reading (ppm)	Blow Counts per 6 Inches	Sample/Core Description
0	1				
1	2	0.5			0-3'; FILL / DEBRIS
2	3	1.2			
3	4	1.4			
4	5	1.7			3-5': F-M GRAINED SAND W/ SOME SILT, LIGHT
5	6	3.1			BROWN TO DARK BROWN W/ DEPTH, RAPID
6	7	9.8			DILATANCY, MOIST, SOFT
7	8	11.3			
8	9	93.2			5-5.5; SAA
9	10	347			5.5-9.5; CLAY, DARK BROWN TO GREY W/ DEPTH,
10	11	750			HIGH PLASTICITY, MED STIFF, MOIST
11	12	157			9.5-10; F. SAND, L. BROWN, SOME SILT, MED.
12	13	350			DILATANCY, MOIST
13	14	813			10-11; SAA
14	15	396			11-15; CLAY W/ VF SAND, MED PLASTICITY, DARK
15	16	8.0			GREY, WET
16	17	5.0			15-20; SAA
17	18	4.4			
18	19	3.2			20-25': F-M SAND, LITTLE SILT, GREY, RAPID
19	20	1.1			DILATANCY, MOIST
20	21	4.1			
21	22	20.3			

* BORING LOCATED 50' NORTH OF WCSS-3

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well WSCL-4 Project/No. ______ Page 2 of 2

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	OVM Reading (ppm)	Blow Counts per 6 Inches	Sample/Core Description
22	23		9.0		
23	24		17.4		
24	25		11.1		25-29.5 ; CLAY, GREY, HIGH PLASTICITY,
25	26				M. STIFF, TRACE CALCITE DEPOSITS
26	27				29.5-30' M-C SAND, L. GREY, W/ CALCITE DEPOSITS,
27	28				RAPID DILATANCY
28	29				
29	30				

ARCADIS

Sample/Core Log

Boring/Well WCSS-5 Project/No. B0007393.0002.00016 Page 1 of 1

Site Location AVX Myrtle Beach Drilling Started 10/27/15 Drilling Completed 10/27/15

Total Depth Drilled 25 Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval ____ feet

☐ ☐ None Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper ____

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	1.3	1 - 0.6	0-2'; FILL / DEBRIS
			2 - 1.3 ⊗	2-5'; CLAY, DARK BROWN TO LIGHT BROWN W/ DEPTH,
			3 - 1.8	HIGH PLASTICITY, MOIST, M. STIFF
			4 - 2.1 ⊗	
			5 - 2.2	
5	10	4	6 - 0.6 ⊗	5-9.8'; SAA; COLOR LIGHTENS W/ DEPTH
			7 - 0.9	9.8-10'; F-C SAND W/ SOME CLAY, LOW PLASTICITY,
			8 - 1.0 ⊗	LIGHT BROWN, MOIST
			9 - 1.6	
			10 - 6.1 ⊗	
10	15	3.5	11 - 1.9	10-15'; VF SAND W/ SILT AND LITTLE CLAY, SLOW DILATANCY
			12 - 8.2 ⊗	GREY, WET
			13 - 2.1	
			14 - 2.3	
			15 - 6.6 ⊗	
15	20	~~5~~ 3.8	16 - 33.4	15-20'; F-C SAND W/ ~~LITTLE~~ SOME SILT, RAPID DILATANCY, GREY
			17 - 94.1	WET
			18 - 167.2 ⊗	
			19 - 279.0	
			20 - 684.2 ⊗	
20	25		21 - 6.2	20-23'; SAA
			22 - 12.3 ⊗	23-25'; CLAY, GREY, HIGH PLASTICITY, M. STIFF, MOIST
			23 - 12.8	
			24 - 277.1 ⊗	
			25 - 206.3	
			26	— END BORING @ 25' BGS —
			27	

Field Forms.xlsx.xls
Geoprobe Log

⊗ - SAMPLE COLLECTED (DISCREET SOIL SAMPLE)

* BORING LOCATED ~50' SOUTH OF WCSS-1

ARCADIS

Sample/Core Log

Boring/Well: WCSS-6 | Project/No.: B0007393.0002.00016 | Page: 1 of 1

Site Location: AVX Myrtle Beach | Drilling Started: 10/27/15 | Drilling Completed: 10/27/15

Total Depth Drilled: _____ Feet | Hole Diamete: 3 inches | Type of Sample/ Coring Device: Geoprobe

Length and Diameter of Coring Device: 5' 1.5" | Sampling Interval: _____ feet

☐ None ☐ | Drilling Method: DPT

Drilling Contractor: Zebra | Driller: Levi Mainard | Helper: _____

Prepared By: Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	2.2	1 - 1.0	0-2'; FILL / DEBRIS
			2 - 3.1	2-5'; VF SAND W/ SILT AND LITTLE CLAY, DARK BROWN,
			3 - 18.7 ⊗	SLOW DILATANCY, MOIST, SOFT
			4 - 29.7	
			5 - 71.2 ⊗	
5	10	2.8	6 - 103.4	5-10'; CLAY, GREY W/ SOME RED/BROWN, HIGH PLASTICITY,
			7 - 253.6 ⊗	MED. STIFF, MOIST
			8 - 5249 ⊗	
			9 - 4303	
			10 - 715000 ⊗	
10	15	2.8	11 - 715000 ⊗	10-15'; F. SAND W/ SILT AND LITTLE CLAY, SLOW DILATANCY,
			12 - 6540 ⊗	GREY, WET, SOME ORGANIC MATERIAL
			13 - 577.7	
			14 - 6690 ⊗	
			15 - 13554 ⊗	
15	20	3.4	16 - 6951 ⊗	15-20'; SAA, GRAIN SIZE INCREASES TO M-C, DECREASED
			17 - 1197	CLAY CONTENT
			18 - 1479 ⊗	
			19 - 922	
			20 - 2092 ⊗	
20	25	4.5	21 - 859	20-23.5'; SAA, GRAIN SIZE DECREASES TO VF-F
			22 - 1438 ⊗	
			23 - 3700	23.5-25'; CLAY, DARK GREY, HIGH PLASTICITY, L-M STIFF
			24 - 668 ⊗	
			25 - 624	
			26	- TERMINATE BORING @ 25' BGS. AND ABANDON -
			27	

⊗ DISCREET SOIL SAMPLE COLLECTED

* BORING LOCATED ~50' SOUTH OF WCSS-5

ARCADIS

Sample/Core Log

Boring/Well WCSS-7 Project/No. B0007393.0002.00016 Page 1 of 1

Site Location AVX Myrtle Beach

Drilling Started 10/27/15 Drilling Completed 10/27/15

Total Depth Drilled 75 Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval ____ feet

☐ None ☐ Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper ____

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	2.6	1 - 1.7	0-2'; FILL / DEBRIS
			2 - 1.3	2-3'; VF SAND W/ SILT AND LITTLE CLAY, DARK BROWN,
			3 - 2.2 ⊗	SLOW DILATANCY, MOIST, SOFT
			4 - 1.5	3-5'; CLAY, DARK BROWN, HIGH PLASTICITY, MED STIFF,
			5 - 3.6 ⊗	MOIST
5	10	5	6 - 0.4	5-10'; SAA, COLOR LIGHTENS W/ DEPTH TO GREY
			7 - 0.8 ⊗	
			8 - 1.0	
			9 - 1.9	
			10 - 3.0 ⊗	
10	15	5	11 - 2.7	10-11'; SAA
			12 - 0.8	11-13'; SILT W/ LITTLE CLAY AND TRACE VF SAND, DARK
			13 - 1.3 ⊗	GREY, WET
			14 - 3.3	13-15'; FINE SAND W/ SILT AND LITTLE CLAY, SLOW
			15 - 35.1 ⊗	DILATANCY, GREY, WET, ORGANIC MATERIAL PRESENT
15	20	4	16 - 116.1 ⊗	15-20'; SAA, GRAIN SIZE INCREASES TO M-C, DECREASED
			17 - 55.6	CLAY CONTENT, WET
			18 - 51.2	
			19 - 147.1 ⊗	
			20 - 71.7	
20	25	4	21 - 12.7	20-23'; SAA, GRAIN SIZE INCREASES TO COARSE,
			22 - 10.8 ⊗	COLOR LIGHTENS
			23 - 6.7	23-25'; CLAY, DARK GREY, HIGH PLASTICITY, L-M STIFF
			24 - 5.7	
			25 - 9.3 ⊗	
			26	- TERMINATE BORING @ 75' BGS AND ABANDON -
			27	

Field Forms.xlsx.xls
Geoprobe Log

⊗ - DISCREET SOIL SAMPLE COLLECTED

* BORING LOCATED ~50' SOUTH OF WCSS-6

ARCADIS

Sample/Core Log

Boring/Well WCSS-8 Project/No. B0007393.0002.00016 Page 1 of 1

Site Location AVX Myrtle Beach Drilling Started 10/28/15 Drilling Completed 10/28/15

Total Depth Drilled 25 Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval 5 feet

None Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	3.6	1 - 0.0	0-3'; FILL / DEBRIS
			2 - 0.0	3-5'; VF-M SAND W/ SILT AND LITTLE CLAY, LIGHT
			3 - 0.0 ⊗	BROWN, RAPID DILATANCY, MOIST, SOFT
			4 - 0.0	
			5 - 0.9 ⊗	
5	10	3.5	6 - 32.1	5-5.5'; SAA
			7 - 285.9	5.5'-9'; CLAY, GREY, HIGH PLASTICITY, MED. STIFF,
			8 - 4978 ⊗	MOIST
			9 - 600.1	9-10'; VF SAND W/ SILT AND LITTLE CLAY, ORGANIC
			10 - 715000 ⊗	MATERIAL PRESENT, DARK GREY, SLOW DILATANCY
10	15	5 2.5	11 - ~~11753~~ 543.2	10-14.5'; SAA, INCREASED CLAY CONTENT, WET
			12 - 11753 ⊗	14.5-15'; CLAY CONTENT DECREASES, GRAIN SIZE
			13 - 8139	INCREASES TO M-C
			14 - 715000 ⊗	
			15 - 3383	
15	20	2.5	16 - 25.5	15-~~20~~ 20'; SAA
			17 - 83.2 ⊗	
			18 - 76.4	
			19 - 105.5 ⊗	
			20 - 659.1 ⊗	
20	25	5	21 - 255.8	20-23'; M-C SAND W/ LITTLE SILT, RAPID DILATANCY,
			22 - 240.9 ⊗	LIGHT GREY,
			23 - 49.2	23-25'; CLAY, GREY, HIGH PLASTICITY, L-M STIFF
			24 - 223.3 ⊗	
			25 - 174.3	
			26	TERMINATE BORING @ 25' BGS AND ABANDON
			27	

Field Forms.xlsx.xls
Geoprobe Log

⊗ - DISCREET SOIL SAMPLE COLLECTED

* BORING LOCATED ~2' FROM SB-216

ARCADIS

Sample/Core Log

Boring/Well: WCSS-9 | Project/No.: B0007393.0002.00016 | Page: 1 of 1

Site Location: AVX Myrtle Beach | Drilling Started: 10/28/15 | Drilling Completed: 10/28/15

Total Depth Drilled: 25 Feet | Hole Diamete: 3 inches | Type of Sample/ Coring Device: Geoprobe

Length and Diameter of Coring Device: 5' 1.5" | Sampling Interval: 5 feet

None | Drilling Method: DPT

Drilling Contractor: Zebra | Driller: Levi Mainard | Helper:

Prepared By: Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	3	1 - 6.4	0-5'; FILL/ DEBRIS
			2 - 6.0	
			3 - 6.0 ⊗	
			4 - 5.0	
			5 - 16.4 ⊗	
5	10	3	6 - 0.5	5-6'; SAA
			7 - 1.1	6-7'; CLAY, GREY, HIGH PLASTICITY, MED. STIFF, MOIST
			8 - 1.4 ⊗	7-10'; VF-F SAND W/ SILT, GREY TO LIGHT BROWN W/
			9 - 1.8	DEPTH, SLOW DILATANCY, MOIST TO WET W/ DEPTH
			10 - 3.4 ⊗	
10	15	5	11 - 24.5	10-11'; SAA
			12 - 35.2 ⊗	11-15'; SILT W/ VF SAND AND SOME CLAY, DARK GREY,
			13 - 103	WET, SOFT, ORGANIC MATERIAL PRESENT
			14 - 1760 ⊗	
			15 - 134	
15	20		16 - 7.0 ⊗	15-19'; SAA + SHEEN
			17 - 8.0	19-20'; F-M SAND W/ SOME SILT, DARK GREY, RAPID
			18 - 39.5 ⊗	DILATANCY, SHEEN
			19 - 83.7	
			20 - 98.6 ⊗	
20	25		21 - 32.9	20-24'; SAA, DECREASED SILT CONTENT, COLOR
			22 - 47.2 ⊗	LIGHTENS, SHEEN
			23 - 17	24-25'; CLAY, GREY, HIGH PLASTICITY, L-M STIFF
			24 - 20.1 ⊗	
			25 - 37.5 ⊗	
			26	- TERMINATE BORING @ 25' BGS AND ABANDON -
			27	

Field Forms.xlsx.xls
Geoprobe Log

⊗ - DISCREET SOIL SAMPLE COLLECTED

* BORING LOCATED ~18' SOUTHEAST OF SB-213

ARCADIS

Sample/Core Log

Boring/Well: WCSS-10 | Project/No.: B0007393.0002.00016 | Page: 1 of 1

Site Location: AVX Myrtle Beach | Drilling Started: 10/28/15 | Drilling Completed: 10/28/15

Total Depth Drilled: 25 Feet | Hole Diamete: 3 inches | Type of Sample/ Coring Device: Geoprobe

Length and Diameter of Coring Device: 5' 1.5" | Sampling Interval: 5 feet

☐ None ☐ | Drilling Method: DPT

Drilling Contractor: Zebra | Driller: Levi Mainard | Helper:

Prepared By: Matt Creel

Sample/Core Depth From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5		1 - 0.4	0-5'; FILL / DEBRIS
			2 - 0.4 ⊗	
			3 - 2.4	
			4 - 2.8 ⊗	
			5 - 1.5	
5	10		6 - 2.8 ⊗	5-7'; FILL / DEBRIS
			7 - 1.5	7-9'; CLAY W/ VF-C SAND (POORLY SORTED) AND SOME
			8 - 1.4	SILT, LIGHT BROWN, MED. PLASTICITY, MOIST, SOFT
			9 - 3.8 ⊗	9-10'; F-M SAND W/ SOME SILT AND LITTLE CLAY, GREY,
			10 - 0.5	SLOW DILATANCY, MOIST, SOFT
10	15		11 - 5.3 ⊗	10-11'; SAA
			12 - 5.0	11-15'; SILT W/ LITTLE FINE SAND AND SOME CLAY (CLAY
			13 - 3.3	CONTENT DECREASES TO TRACE W/ DEPTH), DARK GREY,
			14 - 1.1 ⊗	WET, SOFT
			15 - 1.9	15-19'; F-VF SAND W/ SILT, GREY, SLOW DILATANCY, WET
15	20		16 1.0 ⊗	19-20'; F-M SAND W/ LITTLE SILT, GREY, RAPID DILATANCY
			17 0.6	
			18 2.1 ⊗	
			19 2.8	
			20 3.5 ⊗	20-24.5'; F-M SAND, TRACE SILT, LIGHT GREY, RAPID
20	25		21 - 0.4	DILATANCY
			22 - 0.4 ⊗	24.5-25'; CLAY, GREY, HIGH PLASTICITY, L-M STIFF,
			23 - 0.7	CALCITE DEPOSITS PRESENT
			24 - 0.4 ⊗	
			25 - 12.6 ⊗	
			26	
			27	

Field Forms.xlsx.xls
Geoprobe Log

⊗ - DISCREET SOIL SAMPLE COLLECTED

* BORING LOCATED ~ 34' NORTH OF WCSS-9

ARCADIS

Sample/Core Log

Boring/Well WCSS-11 Project/No. B0007393.0002.00016 Page 1 of 1

Site Location AVX Myrtle Beach Drilling Started 10/24/15 Drilling Completed 10/24/15

Total Depth Drilled 25 Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval 5 feet

☐ None ☐ Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	3	1 - 0.7	0-5' ; FILL / DEBRIS
			2 - 0.7 ⊗	
			3 - 0.7	
			4 - 0.7 ⊗	
			5 - 0.7	
5	10	1.5	6 - 0.7 ⊗	5-10' ; VF-F SAND W/ SILT, TTRACE CLAY, SLOW DILATANCY
			7 - 0.4	MOIST / WET, BROWN * LITTLE RECOVERY
			8 - 0.3 ⊗	
			9 - 0.4	
			10 - 0.4 ⊗	
10	15	1.3	11 - 1.9 ⊗	10-15' ; SILT W/ VF SAND, DARK GREY, RAPID DILATANCY,
			12 5.3 ⊗	WET, SOFT * MINIMAL RECOVERY
			13	
			14 NO RECOVERY	
			15	
15	20	3	16 - 63.8 ⊗	VF-F SAND W/ SOME SILT, DARK GREY, RAPID DILATANCY,
			17 - 49.7	WET
			18 - 1.2 ⊗	
			19 - 1.8	
			20 - 5.7 ⊗	
20	25	4.5	21 - 21.5	20-23' ; M-C SAND, TTRACE SILT, LIGHT GREY, RAPID
			22 - 19.6 ⊗	DILATENCY
			23 - 7.0	23-25' ; CLAY, GREY, M. STIFF, HIGH PLASTICITY, MOIST
			24 - 1.6 ⊗	
			25 - 1.0	
			26	- TERMINATE BORING @ 25' BGS AND ABANDON -
			27	

Field Forms.xlsx.xls
Geoprobe Log

⊗ - DISCREET SOIL SAMPLE COLLECTED

* BORING LOCATED ~ 44' WEST OF WCSS-2

ARCADIS

Sample/Core Log

Boring/Well WLSS-12 Project/No. B0007393.0002.00016 Page 1 of 1

Site Location AVX Myrtle Beach Drilling Started 10/28/15 Drilling Completed 10/28/15

Total Depth Drilled 25 Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval 5 feet

None Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	2.5	1	0-0.5'; ASPHALT
			2 -1.7 ⊗	0.5'-5'; CLAY, GREY, HIGH PLASTICITY, M. STIFF,
			3 . 0.4	MOIST
			4 -0.3 ⊗	
			5 -0.2	
5	10	3	6 -0.2 ⊗	5-9.5'; SAA, COLOR LIGHTENS TO LIGHT GREY W/ DEPTH
			7 -0.2	ORGANIC MATERIAL PRESENT
			8 -0.2 ⊗	9.5-10'; SILT W/ VF SAND AND SOME CLAY, DARK
			9 -0.4	GREY, SLOW DILATANCY, MOIST
			10 -1.1 ⊗	
10	15	3.5	11 -1.2	10-15'; SAA, MOIST TO WET
			12 -0.7 ⊗	
			13 -1.5	
			14 -1.3 ⊗	
			15 -502.2 ⊗	
15	20	4	16 -69.7	15-20'; VF-F SAND W/ LITTLE SILT, LIGHT GREY, RAPID
			17 -283.0 ⊗	DILATANCY, WET, GRAIN SIZE INCREASES TO MEDIUM
			18 -673.2	W/ DEPTH
			19 -156.6 ⊗	
			20 -154.5	
20	25	5	21 -164.3 ⊗	20-23.5'; SAA
			22 -278.0 ⊗	23.5-25'; CLAY, GREY, HIGH PLASTICITY, MOIST
			23 -34.8	M. STIFF
			24 -12.6 ⊗	
			25 -17.7	
			26	TERMINATE BORING @ 25' BGS AND ABANDON
			27	

Field Forms.xlsx.xls
Geoprobe Log

⊗ - DISCREET SOIL SAMPLE COLLECTED

* BORING LOCATED ~64' SOUTH OF WLSS-8

ARCADIS

Sample/Core Log

Boring/Well: WCSS-13 | Project/No.: B0007393.0002.00016 | Page: 1 of 1

Site Location: AVX Myrtle Beach | Drilling Started: 10/29/15 | Drilling Completed: 10/29/15

Total Depth Drilled: 30 Feet | Hole Diamete: 3 inches | Type of Sample/ Coring Device: Geoprobe

Length and Diameter of Coring Device: 5' 1.5" | Sampling Interval: 5 feet

None | Drilling Method: DPT

Drilling Contractor: Zebra | Driller: Levi Mainard | Helper:

Prepared By: Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5		1 - 0.7	0-5'; FILL / DEBRIS
			2 - 0.3 ⊗	
			3 - 0.9	
			4 - 0.3 ⊗	
			5 - 0.1	
5	10		6 - 0.3 ⊗	5-10'; CLAY, GREY (BROWN FROM 6.5-7') HIGH PLASTICITY
			7 - 0.3	M. STIFF, MOIST, COLOR LIGHTENS W/ DEPTH
			8 - 0.8 ⊗	
			9 - 4.9	
			10 - 10.0 ⊗	
10	15		11 - 108.2 ⊗	10-10.5'; SAA
			12 - 135.5	10.5-13'; SILT W/ TRACE F SAND AND SOME CLAY, SLOW
			13 - 758.4 ⊗	DILATANCY, WET, SOFT ORGANIC MATERIAL PRESENT
			14 - 104.8 ⊗	13-15'; VF-F SAND W/ SILT AND LITTLE CLAY, GREY, RAPID
			15 - 52.3	DILATANCY, WET, SOFT, ORGANIC MATERIAL PRESENT
15	20		16 - 223.8 ⊗	
			17 - 492.3 ⊗	15-18'; SILT W/ TRACE FINE SAND AND SOME CLAY, SLOW
			18 - 370.3	DILATANCY, GREY, WET, SOFT
			19 - 1741 ⊗	18-20'; F-M SAND W/ SOME SILT AND TRACE CLAY,
			20 - 818.4	RAPID DILATANCY, GREY, WET
20	25		21 - 55.5	
			22 - 271.7 ⊗	20-25'; SAA, GRAIN SIZE INCREASES TO M-C W/ DEPTH
			23 - 34.7	
			24 - 87.7 ⊗	
25	30		25 - 14.0	25-27.5'; SAA
			26 - 122.6 ⊗	27.5-30'; CLAY, GREY, HIGH PLASTICITY, M. STIFF
			27 - 82.4	
			28 - 103.9 ⊗	
			29 - 71.1	
			30 - 54.9 ⊗	* BORING LOCATED ~13' SOUTH OF SB-204

ARCADIS

Sample/Core Log

Boring/Well SB-14 Project/No. B0007393.0002.00016 Page 1 of 1

Site Location AVX Myrtle Beach Drilling Started 10/29/15 Drilling Completed 10/29/15

Total Depth Drilled 30 Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval 5 feet

None Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	2.5	1 - 0.1	0-5': FILL
			2 - 0.2	
			3 - 0.1 ⊗	5-10'; CLAY, DARK BROWN TO GREY W/ DEPTH, HIGH
			4 - 0.1	PLASTICITY, MOIST, STIFF
			5 - 0.2 ⊗	
5	10	3	6 - 1.0	10-12'; SAA
			7 - 1.1 ⊗	12-15'; SILT W/ VF SAND AND SOME CLAY, DARK BROWN,
			8 - 1.0	SLOW DILATANCY, MOIST TO WET,
			9 - 1.2 ⊗	
			10 - 1.4	
10	15	5	11 - 2.5 ⊗	15-19'; SAA
			12 - 3.3	19-20'; F-M SAND W/ LITTLE SILT AND TRACE CLAY,
			13 - 4.2 ⊗	DARK GREY, RAPID DILATANCY
			14 - 1.4	
			15 - 11.3 ⊗	
15	20	4	16 - 6.3	20-25'; SAA, GRAIN SIZE INCREASES TO M-C W/ DEPTH,
			17 - 8.6 ⊗	(WELL GRADED)
			18 - 5.2	
			19 - 4.7	
			20 - 14.2 ⊗	
20	25	3	21 - 2.1	25-29.5'; ~~SAA (M-C SAND)~~ M-C SAND, W/ LITTLE
			22 - 11.1 ⊗	SILT, RAPID DILATANCY, GREY
			23 - 41.8	29.5-30': CLAY, DARK GREY, HIGH PLASTICITY, MOIST
			24 - 31.2 ⊗	W/ STIFF
25	30	5	25 - 9.0	
			26 - 18.0 ⊗	
			27 - 3.9	- TERMINATE BORING @ 30' BGS AND ABANDON -

Field Forms.xlsx.xls
Geoprobe Log

28 - 18.3
29 - 216.5 ⊗
30 - 187.7 ⊗*

⊗ - DISCREET SOIL SAMPLE COLLECTED

* BORING LOCATED 8' SOUTH OF SB-203

ARCADIS

Sample/Core Log

Boring/Well WCSS-15 Project/No. B0007393.0002.00016 Page 1 of 1

Site Location AVX Myrtle Beach Drilling Started 10/29/15 Drilling Completed 10/29/15

Total Depth Drilled 30 Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval 5 feet

☐ None ☐ Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	3	1 - 2.7	0-5'; FILL
			2 - 0.3 ⊗	
			3 - 0.0	
			4 - 0.1 ⊗	
			5 - 0.0	
5	10	4	6 - 0.1 ⊗	5-10'; CLAY, DARK BROWN TO GREY W/ DEPTH,
			7 - 0.0	HIGH PLASTICITY, STIFF, MOIST
			8 - 0.0 ⊗	
			9 - 0.0	
			10 - 0.1 ⊗	
10	15	4.2	11 - 4.3	10-11'; SAA
			12 - 4.2	11-15'; SILT W/ SOME VF SAND AND SOME CLAY,
			13 5.4 ⊗	SLOW DILATANCY, MOIST TO WET, SOFT
			14 2.8	
			15 6.4 ⊗	
15	20	4.5	16 4.2	15-18.5'; SAA
			17 2.0	18.5'-20'; F-M SAND W/ SOME SILT AND LITTLE
			18 8.3 ⊗	CLAY, RAPID DILATANCY, DARK GREY
			19 18.3	
			20 24.3 ⊗	20-25';
20	25	4	21 4.4	VF SAND TO F-C SAND W/ DEPTH (WELL GRADED)
			22 5.2	RAPID DILATANCY, WET, GREY
			23 14.5 ⊗	
			24 11.5	
25	30	5	25 44.3 ⊗	25-30'; CLAY, GREY, HIGH PLASTICITY, M STIFF,
			26 22.3	TRACE SHELL FRAGMENTS STARTING @ 28'
			27 24.4 ⊗	-TERMINATE BORING @ 30' BGS AND ABANDON-
			28 9.2	
			29 11.3 ⊗	
			30 4.8	

Field Forms.xlsx.xls
Geoprobe Log

⊗ - DISCREET SOIL SAMPLE COLLECTED

*BORING LOCATED ~ 50' SOUTH OF WCSS-13

ARCADIS

Sample/Core Log

Boring/Well WLSS-16 Project/No. B0007393.0002.00016 Page 1 of 1

Site Location AVX Myrtle Beach Drilling Started 10/29/15 Drilling Completed 10/29/15

Total Depth Drilled 25 Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval 5 feet

☐ ☐ None Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	2.5	1 - 0.8 ⊗	0-4'; FILL
			2 - 0.1	4-5'; CLAY, DARK BROWN, HIGH PLASTICITY, STIFF
			3 - 0.1 ⊗	MOIST
			4 - 0.1	
			5 - 0.0 ⊗	
5	10	5	6 - 0.0	5-10'; SAA, COLOR CHANGES TO OLIVE @ 6.5
			7 - 0.0 ⊗	
			8 - 0.0	
			9 - 0.0	
			10 - 0.0 ⊗	
10	15	4	11 - 0.0	10-15'; SILT W/ SOME VF SAND AND CLAY, SLOW
			12 - 0.0	DILATANCY, DARK GREY, MOIST TO WET
			13 - 0.4 ⊗	
			14 - 1.4	
			15 - 4.9 ⊗	15-18.5'; SAA
15	20	4	16 - 15.3	18.5-20'; VF-F SAND W/ SOME SILT AND LITTLE CLAY;
			17 - 19.0 ⊗	RAPID DILATANCY, WET, DARK GREY
			18 - 5.5	
			19 - 38.2 ⊗	
			20 - 236.6 ⊗	
20	25	4.5	21 - 33.5	20-24'; SAND F TO M W/ DEPTH, LITTLE SILT, LIGHT
			22 - 40.0	GREY, MOIST, RAPID DILATANCY
			23 - 71.2 ⊗	24-25'; CLAY, GREY, HIGH PLASTICITY, M. STIFF,
			24 - 72.1	MOIST
			25 - 1.9 ⊗	
			26	- TERMINATE BORING @ 25' BGS AND ABANDON -
			27	

Field Forms.xlsx.xls
Geoprobe Log

⊗ - DISCREET SOIL SAMPLE COLLECTED

* BORING LOCATED ~50' SOUTH OF WLSS-15

ARCADIS

Sample/Core Log

Boring/Well WCSS-17 Project/No. B0007393.0002.00016 Page 1 of 1

Site Location AVX Myrtle Beach Drilling Started 10/30/15 Drilling Completed 10/30/15

Total Depth Drilled 30 Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval 5 feet

☐ ☐ None Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	3.5	1- 0.1	0-4'; FILL
			2- 0.7 ⊗	4-5'; CLAY, DARK BROWN, HIGH PLASTICITY, FIRM,
			3- 0.7	MOIST
			4- 0.1 ⊗	
			5- 0.1	
5	10	4.5	6- 0.1 ⊗	5-10'; SAA, COLOR LIGHTENS TO GREY W/ DEPTH
			7- 0.1	
			8- 0.1 ⊗	
			9- 0.1	
			10- 0.7 ⊗	
10	15	4.5	11- 3.9	10-11'; SAA
			12- 37.0 ⊗	11-15'; SILT W/ SOME VF SAND AND LITTLE CLAY, GREY,
			13- 100.9	SLOW DILATANCY, WET
			14- 158.3 ⊗	
			15- 149.0	
15	20	5	16- 36.6	15-18'; SAA
			17- 156.3 ⊗	18-20'; VF-M SAND W/ SOME SILT AND LITTLE CLAY,
			18- 83.4	RAPID DILATANCY, GREY, WET
			19- 176.3 ⊗	
			20- 102.4	
20	25	3.5	21- 116.3	20-25'; SAA, SILT AND CLAY CONTENT DECREASES
			22- 1166 ⊗	WITH DEPTH, VF-M TO MEC W/ DEPTH (WELL GRADED)
			23- 357.4	
			24- 981.0 ⊗	
			25- 50.3	25-29.5'; SAA
25	30	5	26- 58.9	29.5-30'; CLAY, GREY, HIGH PLASTICITY, MOIST, M. STIFF
			27- 51.3 ⊗	

Field Forms.xlsx.xls
Geoprobe Log

28- 85.7
29- 179.8 ⊗
30- 46.3 ⊗

⊗- DISCREET SOIL SAMPLE COLLECTED

* BORING LOCATED ~50' NORTH OF WCSS-14

ARCADIS

Sample/Core Log

Boring/Well WCSS-18 Project/No. B0007393.0002.00016 Page 1 of 1

Site Location AVX Myrtle Beach Drilling Started 10/30/15 Drilling Completed 10/30/15

Total Depth Drilled 30 Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval 5 feet

☐ None ☐ Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	2.5	1 - 0.2	0-5'; FILL
			2 - 0.1 ⊗	
			3 - 0.1	
			4 - 0.1 ⊗	
			5 - 0.2	
5	10	4	6 - 0.1	5-10'; CLAY, DARK BROWN TO GREY W/ DEPTH, HIGH
			7 - 0.1 ⊗	PLASTICITY, MOIST, STIFF
			8 - 0.0	
			9 - 0.0 ⊗	
			10 - 0.0	
10	15	5	11 - 0.0	~~10-12'~~ ~~15-17~~; SAA
			12 - 0.1 ⊗	~~12'-15'~~ ~~17-20~~; SILT W/ SOME VF SAND AND CLAY, GREY,
			13 - 0.0	SLOW DILATANCY, MOIST TO WET
			14 - 0.1 ⊗	
			15 - 0.1	
15	20	5	16 - 0.1 ⊗	15-19'; SAA, WET
			17 - 0.1	19-20'; F-M SAND, LITTLE SILT, TRACE CLAY, RAPID
			18 - 0.3 ⊗	DILATANCY, GREY
			19 - 2.2	
			20 - 5.7 ⊗	
20	25	0	21 -	20-25'; NO RECOVERY (DRILLER BELIEVES DUE TO
			22	SILT)
			23	
			24	25-29.7'; M-C SAND W/ LITTLE SILT, RAPID DILATANCY,
			25	GREY
25	30	4.5	26 - 1.0	29.7'-30'; CLAY, GREY, HIGH PLASTICITY, MOIST, M. STIFF
			27 - 1.0	TERMINATE BORING @ 30' BGS AND ABANDON
			28 - 5.6	
			29 - 4.4	
			30 - 2.5	

Field Forms.xlsx.xls
Geoprobe Log

⊗ - DISCREET SOIL SAMPLE COLLECTED

* BORING LOCATED ~50' NORTH OF WCSS-17

ARCADIS

Sample/Core Log

Boring/Well WCSS-19 Project/No. B0007393.0002.00016 Page 1 of 1

Site Location AVX Myrtle Beach Drilling Started 10/31/15 Drilling Completed 10/31/15

Total Depth Drilled _____ Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval _____ feet

☐ None ☐ Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper Richard Mooney

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)		Sample/Core Description
0	5	HA	1		0-5' ; MINIMAL RECOVERY DUE TO HAND AUGERING
			2		
			3		
			4		
			5		
5	10	4	6	7.6 ⊗	5-8' ; CLAY, LIGHT GREY, HIGH PLASTICITY, MOIST, M. STIFF
			7	8.6	
			8	3.3 ⊗	8-10' ; VF SAND W/ SOME SILT, RAPID DILATANCY, LIGHT GREY
			9	1.3	
10	15	5	10	0.0 ⊗	10-15' ; SILT W/ VF SAND, DARK GREY, SLOW DILATANCY, MOIST TO WET
			11	0.0	
			12	0.0 ⊗	
			13	0.0	
			14	0.0 ⊗	
15	20	2.5	15	0.0	15-20' ; ~~FINE TO~~ F-M SAND W/ SOME SILT AND SHELL FRAGMENTS, GREY, RAPID DILATANCY
			16	0.0 ⊗	
			17	0.0	
			18	0.2 ⊗	20-20.5' ; SAA
			19	0.3	
20	25	5	20	0.2 ⊗	20.5-25' ; CLAY, GREY, HIGH PLASTICITY, TRACE SHELL FRAGMENTS, M. STIFF, MOIST
			21	0.0	
			22	0.0 ⊗	
			23	0.0	TERMINATE BORING @ 25' BGS AND ABANDON
			24	0.0 ⊗	
			25	0.0	
			26		
			27		

⊗ - DISCREET SOIL SAMPLE COLLECTED

* BORING LOCATED ~75' SOUTH OF WCSS-7

ARCADIS

Sample/Core Log

Boring/Well WCSS-20 Project/No. B0007393.0002.00016 Page 1 of 1

Site Location AVX Myrtle Beach Drilling Started 11/2/15 Drilling Completed 11/2/15

Total Depth Drilled 24 Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval 5 feet

None Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	3.5	1 - 0.1	0-1' ; CLAY W/ SOME SILT, BROWN/GREY, MED. PLASTICITY,
			2 - 0.1 ⊗	MOIST, M. STIFF
			3 - 0.0	1-5' ; CLAY, GREY/BROWN, HIGH PLASTICITY,
			4 - 0.0 ⊗	STIFF, MOIST
			5 - 0.1	
5	10	5	6 - 0.1 ⊗	~~5-13.5~~ ~~10-13.5'~~ ; SAA
			7 - 0.2	~~8.5~~ ~~13.5~~ - 10' ; SILT W/ F-M SAND, LITTLE CLAY, SLOW
			8 - 0.1 ⊗	DILATANCY, DARK GREY, MOIST
			9 - 0.1	
			10 - 0.1 ⊗	
10	15	5	11 - 0.1	
			12 - 0.1 ⊗	
			13 - 0.1	
			14 - 0.1 ⊗	10 - ~~19~~ ~~20~~ ⊗, SILT W/ SOME CLAY AND TRACE VF SAND,
			15 - 0.1	~~19-20~~ ⊗, DARK GREY, WET
15	20	3.5	16 - 0.0 ⊗	~~14-15~~ ; VF-F SAND W LITTLE SILT, LIGHT BROWN,
			17 - 0.0	SLOW DILATANCY
			18 - 0.0 ⊗	
			19 - 0.1	15-20' ; VF-F SAND W/ TRACE SILT TO F-M W/
			20 - 0.0 ⊗	DEPTH (WELL GRADED), WET
20	25	3	21 - 0.1	
			22 - 0.1 ⊗	20-22' ; F-M SAND TRACE SILT, RAPID DILATANCY
			23 - 0.0	LIGHT GREY
			24 - 0.0 ⊗	22-25' ; CLAY, GREY, HIGH PLASTICITY, M. STIFF
			25 - 0.0	MOIST
			26	
			27	

ARCADIS

Sample/Core Log

Boring/Well MCSS-21 Project/No. B0007393.0002.00016 Page 1 of 1

Site Location AVX Myrtle Beach Drilling Started 11/2/15 Drilling Completed 11/2/15

Total Depth Drilled _____ Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval _____ feet

_____ None Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper _____

Prepared By Matt Creel

From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	2	1 - 0.0	*LITTLE RECOVERY
			2 - 0.0 ⊗	0-0.5'; ORGANIC LAYER
			3 - 0.1	0.5-5'; CLAY W/ TRACE SILT, HIGH PLASTICITY,
			4	STIFF, MOIST, BROWN TO GREY
5	10	5	5	
			6 - 0.0 ⊗	5-8.5'; SAA
			7 - 0.1	8.5'-10'; SILT W/ TRACE VF SAND AND SOME CLAY,
			8 - 0.4 ⊗	DARK GREY, WET, SOFT
			9 - 2.0	
			10 - 11.6 ⊗	
10	15	5	11 - 103.4 ⊗	10-15'; SAA
			12 - 28.1	
			13 - 5.8	
			14 - 5.5 ⊗	
			15 - 6.3	15-18'; SILT W/ SOME VF-F SAND, DARK GREY,
15	20	3	16 - 11.0 ⊗	WET, SLOW DILATANCY
			17 - 3.1	18-20'; F-M SAND, LITTLE SILT, LIGHT GREY,
			18 - 5.0 ⊗	RAPID DILATANCY
			19 - 0.11	
			20 - 0.3 ⊗	
20	25	5	21 - 33.9 ⊗	20-21.5'; SAA
			22 - 1.6	21.5-25'; CLAY, DARK GREY, HIGH PLASTICITY,
			23 - 1.9 ⊗	M. STIFF, MOIST
			24 - 2.8	
			25 - 1.1 ⊗	
			26	TERMINATE BORING @ 25' BGS AND ABANDON
			27	

ARCADIS

Sample/Core Log

Boring/Well WCSS-22 Project/No. B0007393.0002.00016 Page 1 of 1

Site Location AVX Myrtle Beach Drilling Started 11/2/15 Drilling Completed 11/2/15

Total Depth Drilled 20 Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval ____ feet

☐ None ☐ Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper ____

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)		Sample/Core Description
0	5	2	1 - 0.1		* LITTLE RECOVERY
			2 - 0.2	(X)	0-5'; CLAY W/ SOME SILT, GREY / BROWN, MED. /
			3 - 0.1		HIGH PLASTICITY, STIFF, MOIST
			4		
			5		
5	10	4.5	6 - 0.3	(X)	5-8'; SAA
			7 - 0.2		8-~~10~~ 9.5', VF SAND W/ LITTLE SILT, TAN, MOIST, SOFT,
			8 - 0.4	(X)	RAPID DILATANCY
			9 - 0.3		9.5-10'; SILT W/ SOME VF SAND AND LITTLE CLAY,
			10 - 0.2	(X)	DARK GREY, WET
10	15	4.5	11 - 0.0		
			12 - 0.1	(X)	10-15'; SAA W/ SOME SHELL FRAGMENTS
			13 - 0.0		
			14 - 0.0	(X)	15-19.5'; VF-F SAND W/ SOME SILT AND SHELL
			15 - 0.0		FRAGMENTS LIGHT BROWN TO TAN, RAPID DILATANCY,
15	20	5.0	16 - 0.0	(X)	WET
			17 - 0.0		19.5-20'; CLAY, DARK GREY, HIGH PLASTICITY, M. STIFF
			18 - 0.0	(X)	MOIST
			19 - 0.0		
			20 - 0.0	(X)	
			21		- TERMINATE BORING @ 20' BGS AND ABANDON -
			22		
			23		
			24		
			25		
			26		
			27		

ARCADIS

Sample/Core Log

Boring/Well MW35-23 Project/No. B0007393.0002.00016 Page 1 of 1

Site Location AVX Myrtle Beach Drilling Started 11/2/15 Drilling Completed 11/2/15

Total Depth Drilled 25 Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval ____ feet

☐ None ☐ Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper ____

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	3	1 - 0.0	
			2 - 0.0 ⊗	0-5': CLAY W/ SOME SILT, GREY/BROWN, MED.
			3 - 0.1	PLASTICITY, MOIST, STIFF
			4 - 0.1 ⊗	
			5 -	
5	10	5	6 - 0.0 ⊗	5-8.5': CLAY, GREY, HIGH PLASTICITY, M. STIFF,
			7 - 0.0	MOIST
			8 - 0.7 ⊗	8.5'-10': SILT W/ SOME CLAY AND LITTLE VF SAND,
			9 - 0.7	DARK GREY, MOIST, SOFT, ORGANIC MATERIAL
			10 - 0.8 ⊗	PRESENT
10	15	4	11 - 1.4	10-15': SAA, MOIST TO WET
			12 - 1.3 ⊗	
			13 - 2.3	
			14 - 13.7 ⊗	
			15 - 6.4	
15	20	4	16 - 8.6 ⊗	15-18': SILT W/ SOME VF SAND, GREY, SLOW
			17 - 0.6	DILATANCY, WET
			18 - 1.6 ⊗	18-20': F-M SAND W/ LITTLE SILT, LIGHT GREY,
			19 - 0.5	RAPID DILATANCY,
			20 - 0.4 ⊗	
20	25	4	21 - 0.6 ⊗	20-21.5': SAA
			22 - 0.0	
			23 - 0.0	21.5-25': CLAY, GREY, HIGH PLASTICITY, M. STIFF
			24 - 0.0 ⊗	MOIST
			25 - 0.0	
			26	
			27	

ARCADIS

Sample/Core Log

Boring/Well WCSS-24 Project/No. B0007393.0002.00016 Page 1 of 1

Site Location AVX Myrtle Beach Drilling Started 11/2/15 Drilling Completed 11/2/15

Total Depth Drilled 25 Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval ____ feet

None Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper ____

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	2.5	1 - 0.0	0-5': CLAY W/ LITTLE SILT, GREY TO BROWN, MED.
			2 - 0.0	PLASTICITY, STIFF, MOIST
			3 - 0.0	
			4 - 0.0 ⊗	5-7.5': SAA
			5 - 0.0	
5	10	4.5	6 - 0.1 ⊗	7.5-10': SILT W/ SOME VF SAND AND CLAY, DARK
			7 - 0.3	GREY, WET, SOFT
			8 - 1.7 ⊗	
			9 - 0.8	10-12.5': SAA
			10 - 0.3 ⊗	12.5-15': F-M SAND W/ SILT AND LITTLE CLAY,
10	15	4.5	11 - 0.7	LIGHT BROWN TO DARK GREY, MOIST
			12 - 0.6 ⊗	
			13 - 0.2	
			14 - 0.2 ⊗	
			15 - 0.1	
15	20	2	16 - 0.0 ⊗	* LITTLE RECOVERY
			17 - 0.0	15-20': F-M SAND W/ LITTLE SILT, LIGHT GREY,
			18	WET, RAPID DILATANCY
			19	
			20 No Recovery -0.2 ⊗	
20	25		21 - 0.2	20-25': CLAY, GREY, HIGH PLASTICITY, M. STIFF,
			22 - 0.2 ⊗	MOIST
			23 - 0.1	
			24 - 0.1 ⊗	
			25 - 0.2	
			26	
			27	

ARCADIS

Sample/Core Log

Boring/Well MCSS-25 Project/No. B0007393.0002.00016 Page 1 of 1

Site Location AVX Myrtle Beach

Drilling Started 11/3/15 Drilling Completed 11/3/15

Total Depth Drilled 20 Feet Hole Diamete 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5" Sampling Interval ____ feet

None Drilling Method DPT

Drilling Contractor Zebra Driller Levi Mainard Helper ____

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	3	1 - 0.0	0-5'; CLAY W/ SOME SILT, GREY / BROWN, MED /
			2 - 0.0 (R)	HIGH PLASTICITY, MOIST, STIFF
			3 - 0.0	
			4 - 0.0 (R)	
			5 - 0.0	
5	10	5	6 - 0.0 (R)	5-8'; CLAY, LIGHT GREY, HIGH PLASTICITY, M. STIFF,
			7 - 0.0	MOIST
			8 - 0.0 (R)	
			9 - 0.0	8-10'; SILT W/ SOME CLAY AND VF SAND, SLOW
			10 - 0.0 (R)	DILATANCY, DARK GREY, MOIST/WET, SOFT
10	15	2.5	11 - 0.0	
			12 - 0.0 (R)	10-14.5'; SILT W/ SOME VF SAND, LITTLE CLAY,
			13 - 0.0	WET, SLOW DILATANCY
			14 - 0.0 (R)	
			15 - 0.0	14.5-15'; F-M SAND, LITTLE SILT, RAPID DILATANCY,
15	20	2.5	16 - 0.0 (R)	MOIST
			17 - 0.0	
			18 - 0.0 (R)	15-19.8'; SAA
			19 - 0.0	19.8-20'; CLAY, GREY, HIGH PLASTICITY, M. STIFF,
			20 - 0.0 (R)	MOIST
			21	
			22	TERMINATE BORING @ 20' BGS AND ABANDON
			23	
			24	
			25	
			26	
			27	

ARCADIS

Sample/Core Log

Boring/Well: WLSS-26 | Project/No.: B0007393.0002.00016 | Page 1 of 1

Site Location: AVX Myrtle Beach | Drilling Started: 11/3/15 | Drilling Completed: 11/3/15

Total Depth Drilled: 25 Feet | Hole Diamete: 3 inches | Type of Sample/ Coring Device: Geoprobe

Length and Diameter of Coring Device: 5' 1.5" | Sampling Interval: 5 feet

None | Drilling Method: DPT

Drilling Contractor: Zebra | Driller: Levi Mainard | Helper:

Prepared By: Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	2	1 - 1.9	0-2'; FILL
			2 - 230.7 ⊗	2-5'; CLAY W/ SOME SILT, GREY & BROWN, STIFF,
			3 - 22.4	MED./HIGH PLASTICITY, MOIST
			4 - 109.3 ⊗	
			5 - 35.0	5-9'; SAA
5	10	3.5	6 - 112.7 ⊗	9-10'; SILT W/ LITTLE SAND AND CLAY, SLOW DILATANCY,
			7 - 172.3	MOIST, SOFT
			8 - 98.7 ⊗	
			9 - 215.5	10-14.5'; SAA
			10 - 100.7 ⊗	14.5-15'; F-M SAND, LITTLE SILT, GREY, RAPID
10	15	4	11 - 7.9	DILATANCY
			12 - 61.3 ⊗	15-20'; SAA
			13 - 31.3	
			14 - 170.4	
			15 - 307.2 ⊗	
15	20	3.5	16 - 3.4	
			17 - 4.7 ⊗	
			18 - 4.6	
			19 - 6.4 ⊗	
			20 - 1.4	
20	25	4	21 - 6.4 ⊗	20-25'; SAA, GRADED TO M-C W/ DEPTH
			22 - 10.6	24-25'; CLAY, GREY, M. STIFF, HIGH PLASTICITY,
			23 - 30.9 ⊗	MOIST
			24 - 26.8	
			25 - 19.0 ⊗	
			26	
			27	

Field Forms.xlsx.xls
Geoprobe Log

⊗ - DISCREET SOIL SAMPLE COLLECTED

* BORING ~25' NORTH OF WLSS-8

ARCADIS

Sample/Core Log

Boring/Well MW55-27 Project/No. B0007393.0002.00016 Page 1 of 1

Site Location AVX Myrtle Beach Drilling Started 11/3/15 Drilling Completed 11/3/15

Total Depth Drilled 25 Feet Hole Diameter 3 inches Type of Sample/ Coring Device Geoprobe

Length and Diameter of Coring Device 5' 1.5"

☐ None ☐ Sampling Interval ____ feet

Drilling Contractor Zebra Drilling Method DPT

Prepared By Matt Creel Driller Levi Mainard Helper ____

Sample/Core Depth (feet below land surface)

From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	2	1 - 0.0	0-2'; FILL
			2 - 0.0	2-5'; CLAY W/ LITTLE SILT, GREY, MED. PLASTICITY
			3 - 0.0	STIFF, MOIST
			4 - 0.0 ⊗	
			5 - 0.0	
5	10	3	6 - 0.1 ⊗	~~5-10'~~ 5-12' SAA
			7 - 0.1	~~9 @ 10'~~
			8 - 0.2 ⊗	
			9 - 0.4	
			10 - 111.9 ⊗	
10	15	2	11 - 193.3 ⊗	* LITTLE PETROLEUM
			12 - 140.9	10-15'; SILT W/ CLAY AND VF SAND, GREY,
			13 - 157.2 ⊗	
			14	
			15 18.2 ⊗	
15	20	1.5	16 - ~~18.2~~ WET 140	15-20'; SAA; DECREASED CLAY TO TRACE, WET
			17 - ~~13.5~~ 13.5 WET ⊗	
			18 - ~~14~~ WET	
			19	
			20	
20	25	4.5	21 - 34.3 ⊗	20-25.5'; F TO M-C SAND W/ DEPTH, LITTLE SILT,
			22 - 20.0	RAPID DILATANCY, LIGHT GREY
			23 - 75.4 ⊗	25.5-25'; CLAY, GREY, HIGH PLASTICITY, M. STIFF
			24 - 79.4	MOIST
			25 - 57.7 ⊗	
			26	
			27	

Field Forms.xlsx.xls
Geoprobe Log

⊗ - DISCREET SOIL SAMPLE COLLECTION

* [illegible]

ADIS
Core Log

VCSS-28 Project/No. B0007393.0002.00016 Page 1 of 1

AVX Myrtle Beach | Drilling Started 11/3/15 | Drilling Completed 11/3/15

epth Drilled 25 Feet | Hole Diamete 3 inches | Type of Sample/ Coring Device Geoprobe

h and Diameter oring Device 5' 1.5" | Sampling Interval ____ feet

None | Drilling Method DPT

Drilling Contractor Zebra | Driller Levi Mainard | Helper ____

Prepared By Matt Creel

Sample/Core Depth (feet below land surface) From	To	Core Recovery (ft)	PID Reading ft (ppm)	Sample/Core Description
0	5	0.5	1 - 0.1	* VERY LITTLE RECOVERY
			2	
			3	
			4	
			5	
5	10	2.5	6 - 0.1 ⊗	5-10'; CLAY W/ LITTLE SILT, BROWN TO GREY, STIFF
			7 - 0.0	MOIST, MED. PLASTICITY
			8 - 0.0 ⊗	
			9 - 0.0	
			10 - 0.1 ⊗	10-14.8'; SILT W/ SOME CLAY AND LITTLE F SAND,
10	15	3	11 - 1.1	DARK GREY, WET, SOFT
			12 - 0.5	14.8-15'; F-M SAND W/ LITTLE SILT, GREY, RAPID
			13 - 1.6 ⊗	DILATANCY
			14 - 6.7	
			15 - 63.0 ⊗	15-20'; SAA
15	20	3.5	16 - 279.0 ⊗	
			17 - 46.5	
			18 - 42.3 ⊗	
			19 - 39.7	
			20 - 28.9 ⊗	
20	25		21 - 0.6 ⊗	20-24.9'; F-M SAND, TRACE SILT, LIGHT
			22 - 0.7	GREY, RAPID DILATANCY
			23 - 0.4 ⊗	
			24 - 1.5	24.9-25'; CLAY, GREY, HIGH PLASTICITY,
			25 - 6.6 ⊗	M. STIFF, MOIST
			26	- TERMINATE BORING @ 25' BGS AND ABANDON -
			27	

Field Forms.xlsx.xls
Geoprobe Log

⊗ - DISCREET SOIL SAMPLE COLLECTED

35' (OFF-SET DUE TO REFUSAL DURING PROBING)

* BORING LOCATED AT ⊗ SOUTH

APPENDIX B

Laboratory Analytical Data

Ozark UNDERGROUND LABORATORY 1572 Aley Lane • Protem, MO 65733 • (417) 785-4289 • fax (417) 785-4290 • contact@ozarkundergroundlab.com

Certificate of Analysis

Date of certificate: April 25, 2016
Client: ARCADIS
2200 AVX Drive
Myrtle Beach, SC 29577
Project name/location: AVX MB, Myrtle Beach, SC
Project number: B0007393.0002
Contact people: Jeffrey.McDonough@arcadis.com
Thomas.Darby@arcadis.com
Robby.Shealy@arcadis.com

Samples collected by: Robert B. Shealy
Date samples shipped: April 11, 2016
Date samples rec'd at OUL: April 12, 2016
Date analyzed by OUL: April 18, 20 and 21, 2016
Included with certificate of analysis: Table of results, copy of chain of custody record and discrepancy sheet

Results for water samples analyzed for the presence of fluorescein dye.

Peak wavelengths are reported in nanometers (nm); dye concentrations are reported in parts per billion (ppb).

OUL Number	Sample ID	Date/Time Collected	Fluorescein Results	
			Peak (nm)	Conc. (ppb)
B4168	**DPW-4SD**	**4/4/16 1245**	**ND**	
B4169	DPW-4SD	4/7/16 1745	ND	
B4170	**DPW-5SD**	**4/4/16 1245**	**ND**	
B4171	DPW-5SD	4/7/16 1745	ND	
B4172	**Injectate**	**4/5/16 0110**	**508.0**	**13,000**
B4173	Injectate	4/5/16 0745	507.7	10,700
B4174	Injectate	4/5/16 1640	508.1	9,640
B4175	Injectate	4/6/16 0818	508.3	10,200
B4104	**P-6S1**	**4/4/16 1000**	**ND**	
B4105	P-6S1	4/7/16 1000	513.0 **	0.299
B4106	**P-6S2**	**4/4/16 1000**	**ND**	
B4107	P-6S2	4/7/16 1000	507.9	53.8
B4108	**P-6S3**	**4/4/16 1000**	**ND**	
B4109	P-6S3	4/5/16 0801	506.0	0.016
B4110	P-6S3	4/5/16 1130	507.7	24.4
B4111	P-6S3	4/5/16 1325	507.7	3,880
B4112	P-6S3	4/5/16 1448	507.9	5,580
B4113	P-6S3	4/5/16 1746	508.0	7,050
B4114	P-6S3	4/6/16 0538	507.7	10,100
B4115	P-6S3	4/7/16 1000	507.5	8,200
B4116	**P-7S1**	**4/4/16 1000**	**ND**	
B4117	P-7S1	4/7/16 1000	513.6 **	0.806
B4118	**P-7S2**	**4/4/16 1000**	**ND**	
B4119	P-7S2	4/5/16 1130	506.4 **	0.018
B4121	P-7S2	4/5/16 1448	507.4 **	0.018

F:\docs\COA\Arcadis Certificates\Arcadis_AVXMyrtleBeachSC_01

OUL Number	Sample ID	Date/Time Collected	Fluorescein Results	
			Peak (nm)	Conc. (ppb)
B4122	P-7S2	4/5/16 1746	507.6	364
B4123	P-7S2	4/5/16 2135	507.5	1,050
B4124	P-7S2	4/6/16 0538	507.4	2,050
B4125	P-7S2	4/6/16 1010	507.5	3,200
B4126	P-7S2	4/6/16 1920	507.5	3,810
B4127	P-7S2	4/7/16 0408	507.5	3,610
B4128	P-7S2	4/7/16 1000	507.7	2,990
B4129	**P-7S3**	**4/4/16 1000**	**ND**	
B4130	P-7S3	4/5/16 0445	ND	
B4131	P-7S3	4/5/16 0801	507.8	1.03
B4132	P-7S3	4/5/16 1130	507.4	439
B4133	P-7S3	4/5/16 1448	507.6	3,580
B4134	P-7S3	4/6/16 0538	507.7	8,910
B4135	P-7S3	4/6/16 1010	507.7	10,100
B4136	P-7S3	4/7/16 1000	507.5	9,410
B4137	**P-8S1**	**4/4/16 1000**	**ND**	
B4176	P-8S1	4/7/16 1000	ND	
B4177	**P-8S2**	**4/4/16 1000**	**ND**	
B4138	P-8S2	4/7/16 1000	508.2	38.0
B4139	**P-8S3**	**4/4/16 1000**	**ND**	
B4141	P-8S3	4/5/16 1746	508.6	0.054
B4142	P-8S3	4/5/16 2135	507.6	129
B4143	P-8S3	4/6/16 0100	508.2	321
B4144	P-8S3	4/6/16 0140	507.5	346
B4145	P-8S3	4/6/16 0538	507.5	657
B4146	P-8S3	4/6/16 1318	507.5	1,280
B4147	P-8S3	4/6/16 1630	507.5	1,620
B4148	P-8S3	4/7/16 0100	507.4	1,440
B4149	P-8S3	4/7/16 1000	507.5	1,890
B4150	**P-9S1**	**4/4/16 1000**	**ND**	
B4151	P-9S1	4/7/16 1000	508.2	6.56
B4152	**P-9S2**	**4/4/16 1000**	**ND**	
B4153	P-9S2	4/6/16 1630	508.3	119
B4154	P-9S2	4/6/16 1920	508.1	136
B4155	P-9S2	4/6/16 2151	507.4	357
B4156	P-9S2	4/7/16 0100	507.4	201
B4157	P-9S2	4/7/16 1000	508.3	19.1
B4158	**P-9S3**	**4/4/16 1000**	**ND**	
B4159	P-9S3	4/5/16 1448	507.5	67.7
B4161	P-9S3	4/5/16 1710	508.2	774
B4162	P-9S3	4/5/16 1746	507.5	1,170
B4163	P-9S3	4/5/16 2135	507.6	1,590
B4164	P-9S3	4/6/16 0538	507.6	2,550
B4165	P-9S3	4/6/16 1010	507.5	3,050
B4166	P-9S3	4/6/16 1318	507.7	4,880
B4223	P-9S3	4/6/16 1920	507.5	3,710

OUL Number	Sample ID	Date/Time Collected	Fluorescein Results	
			Peak (nm)	Conc. (ppb)
B4167	P-9S3	4/7/16 1000	507.3	4,290
B4120	Laboratory control water blank			
B4140	Laboratory control water blank			
B4160	Laboratory control water blank			

Note: Dye concentrations are based upon standards used at the OUL. The standard concentrations are based upon the as sold weight of the dye that the OUL uses. If the client is not using OUL dyes, the client should provide the OUL with a sample of the dye to compare to the OUL dyes.

Footnotes: ND = No dye detected

** = A fluorescence peak is present that does not meet all the criteria for this dye. However, it has been calculated as a positive dye result.

Thomas J. Aley, PHG and RG

Page 1 of 11 ax

Ozark Underground
1572 Aley Lane
Protem, Missouri 65733
417-785-4289

Chain of Custody Record

Client Information	Sampler: Robert B. Shealy	Lab PM:	Carrier Tracking No(s):	COC No: 1 of 7
Client Contact: Jeff McDonough	Phone: 864-216-5450	E-Mail:		Page:
Company: ARCADIS				Job #:
Address: 10 Friends Lane	Due Date Requested:			
City: Newtown	TAT Requested (days): Standard			
State, Zip: PA, 18940	PO #: B0007393.0002			
Phone: 267-685-1800	WO #:			
Email: Jeffery.Mcdonough@arcadis.com	Project #:			
Project Name: AVX Myrtle Beach	SSOW#:			
Site: AVX Myrtle Beach				

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify), Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Fluorescein	#charcoal Rec'd by OUL	#water Rec'd by OUL	OUL #	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N				X	
P-6S1	4/4/16	1000	G	W			x	0	1	B410 4		
P-6S1	4/7/16	1000	G	W			x	0	1	B410 5		
P-6S2	4/4/16	1000	G	W			x	0	1	B410 6		
P-6S2	4/7/16	1000	G	W			x	0	1	B410 7		
P-6S3	4/4/16	1000	G	W			x	0	1	B410 8		
P-6S3	4/5/16	0801	G	W			x	0	1	B410 9		OUL project #1482
P-6S3	4/5/16	1130	G	W			x	0	1	B410 10		Analyzed 4/18/16
P-6S3	4/5/16	1325	G	W			x	0	1	B410 11		by Lisa Gilcrease
P-6S3	4/5/16	1448	G	W			x	0	1	B410 12		
P-6S3	4/5/16	1746	G	W			x	0	1	B410 13		
P-6S3	4/6/16	0538	G	W			x	0	1	B410 14		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	Robert B. Shealy	4/11/16 / 1730	ARCADIS	Rebecca Scott	4/12/16 @ 1300	OUL
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☒ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Charts proofed RScott/OUL

Ozark Underground
1572 Aley Lane
Protem, Missouri 65733
417-785-4289

Chain of Custody Record

Page 2 of 11 QL

Client Information	Sampler: Robert B. Shealy	Lab PM:	Carrier Tracking No(s):	COC No: 2 of 7
Client Contact: Jeff McDonough	Phone: 864-216-5450	E-Mail:		Page:
Company: ARCADIS				Job #:
Address: 10 Friends Lane	Due Date Requested:			
City: Newtown	TAT Requested (days): Standard			
State, Zip: PA, 18940	PO #: B0007393.0002			
Phone: 267-685-1800	WO #:			
Email: jeffery.Mcdonough@arcadis.com	Project #:			
Project Name: AVX Myrtle Beach	SSOW#:			
Site: AVX Myrtle Beach				

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify), Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Fluorescein	#Charts Rec'd by QLL	#Water Rec'd by QLL	QLL #	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N					
P-6S3	4/7/16	1000	G	W			X	0	1	B41 15		
P-7S1	4/4/16	1000	G	W			X	0	1	B41 16		
P-7S1	4/7/16	1000	G	W			X	0	1	B41 17		
P-7S2	4/4/16	1000	G	W			X	0	1	B41 18		
P-7S2	4/5/16	1130	G	W			X	0	1	B41 19		
P-7S2	4/5/16	1448	G	W			X	0	1	B41 21		
P-7S2	4/5/16	1748	G	W			X	0	1	B41 22		
P-7S2	4/5/16	2135	G	W			X	0	1	B41 23		
P-7S2	4/6/16	0538	G	W			X	0	1	B41 24		
P-7S2	4/6/16	1010	G	W			X	0	1	B41 25		
P-7S2	4/6/16	1920	G	W			X	0	1	B41 26		

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☑ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Robert B. Shealy	Date/Time: 4/11/16/1730	Company ARCADIS	Received by: Rebecca Scott	Date/Time: 4/12/16 @ 1300	Company QLL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☒ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

B4120= QL water blank QL project #1482 Analyzed 4/20/16 by NLK Charts proofed RScott/QL

Ozark Underground
1572 Aley Lane
Protem, Missouri 65733
417-785-4289

Chain of Custody Record

Page 3 of 11 OUL

Client Information	Sampler: Robert B. Shealy	Lab PM:	Carrier Tracking No(s):
Client Contact: Jeff McDonough	Phone: 864-216-5450	E-Mail:	COC No: 3 of 7
Company: ARCADIS			Page:
Address: 10 Friends Lane	Due Date Requested:		Job #:
City: Newtown	TAT Requested (days): Standard		
State, Zip: PA, 18940			
Phone: 267-685-1800	PO #: B0007393.0002		
Email: jeffery.Mcdonough@arcadis.com	WO #:		
Project Name: AVX Myrtle Beach	Project #:		
Site: AVX Myrtle Beach	SSOW#:		

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Fluorescein	#Charcoal Rec'd OUL	#Water Rec'd OUL	OUL #	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N					
P-7S2	4/7/16	0408	G	W			x	0	1	B 41 27		
P-7S2	4/7/16	1000	G	W			x	0	1	B 41 28		
P-7S3	4/4/16	1000	G	W			x	0	1	B 41 29		
P-7S3	4/5/16	0445	G	W			x	0	1	B 41 30		
P-7S3	4/5/16	0801	G	W			x	0	1	B 41 31		
P-7S3	4/5/16	1130	G	W			x	0	1	B 41 32		
P-7S3	4/5/16	1448	G	W			x	0	1	B 41 33		
P-7S3	4/6/16	0538	G	W			x	0	1	B 41 34		
P-7S3	4/6/16	1010	G	W			x	0	1	B 41 35		
P-7S3	4/7/16	1000	G	W			x	0	1	B 41 36		
P-8S1	4/4/16	1000	G	W			x	0	1	B 41 37		

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ______ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:
Relinquished by: Robert B. Shealy [signature]	Date/Time: 4/11/16 / 1730	Company: ARCADIS	Received by: Rebecca Scott	Date/Time: 4/12/16 @ 1300	Company: OUL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☒ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

analyzed 4/20/16 by [initials] / OUL
Charts proofed by: RS/KC OUL

Page 4 of 11 ou

Ozark Underground
1572 Aley Lane
Protem, Missouri 65733
417-785-4289

Chain of Custody Record

Client Information	Sampler: Robert B. Shealy	Lab PM:	Carrier Tracking No(s):	COC No: 4 of 7
Client Contact: Jeff McDonough	Phone: 864-216-5450	E-Mail:		Page:
Company: ARCADIS				Job #:
Address: 10 Friends Lane	Due Date Requested:	Analysis Requested		
City: Newtown	TAT Requested (days): Standard			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: PA, 18940				
Phone: 267-685-1800	PO #: B0007393.0002			Other:
Email: jeffery.Mcdonough@arcadis.com	WO #:			
Project Name: AVX Myrtle Beach	Project #:			
Site: AVX Myrtle Beach	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Fluorescein	#Charcoal Rec'd OUL	#Water Rec'd by OUL	OUL #	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N					
P-8S2	4/7/16	1000	G	W			x	0	1	B41 38		
P-8S3	4/4/16	1000	G	W			x	0	1	B41 39		
P-8S3	4/5/16	1746	G	W			x	0	1	B41 41		
P-8S3	4/5/16	2135	G	W			x	0	1	B41 42		
P-8S3	4/6/16	0100	G	W			x	0	1	B41 43		
P-8S3	4/6/16	0140	G	W			x	0	1	B41 44		
P-8S3	4/6/16	0538	G	W			x	0	1	B41 45		
P-8S3	4/6/16	1318	G	W			x	0	1	B41 46		
P-8S3	4/6/16	1630	G	W			x	0	1	B41 47		
P-8S3	4/7/16	0100	G	W			x	0	1	B41 48		
P-8S3	4/7/16	1000	G	W			x	0	1	B41 49		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Robert B. Shealy	Date/Time: 4/11/16 1730	Company ARCADIS	Received by: Rebecca Scott	Date/Time: 4/12/16 1300	Company OU
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☑ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

B4140= OU water blank OUL project #1482 Analyzed 4/20/16 by Lisa Glicrease

Charts proofed by: KC/OUL

Ozark Underground
1572 Aley Lane
Protem, Missouri 65733
417-785-4289

Chain of Custody Record

Client Information	Sampler: Robert B. Shealy	Lab PM:	Carrier Tracking No(s):	COC No: 5 of 7
Client Contact: Jeff McDonough	Phone: 864-216-5450	E-Mail:		Page:
Company: ARCADIS				Job #:
Address: 10 Friends Lane	Due Date Requested:			
City: Newtown	TAT Requested (days): Standard			
State, Zip: PA, 18940				
Phone: 267-685-1800	PO #: B0007393.0002			
Email: jeffery.mcdonough@arcadis.com	WO #:			
Project Name: AVX Myrtle Beach	Project #:			
Site: AVX Myrtle Beach	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify), Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Fluorescein	#Charcoal Recd by OUL	#Water Recd by OUL	OUL #	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N					
P-9S1	4/4/16	1000	G	W			X	0	1	B41150		
P-9S1	4/7/16	1000	G	W			X	0	1	B41151		
P-9S2	4/4/16	1000	G	W			X	0	1	B41152		
P-9S2	4/6/16	1630	G	W			X	0	1	B41153		
P-9S2	4/6/16	1920	G	W			X	0	1	B41154		
P-9S2	4/6/16	2151	G	W			X	0	1	B41155		
P-9S2	4/7/16	0100	G	W			X	0	1	B41156		
P-9S2	4/7/16	1000	G	W			X	0	1	B41157		
P-9S3	4/4/16	1000	G	W			X	0	1	B41158		
P-9S3	4/5/16	1448	G	W			X	0	1	B41159		
P-9S3	4/5/16	1710	G	W			X	0	1	B41161		

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by: Robert B. Shealy	Date/Time: 4/11/16 1730	Company: ARCADIS	Received by: Rebecca Scott	Date/Time: 4/12/16 1300	Company: OUL
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☑ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

B41160 = QL water blank OUL project #1482 Analyzed by Lisa Gilcrease on 4/21/16

Charts proofed by: KC/OUL

Page 6 of 11 QC

Ozark Underground
1572 Aley Lane
Protem, Missouri 65733
417-785-4289

Chain of Custody Record

Client Information	Sampler: Robert B. Shealy	Lab PM:	Carrier Tracking No(s):	COC No: 6 of 7
Client Contact: Jeff McDonough	Phone: 864-216-5450	E-Mail:		Page:
Company: ARCADIS				Job #:
Address: 10 Friends Lane	Due Date Requested:			
City: Newtown	TAT Requested (days): Standard			
State, Zip: PA, 18940	PO #: B0007393.0002			
Phone: 267-685-1800	WO #:			
Email: jeffery.Mcdonough@arcadis.com	Project #:			
Project Name: AVX Myrtle Beach	SSOW#:			
Site: AVX Myrtle Beach				

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - ph 4-5; Z - other (specify); Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Fluorescein	#Charcoal Rec'd by OUL	#Water Rec'd by OUL	OUL #	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N					
P-9S3	4/5/16	1746	G	W			X	0	1	B41162		
P-9S3	4/5/16	2135	G	W			X	0	1	B41163		
P-9S3	4/6/16	0538	G	W			X	0	1	B41164		
P-9S3	4/6/16	1010	G	W			X	0	1	B41165		
P-9S3	4/6/16	1318	G	W			X	0	1	B41166		
P-9S3 (*)	4/6/16	2151	G	W			X	0	0	—		
P-9S3	4/7/16	1000	G	W			X	0	1	B41167		
DPW-4SD	4/4/16	1245	G	W			X	0	1	B41168		
DPW-4SD	4/7/16	1745	G	W			X	0	1	B41169		
DPW-5SD	4/4/16	1245	G	W			X	0	1	B41170		
DPW-5SD	4/7/16	1745	G	W			X	0	1	B41171		

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by: Robert B. Shealy	Date/Time: 4/11/16/1730	Company ARCADIS	Received by: (Rebecca Scott)	Date/Time: 4/12/16 1300	Company QA
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

(*) See discrepancy sheet OUL project #1482 Analyzed 4/21/16 by Lisa Gilcrease

Charts proofed by: KC/OUL

Ozark Underground
1572 Aley Lane
Protem, Missouri 65733
417-785-4289

Chain of Custody Record

Page 7 of 11 OUL

Client Information	Sampler: Robert B. Shealy	Lab PM:	Carrier Tracking No(s):	COC No: 7 of 7
Client Contact: Jeff McDonough	Phone: 864-216-5450	E-Mail:		Page:
Company: ARCADIS				Job #:
Address: 10 Friends Lane	Due Date Requested:			
City: Newtown	TAT Requested (days): Standard			
State, Zip: PA, 18940	PO #: B0007393.0002			
Phone: 267-685-1800	WO #:			
Email: jeffery.Mcdonough@arcadis.com	Project #:			
Project Name: AVX Myrtle Beach	SSOW#:			
Site: AVX Myrtle Beach				

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - ph 4-5; Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Fluorescein	#Charcoal Recd by OUL	#Water Recd by OUL	OUL #	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N					
Injectate (*) 4/5/16	~~4/4/16~~	0110	G	W			X	0	1	B41172		
Injectate PF OUL	4/5/16	0745	G	W			X	0	1	B41173		
Injectate	4/5/16	1640	G	W			X	0	1	B41174		
Injectate	4/6/16	0818	G	W			X	0	1	B41175		
P-8S1	4/7/16	1000	G	W			X	0	1	B41176		
P-8S2	4/4/16	1000	G	W			X	0	1	B41177		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Robert B. Shealy	Date/Time: 4/11/16/1730	Company ARCADIS	Received by: Rebecca Scott	Date/Time: 4/12/16 1300	Company OUL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☒ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

(*) See discrepancy sheet OUL project #1482 Analyzed 4/21/16 by Lisa Glenease

Charts proofed by: KC/OUL

Ozark Underground
1572 Aley Lane
Protem, Missouri 65733
417-785-4289

Chain of Custody Record

Page 8 of 11 ou

Client Information	Sampler: Robert B. Shealy	Lab PM:	Carrier Tracking No(s):	COC No: 1 of 4
Client Contact: Jeff McDonough	Phone: 864-216-5450	E-Mail:		Page:
Company: ARCADIS				Job #:
Address: 10 Friends Lane	Due Date Requested:			
City: Newtown	TAT Requested (days): HOLD			
State, Zip: PA, 18940				
Phone: 267-685-1800	PO #: B0007393.0002			
Email: jeffery.Mcdonough@arcadis.com	WO #:			
Project Name: AVX Myrtle Beach	Project #:			
Site: AVX Myrtle Beach	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - Di Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - ph 4-5; Z - other (specify); Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Fluorescein	#Channel Rec'd by OUL	#Water Rec'd by OUL	OUL #	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N					
P-6S3	4/5/16	0445	G	W			X	0	1			HOLD
P-6S3	4/5/16	2135	G	W			X	0	1			HOLD
P-6S3	4/6/16	0140	G	W			X	0	1			HOLD
P-6S3	4/6/16	1010	G	W			X	0	1			HOLD
P-6S3 (*)	4/7/16	0905	G	W			X	0	0			HOLD
P-7S2	4/5/16	0801	G	W			X	0	1			HOLD
P-7S2	4/6/16	0140	G	W			X	0	1			HOLD
P-7S2	4/6/16	1318	G	W			X	0	1			HOLD
P-7S2	4/6/16	1630	G	W			X	0	1			HOLD
P-7S2	4/6/16	2151	G	W			X	0	1			HOLD
P-7S2	4/7/16	0100	G	W			X	0	1			HOLD

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by: Robert B. Shealy	Date/Time: 4/11/16 / 0730	Company ARCADIS	Received by: Rebecca Scott	Date/Time: 4/12/16 1300	Company OUL
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☑ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

(*) See discrepancy sheet

Ozark Underground
1572 Aley Lane
Protem, Missouri 65733
417-785-4289

Chain of Custody Record

Client Information	Sampler: Robert B. Shealy	Lab PM:	Carrier Tracking No(s):	COC No: 2 of 4
Client Contact: Jeff McDonough	Phone: 864-216-5450	E-Mail:		Page:
Company: ARCADIS				Job #:

Address: 10 Friends Lane	Due Date Requested:	Analysis Requested
City: Newtown	TAT Requested (days): HOLD	
State, Zip: PA, 18940		
Phone: 267-685-1800	PO #: B0007393.0002	
Email: jeffery.Mcdonough@arcadis.com	WO #:	
Project Name: AVX Myrtle Beach	Project #:	
Site: AVX Myrtle Beach	SSOW#:	

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - ph 4-5; Z - other (specify); Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Fluorescein	#Charcoal Rec'd by OUL	#Water Rec'd by OUL	OUL#	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N					
P-7S2	4/7/16	0905	G	W			X	0	1			HOLD
P-7S3	4/5/16	1746	G	W			X	0	1			HOLD
P-7S3 ⊛	4/5/16	2135	G	W			X	0	1			HOLD
P-7S3	4/6/16	0140	G	W			X	0	1			HOLD
P-7S3 ⊛	4/7/16	0905	G	W			X	0	0			HOLD
P-8S3	4/5/16	1448	G	W			X	0	1			HOLD
P-8S3	4/6/16	1010	G	W			X	0	1			HOLD
P-8S3	4/6/16	1920	G	W			X	0	1			HOLD
P-8S3	4/6/16	2151	G	W			X	0	1			HOLD
P-8S3	4/7/16	0408	G	W			X	0	1			HOLD
P-8S3	4/7/16	0905	G	W			X	0	1			HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Robert B. Shealy	Date/Time: 4/11/16/1730	Company ARCADIS	Received by: Rebecca Scott	Date/Time: 4/12/16 1300	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☑ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

⊛ See discrepancy Sheet.

Ozark Underground
1572 Aley Lane
Protem, Missouri 65733
417-785-4269

Chain of Custody Record

Page 10 of 11 QC

Client Information	Sampler: Robert B. Shealy	Lab PM:	Carrier Tracking No(s):	COC No: 3 of 4
Client Contact: Jeff McDonough	Phone: 864-216-5450	E-Mail:		Page:
Company: ARCADIS				Job #:
Address: 10 Friends Lane	Due Date Requested:			
City: Newtown	TAT Requested (days): HOLD			
State, Zip: PA, 18940				
Phone: 267-685-1800	PO #: B0007393.0002			
Email: jeffery.Mcdonough@arcadis.com	WO #:			
Project Name: AVX Myrtle Beach	Project #:			
Site: AVX Myrtle Beach	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - ph 4-5; Z - other (specify); Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Fluorescein	# Charcoal Rec'd by OUL	# Water Rec'd by OUL	OUL #	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N				X	
P-9S2	4/6/16	1318	G	W			X	0	1			HOLD
P-9S2	4/7/16	0408	G	W			X	0	1			HOLD
P-9S2	4/7/16	0905	G	W			X	0	1			HOLD
P-9S3	4/5/16	0801	G	W			X	0	1			HOLD
P-9S3	4/5/16	1130	G	W			X	0	1			HOLD
P-9S3 (*)	4/6/16	0100	G	W			X	0	0			HOLD
P-9S3	4/6/16	0140	G	W			X	0	1			HOLD
P-9S3	4/6/16	1630	G	W			X	0	1			HOLD
P-9S3	4/6/16	1920	G	W			X	0	1	B4223		HOLD (*) Analyze per R. Shealy email
P-9S3 (*)	4/7/16	0100	G	W			X	0	0			HOLD
P-9S3 (*)	4/7/16	0408	G	W			X	0	0			HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Robert B. Shealy	Date/Time: 4/11/16 1730	Company ARCADIS	Received by: Rebecca Scott	Date/Time: 4/12/16 1300	Company OUL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☆ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

(*) See discrepancy sheet OUL project #1482 Analyzed 4/21/16 by Lisa Gilchrist
Charts proofed by: KC/OUL

Ozark Underground
1572 Aley Lane
Protem, Missouri 65733
417-785-4289

Chain of Custody Record

Page 11 of 11 QL

Client Information	Sampler: Robert B. Shealy	Lab PM:	Carrier Tracking No(s):	COC No: 4 of 4
Client Contact: Jeff McDonough	Phone: 864-216-5450	E-Mail:		Page:
Company: ARCADIS				Job #:
Address: 10 Friends Lane	Due Date Requested:			
City: Newtown	TAT Requested (days): HOLD			
State, Zip: PA, 18940	PO #: B0007393.0002			
Phone: 267-685-1800	WO #:			
Email: jeffery.Mcdonough@arcadis.com	Project #:			
Project Name: AVX Myrtle Beach	SSOW#:			
Site: AVX Myrtle Beach				

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Fluorescein	#Charcoal Rec'd by QL	#Water Rec'd by QL	OWLH	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N					
P-9S3	4/7/16	0905	G	W			X	0	1			HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Robert B. Shealy	Date/Time: 4/11/16 1730	Company ARCADIS	Received by: Rebecca Sooh	Date/Time: 4/12/16 1300	Company QL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☒ Yes ☐ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

OZARK UNDERGROUND LABORATORY, INC.

DISCREPANCIES BETWEEN CHAIN-OF-CUSTODY SHEETS AND ACTUAL SAMPLES RECEIVED Page 1 of 1

Company & Project Name: ARCADIS / AVX Myrtle Beach **Date Rec'd by OUL:** 4/12/16 **Wk #** _____

Lab #	Sta #	Station Name	Date Pulled	Problem	Solution
		P-753	4/5/16 @2135	Sample labeled as P-573. Collection date + time corresponds with sample P-753 on the COC.	as per email name is P-753
B4172		Injection		Sample Collection noted as 4/4/16 @ 0110 on COC. Collection noted on sample as 4/5/16 @ 0110.	as per. e-mail date is 4/5/16
B4223		P-953	4/6/16 @ 2151	Samples listed on COC, not rec'd by OUL.	Analyze P-953 collected 4/6/16 @ 1920 in place of the missing sample P-953 collected 4/6/16 @ 2151
		P-683	4/7/16 @ 0905		
		P-753	4/7/16 @ 0905		
		P-953	4/6/16 @ 0100		
		P-953	4/7/16 @ 0100		
		P-953	4/7/16 @ 0408		

Comments:

f:\shared\forms\dscrpsht.doc
rev. 12/28/99

Sample Receipt Acknowledgement

Mark Hanish
ARCADIS
310 Seven Fields Blvd
Suite 210
Seven Fields, PA 16046
US

Michael D. Page
SGS North America, Inc.
5500 Business Drive
Wilmington, NC 28405
(910) 350-1903
michael.page@sgs.com

Samples Received and Services to Perform

Client Project ID: **AVX Myrtle Beach**
Lab Project ID: **31502068**
PO Number: **B0007393.0002.00016**

Due Date: **11/19/2015**
Report:
EDD:

The following samples were received at our lab on 11/05/2015 11:27:

Client Sample ID	Lab Sample ID	Date Collected	Services
WCSS-1 (2)	31502068001	10/26/2015 14:15	VOA, SW8260, Standard List W
WCSS-1 (10)	31502068002	10/26/2015 14:24	VOA, SW8260, Standard List W
WCSS-1 (20)	31502068003	10/26/2015 14:35	VOA, SW8260, Standard List W
WCCS-3 (8)	31502068004	10/27/2015 08:36	VOA, SW8260, Standard List W
WCCS-3 (13)	31502068005	10/27/2015 08:42	VOA, SW8260, Standard List W
WCCS-4 (11)	31502068006	10/27/2015 10:15	VOA, SW8260, Standard List W
WCCS-4 (22)	31502068007	10/27/2015 10:23	VOA, SW8260, Standard List W
WCCS-4 (27)	31502068008	10/27/2015 10:40	VOA, SW8260, Standard List W
WCCS-5 (15)	31502068009	10/27/2015 11:22	VOA, SW8260, Standard List W
WCCS-5 (24)	31502068010	10/27/2015 11:30	VOA, SW8260, Standard List W
WCCS-6 (10)	31502068011	10/27/2015 13:48	VOA, SW8260, Standard List W
WCCS-8 (8)	31502068012	10/28/2015 08:04	VOA, SW8260, Standard List W
WCCS-8 (10)	31502068013	10/28/2015 08:06	VOA, SW8260, Standard List W
WCCS-9 (24)	31502068014	10/28/2015 10:10	VOA, SW8260, Standard List W
WCCS-10 (9)	31502068015	10/28/2015 11:56	VOA, SW8260, Standard List W
WCCS-12 (15)	31502068016	10/28/2015 15:34	VOA, SW8260, Standard List W
WCCS-13 (28)	31502068017	10/29/2015 09:08	VOA, SW8260, Standard List W
WCCS-14 (30)	31502068018	10/29/2015 14:46	VOA, SW8260, Standard List W
WCCS-16 (20)	31502068019	10/29/2015 16:58	VOA, SW8260, Standard List W
IDW-1 (110415)	31502068020	11/04/2015 12:00	8270 SVOC Subcontract
IDW-1 (110415)	31502068020	11/04/2015 12:00	TCLP VOA, SW8260

Data Deliverables Online at labview.sgs.com

Print Date: 11/05/2015

N.C. Certification # 481

Terms and Conditions:

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via:
http://www.sgs.com/terms_and_conditions.htm

Laboratory Report of Analysis

To: Mark Hanish
ARCADIS
310 Seven Fields Blvd
Suite 210
Seven Fields, PA 16046
US

Report Number: **31502068**

Client Project: **AVX Myrtle Beach**

Dear Mark Hanish,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples analyzed at the SGS Wilmington location are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards, unless otherwise noted. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or services performed during this project, please call Michael D. Page at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America Inc.

Digitally signed by: Michael Page
DN: CN = Michael Page C = US O = SGS North America OU = Environmental Services
Date: 2015.11.18 16:27:37 -04'00'

Michael D. Page
Project Manager
michael.page@sgs.com

Date

Print Date: 11/18/2015

N.C. Certification # 481

Terms and Conditions:

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via:
http://www.sgs.com/terms_and_conditions.htm

Laboratory Qualifiers

Report Definitions

DL	Method, Instrument, or Estimated Detection Limit per Analytical Method
CL	Control Limits for the recovery result of a parameter
LOQ	Reporting Limit
DF	Dilution Factor
RPD	Relative Percent Difference
LCS(D)	Laboratory Control Spike (Duplicate)
MS(D)	Matrix Spike (Duplicate)
MB	Method Blank

Qualifier Definitions

*	Recovery or RPD outside of control limits
B	Analyte was detected in the Lab Method Blank at a level above the LOQ
U	Undetected (Reported as ND or < DL)
J	Estimated Concentration.
E	Amount detected is greater than the Upper Calibration Limit
TIC	Tentatively Identified Compound
ND	Not Detected
P	RPD > 40% between results of dual columns
D	Spike or surrogate was diluted out in order to achieve a parameter result within instrument calibration range

Samples requiring manual integrations for various congeners and/or standards are marked and dated by the analyst. A code definition is provided below:

M1	Mis-identified peak
M2	Software did not integrate peak
M3	Incorrect baseline construction (i.e. not all of peak included; two peaks integrated as one)
M4	Pattern integration required (i.e. DRO, GRO, PCB, Toxaphene and Technical Chlordane)
M5	Other - Explained in case narrative

Note Results pages that include a value for "Solids (%)" have been adjusted for moisture content.

Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
WCSS-1 (2)	31502068001	10/26/2015 14:15	11/05/2015 11:27	Soil-Solid as received
WCSS-1 (10)	31502068002	10/26/2015 14:24	11/05/2015 11:27	Soil-Solid as received
WCSS-1 (20)	31502068003	10/26/2015 14:35	11/05/2015 11:27	Soil-Solid as received
WCCS-3 (8)	31502068004	10/27/2015 08:36	11/05/2015 11:27	Soil-Solid as received
WCCS-3 (13)	31502068005	10/27/2015 08:42	11/05/2015 11:27	Soil-Solid as received
WCCS-4 (11)	31502068006	10/27/2015 10:15	11/05/2015 11:27	Soil-Solid as received
WCCS-4 (22)	31502068007	10/27/2015 10:23	11/05/2015 11:27	Soil-Solid as received
WCCS-4 (27)	31502068008	10/27/2015 10:40	11/05/2015 11:27	Soil-Solid as received
WCCS-5 (15)	31502068009	10/27/2015 11:22	11/05/2015 11:27	Soil-Solid as received
WCCS-5 (24)	31502068010	10/27/2015 11:30	11/05/2015 11:27	Soil-Solid as received
WCCS-6 (10)	31502068011	10/27/2015 13:48	11/05/2015 11:27	Soil-Solid as received
WCCS-8 (8)	31502068012	10/28/2015 08:04	11/05/2015 11:27	Soil-Solid as received
WCCS-8 (10)	31502068013	10/28/2015 08:06	11/05/2015 11:27	Soil-Solid as received
WCCS-9 (24)	31502068014	10/28/2015 10:10	11/05/2015 11:27	Soil-Solid as received
WCCS-10 (9)	31502068015	10/28/2015 11:56	11/05/2015 11:27	Soil-Solid as received
WCCS-12 (15)	31502068016	10/28/2015 15:34	11/05/2015 11:27	Soil-Solid as received
WCCS-13 (28)	31502068017	10/29/2015 09:08	11/05/2015 11:27	Soil-Solid as received
WCCS-14 (30)	31502068018	10/29/2015 14:46	11/05/2015 11:27	Soil-Solid as received
WCCS-16 (20)	31502068019	10/29/2015 16:58	11/05/2015 11:27	Soil-Solid as received
IDW-1 (110415)	31502068020	11/04/2015 12:00	11/05/2015 11:27	Soil-Solid as dry weight

Case Narrative

8260: The client submitted 5035 methanol extraction aliquots for analysis by method SW-846 8260C. The initial weight of the sample and initial volume of methanol were provided by the client as seen in the table below.

Sample_Name	Date_Sampled	%MeOH in water (%)	Soil Wt (g)	Volume MeOH (mL)
WCSS-1 (2)	10/26/2015	1.000	9.7	10.0
WCSS-1 (10)	10/26/2015	0.050	7.8	10.0
WCSS-1 (20)	10/26/2015	0.500	9.8	10.0
WCSS-3 (8)	10/27/2015	0.050	10	10.0
WCSS-3 (13)	10/27/2015	1.000	10.1	10.0
WCSS-4 (11)	10/27/2015	0.125	11.1	10.0
WCSS-4 (22)	10/27/2015	1.000	11.9	10.0
WCSS-4 (27)	10/27/2015	1.000	8.5	10.0
WCSS-5 (15)	10/27/2015	1.000	10.9	10.0
WCSS-5 (24)	10/27/2015	0.013	9.5	10.0
WCSS-6 (10)	10/27/2015	0.003	11.2	10.0
WCSS-8 (8)	10/28/2015	0.003	8.5	10.0
WCSS-8 (10)	10/28/2015	0.000	9.9	10.0
WCSS-9 (24)	10/28/2015	1.000	9.8	10.0
WCSS-10 (9)	10/28/2015	1.000	10.5	10.0
WCSS-12 (15)	10/28/2015	0.125	11.8	10.0
WCSS-13 (28)	10/29/2015	0.125	8.6	10.0
WCSS-14 (30)	10/29/2015	0.013	8.2	10.0
WCSS-16 (20)	10/29/2015	0.125	11.8	10.0

Detectable Results Summary

Client Sample ID: **WCSS-1 (2)**
Lab Sample ID: 31502068001-A
SW-846 8260B

Parameter	Result	Units	
1,1,1-Trichloroethane	2730	ug/Kg	
1,1-Dichloroethane	405	ug/Kg	
1,1-Dichloroethene	165	ug/Kg	
2-Butanone	445	ug/Kg	J
Ethyl Benzene	105	ug/Kg	
Toluene	55.7	ug/Kg	J
Trichloroethene	458	ug/Kg	
Vinyl chloride	87.6	ug/Kg	J
cis-1,2-Dichloroethene	1660	ug/Kg	

Client Sample ID: **WCSS-1 (10)**
Lab Sample ID: 31502068002-A
SW-846 8260B

Parameter	Result	Units
1,1,1-Trichloroethane	66900	ug/Kg
1,1-Dichloroethene	31300	ug/Kg
Trichloroethene	617000	ug/Kg
cis-1,2-Dichloroethene	58500	ug/Kg

Client Sample ID: **WCSS-1 (20)**
Lab Sample ID: 31502068003-A
SW-846 8260B

Parameter	Result	Units	
1,1,1-Trichloroethane	327	ug/Kg	
1,1-Dichloroethane	65.3	ug/Kg	J
2-Butanone	459	ug/Kg	J
Ethyl Benzene	95.9	ug/Kg	J
Toluene	143	ug/Kg	J
Trichloroethene	11400	ug/Kg	
Vinyl chloride	147	ug/Kg	J
cis-1,2-Dichloroethene	6670	ug/Kg	

Client Sample ID: **WCCS-3 (8)**
Lab Sample ID: 31502068004-A
SW-846 8260B

Parameter	Result	Units	
Toluene	1040	ug/Kg	J
Trichloroethene	24000	ug/Kg	
Vinyl chloride	1320	ug/Kg	J
cis-1,2-Dichloroethene	69700	ug/Kg	

Detectable Results Summary

Client Sample ID: **WCCS-3 (13)**
Lab Sample ID: 31502068005-A
SW-846 8260B

Parameter	Result	Units	
1,2,4-Trimethylbenzene	492	ug/Kg	
1,3,5-Trimethylbenzene	254	ug/Kg	
2-Butanone	404	ug/Kg	J
4-Isopropyltoluene	1490	ug/Kg	
Acetone	93.6	ug/Kg	J
n-Butylbenzene	26.2	ug/Kg	J
Ethyl Benzene	93.1	ug/Kg	
Isopropylbenzene (Cumene)	51.0	ug/Kg	
Naphthalene	30.2	ug/Kg	J
Toluene	205	ug/Kg	
Trichloroethene	1230	ug/Kg	
Xylene (total)	166	ug/Kg	
cis-1,2-Dichloroethene	373	ug/Kg	
m,p-Xylene	78.2	ug/Kg	J
n-Propylbenzene	256	ug/Kg	
o-Xylene	87.6	ug/Kg	

Client Sample ID: **WCCS-4 (11)**
Lab Sample ID: 31502068006-A
SW-846 8260B

Parameter	Result	Units	
Toluene	1080	ug/Kg	J
Vinyl chloride	7280	ug/Kg	
cis-1,2-Dichloroethene	50500	ug/Kg	

Client Sample ID: **WCCS-4 (22)**
Lab Sample ID: 31502068007-A
SW-846 8260B

Parameter	Result	Units	
2-Butanone	371	ug/Kg	J
Ethyl Benzene	91.6	ug/Kg	
Toluene	49.2	ug/Kg	
Trichloroethene	271	ug/Kg	
Vinyl chloride	34.9	ug/Kg	J
cis-1,2-Dichloroethene	642	ug/Kg	

Client Sample ID: **WCCS-4 (27)**
Lab Sample ID: 31502068008-A
SW-846 8260B

Parameter	Result	Units	
Trichloroethene	12700	ug/Kg	
cis-1,2-Dichloroethene	2540	ug/Kg	

Client Sample ID: **WCCS-5 (15)**
Lab Sample ID: 31502068009-A
SW-846 8260B

Parameter	Result	Units	
1,1-Dichloroethane	49.5	ug/Kg	J
2-Butanone	324	ug/Kg	J
Ethyl Benzene	82.6	ug/Kg	J
Toluene	44.0	ug/Kg	J
Trichloroethene	2270	ug/Kg	
Vinyl chloride	139	ug/Kg	
cis-1,2-Dichloroethene	2680	ug/Kg	

Client Sample ID: **WCCS-5 (24)**
Lab Sample ID: 31502068010-A
SW-846 8260B

Parameter	Result	Units	
Trichloroethene	298000	ug/Kg	
cis-1,2-Dichloroethene	21500	ug/Kg	

Detectable Results Summary

Client Sample ID: **WCCS-6 (10)**
Lab Sample ID: 31502068011-A
SW-846 8260B

Parameter	Result	Units	
Trichloroethene	2790000	ug/Kg	

Client Sample ID: **WCCS-8 (8)**
Lab Sample ID: 31502068012-A
SW-846 8260B

Parameter	Result	Units	
Trichloroethene	4380000	ug/Kg	
cis-1,2-Dichloroethene	148000	ug/Kg	J

Client Sample ID: **WCCS-8 (10)**
Lab Sample ID: 31502068013-A
SW-846 8260B

Parameter	Result	Units	
Trichloroethene	2430000	ug/Kg	
cis-1,2-Dichloroethene	62600	ug/Kg	J

Client Sample ID: **WCCS-9 (24)**
Lab Sample ID: 31502068014-A
SW-846 8260B

Parameter	Result	Units	
2-Butanone	590	ug/Kg	J
Ethyl Benzene	106	ug/Kg	
Toluene	52.6	ug/Kg	
Trichloroethene	360	ug/Kg	
Vinyl chloride	26.5	ug/Kg	J
cis-1,2-Dichloroethene	301	ug/Kg	

Client Sample ID: **WCCS-10 (9)**
Lab Sample ID: 31502068015-A
SW-846 8260B

Parameter	Result	Units	
1,1-Dichloroethane	10.5	ug/Kg	J
2-Butanone	439	ug/Kg	J
Ethyl Benzene	99.5	ug/Kg	
Toluene	51.9	ug/Kg	
Trichloroethene	192	ug/Kg	
Vinyl chloride	64.3	ug/Kg	
Xylene (total)	10.0	ug/Kg	J
cis-1,2-Dichloroethene	482	ug/Kg	
m,p-Xylene	10.0	ug/Kg	J

Client Sample ID: **WCCS-12 (15)**
Lab Sample ID: 31502068016-A
SW-846 8260B

Parameter	Result	Units	
Trichloroethene	87800	ug/Kg	
cis-1,2-Dichloroethene	12500	ug/Kg	

Client Sample ID: **WCCS-13 (28)**
Lab Sample ID: 31502068017-A
SW-846 8260B

Parameter	Result	Units	
Trichloroethene	115000	ug/Kg	
cis-1,2-Dichloroethene	76600	ug/Kg	

Client Sample ID: **WCCS-14 (30)**
Lab Sample ID: 31502068018-A
SW-846 8260B

Parameter	Result	Units	
1,1,1-Trichloroethane	13200	ug/Kg	J
Trichloroethene	400000	ug/Kg	
cis-1,2-Dichloroethene	22000	ug/Kg	J

Detectable Results Summary

Client Sample ID: **WCCS-16 (20)**
Lab Sample ID: 31502068019-A
SW-846 8260B

Parameter	Result	Units
Trichloroethene	53200	ug/Kg
cis-1,2-Dichloroethene	8540	ug/Kg

Client Sample ID: **IDW-1 (110415)**
Lab Sample ID: 31502068020-A
SW-846 8260B-TCLP

Parameter	Result	Units
Trichloroethene	41.1	ug/L

Results of **WCSS-1 (2)**

Client Sample ID: **WCSS-1 (2)**
Client Project ID: **AVX Myrtle Beach**
Lab Sample ID: 31502068001-A
Lab Project ID: 31502068

Collection Date: 10/26/2015 14:15
Received Date: 11/05/2015 11:27
Matrix: Soil-Solid as received
Solids (%):

Results by **SW-846 8260B**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	10.7	103	ug/Kg	100	11/6/2015 17:01
1,1,1-Trichloroethane	**2730**		12.7	103	ug/Kg	100	11/6/2015 17:01
1,1,2,2-Tetrachloroethane	ND	U	16.1	103	ug/Kg	100	11/6/2015 17:01
1,1,2-Trichloroethane	ND	U	13.0	103	ug/Kg	100	11/6/2015 17:01
1,1-Dichloroethane	**405**		17.0	103	ug/Kg	100	11/6/2015 17:01
1,1-Dichloroethene	**165**		21.9	103	ug/Kg	100	11/6/2015 17:01
1,1-Dichloropropene	ND	U	8.90	103	ug/Kg	100	11/6/2015 17:01
1,2,3-Trichlorobenzene	ND	U	11.3	103	ug/Kg	100	11/6/2015 17:01
1,2,3-Trichloropropane	ND	U	21.9	103	ug/Kg	100	11/6/2015 17:01
1,2,4-Trichlorobenzene	ND	U	9.41	103	ug/Kg	100	11/6/2015 17:01
1,2,4-Trimethylbenzene	ND	U	9.91	103	ug/Kg	100	11/6/2015 17:01
1,2-Dibromo-3-chloropropane	ND	U	77.1	515	ug/Kg	100	11/6/2015 17:01
1,2-Dibromoethane	ND	U	12.4	103	ug/Kg	100	11/6/2015 17:01
1,2-Dichlorobenzene	ND	U	14.1	103	ug/Kg	100	11/6/2015 17:01
1,2-Dichloroethane	ND	U	17.2	103	ug/Kg	100	11/6/2015 17:01
1,2-Dichloropropane	ND	U	16.8	103	ug/Kg	100	11/6/2015 17:01
1,3,5-Trimethylbenzene	ND	U	11.6	103	ug/Kg	100	11/6/2015 17:01
1,3-Dichlorobenzene	ND	U	10.6	103	ug/Kg	100	11/6/2015 17:01
1,3-Dichloropropane	ND	U	13.4	103	ug/Kg	100	11/6/2015 17:01
1,4-Dichlorobenzene	ND	U	13.4	103	ug/Kg	100	11/6/2015 17:01
2,2-Dichloropropane	ND	U	40.5	103	ug/Kg	100	11/6/2015 17:01
2-Butanone	**445**	J	74.5	2580	ug/Kg	100	11/6/2015 17:01
2-Chlorotoluene	ND	U	11.6	103	ug/Kg	100	11/6/2015 17:01
2-Hexanone	ND	U	75.1	515	ug/Kg	100	11/6/2015 17:01
4-Chlorotoluene	ND	U	12.9	103	ug/Kg	100	11/6/2015 17:01
4-Isopropyltoluene	ND	U	7.93	103	ug/Kg	100	11/6/2015 17:01
4-Methyl-2-pentanone	ND	U	57.5	515	ug/Kg	100	11/6/2015 17:01
Acetone	ND	U	89.1	2580	ug/Kg	100	11/6/2015 17:01
Benzene	ND	U	11.6	103	ug/Kg	100	11/6/2015 17:01
Bromobenzene	ND	U	11.3	103	ug/Kg	100	11/6/2015 17:01
Bromochloromethane	ND	U	21.8	103	ug/Kg	100	11/6/2015 17:01
Bromodichloromethane	ND	U	11.3	103	ug/Kg	100	11/6/2015 17:01
Bromoform	ND	U	10.0	103	ug/Kg	100	11/6/2015 17:01
Bromomethane	ND	U	24.4	103	ug/Kg	100	11/6/2015 17:01
n-Butylbenzene	ND	U	7.93	103	ug/Kg	100	11/6/2015 17:01
Carbon disulfide	ND	U	10.9	103	ug/Kg	100	11/6/2015 17:01
Carbon tetrachloride	ND	U	10.4	103	ug/Kg	100	11/6/2015 17:01
Chlorobenzene	ND	U	12.0	103	ug/Kg	100	11/6/2015 17:01
Chloroethane	ND	U	32.1	103	ug/Kg	100	11/6/2015 17:01
Chloroform	ND	U	14.3	103	ug/Kg	100	11/6/2015 17:01
Chloromethane	ND	U	46.2	103	ug/Kg	100	11/6/2015 17:01
Dibromochloromethane	ND	U	13.8	103	ug/Kg	100	11/6/2015 17:01

Results of **WCSS-1 (2)**

Client Sample ID: **WCSS-1 (2)**
Client Project ID: **AVX Myrtle Beach**
Lab Sample ID: 31502068001-A
Lab Project ID: 31502068

Collection Date: 10/26/2015 14:15
Received Date: 11/05/2015 11:27
Matrix: Soil-Solid as received
Solids (%):

Results by **SW-846 8260B**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dibromomethane	ND	U	17.3	103	ug/Kg	100	11/6/2015 17:01
Dichlorodifluoromethane	ND	U	17.6	515	ug/Kg	100	11/6/2015 17:01
cis-1,3-Dichloropropene	ND	U	7.91	103	ug/Kg	100	11/6/2015 17:01
trans-1,3-Dichloropropene	ND	U	8.89	103	ug/Kg	100	11/6/2015 17:01
Diisopropyl Ether	ND	U	30.3	103	ug/Kg	100	11/6/2015 17:01
Ethyl Benzene	**105**		9.04	103	ug/Kg	100	11/6/2015 17:01
Hexachlorobutadiene	ND	U	8.16	103	ug/Kg	100	11/6/2015 17:01
Isopropylbenzene (Cumene)	ND	U	8.96	103	ug/Kg	100	11/6/2015 17:01
Methyl iodide	ND	U	11.9	103	ug/Kg	100	11/6/2015 17:01
Methylene chloride	ND	U	15.7	515	ug/Kg	100	11/6/2015 17:01
Naphthalene	ND	U	8.81	103	ug/Kg	100	11/6/2015 17:01
Styrene	ND	U	10.5	103	ug/Kg	100	11/6/2015 17:01
Tetrachloroethene	ND	U	16.0	103	ug/Kg	100	11/6/2015 17:01
Toluene	**55.7**	J	13.7	103	ug/Kg	100	11/6/2015 17:01
Trichloroethene	**458**		12.9	103	ug/Kg	100	11/6/2015 17:01
Trichlorofluoromethane	ND	U	14.1	103	ug/Kg	100	11/6/2015 17:01
Vinyl chloride	**87.6**	J	12.8	103	ug/Kg	100	11/6/2015 17:01
Xylene (total)	ND	U	18.8	206	ug/Kg	100	11/6/2015 17:01
cis-1,2-Dichloroethene	**1660**		14.0	103	ug/Kg	100	11/6/2015 17:01
m,p-Xylene	ND	U	18.8	206	ug/Kg	100	11/6/2015 17:01
n-Propylbenzene	ND	U	11.6	103	ug/Kg	100	11/6/2015 17:01
o-Xylene	ND	U	9.01	103	ug/Kg	100	11/6/2015 17:01
sec-Butylbenzene	ND	U	11.5	103	ug/Kg	100	11/6/2015 17:01
tert-Butyl methyl ether (MTBE)	ND	U	14.8	103	ug/Kg	100	11/6/2015 17:01
tert-Butylbenzene	ND	U	8.81	103	ug/Kg	100	11/6/2015 17:01
trans-1,2-Dichloroethene	ND	U	23.0	103	ug/Kg	100	11/6/2015 17:01
trans-1,4-Dichloro-2-butene	ND	U	42.7	515	ug/Kg	100	11/6/2015 17:01
Surrogates							
1,2-Dichloroethane-d4	109			55.0-173	%	100	11/6/2015 17:01
4-Bromofluorobenzene	99.0			23.0-141	%	100	11/6/2015 17:01
Toluene d8	92.0			57.0-134	%	100	11/6/2015 17:01

Batch Information

Analytical Batch: **VMS3788**
Analytical Method: **SW-846 8260B**
Instrument: **MSD8**
Analyst: **BWS**

Prep Batch: **VXX6057**
Prep Method: **SW-846 5035 SM**
Prep Date/Time: **11/06/2015 14:34**
Prep Initial Wt./Vol.: **9.7 g**
Prep Extract Vol: **10 mL**

Print Date: 11/18/2015

N.C. Certification # 481

Results of **WCSS-1 (12)**

Client Sample ID: **WCSS-1 (12)**
Client Project ID: **AVX Myrtle Beach**
Lab Sample ID: 31502068002-A
Lab Project ID: 31502068

Collection Date: 10/26/2015 14:24
Received Date: 11/05/2015 11:27
Matrix: Soil-Solid as received
Solids (%):

Results by **SW-846 8062B**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	2670	25600	ug/Kg	20000	11/6/2015 20:52
1,1,1-Trichloroethane	**66722**		3150	25600	ug/Kg	20000	11/6/2015 20:52
1,1,2,2-Tetrachloroethane	ND	U	4000	25600	ug/Kg	20000	11/6/2015 20:52
1,1,2-Trichloroethane	ND	U	3230	25600	ug/Kg	20000	11/6/2015 20:52
1,1-Dichloroethane	ND	U	4230	25600	ug/Kg	20000	11/6/2015 20:52
1,1-Dichloroethene	**31322**		5440	25600	ug/Kg	20000	11/6/2015 20:52
1,1-Dichloropropene	ND	U	2210	25600	ug/Kg	20000	11/6/2015 20:52
1,2,3-Trichlorobenzene	ND	U	2820	25600	ug/Kg	20000	11/6/2015 20:52
1,2,3-Trichloropropane	ND	U	5440	25600	ug/Kg	20000	11/6/2015 20:52
1,2,4-Trichlorobenzene	ND	U	2340	25600	ug/Kg	20000	11/6/2015 20:52
1,2,4-Trimethylbenzene	ND	U	2460	25600	ug/Kg	20000	11/6/2015 20:52
1,2-Dibromo-3-chloropropane	ND	U	19200	128000	ug/Kg	20000	11/6/2015 20:52
1,2-Dibromoethane	ND	U	3080	25600	ug/Kg	20000	11/6/2015 20:52
1,2-Dichlorobenzene	ND	U	3510	25600	ug/Kg	20000	11/6/2015 20:52
1,2-Dichloroethane	ND	U	4280	25600	ug/Kg	20000	11/6/2015 20:52
1,2-Dichloropropane	ND	U	4180	25600	ug/Kg	20000	11/6/2015 20:52
1,3,5-Trimethylbenzene	ND	U	2900	25600	ug/Kg	20000	11/6/2015 20:52
1,3-Dichlorobenzene	ND	U	2640	25600	ug/Kg	20000	11/6/2015 20:52
1,3-Dichloropropane	ND	U	3330	25600	ug/Kg	20000	11/6/2015 20:52
1,4-Dichlorobenzene	ND	U	3330	25600	ug/Kg	20000	11/6/2015 20:52
2,2-Dichloropropane	ND	U	10100	25600	ug/Kg	20000	11/6/2015 20:52
2-Butanone	ND	U	18500	641000	ug/Kg	20000	11/6/2015 20:52
2-Chlorotoluene	ND	U	2900	25600	ug/Kg	20000	11/6/2015 20:52
2-Hexanone	ND	U	18700	128000	ug/Kg	20000	11/6/2015 20:52
4-Chlorotoluene	ND	U	3210	25600	ug/Kg	20000	11/6/2015 20:52
4-Isopropyltoluene	ND	U	1970	25600	ug/Kg	20000	11/6/2015 20:52
4-Methyl-2-pentanone	ND	U	14300	128000	ug/Kg	20000	11/6/2015 20:52
Acetone	ND	U	22200	641000	ug/Kg	20000	11/6/2015 20:52
Benzene	ND	U	2900	25600	ug/Kg	20000	11/6/2015 20:52
Bromobenzene	ND	U	2820	25600	ug/Kg	20000	11/6/2015 20:52
Bromochloromethane	ND	U	5410	25600	ug/Kg	20000	11/6/2015 20:52
Bromodichloromethane	ND	U	2820	25600	ug/Kg	20000	11/6/2015 20:52
Bromoform	ND	U	2500	25600	ug/Kg	20000	11/6/2015 20:52
Bromomethane	ND	U	6080	25600	ug/Kg	20000	11/6/2015 20:52
n-Butylbenzene	ND	U	1970	25600	ug/Kg	20000	11/6/2015 20:52
Carbon disulfide	ND	U	2720	25600	ug/Kg	20000	11/6/2015 20:52
Carbon tetrachloride	ND	U	2590	25600	ug/Kg	20000	11/6/2015 20:52
Chlorobenzene	ND	U	2970	25600	ug/Kg	20000	11/6/2015 20:52
Chloroethane	ND	U	7970	25600	ug/Kg	20000	11/6/2015 20:52
Chloroform	ND	U	3560	25600	ug/Kg	20000	11/6/2015 20:52
Chloromethane	ND	U	11500	25600	ug/Kg	20000	11/6/2015 20:52
Dibromochloromethane	ND	U	3440	25600	ug/Kg	20000	11/6/2015 20:52

Results of **WCSS-1 (12)**

Client Sample ID: **WCSS-1 (12)**
Client Project ID: **AVX Myrtle Beach**
Lab Sample ID: 31502068002-A
Lab Project ID: 31502068

Collection Date: 10/26/2015 14:24
Received Date: 11/05/2015 11:27
Matrix: Soil-Solid as received
Solids (%):

Results by **SW-846 8062B**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dibromomethane	ND	U	4310	25600	ug/Kg	20000	11/6/2015 20:52
Dichlorodifluoromethane	ND	U	4380	128000	ug/Kg	20000	11/6/2015 20:52
cis-1,3-Dichloropropene	ND	U	1970	25600	ug/Kg	20000	11/6/2015 20:52
trans-1,3-Dichloropropene	ND	U	2210	25600	ug/Kg	20000	11/6/2015 20:52
Diisopropyl Ether	ND	U	7540	25600	ug/Kg	20000	11/6/2015 20:52
Ethyl Benzene	ND	U	2250	25600	ug/Kg	20000	11/6/2015 20:52
Hexachlorobutadiene	ND	U	2030	25600	ug/Kg	20000	11/6/2015 20:52
Isopropylbenzene (Cumene)	ND	U	2230	25600	ug/Kg	20000	11/6/2015 20:52
Methyl iodide	ND	U	2950	25600	ug/Kg	20000	11/6/2015 20:52
Methylene chloride	ND	U	3900	128000	ug/Kg	20000	11/6/2015 20:52
Naphthalene	ND	U	2190	25600	ug/Kg	20000	11/6/2015 20:52
Styrene	ND	U	2620	25600	ug/Kg	20000	11/6/2015 20:52
Tetrachloroethene	ND	U	3970	25600	ug/Kg	20000	11/6/2015 20:52
Toluene	ND	U	3410	25600	ug/Kg	20000	11/6/2015 20:52
Trichloroethene	**615222**		3210	25600	ug/Kg	20000	11/6/2015 20:52
Trichlorofluoromethane	ND	U	3510	25600	ug/Kg	20000	11/6/2015 20:52
Vinyl chloride	ND	U	3180	25600	ug/Kg	20000	11/6/2015 20:52
Xylene (total)	ND	U	4670	51300	ug/Kg	20000	11/6/2015 20:52
cis-1,2-Dichloroethene	**. 8. 22**		3490	25600	ug/Kg	20000	11/6/2015 20:52
m,p-Xylene	ND	U	4670	51300	ug/Kg	20000	11/6/2015 20:52
n-Propylbenzene	ND	U	2900	25600	ug/Kg	20000	11/6/2015 20:52
o-Xylene	ND	U	2240	25600	ug/Kg	20000	11/6/2015 20:52
sec-Butylbenzene	ND	U	2870	25600	ug/Kg	20000	11/6/2015 20:52
tert-Butyl methyl ether (MTBE)	ND	U	3690	25600	ug/Kg	20000	11/6/2015 20:52
tert-Butylbenzene	ND	U	2190	25600	ug/Kg	20000	11/6/2015 20:52
trans-1,2-Dichloroethene	ND	U	5720	25600	ug/Kg	20000	11/6/2015 20:52
trans-1,4-Dichloro-2-butene	ND	U	10600	128000	ug/Kg	20000	11/6/2015 20:52
Surrogates							
1,2-Dichloroethane-d4	116			55.0-173	%	20000	11/6/2015 20:52
4-Bromofluorobenzene	97.0			23.0-141	%	20000	11/6/2015 20:52
Toluene d8	90.0			57.0-134	%	20000	11/6/2015 20:52

Batch Information

Analytical Batch: **VMS3588**
Analytical Method: **SW-846 8062B**
Instrument: **MSD8**
Analyst: **BWS**

Prep Batch: **VXX62. 5**
Prep Method: **SW-846 . 23. SM**
Prep Date/Time: **11/26/021. 14:34**
Prep Initial Wt./Vol.: **59 g**
Prep Extract Vol: **12 mL**

Print Date: 11/18/2015

N.C. Certification # 481

Results of **WCSS-1 (2) A**

Client Sample ID: **WCSS-1 (2) A**
Client Project ID: **VXMy rtleBa Bch8**
Lab Sample ID: 31502068003-A
Lab Project ID: 31502068

Collection Date: 10/26/2015 14:35
Received Date: 11/05/2015 11:27
Matrix: Soil-Solid as received
Solids (%):

Results by **SW-460 420) a**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	21.2	204	ug/Kg	200	11/6/2015 17:52
1,1,1-Trichloroethane	**723**		25.1	204	ug/Kg	200	11/6/2015 17:52
1,1,2,2-Tetrachloroethane	ND	U	31.8	204	ug/Kg	200	11/6/2015 17:52
1,1,2-Trichloroethane	ND	U	25.7	204	ug/Kg	200	11/6/2015 17:52
1,1-Dichloroethane	**05.7**	9	33.7	204	ug/Kg	200	11/6/2015 17:52
1,1-Dichloroethene	ND	U	43.3	204	ug/Kg	200	11/6/2015 17:52
1,1-Dichloropropene	ND	U	17.6	204	ug/Kg	200	11/6/2015 17:52
1,2,3-Trichlorobenzene	ND	U	22.4	204	ug/Kg	200	11/6/2015 17:52
1,2,3-Trichloropropane	ND	U	43.3	204	ug/Kg	200	11/6/2015 17:52
1,2,4-Trichlorobenzene	ND	U	18.6	204	ug/Kg	200	11/6/2015 17:52
1,2,4-Trimethylbenzene	ND	U	1B.6	204	ug/Kg	200	11/6/2015 17:52
1,2-Dibromo-3-chloropropane	ND	U	153	1020	ug/Kg	200	11/6/2015 17:52
1,2-Dibromoethane	ND	U	24.5	204	ug/Kg	200	11/6/2015 17:52
1,2-Dichlorobenzene	ND	U	28.0	204	ug/Kg	200	11/6/2015 17:52
1,2-Dichloroethane	ND	U	34.1	204	ug/Kg	200	11/6/2015 17:52
1,2-Dichloropropane	ND	U	33.3	204	ug/Kg	200	11/6/2015 17:52
1,3,5-Trimethylbenzene	ND	U	23.1	204	ug/Kg	200	11/6/2015 17:52
1,3-Dichlorobenzene	ND	U	21.0	204	ug/Kg	200	11/6/2015 17:52
1,3-Dichloropropane	ND	U	26.5	204	ug/Kg	200	11/6/2015 17:52
1,4-Dichlorobenzene	ND	U	26.5	204	ug/Kg	200	11/6/2015 17:52
2,2-Dichloropropane	ND	U	80.2	204	ug/Kg	200	11/6/2015 17:52
2-J utanone	**65u**	9	148	5100	ug/Kg	200	11/6/2015 17:52
2-Chlorotoluene	ND	U	23.1	204	ug/Kg	200	11/6/2015 17:52
2-Hexanone	ND	U	14B	1020	ug/Kg	200	11/6/2015 17:52
4-Chlorotoluene	ND	U	25.5	204	ug/Kg	200	11/6/2015 17:52
4-Isopropyltoluene	ND	U	15.7	204	ug/Kg	200	11/6/2015 17:52
4-Methyl-2-pentanone	ND	U	114	1020	ug/Kg	200	11/6/2015 17:52
Acetone	ND	U	176	5100	ug/Kg	200	11/6/2015 17:52
J enzene	ND	U	23.1	204	ug/Kg	200	11/6/2015 17:52
J romobenzene	ND	U	22.4	204	ug/Kg	200	11/6/2015 17:52
J romochloromethane	ND	U	43.1	204	ug/Kg	200	11/6/2015 17:52
J romodichloromethane	ND	U	22.4	204	ug/Kg	200	11/6/2015 17:52
J romoform	ND	U	1B.B	204	ug/Kg	200	11/6/2015 17:52
J romomethane	ND	U	48.4	204	ug/Kg	200	11/6/2015 17:52
n-J utylbenzene	ND	U	15.7	204	ug/Kg	200	11/6/2015 17:52
Carbon disulfide	ND	U	21.6	204	ug/Kg	200	11/6/2015 17:52
Carbon tetrachloride	ND	U	20.6	204	ug/Kg	200	11/6/2015 17:52
Chlorobenzene	ND	U	23.7	204	ug/Kg	200	11/6/2015 17:52
Chloroethane	ND	U	63.5	204	ug/Kg	200	11/6/2015 17:52
Chloroform	ND	U	28.4	204	ug/Kg	200	11/6/2015 17:52
Chloromethane	ND	U	B1.4	204	ug/Kg	200	11/6/2015 17:52
Dibromochloromethane	ND	U	27.3	204	ug/Kg	200	11/6/2015 17:52

Results of **WCSS-1 (2) A**

Client Sample ID: **WCSS-1 (2) A**
Client Project ID: **VXMy rtleBa Bch8**
Lab Sample ID: 31502068003-A
Lab Project ID: 31502068

Collection Date: 10/26/2015 14:35
Received Date: 11/05/2015 11:27
Matrix: Soil-Solid as received
Solids (%):

Results by **SW-460 420) a**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dibromomethane	ND	U	34.3	204	ug/Kg	200	11/6/2015 17:52
Dichlorodifluoromethane	ND	U	34.B	1020	ug/Kg	200	11/6/2015 17:52
cis-1,3-Dichloropropene	ND	U	15.7	204	ug/Kg	200	11/6/2015 17:52
trans-1,3-Dichloropropene	ND	U	17.6	204	ug/Kg	200	11/6/2015 17:52
Diisopropyl Ether	ND	U	60.0	204	ug/Kg	200	11/6/2015 17:52
Ethyl J enzene	**u5.u**	9	17.B	204	ug/Kg	200	11/6/2015 17:52
Hexachlorobutadiene	ND	U	16.2	204	ug/Kg	200	11/6/2015 17:52
Isopropylbenzene (Cumene)	ND	U	17.7	204	ug/Kg	200	11/6/2015 17:52
Methyl iodide	ND	U	23.5	204	ug/Kg	200	11/6/2015 17:52
Methylene chloride	ND	U	31.0	1020	ug/Kg	200	11/6/2015 17:52
Naphthalene	ND	U	17.4	204	ug/Kg	200	11/6/2015 17:52
Styrene	ND	U	20.8	204	ug/Kg	200	11/6/2015 17:52
Tetrachloroethene	ND	U	31.6	204	ug/Kg	200	11/6/2015 17:52
Toluene	**167**	9	27.1	204	ug/Kg	200	11/6/2015 17:52
Trichloroethene	**116))**		25.5	204	ug/Kg	200	11/6/2015 17:52
Trichlorofluoromethane	ND	U	28.0	204	ug/Kg	200	11/6/2015 17:52
Vinyl chloride	**163**	9	25.3	204	ug/Kg	200	11/6/2015 17:52
Xylene (total)	ND	U	37.1	408	ug/Kg	200	11/6/2015 17:52
cis-1,2-Dichloroethene	**003)**		27.8	204	ug/Kg	200	11/6/2015 17:52
m,p-Xylene	ND	U	37.1	408	ug/Kg	200	11/6/2015 17:52
n-Propylbenzene	ND	U	23.1	204	ug/Kg	200	11/6/2015 17:52
o-Xylene	ND	U	17.8	204	ug/Kg	200	11/6/2015 17:52
sec-J utylbenzene	ND	U	22.B	204	ug/Kg	200	11/6/2015 17:52
tert-J utyl methyl ether (MTJ E)	ND	U	2B.4	204	ug/Kg	200	11/6/2015 17:52
tert-J utylbenzene	ND	U	17.4	204	ug/Kg	200	11/6/2015 17:52
trans-1,2-Dichloroethene	ND	U	45.5	204	ug/Kg	200	11/6/2015 17:52
trans-1,4-Dichloro-2-butene	ND	U	84.5	1020	ug/Kg	200	11/6/2015 17:52
SottgsclBl							
1,2-Dichloroethane-d4	112			55.0-173	%	200	11/6/2015 17:52
4-J romofluorobenzene	B8.0			23.0-141	%	200	11/6/2015 17:52
Toluene d8	B3.0			57.0-134	%	200	11/6/2015 17:52

a clh8 rf rgti cl/gf

Analytical J atch: **Xy S7344**
Analytical Method: **SW-460 420) a**
Instrument: **y SD4**
Analyst: **a WS**

Prep J atch: **XMM0) 53**
Prep Method: **SW-460 5) 75 Sy**
Prep Date/Time: **11:) 0:2) 15 16976**
Prep Initial Wt./Vol.: **u.4 s**
Prep Extract Vol: **1) i L**

v esults of **WCCS-3 (8)**

Client Sample ID: **WCCS-3 (8)**
Client Project ID: **AVX Myrtle Beach**
Lab Sample ID: 3150206800-A
Lab Project ID: 31502068

Collection Date: 104-2R-2015 08:36
v eceide7 Date: 114054-2015 11:2R
Matrix: SoilASoli7 as receide7
Soli7s (%):

v esults by **SW-846 8260B**

Parameter	v esult	Qual	DL	LOQ4CL	Units	DF	Date / nalyze7
1,1,1,2A Tetrachloroethane	ND	U	- 16	- 000	ug4Kg	- 000	11464-2015 18:- 3
1,1,1A Trichloroethane	ND	U	- . 2	- 000	ug4Kg	- 000	11464-2015 18:- 3
1,1,2,2A Tetrachloroethane	ND	U	62-	- 000	ug4Kg	- 000	11464-2015 18:- 3
1,1,2A Trichloroethane	ND	U	50-	- 000	ug4Kg	- 000	11464-2015 18:- 3
1,1A Dichloroethane	ND	U	660	- 000	ug4Kg	- 000	11464-2015 18:- 3
1,1A Dichloroethene	ND	U	8- 8	- 000	ug4Kg	- 000	11464-2015 18:- 3
1,1A Dichloropropene	ND	U	3- 5	- 000	ug4Kg	- 000	11464-2015 18:- 3
1,2,3A Trichlorobenzene	ND	U	- - 0	- 000	ug4Kg	- 000	11464-2015 18:- 3
1,2,3A Trichloropropane	ND	U	8- 8	- 000	ug4Kg	- 000	11464-2015 18:- 3
1,2,- A Trichlorobenzene	ND	U	365	- 000	ug4Kg	- 000	11464-2015 18:- 3
1,2,- A Trimethylbenzene	ND	U	38-	- 000	ug4Kg	- 000	11464-2015 18:- 3
1,2A Dibromo A3A chloropropane	ND	U	2. . 0	20000	ug4Kg	- 000	11464-2015 18:- 3
1,2A Dibromoethane	ND	U	- 80	- 000	ug4Kg	- 000	11464-2015 18:- 3
1,2A Dichlorobenzene	ND	U	5- 8	- 000	ug4Kg	- 000	11464-2015 18:- 3
1,2A Dichloroethane	ND	U	668	- 000	ug4Kg	- 000	11464-2015 18:- 3
1,2A Dichloropropane	ND	U	652	- 000	ug4Kg	- 000	11464-2015 18:- 3
1,3,5A Trimethylbenzene	ND	U	- 52	- 000	ug4Kg	- 000	11464-2015 18:- 3
1,3A Dichlorobenzene	ND	U	- 12	- 000	ug4Kg	- 000	11464-2015 18:- 3
1,3A Dichloropropane	ND	U	520	- 000	ug4Kg	- 000	11464-2015 18:- 3
1,- A Dichlorobenzene	ND	U	520	- 000	ug4Kg	- 000	11464-2015 18:- 3
2,2A Dichloropropane	ND	U	15R0	- 000	ug4Kg	- 000	11464-2015 18:- 3
2A9 utanone	ND	U	28. 0	100000	ug4Kg	- 000	11464-2015 18:- 3
2AChlorotoluene	ND	U	- 52	- 000	ug4Kg	- 000	11464-2015 18:- 3
2AB exanone	ND	U	2. 10	20000	ug4Kg	- 000	11464-2015 18:- 3
- AChlorotoluene	ND	U	500	- 000	ug4Kg	- 000	11464-2015 18:- 3
- Asopropyltoluene	ND	U	308	- 000	ug4Kg	- 000	11464-2015 18:- 3
- AMethylA2A pentanone	ND	U	2230	20000	ug4Kg	- 000	11464-2015 18:- 3
/ cetone	ND	U	3- 60	100000	ug4Kg	- 000	11464-2015 18:- 3
9enzene	ND	U	- 52	- 000	ug4Kg	- 000	11464-2015 18:- 3
9romobenzene	ND	U	- - 0	- 000	ug4Kg	- 000	11464-2015 18:- 3
9romochloromethane	ND	U	8- -	- 000	ug4Kg	- 000	11464-2015 18:- 3
9romo7ichloromethane	ND	U	- - 0	- 000	ug4Kg	- 000	11464-2015 18:- 3
9romoform	ND	U	3. 0	- 000	ug4Kg	- 000	11464-2015 18:- 3
9romomethane	ND	U	. - 8	- 000	ug4Kg	- 000	11464-2015 18:- 3
nA9 utylbenzene	ND	U	308	- 000	ug4Kg	- 000	11464-2015 18:- 3
Carbon 7isulfi7e	ND	U	- 2-	- 000	ug4Kg	- 000	11464-2015 18:- 3
Carbon tetrachlori7e	ND	U	- 0-	- 000	ug4Kg	- 000	11464-2015 18:- 3
Chlorobenzene	ND	U	- 6-	- 000	ug4Kg	- 000	11464-2015 18:- 3
Chloroethane	ND	U	12- 0	- 000	ug4Kg	- 000	11464-2015 18:- 3
Chloroform	ND	U	556	- 000	ug4Kg	- 000	11464-2015 18:- 3
Chloromethane	ND	U	1R 0	- 000	ug4Kg	- 000	11464-2015 18:- 3
Dibromochloromethane	ND	U	536	- 000	ug4Kg	- 000	11464-2015 18:- 3

Print Date: 114184-2015

NJCJCertification H- 81

v esults of **WCCS-3 (8)**

Client Sample ID: **WCCS-3 (8)**
Client Project ID: **AVX Myrtle Beach**
Lab Sample ID: 3150206800-A
Lab Project ID: 31502068

Collection Date: 10/21/2015 08:36
v eceide7 Date: 11/05/2015 11:2R
Matrix: SoilASoli7 as receide7
Soli7s (%):

v esults by **SW-846 8260B**

Parameter	v esult	Qual	DL	LOQ/CL	Units	DF	Date / nalyze7
Dibromomethane	ND	U	6R2	- 000	ug/Kg	- 000	11/6/2015 18:- 3
Dichloro7ifluoromethane	ND	U	68-	20000	ug/Kg	- 000	11/6/2015 18:- 3
cisA1,3ADichloropropene	ND	U	30R	- 000	ug/Kg	- 000	11/6/2015 18:- 3
transA1,3ADichloropropene	ND	U	3- 5	- 000	ug/Kg	- 000	11/6/2015 18:- 3
Diisopropyl #ther	ND	U	1180	- 000	ug/Kg	- 000	11/6/2015 18:- 3
#thyl 9enzene	ND	U	351	- 000	ug/Kg	- 000	11/6/2015 18:- 3
Bexachlorobuta7iene	ND	U	31R	- 000	ug/Kg	- 000	11/6/2015 18:- 3
Isopropylbenzene (Cumene)	ND	U	3- 8	- 000	ug/Kg	- 000	11/6/2015 18:- 3
Methyl io7i7e	ND	U	- 60	- 000	ug/Kg	- 000	11/6/2015 18:- 3
Methylene chlori7e	ND	U	608	20000	ug/Kg	- 000	11/6/2015 18:- 3
Naphthalene	ND	U	3- 2	- 000	ug/Kg	- 000	11/6/2015 18:- 3
Styrene	ND	U	- 08	- 000	ug/Kg	- 000	11/6/2015 18:- 3
Tetrachloroethene	ND	U	620	- 000	ug/Kg	- 000	11/6/2015 18:- 3
Toluene	**1040**	E	532	- 000	ug/Kg	- 000	11/6/2015 18:- 3
Trichloroethene	**24000**		500	- 000	ug/Kg	- 000	11/6/2015 18:- 3
Trichlorofluoromethane	ND	U	5- 8	- 000	ug/Kg	- 000	11/6/2015 18:- 3
Vinyl chlori7e	**1320**	E	- . 6	- 000	ug/Kg	- 000	11/6/2015 18:- 3
Xylene (total)	ND	U	R28	8000	ug/Kg	- 000	11/6/2015 18:- 3
cisA1,2ADichloroethene	**69700**		5- -	- 000	ug/Kg	- 000	11/6/2015 18:- 3
m,pAXylene	ND	U	R28	8000	ug/Kg	- 000	11/6/2015 18:- 3
nAPropylbenzene	ND	U	- 52	- 000	ug/Kg	- 000	11/6/2015 18:- 3
oAXylene	ND	U	350	- 000	ug/Kg	- 000	11/6/2015 18:- 3
secA9utylbenzene	ND	U	- - 8	- 000	ug/Kg	- 000	11/6/2015 18:- 3
tertA9utyl methyl ether (MT9#)	ND	U	5R6	- 000	ug/Kg	- 000	11/6/2015 18:- 3
tertA9utylbenzene	ND	U	3- 2	- 000	ug/Kg	- 000	11/6/2015 18:- 3
transA1,2ADichloroethene	ND	U	8. 2	- 000	ug/Kg	- 000	11/6/2015 18:- 3
transA1,- ADichloroA2Abutene	ND	U	1660	20000	ug/Kg	- 000	11/6/2015 18:- 3
Surrogates							
1,2ADichloroethaneA7-	113			55.JDA1R3	%	- 000	11/6/2015 18:- 3
- A9romofluorobenzene	. RJ0			23.JDA1- 1	%	- 000	11/6/2015 18:- 3
Toluene 78	. 0J0			5RJDA13-	%	- 000	11/6/2015 18:- 3

Batch Information

/ nalytical 9atch: **VMS3788**
/ nalytical Metho7: **SW-846 8260B**
Instrument: **MSD8**
/ nalyst: **BWS**

Prep 9atch: **VXX6057**
Prep Metho7: **SW-846 5035 SM**
Prep Date4Time: **11/06/2015 14:34**
Prep Initial Wt/Vol: **10 g**
Prep #xtract Vol: **10 mL**

Print Date: 11/18/2015

NJCJCertification H- 81

v esults of **WCCS-1 (21)**

Client Sample ID: **WCCS-1 (21)**
Client Project ID: **AVX Myrtle Beach**
Lab Sample ID: 31502068005-A
Lab Project ID: 31502068

Collection Date: 10/24/2015 08:R2
v eceide7 Date: 11/05/2015 11:24
Matrix: Soil-Soli7 as receide7
Soli7s (%):

v esults by **SW-846 8067B**

Parameter	v esult	Qual	DL	LOQ/CL	Units	DF	Date Analyze7
1,1,1,2-Tetrachloroethane	ND	U	5915	R. 95	ug/Kg	50	11/6/2015 15:18
1,1,1-Trichloroethane	ND	U	690.	R. 95	ug/Kg	50	11/6/2015 15:18
1,1,2,2-Tetrachloroethane	ND	U	4942	R. 95	ug/Kg	50	11/6/2015 15:18
1,1,2-Trichloroethane	ND	U	692R	R. 95	ug/Kg	50	11/6/2015 15:18
1,1-Dichloroethane	ND	U	8914	R. 95	ug/Kg	50	11/6/2015 15:18
1,1-Dichloroethene	ND	U	1095	R. 95	ug/Kg	50	11/6/2015 15:18
1,1-Dichloropropene	ND	U	R924	R. 95	ug/Kg	50	11/6/2015 15:18
1,2,3-Trichlorobenzene	ND	U	59R5	R. 95	ug/Kg	50	11/6/2015 15:18
1,2,3-Trichloropropane	ND	U	1095	R. 95	ug/Kg	50	11/6/2015 15:18
1,2,R-Trichlorobenzene	ND	U	R952	R. 95	ug/Kg	50	11/6/2015 15:18
1,2,R-Trimethylbenzene	**430**		R946	R. 95	ug/Kg	50	11/6/2015 15:18
1,2-Dibromo-3-chloropropane	ND	U	3490	2R8	ug/Kg	50	11/6/2015 15:18
1,2-Dibromoethane	ND	U	59 R	R. 95	ug/Kg	50	11/6/2015 15:18
1,2-Dichlorobenzene	ND	U	6948	R. 95	ug/Kg	50	11/6/2015 15:18
1,2-Dichloroethane	ND	U	8924	R. 95	ug/Kg	50	11/6/2015 15:18
1,2-Dichloropropane	ND	U	8904	R. 95	ug/Kg	50	11/6/2015 15:18
1,3,5-Trimethylbenzene	**054**		595.	R. 95	ug/Kg	50	11/6/2015 15:18
1,3-Dichlorobenzene	ND	U	5910	R. 95	ug/Kg	50	11/6/2015 15:18
1,3-Dichloropropane	ND	U	69RR	R. 95	ug/Kg	50	11/6/2015 15:18
1,R-Dichlorobenzene	ND	U	69RR	R. 95	ug/Kg	50	11/6/2015 15:18
2,2-Dichloropropane	ND	U	1. 95	R. 95	ug/Kg	50	11/6/2015 15:18
2-Butanone	**474**	J	3598	12R0	ug/Kg	50	11/6/2015 15:18
2-Chlorotoluene	ND	U	595.	R. 95	ug/Kg	50	11/6/2015 15:18
2-Hexanone	ND	U	3690	2R8	ug/Kg	50	11/6/2015 15:18
R-Chlorotoluene	ND	U	691.	R. 95	ug/Kg	50	11/6/2015 15:18
R-Isopropyltoluene	**2437**		3981	R. 95	ug/Kg	50	11/6/2015 15:18
R-Methyl-2-pentanone	ND	U	2496	2R8	ug/Kg	50	11/6/2015 15:18
Acetone	**31.6**	J	R298	12R0	ug/Kg	50	11/6/2015 15:18
Benzene	ND	U	595.	R. 95	ug/Kg	50	11/6/2015 15:18
Bromobenzene	ND	U	59R5	R. 95	ug/Kg	50	11/6/2015 15:18
Bromochloromethane	ND	U	109R	R. 95	ug/Kg	50	11/6/2015 15:18
Bromo7ichloromethane	ND	U	59R5	R. 95	ug/Kg	50	11/6/2015 15:18
Bromoform	ND	U	R982	R. 95	ug/Kg	50	11/6/2015 15:18
Bromomethane	ND	U	1194	R. 95	ug/Kg	50	11/6/2015 15:18
n-Butylbenzene	**06.0**	J	3981	R. 95	ug/Kg	50	11/6/2015 15:18
Carbon 7isulfi7e	ND	U	5925	R. 95	ug/Kg	50	11/6/2015 15:18
Carbon tetrachlori7e	ND	U	5900	R. 95	ug/Kg	50	11/6/2015 15:18
Chlorobenzene	ND	U	594R	R. 95	ug/Kg	50	11/6/2015 15:18
Chloroethane	ND	U	159R	R. 95	ug/Kg	50	11/6/2015 15:18
Chloroform	ND	U	6988	R. 95	ug/Kg	50	11/6/2015 15:18
Chloromethane	ND	U	2292	R. 95	ug/Kg	50	11/6/2015 15:18
Dibromochloromethane	ND	U	6963	R. 95	ug/Kg	50	11/6/2015 15:18

v esults of **WCCS-1 (21)**

Client Sample ID: **WCCS-1 (21)**
Client Project ID: **AVX Myrtle Beach**
Lab Sample ID: 31502068005-A
Lab Project ID: 31502068

Collection Date: 10/24/2015 08:R2
v eceide7 Date: 11/05/2015 11:24
Matrix: Soil-Soli7 as receide7
Soli7s (%):

v esults by **SW-846 8067B**

Parameter	v esult	Qual	DL	LOQ/CL	Units	DF	Date Analyze7
Dibromomethane	ND	U	8932	R. 95	ug/Kg	50	11/6/2015 15:18
Dichloro7ifluoromethane	ND	U	89R4	2R8	ug/Kg	50	11/6/2015 15:18
cis-1,3-Dichloropropene	ND	U	3980	R. 95	ug/Kg	50	11/6/2015 15:18
trans-1,3-Dichloropropene	ND	U	R924	R. 95	ug/Kg	50	11/6/2015 15:18
Diisopropyl Ether	ND	U	1R96	R. 95	ug/Kg	50	11/6/2015 15:18
Ethyl Benzene	**31.2**		R98R	R. 95	ug/Kg	50	11/6/2015 15:18
Hexachlorobuta7iene	ND	U	39 2	R. 95	ug/Kg	50	11/6/2015 15:18
Isopropylbenzene (Cumene)	**52.7**		R980	R. 95	ug/Kg	50	11/6/2015 15:18
Methyl io7i7e	ND	U	596.	R. 95	ug/Kg	50	11/6/2015 15:18
Methylene chlori7e	ND	U	4952	2R8	ug/Kg	50	11/6/2015 15:18
Naphthalene	**17.0**	J	R923	R. 95	ug/Kg	50	11/6/2015 15:18
Styrene	ND	U	5905	R. 95	ug/Kg	50	11/6/2015 15:18
Tetrachloroethene	ND	U	4964	R. 95	ug/Kg	50	11/6/2015 15:18
Toluene	**075**		6958	R. 95	ug/Kg	50	11/6/2015 15:18
Trichloroethene	**2017**		691.	R. 95	ug/Kg	50	11/6/2015 15:18
Trichlorofluoromethane	ND	U	6948	R. 95	ug/Kg	50	11/6/2015 15:18
Vinyl chlori7e	ND	U	691R	R. 95	ug/Kg	50	11/6/2015 15:18
Xylene (total)	**266**		. 901	. . 90	ug/Kg	50	11/6/2015 15:18
cis-1,2-Dichloroethene	**1u1**		6943	R. 95	ug/Kg	50	11/6/2015 15:18
m,p-Xylene	**u8.0**	J	. 901	. . 90	ug/Kg	50	11/6/2015 15:18
n-Propylbenzene	**056**		595.	R. 95	ug/Kg	50	11/6/2015 15:18
o-Xylene	**8u.6**		R983	R. 95	ug/Kg	50	11/6/2015 15:18
sec-Butylbenzene	ND	U	595R	R. 95	ug/Kg	50	11/6/2015 15:18
tert-Butyl methyl ether (MTBE)	ND	U	4913	R. 95	ug/Kg	50	11/6/2015 15:18
tert-Butylbenzene	ND	U	R923	R. 95	ug/Kg	50	11/6/2015 15:18
trans-1,2-Dichloroethene	ND	U	1190	R. 95	ug/Kg	50	11/6/2015 15:18
trans-1,R-Dichloro-2-butene	ND	U	2095	2R8	ug/Kg	50	11/6/2015 15:18
Sorrgsatel							
1,2-Dichloroethane-7R	112			559-143	%	50	11/6/2015 15:18
R-Bromofluorobenzene	112			239-1R1	%	50	11/6/2015 15:18
Toluene 78	. 390			549-13R	%	50	11/6/2015 15:18

Batch rf rgri at/gf

Analytical Batch: **VMS1u88**
Analytical Metho7: **SW-846 8067B**
Instrument: **MSD8**
Analyst: **BWS**

Prep Batch: **VXX675u**
Prep Metho7: **SW-846 5715 SM**
Prep Date/Time: **22:76:0725 24914**
Prep Initial Wt9Vol9 **27.2 s**
Prep Extract Vol: **27 i L**

Print Date: 11/18/2015

N9C9Certification # R81

RexQltx oy **WCCS-4 (11)**

Client Sample ID: **WCCS-4 (11)**
Client Project ID: **AVX Myrtle Beach**
Lab Sample ID: 31502068006-A
Lab Project ID: 31502068

Collection Date: 10/24/2015 10:15
Received Date: 11/05/2015 11:24
7 atriM Soil-Solid ax received
Solidx s(%

RexQltx bF **SW-846 8260B**

Parameter	RexQlt	OQal	DL	L) O/CL	unitx	DU	Date AnalFf ed
1z1z1z2-, etracTloroetTane	h D	u	345	3600	QN/g N	K000	11/6/2015 1. :0.
1z1z1-, ricTloroetTane	h D	u	KK3	3600	QN/g N	K000	11/6/2015 1. :0.
1z1z2z2-, etracTloroetTane	h D	u	562	3600	QN/g N	K000	11/6/2015 1. :0.
1z1z2-, ricTloroetTane	h D	u	K5K	3600	QN/g N	K000	11/6/2015 1. :0.
1z1-DicTloroetTane	h D	u	5. 5	3600	QN/g N	K000	11/6/2015 1. :0.
1z1-DicTloroetTene	h D	u	46K	3600	QN/g N	K000	11/6/2015 1. :0.
1z1-DicTloropropene	h D	u	311	3600	QN/g N	K000	11/6/2015 1. :0.
1z2z3-, ricTlorobenf ene	h D	u	3. 6	3600	QN/g N	K000	11/6/2015 1. :0.
1z2z3-, ricTloropropane	h D	u	46K	3600	QN/g N	K000	11/6/2015 1. :0.
1z2z4-, ricTlorobenf ene	h D	u	32.	3600	QN/g N	K000	11/6/2015 1. :0.
1z2z4-, rimetTFlbenf ene	h D	u	3K6	3600	QN/g N	K000	11/6/2015 1. :0.
1z2-Dibromo-3-cTloropropane	h D	u	2400	18000	QN/g N	K000	11/6/2015 1. :0.
1z2-DibromoetTane	h D	u	K32	3600	QN/g N	K000	11/6/2015 1. :0.
1z2-DicTlorobenf ene	h D	u	K. K	3600	QN/g N	K000	11/6/2015 1. :0.
1z2-DicTloroetTane	h D	u	602	3600	QN/g N	K000	11/6/2015 1. :0.
1z2-DicTloropropane	h D	u	584	3600	QN/g N	K000	11/6/2015 1. :0.
1z3z5-, rimetTFlbenf ene	h D	u	K04	3600	QN/g N	K000	11/6/2015 1. :0.
1z3-DicTlorobenf ene	h D	u	341	3600	QN/g N	K000	11/6/2015 1. :0.
1z3-DicTloropropane	h D	u	K68	3600	QN/g N	K000	11/6/2015 1. :0.
1z4-DicTlorobenf ene	h D	u	K68	3600	QN/g N	K000	11/6/2015 1. :0.
2z2-DicTloropropane	h D	u	1K20	3600	QN/g N	K000	11/6/2015 1. :0.
2-9 Qtanone	h D	u	2610	. 0100	QN/g N	K000	11/6/2015 1. :0.
2-CTlorotolQene	h D	u	K04	3600	QN/g N	K000	11/6/2015 1. :0.
2-BeManone	h D	u	2620	18000	QN/g N	K000	11/6/2015 1. :0.
K-CTlorotolQene	h D	u	K50	3600	QN/g N	K000	11/6/2015 1. :0.
K-IxopropFltolQene	h D	u	244	3600	QN/g N	K000	11/6/2015 1. :0.
K-7 etTFl-2-pentanone	h D	u	2010	18000	QN/g N	K000	11/6/2015 1. :0.
Acetone	h D	u	3110	. 0100	QN/g N	K000	11/6/2015 1. :0.
9enf ene	h D	u	K04	3600	QN/g N	K000	11/6/2015 1. :0.
9romobenf ene	h D	u	3. 6	3600	QN/g N	K000	11/6/2015 1. :0.
9romocTlorometTane	h D	u	460	3600	QN/g N	K000	11/6/2015 1. :0.
9romodicTlorometTane	h D	u	3. 6	3600	QN/g N	K000	11/6/2015 1. :0.
9romoyorm	h D	u	351	3600	QN/g N	K000	11/6/2015 1. :0.
9romometTane	h D	u	85K	3600	QN/g N	K000	11/6/2015 1. :0.
n-9 QtFlbenf ene	h D	u	244	3600	QN/g N	K000	11/6/2015 1. :0.
Carbon dixQlyide	h D	u	382	3600	QN/g N	K000	11/6/2015 1. :0.
Carbon tetracTloride	h D	u	36K	3600	QN/g N	K000	11/6/2015 1. :0.
CTlorobenf ene	h D	u	K18	3600	QN/g N	K000	11/6/2015 1. :0.
CTloroetTane	h D	u	1120	3600	QN/g N	K000	11/6/2015 1. :0.
CTloroyorm	h D	u	501	3600	QN/g N	K000	11/6/2015 1. :0.
CTlorometTane	h D	u	1610	3600	QN/g N	K000	11/6/2015 1. :0.
DibromocTlorometTane	h D	u	K83	3600	QN/g N	K000	11/6/2015 1. :0.

RexQltx oy **WCCS-4 (11)**

Client Sample ID: **WCCS-4 (11)**
Client Project ID: **AVX Myrtle Beach**
Lab Sample ID: 31502068006-A
Lab Project ID: 31502068

Collection Date: 10/24/2015 10:15
Received Date: 11/05/2015 11:24
7 atriM Soil-Solid ax received
Solidx s(%

RexQltx bF **SW-846 8260B**

Parameter	RexQlt	OQal	DL	L) O/CL	u nitx	DU	Date AnalFf ed
DibromometTane	h D	u	605	3600	QN/g N	K000	11/6/2015 1. :0.
DicTlorodiyIQbrometTane	h D	u	616	18000	QN/g N	K000	11/6/2015 1. :0.
cix-1z3-DicTloropropene	h D	u	246	3600	QN/g N	K000	11/6/2015 1. :0.
tranx-1z3-DicTloropropene	h D	u	311	3600	QN/g N	K000	11/6/2015 1. :0.
DiixopropFl #tTer	h D	u	1060	3600	QN/g N	K000	11/6/2015 1. :0.
#tTFl 9enf ene	h D	u	316	3600	QN/g N	K000	11/6/2015 1. :0.
BeMacTlorobQtadiene	h D	u	285	3600	QN/g N	K000	11/6/2015 1. :0.
IxopropFlbenf ene sCQmene%	h D	u	313	3600	QN/g N	K000	11/6/2015 1. :0.
7 etTFl iodide	h D	u	K1K	3600	QN/g N	K000	11/6/2015 1. :0.
7 etTFlene cTloride	h D	u	5K8	18000	QN/g N	K000	11/6/2015 1. :0.
h apTtTalene	h D	u	308	3600	QN/g N	K000	11/6/2015 1. :0.
StFrene	h D	u	368	3600	QN/g N	K000	11/6/2015 1. :0.
, etracTloroetTene	h D	u	55.	3600	QN/g N	K000	11/6/2015 1. :0.
, olQene	**1080**	E	K4.	3600	QN/g N	K000	11/6/2015 1. :0.
, ricTloroetTene	h D	u	K50	3600	QN/g N	K000	11/6/2015 1. :0.
, ricTloroyIQbrometTane	h D	u	K. K	3600	QN/g N	K000	11/6/2015 1. :0.
VinFl cTloride	**7280**		KK4	3600	QN/g N	K000	11/6/2015 1. :0.
XFlene stotal%	h D	u	656	4210	QN/g N	K000	11/6/2015 1. :0.
cix-1z2-DicTloroetTene	**50500**		K. 0	3600	QN/g N	K000	11/6/2015 1. :0.
mzp-XFlene	h D	u	656	4210	QN/g N	K000	11/6/2015 1. :0.
n-PropFlbenf ene	h D	u	K04	3600	QN/g N	K000	11/6/2015 1. :0.
o-XFlene	h D	u	315	3600	QN/g N	K000	11/6/2015 1. :0.
xec-9 QtFlbenf ene	h D	u	K0K	3600	QN/g N	K000	11/6/2015 1. :0.
tert-9 QtFl metTFl etTer s7 , 9#%	h D	u	51.	3600	QN/g N	K000	11/6/2015 1. :0.
tert-9 QtFlbenf ene	h D	u	308	3600	QN/g N	K000	11/6/2015 1. :0.
tranx-1z2-DicTloroetTene	h D	u	80K	3600	QN/g N	K000	11/6/2015 1. :0.
tranx-1zK-DicTloro-2-bQtene	h D	u	1K. 0	18000	QN/g N	K000	11/6/2015 1. :0.
Surrogates							
1z2-DicTloroetTane-dK	113			55J0-143	(	K000	11/6/2015 1. :0.
K-9romoyIQbrobenf ene	. 6J0			23J0-1K1	(	K000	11/6/2015 1. :0.
, olQene d8	. 0J0			54J0-13K	(	K000	11/6/2015 1. :0.

Batch Information

AnalFtical 9atcT: **VMS3788**
AnalFtical 7 etTod: **SW-846 8260B**
InxtrQment: **MSD8**
AnalFxt: **BWS**

Prep 9atcT: **VXX6057**
Prep 7 etTod: **SW-846 5035 SM**
Prep Date/, ime: **11/06/2015 14:34**
Prep Initial WtJVolJ: **11.1 g**
Prep #Mract Vol: **10 mL**

Print Date: 11/18/2015

h JCJCertiyication HK81

RexQltx oy **WCCS-1 (22)**

Client Sample ID: **WCCS-1 (22)**
Client Project ID: **AVX Myrtle Beach**
Lab Sample ID: 3150206800-A
Lab Project ID: 31502068

Collection Date: 104-4-2015 10:23
Received Date: 1140542015 11:2-
7 atriM SoilASolid ax received
Solidx s(%

RexQltx bF **SW-814 8246B**

Parameter	RexQlt	OQal	DL	L) O4CL	unitx	DU	Date / nalFf ed
1z1z2A, etracTloroetTane	h D	u	K.3-	K2.0	QN4gN	50	11464-2015 15:KK
1z1zA, ricTloroetTane	h D	u	5.1-	K2.0	QN4gN	50	11464-2015 15:KK
1z2z2A, etracTloroetTane	h D	u	6.55	K2.0	QN4gN	50	11464-2015 15:KK
1z2z2A, ricTloroetTane	h D	u	5.29	K2.0	QN4gN	50	11464-2015 15:KK
1z1ADicTloroetTane	h D	u	6.93	K2.0	QN4gN	50	11464-2015 15:KK
1z1ADicTloroetTene	h D	u	8.91	K2.0	QN4gN	50	11464-2015 15:KK
1z1ADicTloropropene	h D	u	3.63	K2.0	QN4gN	50	11464-2015 15:KK
1z2z3A, ricTlorobenf ene	h D	u	K.62	K2.0	QN4gN	50	11464-2015 15:KK
1z2z3A, ricTloropropane	h D	u	8.91	K2.0	QN4gN	50	11464-2015 15:KK
1z2zKA, ricTlorobenf ene	h D	u	3.8K	K2.0	QN4gN	50	11464-2015 15:KK
1z2zKA, rimetTFlbenf ene	h D	u	K.0K	K2.0	QN4gN	50	11464-2015 15:KK
1z2ADibromoA3ATcTloropropane	h D	u	31.K	210	QN4gN	50	11464-2015 15:KK
1z2ADibromoetTane	h D	u	5.0K	K2.0	QN4gN	50	11464-2015 15:KK
1z2ADicTlorobenf ene	h D	u	5.- 6	K2.0	QN4gN	50	11464-2015 15:KK
1z2ADicTloroetTane	h D	u	- .02	K2.0	QN4gN	50	11464-2015 15:KK
1z2ADicTloropropane	h D	u	6.85	K2.0	QN4gN	50	11464-2015 15:KK
1z3z5A, rimetTFlbenf ene	h D	u	K.- 5	K2.0	QN4gN	50	11464-2015 15:KK
1z3ADicTlorobenf ene	h D	u	K.33	K2.0	QN4gN	50	11464-2015 15:KK
1z3ADicTloropropane	h D	u	5.K6	K2.0	QN4gN	50	11464-2015 15:KK
1zKADicTlorobenf ene	h D	u	5.K6	K2.0	QN4gN	50	11464-2015 15:KK
2z2ADicTloropropane	h D	u	16.5	K2.0	QN4gN	50	11464-2015 15:KK
2ABQtanone	**073**	J	30.K	1050	QN4gN	50	11464-2015 15:KK
2ACTlorotolQene	h D	u	K.- 5	K2.0	QN4gN	50	11464-2015 15:KK
2AHeManone	h D	u	30.6	210	QN4gN	50	11464-2015 15:KK
KACTlorotolQene	h D	u	5.25	K2.0	QN4gN	50	11464-2015 15:KK
KAxopropFltolQene	h D	u	3.23	K2.0	QN4gN	50	11464-2015 15:KK
KAT etTFlA2Apentanone	h D	u	23.K	210	QN4gN	50	11464-2015 15:KK
/ cetone	h D	u	36.3	1050	QN4gN	50	11464-2015 15:KK
Benf ene	h D	u	K.- 5	K2.0	QN4gN	50	11464-2015 15:KK
Bromobenf ene	h D	u	K.62	K2.0	QN4gN	50	11464-2015 15:KK
BromocTlorometTane	h D	u	8.8-	K2.0	QN4gN	50	11464-2015 15:KK
BromodicTlorometTane	h D	u	K.62	K2.0	QN4gN	50	11464-2015 15:KK
Bromoyorm	h D	u	K.09	K2.0	QN4gN	50	11464-2015 15:KK
BromometTane	h D	u	9.96	K2.0	QN4gN	50	11464-2015 15:KK
nABQtFlbenf ene	h D	u	3.23	K2.0	QN4gN	50	11464-2015 15:KK
Carbon dixQlyide	h D	u	K.K5	K2.0	QN4gN	50	11464-2015 15:KK
Carbon tetracTloride	h D	u	K.2K	K2.0	QN4gN	50	11464-2015 15:KK
CTlorobenf ene	h D	u	K.8-	K2.0	QN4gN	50	11464-2015 15:KK
CTloroetTane	h D	u	13.1	K2.0	QN4gN	50	11464-2015 15:KK
CTloroyorm	h D	u	5.8K	K2.0	QN4gN	50	11464-2015 15:KK
CTlorometTane	h D	u	18.8	K2.0	QN4gN	50	11464-2015 15:KK
DibromocTlorometTane	h D	u	5.63	K2.0	QN4gN	50	11464-2015 15:KK

Print Date: 1141842015

h.C. Certiyication # K81

RexQltx oy **WCCS-1 (22)**

Client Sample ID: **WCCS-1 (22)**
Client Project ID: **AVX Myrtle Beach**
Lab Sample ID: 3150206800-A
Lab Project ID: 31502068

Collection Date: 104-42015 10:23
Received Date: 1140542015 11:2-
7 atriM SoilASolid ax received
Solidx s(%

RexQltx bF **SW-814 8246B**

Parameter	RexQlt	OQal	DL	L) O4CL	u nitx	DU	Date / nalFf ed
DibromometTane	h D	u	- .06	K2.0	QN4g N	50	11464-2015 15:KK
DicTlorodiyIQbromet Tane	h D	u	- .18	210	QN4g N	50	11464-2015 15:KK
cixA1z3ADicTloropropene	h D	u	3.22	K2.0	QN4g N	50	11464-2015 15:KK
tranxA1z3ADicTloropropene	h D	u	3.62	K2.0	QN4g N	50	11464-2015 15:KK
DiixopropFl EtTer	h D	u	12.K	K2.0	QN4g N	50	11464-2015 15:KK
EtTFl Benf ene	**53.4**		3.68	K2.0	QN4g N	50	11464-2015 15:KK
HeMacTlorobQtadiene	h D	u	3.33	K2.0	QN4g N	50	11464-2015 15:KK
IxopropFlbenf ene sCQmene%	h D	u	3.65	K2.0	QN4g N	50	11464-2015 15:KK
7 etTFl iodide	h D	u	K.83	K2.0	QN4g N	50	11464-2015 15:KK
7 etTFlene cTloride	h D	u	6.39	210	QN4g N	50	11464-2015 15:KK
h apTtTalene	h D	u	3.59	K2.0	QN4g N	50	11464-2015 15:KK
StFrene	h D	u	K.29	K2.0	QN4g N	50	11464-2015 15:KK
, etracTloroetTene	h D	u	6.51	K2.0	QN4g N	50	11464-2015 15:KK
, olQene	**15.2**		5.59	K2.0	QN4g N	50	11464-2015 15:KK
, ricTloroetTene	**273**		5.25	K2.0	QN4g N	50	11464-2015 15:KK
, ricTloroyIQbromet Tane	h D	u	5.-6	K2.0	QN4g N	50	11464-2015 15:KK
VinFl cTloride	**01.5**	J	5.21	K2.0	QN4g N	50	11464-2015 15:KK
XFlene stotal%	h D	u	- .65	8K.0	QN4g N	50	11464-2015 15:KK
cixA1z2ADicTloroetTene	**412**		5.-1	K2.0	QN4g N	50	11464-2015 15:KK
mzpAXFlene	h D	u	- .65	8K.0	QN4g N	50	11464-2015 15:KK
nAPropFlbenf ene	h D	u	K.-5	K2.0	QN4g N	50	11464-2015 15:KK
oAXFlene	h D	u	3.6-	K2.0	QN4g N	50	11464-2015 15:KK
xecABQtFlbenf ene	h D	u	K.-1	K2.0	QN4g N	50	11464-2015 15:KK
tertABQtFl metTFl etTer s7 , BE%	h D	u	6.05	K2.0	QN4g N	50	11464-2015 15:KK
tertABQtFlbenf ene	h D	u	3.59	K2.0	QN4g N	50	11464-2015 15:KK
tranxA1z2ADicTloroetTene	h D	u	9.3-	K2.0	QN4g N	50	11464-2015 15:KK
tranxA1zKADicTloroA2AbQtene	h D	u	1-.K	210	QN4g N	50	11464-2015 15:KK
Surrogates							
1z2ADicTloroetTaneAdK	110			55.0A1-3	(	50	11464-2015 15:KK
KABromoyIQbrobenf ene	99.0			23.0A1K1	(	50	11464-2015 15:KK
, olQene d8	92.0			5-.0A13K	(	50	11464-2015 15:KK

Batch Information

/ nalFtical BatcT: **VMS0788**
/ nalFtical 7 etTod: **SW-814 8246B**
InxtrQment: **MSD8**
/ nalFxt: **BWS**

Prep BatcT: **VXX46/ 7**
Prep 7 etTod: **SW-814 / 60/ SM**
Prep Date4 ime: **33:64:263/ 31901**
Prep Initial Wt.4Vol.: **33.5 g**
Prep EMract Vol: **36 mL**

Print Date: 1141842015

h .C. Certiyication # K81

v esults of **WCCS-4 (1) A**

Client Sample ID: **WCCS-4 (1) A**
Client Project ID: **VXMy rtleBa Bch8**
Lab Sample ID: 31502068008-A
Lab Project ID: 31502068

Collection Date: 10/24/2015 10:R0
v eceide7 Date: 11/05/2015 11:24
Matrix: Soil-Soli7 as receide7
Soli7s (%):

v esults by **SW-642 6120a**

Parameter	v esult	Qual	DL	LOQ/CL	Units	DF	Date Analyze7
1,1,1,2-Tetrachloroethane	ND	U	6192	588	ug/Kg	500	11/6/2015 18:14
1,1,1-Trichloroethane	ND	U	429R	588	ug/Kg	500	11/6/2015 18:14
1,1,2,2-Tetrachloroethane	ND	U	B198	588	ug/Kg	500	11/6/2015 18:14
1,1,2-Trichloroethane	ND	U	4R91	588	ug/Kg	500	11/6/2015 18:14
1,1-Dichloroethane	ND	U	B491	588	ug/Kg	500	11/6/2015 18:14
1,1-Dichloroethene	ND	U	125	588	ug/Kg	500	11/6/2015 18:14
1,1-Dichloropropene	ND	U	5098	588	ug/Kg	500	11/6/2015 18:14
1,2,3-Trichlorobenzene	ND	U	6R94	588	ug/Kg	500	11/6/2015 18:14
1,2,3-Trichloropropane	ND	U	125	588	ug/Kg	500	11/6/2015 18:14
1,2,R-Trichlorobenzene	ND	U	5394	588	ug/Kg	500	11/6/2015 18:14
1,2,R-Trimethylbenzene	ND	U	5695	588	ug/Kg	500	11/6/2015 18:14
1,2-Dibromo-3-chloropropane	ND	U	RR0	2BR0	ug/Kg	500	11/6/2015 18:14
1,2-Dibromoethane	ND	U	4096	588	ug/Kg	500	11/6/2015 18:14
1,2-Dichlorobenzene	ND	U	8096	588	ug/Kg	500	11/6/2015 18:14
1,2-Dichloroethane	ND	U	B892	588	ug/Kg	500	11/6/2015 18:14
1,2-Dichloropropane	ND	U	B59B	588	ug/Kg	500	11/6/2015 18:14
1,3,5-Trimethylbenzene	ND	U	6695	588	ug/Kg	500	11/6/2015 18:14
1,3-Dichlorobenzene	ND	U	6096	588	ug/Kg	500	11/6/2015 18:14
1,3-Dichloropropane	ND	U	4695	588	ug/Kg	500	11/6/2015 18:14
1,R-Dichlorobenzene	ND	U	4695	588	ug/Kg	500	11/6/2015 18:14
2,2-Dichloropropane	ND	U	231	588	ug/Kg	500	11/6/2015 18:14
2-Hutanone	ND	U	R25	1R400	ug/Kg	500	11/6/2015 18:14
2-Chlorotoluene	ND	U	6695	588	ug/Kg	500	11/6/2015 18:14
2-. exanone	ND	U	R28	2BR0	ug/Kg	500	11/6/2015 18:14
R-Chlorotoluene	ND	U	4395	588	ug/Kg	500	11/6/2015 18:14
R-Isopropyltoluene	ND	U	R592	588	ug/Kg	500	11/6/2015 18:14
R-Methyl-2-pentanone	ND	U	328	2BR0	ug/Kg	500	11/6/2015 18:14
Acetone	ND	U	508	1R400	ug/Kg	500	11/6/2015 18:14
Henzene	ND	U	6695	588	ug/Kg	500	11/6/2015 18:14
Hromobenzene	ND	U	6R94	588	ug/Kg	500	11/6/2015 18:14
Hromochloromethane	ND	U	12R	588	ug/Kg	500	11/6/2015 18:14
Hromo7ichloromethane	ND	U	6R94	588	ug/Kg	500	11/6/2015 18:14
Hromoform	ND	U	5498	588	ug/Kg	500	11/6/2015 18:14
Hromomethane	ND	U	13B	588	ug/Kg	500	11/6/2015 18:14
n-Hutylbenzene	ND	U	R592	588	ug/Kg	500	11/6/2015 18:14
Carbon 7isulfi7e	ND	U	629R	588	ug/Kg	500	11/6/2015 18:14
Carbon tetrachlori7e	ND	U	5B9R	588	ug/Kg	500	11/6/2015 18:14
Chlorobenzene	ND	U	6892	588	ug/Kg	500	11/6/2015 18:14
Chloroethane	ND	U	183	588	ug/Kg	500	11/6/2015 18:14
Chloroform	ND	U	8198	588	ug/Kg	500	11/6/2015 18:14
Chloromethane	ND	U	26R	588	ug/Kg	500	11/6/2015 18:14
Dibromochloromethane	ND	U	4898	588	ug/Kg	500	11/6/2015 18:14

v esults of **WCCS-4 (1) A**

Client Sample ID: **WCCS-4 (1) A**
Client Project ID: **VXMy rtleBa Bch8**
Lab Sample ID: 31502068008-A
Lab Project ID: 31502068

Collection Date: 10/24/2015 10:R0
v eceide7 Date: 11/05/2015 11:24
Matrix: Soil-Soli7 as receide7
Soli7s (%):

v esults by **SW-642 6120a**

Parameter	v esult	Qual	DL	LOQ/CL	Units	DF	Date Analyze7
Dibromomethane	ND	U	B898	588	ug/Kg	500	11/6/2015 18:14
Dichloro7ifluoromethane	ND	U	101	2BR0	ug/Kg	500	11/6/2015 18:14
cis-1,3-Dichloropropene	ND	U	R591	588	ug/Kg	500	11/6/2015 18:14
trans-1,3-Dichloropropene	ND	U	5094	588	ug/Kg	500	11/6/2015 18:14
Diisopropyl Ether	ND	U	143	588	ug/Kg	500	11/6/2015 18:14
Ethyl Henzene	ND	U	5196	588	ug/Kg	500	11/6/2015 18:14
. exachlorobuta7iene	ND	U	R696	588	ug/Kg	500	11/6/2015 18:14
Isopropylbenzene (Cumene)	ND	U	5191	588	ug/Kg	500	11/6/2015 18:14
Methyl io7i7e	ND	U	6496	588	ug/Kg	500	11/6/2015 18:14
Methylene chlori7e	ND	U	8B9R	2BR0	ug/Kg	500	11/6/2015 18:14
Naphthalene	ND	U	5093	588	ug/Kg	500	11/6/2015 18:14
Styrene	ND	U	6090	588	ug/Kg	500	11/6/2015 18:14
Tetrachloroethene	ND	U	B192	588	ug/Kg	500	11/6/2015 18:14
Toluene	ND	U	4892	588	ug/Kg	500	11/6/2015 18:14
Trichloroethene	**71) 00**		4395	588	ug/Kg	500	11/6/2015 18:14
Trichlorofluoromethane	ND	U	8096	588	ug/Kg	500	11/6/2015 18:14
Vinyl chlori7e	ND	U	429B	588	ug/Kg	500	11/6/2015 18:14
Xylene (total)	ND	U	104	1180	ug/Kg	500	11/6/2015 18:14
cis-1,2-Dichloroethene	**1540**		8090	588	ug/Kg	500	11/6/2015 18:14
m,p-Xylene	ND	U	104	1180	ug/Kg	500	11/6/2015 18:14
n-Propylbenzene	ND	U	6695	588	ug/Kg	500	11/6/2015 18:14
o-Xylene	ND	U	519R	588	ug/Kg	500	11/6/2015 18:14
sec-Hutylbenzene	ND	U	659B	588	ug/Kg	500	11/6/2015 18:14
tert-Hutyl methyl ether (MTHE)	ND	U	8R94	588	ug/Kg	500	11/6/2015 18:14
tert-Hutylbenzene	ND	U	5093	588	ug/Kg	500	11/6/2015 18:14
trans-1,2-Dichloroethene	ND	U	131	588	ug/Kg	500	11/6/2015 18:14
trans-1,R-Dichloro-2-butene	ND	U	2RR	2BR0	ug/Kg	500	11/6/2015 18:14
SuttogclBs							
1,2-Dichloroethane-7R	112			559-143	%	500	11/6/2015 18:14
R-Hromofluorobenzene	B890			239-1R1	%	500	11/6/2015 18:14
Toluene 78	B190			549-13R	%	500	11/6/2015 18:14

a clh8 Infotmclion

Analytical Hatch: **Xy S3) 66**
Analytical Metho7: **SW-642 6120a**
Instrument: **y SD6**
Analyst: **a WS**

Prep Hatch: **XMM205)**
Prep Metho7: **SW-642 5035 Sy**
Prep Date/Time: **77/02/1075 74:34**
Prep Initial Wt9Vol9 **6.5 g**
Prep Extract Vol: **70 mL**

Print Date: 11/18/2015

N9C9Certification # R81

v esults of **WCCS-1 (21)**

Client Sample ID: **WCCS-1 (21)**
Client Project ID: **AVX Myrtle Beach**
Lab Sample ID: 3150206800-A
Lab Project ID: 31502068

Collection Date: 10/21/2015 11:22
v eceide7 Date: 11/05/2015 11:2R
Matrix: SoilASoli7 as receide7
Soli7s (%):

v esults by **SW-846 8067B**

Parameter	v esult	Qual	DL	LOQ/CL	Units	DF	Date / nalyze7
1,1,1,2A Tetrachloroethane	ND	U	- .59	- 1.R	ug/Kg	100	11/6/2015 1R:26
1,1,1A Trichloroethane	ND	U	11.3	- 1.R	ug/Kg	100	11/6/2015 1R:26
1,1,2,2A Tetrachloroethane	ND	U	19.3	- 1.R	ug/Kg	100	11/6/2015 1R:26
1,1,2A Trichloroethane	ND	U	11.6	- 1.R	ug/Kg	100	11/6/2015 1R:26
1,1A Dichloroethane	**435** I	B	15.1	- 1.R	ug/Kg	100	11/6/2015 1R:26
1,1A Dichloroethene	ND	U	1- .9	- 1.R	ug/Kg	100	11/6/2015 1R:26
1,1A Dichloropropene	ND	U	R- 2	- 1.R	ug/Kg	100	11/6/2015 1R:26
1,2,3A Trichlorobenzene	ND	U	10.1	- 1.R	ug/Kg	100	11/6/2015 1R:26
1,2,3A Trichloropropane	ND	U	1- .9	- 1.R	ug/Kg	100	11/6/2015 1R:26
1,2,9A Trichlorobenzene	ND	U	8.38	- 1.R	ug/Kg	100	11/6/2015 1R:26
1,2,9A Trimethylbenzene	ND	U	8.82	- 1.R	ug/Kg	100	11/6/2015 1R:26
1,2A DibromoA3A chloropropane	ND	U	68.6	95-	ug/Kg	100	11/6/2015 1R:26
1,2A Dibromoethane	ND	U	11.0	- 1.R	ug/Kg	100	11/6/2015 1R:26
1,2A Dichlorobenzene	ND	U	12.6	- 1.R	ug/Kg	100	11/6/2015 1R:26
1,2A Dichloroethane	ND	U	15.3	- 1.R	ug/Kg	100	11/6/2015 1R:26
1,2A Dichloropropane	ND	U	15.0	- 1.R	ug/Kg	100	11/6/2015 1R:26
1,3,5A Trimethylbenzene	ND	U	10.9	- 1.R	ug/Kg	100	11/6/2015 1R:26
1,3A Dichlorobenzene	ND	U	- .95	- 1.R	ug/Kg	100	11/6/2015 1R:26
1,3A Dichloropropane	ND	U	11.-	- 1.R	ug/Kg	100	11/6/2015 1R:26
1,9A Dichlorobenzene	ND	U	11.-	- 1.R	ug/Kg	100	11/6/2015 1R:26
2,2A Dichloropropane	ND	U	36.1	- 1.R	ug/Kg	100	11/6/2015 1R:26
2A Jutanone	**. 04**	B	66.3	22- 0	ug/Kg	100	11/6/2015 1R:26
2A Chlorotoluene	ND	U	10.9	- 1.R	ug/Kg	100	11/6/2015 1R:26
2A Hexanone	ND	U	66.8	95-	ug/Kg	100	11/6/2015 1R:26
9A Chlorotoluene	ND	U	11.5	- 1.R	ug/Kg	100	11/6/2015 1R:26
9A sopropyltoluene	ND	U	R06	- 1.R	ug/Kg	100	11/6/2015 1R:26
9A Methyl-2A pentanone	ND	U	51.2	95-	ug/Kg	100	11/6/2015 1R:26
/ cetone	ND	U	R- .3	22- 0	ug/Kg	100	11/6/2015 1R:26
J enzene	ND	U	10.9	- 1.R	ug/Kg	100	11/6/2015 1R:26
J romobenzene	ND	U	10.1	- 1.R	ug/Kg	100	11/6/2015 1R:26
J romochloromethane	ND	U	1- .9	- 1.R	ug/Kg	100	11/6/2015 1R:26
J romo7ichloromethane	ND	U	10.1	- 1.R	ug/Kg	100	11/6/2015 1R:26
J romoform	ND	U	8.- 9	- 1.R	ug/Kg	100	11/6/2015 1R:26
J romomethane	ND	U	21.R	- 1.R	ug/Kg	100	11/6/2015 1R:26
nA Jutylbenzene	ND	U	R06	- 1.R	ug/Kg	100	11/6/2015 1R:26
Carbon 7isulfi7e	ND	U	- .R2	- 1.R	ug/Kg	100	11/6/2015 1R:26
Carbon tetrachlori7e	ND	U	- .2R	- 1.R	ug/Kg	100	11/6/2015 1R:26
Chlorobenzene	ND	U	10.6	- 1.R	ug/Kg	100	11/6/2015 1R:26
Chloroethane	ND	U	28.5	- 1.R	ug/Kg	100	11/6/2015 1R:26
Chloroform	ND	U	12.8	- 1.R	ug/Kg	100	11/6/2015 1R:26
Chloromethane	ND	U	91.1	- 1.R	ug/Kg	100	11/6/2015 1R:26
Dibromochloromethane	ND	U	12.3	- 1.R	ug/Kg	100	11/6/2015 1R:26

Print Date: 11/18/2015

N.C. Certification # 981

v esults of **WCCS-1 (21)**

Client Sample ID: **WCCS-1 (21)**
Client Project ID: **AVX Myrtle Beach**
Lab Sample ID: 3150206800-A
Lab Project ID: 31502068

Collection Date: 104-2R-42015 11:22
v eceide7 Date: 114054-2015 11:2R
Matrix: SoilASoli7 as receide7
Soli7s (%):

v esults by **SW-846 8067B**

Parameter	v esult	Qual	DL	LOQ4CL	Units	DF	Date / nalyze7
Dibromomethane	ND	U	15.9	- 1.R	ug4Kg	100	11464-2015 1R26
Dichloro7ifluoromethane	ND	U	15.R	95-	ug4Kg	100	11464-2015 1R26
cisA1,3ADichloropropene	ND	U	R09	- 1.R	ug4Kg	100	11464-2015 1R26
transA1,3ADichloropropene	ND	U	R- 1	- 1.R	ug4Kg	100	11464-2015 1R26
Diisopropyl Ether	ND	U	2R0	- 1.R	ug4Kg	100	11464-2015 1R26
Ethyl J enzene	**8056**	B	8.05	- 1.R	ug4Kg	100	11464-2015 1R26
Hexachlorobuta7iene	ND	U	R2R	- 1.R	ug4Kg	100	11464-2015 1R26
Isopropylbenzene (Cumene)	ND	U	R- R	- 1.R	ug4Kg	100	11464-2015 1R26
Methyl io7i7e	ND	U	10.6	- 1.R	ug4Kg	100	11464-2015 1R26
Methylene chlori7e	ND	U	13.-	95-	ug4Kg	100	11464-2015 1R26
Naphthalene	ND	U	R89	- 1.R	ug4Kg	100	11464-2015 1R26
Styrene	ND	U	- .36	- 1.R	ug4Kg	100	11464-2015 1R26
Tetrachloroethene	ND	U	19.2	- 1.R	ug4Kg	100	11464-2015 1R26
Toluene	**4457**	B	12.2	- 1.R	ug4Kg	100	11464-2015 1R26
Trichloroethene	**00u7**		11.5	- 1.R	ug4Kg	100	11464-2015 1R26
Trichlorofluoromethane	ND	U	12.6	- 1.R	ug4Kg	100	11464-2015 1R26
Vinyl chlori7e	**2. 3**		11.9	- 1.R	ug4Kg	100	11464-2015 1R26
Xylene (total)	ND	U	16.R	183	ug4Kg	100	11464-2015 1R26
cisA1,2ADichloroethene	**0687**		12.5	- 1.R	ug4Kg	100	11464-2015 1R26
m,pAXylene	ND	U	16.R	183	ug4Kg	100	11464-2015 1R26
nAPropylbenzene	ND	U	10.9	- 1.R	ug4Kg	100	11464-2015 1R26
oAXylene	ND	U	8.02	- 1.R	ug4Kg	100	11464-2015 1R26
secAJ utylbenzene	ND	U	10.3	- 1.R	ug4Kg	100	11464-2015 1R26
tertAJ utyl methyl ether (MTJ E)	ND	U	13.2	- 1.R	ug4Kg	100	11464-2015 1R26
tertAJ utylbenzene	ND	U	R89	- 1.R	ug4Kg	100	11464-2015 1R26
transA1,2ADichloroethene	ND	U	20.5	- 1.R	ug4Kg	100	11464-2015 1R26
transA1,9ADichloroA2Abutene	ND	U	38.0	95-	ug4Kg	100	11464-2015 1R26
Sorrgsatel							
1,2ADichloroethaneA79	112			55.0A1R3	%	100	11464-2015 1R26
9AJ romofluorobenzene	- R0			23.0A191	%	100	11464-2015 1R26
Toluene 78	- 3.0			5R0A139	%	100	11464-2015 1R26

Batch rf rgri at/gf

/ nalytical J atch: **VMS. u88**
/ nalytical Metho7: **SW-846 8067B**
Instrument: **MSD8**
/ nalyst: **BWS**

Prep J atch: **VXX671u**
Prep Metho7: **SW-846 17. 1 SM**
Prep Date4Time: **22:76:0721 249 4**
Prep Initial Wt.4Vol.: **275 3 s**
Prep Extract Vol: **27 i L**

Print Date: 114184-2015

N.C. Certification # 981

RexQltx oy **WCCS-1 (2) A**

Client Sample ID: **WCCS-1 (2) A**
Client Project ID: **VXMy rtleBa Bch8**
Lab Sample ID: 31502068010-A
Lab Project ID: 31502068

Collection Date: 10/24/2015 11:30
Received Date: 11/05/2015 11:24
7 atriM Soil-Solid ax received
Solidx s(%

RexQltx bF **SW-4) 6 4260a**

Parameter	RexQlt	OQal	DL	L) O/CL	u nitx	DU	Date AnalFf ed
1z1z2z2-, etracTloroetTane	h D	u	21K0	21100	QNVgN	20000	11/6/2015 21:18
1z1z1-, ricTloroetTane	h D	u	25K0	21100	QNVgN	20000	11/6/2015 21:18
1z1z2z2-, etracTloroetTane	h D	u	3280	21100	QNVgN	20000	11/6/2015 21:18
1z1z2-, ricTloroetTane	h D	u	2650	21100	QNVgN	20000	11/6/2015 21:18
1z1-DicTloroetTane	h D	u	3940	21100	QNVgN	20000	11/6/2015 21:18
1z1-DicTloroetTene	h D	u	9960	21100	QNVgN	20000	11/6/2015 21:18
1z1-DicTloropropene	h D	u	1820	21100	QNVgN	20000	11/6/2015 21:18
1z2z3-, ricTlorobenf ene	h D	u	2320	21100	QNVgN	20000	11/6/2015 21:18
1z2z3-, ricTloropropane	h D	u	9960	21100	QNVgN	20000	11/6/2015 21:18
1z2z9-, ricTlorobenf ene	h D	u	1K20	21100	QNVgN	20000	11/6/2015 21:18
1z2z9-, rimetTFlbenf ene	h D	u	2020	21100	QNVgN	20000	11/6/2015 21:18
1z2-Dibromo-3-cTloropropane	h D	u	15400	105000	QNVgN	20000	11/6/2015 21:18
1z2-DibromoetTane	h D	u	2530	21100	QNVgN	20000	11/6/2015 21:18
1z2-DicTlorobenf ene	h D	u	2880	21100	QNVgN	20000	11/6/2015 21:18
1z2-DicTloroetTane	h D	u	3520	21100	QNVgN	20000	11/6/2015 21:18
1z2-DicTloropropane	h D	u	3930	21100	QNVgN	20000	11/6/2015 21:18
1z3z5-, rimetTFlbenf ene	h D	u	2380	21100	QNVgN	20000	11/6/2015 21:18
1z3-DicTlorobenf ene	h D	u	2140	21100	QNVgN	20000	11/6/2015 21:18
1z3-DicTloropropane	h D	u	2490	21100	QNVgN	20000	11/6/2015 21:18
1z9-DicTlorobenf ene	h D	u	2490	21100	QNVgN	20000	11/6/2015 21:18
2z2-DicTloropropane	h D	u	8240	21100	QNVgN	20000	11/6/2015 21:18
2-BQtanone	h D	u	15200	526000	QNVgN	20000	11/6/2015 21:18
2-CTlorotolQene	h D	u	2380	21100	QNVgN	20000	11/6/2015 21:18
2-HeManone	h D	u	15300	105000	QNVgN	20000	11/6/2015 21:18
9-CTlorotolQene	h D	u	2630	21100	QNVgN	20000	11/6/2015 21:18
9-IxopropFltolQene	h D	u	1620	21100	QNVgN	20000	11/6/2015 21:18
9-7 etTFl-2-pentanone	h D	u	11400	105000	QNVgN	20000	11/6/2015 21:18
Acetone	h D	u	18200	526000	QNVgN	20000	11/6/2015 21:18
Benf ene	h D	u	2380	21100	QNVgN	20000	11/6/2015 21:18
Bromobenf ene	h D	u	2320	21100	QNVgN	20000	11/6/2015 21:18
BromocTlorometTane	h D	u	9990	21100	QNVgN	20000	11/6/2015 21:18
BromodicTlorometTane	h D	u	2320	21100	QNVgN	20000	11/6/2015 21:18
Bromoyorm	h D	u	2050	21100	QNVgN	20000	11/6/2015 21:18
BromometTane	h D	u	9KK0	21100	QNVgN	20000	11/6/2015 21:18
n-BQtFlbenf ene	h D	u	1620	21100	QNVgN	20000	11/6/2015 21:18
Carbon dixQlyide	h D	u	2230	21100	QNVgN	20000	11/6/2015 21:18
Carbon tetracTloride	h D	u	2130	21100	QNVgN	20000	11/6/2015 21:18
CTlorobenf ene	h D	u	2990	21100	QNVgN	20000	11/6/2015 21:18
CTloroetTane	h D	u	6550	21100	QNVgN	20000	11/6/2015 21:18
CTloroyorm	h D	u	2K30	21100	QNVgN	20000	11/6/2015 21:18
CTlorometTane	h D	u	K930	21100	QNVgN	20000	11/6/2015 21:18
DibromocTlorometTane	h D	u	2820	21100	QNVgN	20000	11/6/2015 21:18

Print Date: 11/18/2015

h .C. Certiyication # 981

RexQtx oy **WCCS-1 (2) A**

Client Sample ID: **WCCS-1 (2) A**
Client Project ID: **VXMy rtleBa Bch8**
Lab Sample ID: 31502068010-A
Lab Project ID: 31502068

Collection Date: 10/24/2015 11:30
Received Date: 11/05/2015 11:24
7 atriM Soil-Solid ax received
Solidx s(%

RexQtx bF **SW-4) 6 4260a**

Parameter	RexQt	OQal	DL	L) O/CL	u nitx	DU	Date AnalFf ed
DibromometTane	h D	u	3590	21100	QN/g N	20000	11/6/2015 21:18
DicTlorodiyIQbrometTane	h D	u	3600	105000	QN/g N	20000	11/6/2015 21:18
cix-1z3-DicTloropropene	h D	u	1610	21100	QN/g N	20000	11/6/2015 21:18
tranx-1z3-DicTloropropene	h D	u	1810	21100	QN/g N	20000	11/6/2015 21:18
DiixopropFl EtTer	h D	u	61K0	21100	QN/g N	20000	11/6/2015 21:18
EtTFl Benf ene	h D	u	1850	21100	QN/g N	20000	11/6/2015 21:18
HeMacTlorobQtadiene	h D	u	1640	21100	QN/g N	20000	11/6/2015 21:18
IxopropFlbenf ene sCQmene%	h D	u	1830	21100	QN/g N	20000	11/6/2015 21:18
7 etTFl iodide	h D	u	2920	21100	QN/g N	20000	11/6/2015 21:18
7 etTFlene cTloride	h D	u	3200	105000	QN/g N	20000	11/6/2015 21:18
h apTtTalene	h D	u	1800	21100	QN/g N	20000	11/6/2015 21:18
StFrene	h D	u	2150	21100	QN/g N	20000	11/6/2015 21:18
, etracTloroetTene	h D	u	3260	21100	QN/g N	20000	11/6/2015 21:18
, olQene	h D	u	2800	21100	QN/g N	20000	11/6/2015 21:18
, ricTloroetTene	**274000**		2630	21100	QN/g N	20000	11/6/2015 21:18
, ricTloroyIQbrometTane	h D	u	2880	21100	QN/g N	20000	11/6/2015 21:18
VinFl cTloride	h D	u	2610	21100	QN/g N	20000	11/6/2015 21:18
XFlene stotal%	h D	u	3830	92100	QN/g N	20000	11/6/2015 21:18
cix-1z2-DicTloroetTene	**23100**		2860	21100	QN/g N	20000	11/6/2015 21:18
mzp-XFlene	h D	u	3830	92100	QN/g N	20000	11/6/2015 21:18
n-PropFlbenf ene	h D	u	2380	21100	QN/g N	20000	11/6/2015 21:18
o-XFlene	h D	u	1890	21100	QN/g N	20000	11/6/2015 21:18
xec-BQtFlbenf ene	h D	u	2360	21100	QN/g N	20000	11/6/2015 21:18
tert-BQtFl metTFl etTer s7 , BE%	h D	u	3030	21100	QN/g N	20000	11/6/2015 21:18
tert-BQtFlbenf ene	h D	u	1800	21100	QN/g N	20000	11/6/2015 21:18
tranx-1z2-DicTloroetTene	h D	u	96K0	21100	QN/g N	20000	11/6/2015 21:18
tranx-1z9-DicTloro-2-bQtene	h D	u	8420	105000	QN/g N	20000	11/6/2015 21:18
S5tt. uclBo							
1z2-DicTloroetTane-d9	118			55.0-143	(	20000	11/6/2015 21:18
9-BromoyIQbrobenf ene	K4.0			23.0-191	(	20000	11/6/2015 21:18
, olQene d8	8K.0			54.0-139	(	20000	11/6/2015 21:18

a clh8 gsI. tn clf. s

AnalFtical BatcT: **Xy Si m44**
AnalFtical 7 etTod: **SW-4) 6 4260a**
InxtrQment: **y SD4**
AnalFxt: **a WS**

Prep BatcT: **XMM601m**
Prep 7 etTod: **SW-4) 6 10i 1 Sy**
Prep Date/, ime: **33/06/2031 3) :i)**
Prep Initial Wt./Vol.: **79I u**
Prep EMract Vol: **30 n L**

v esults of **WCCS-1 (2) A**

Client Sample ID: **WCCS-1 (2) A**
Client Project ID: **VXMy rtleBa Bch8**
Lab Sample ID: 31502068011-A
Lab Project ID: 31502068

Collection Date: 10/24/2015 13:R8
v eceide7 Date: 11/05/2015 11:24
Matrix: Soil-Soli7 as receide7
Soli7s (%):

v esults by **SW-461 401) a**

Parameter	v esult	Qual	DL	LOQ/CL	Units	DF	Date Analyze7
1,1,1,2-Tetrachloroethane	ND	U	9290	89300	ug/Kg	100000	11/6/2015 22:09
1,1,1-Trichloroethane	ND	U	11000	89300	ug/Kg	100000	11/6/2015 22:09
1,1,2,2-Tetrachloroethane	ND	U	13900	89300	ug/Kg	100000	11/6/2015 22:09
1,1,2-Trichloroethane	ND	U	11300	89300	ug/Kg	100000	11/6/2015 22:09
1,1-Dichloroethane	ND	U	1R400	89300	ug/Kg	100000	11/6/2015 22:09
1,1-Dichloroethene	ND	U	18900	89300	ug/Kg	100000	11/6/2015 22:09
1,1-Dichloropropene	ND	U	4410	89300	ug/Kg	100000	11/6/2015 22:09
1,2,3-Trichlorobenzene	ND	U	9820	89300	ug/Kg	100000	11/6/2015 22:09
1,2,3-Trichloropropane	ND	U	18900	89300	ug/Kg	100000	11/6/2015 22:09
1,2,R-Trichlorobenzene	ND	U	8150	89300	ug/Kg	100000	11/6/2015 22:09
1,2,R-Trimethylbenzene	ND	U	8580	89300	ug/Kg	100000	11/6/2015 22:09
1,2-Dibromo-3-chloropropane	ND	U	66800	RR6000	ug/Kg	100000	11/6/2015 22:09
1,2-Dibromoethane	ND	U	10400	89300	ug/Kg	100000	11/6/2015 22:09
1,2-Dichlorobenzene	ND	U	12200	89300	ug/Kg	100000	11/6/2015 22:09
1,2-Dichloroethane	ND	U	1R900	89300	ug/Kg	100000	11/6/2015 22:09
1,2-Dichloropropane	ND	U	1R600	89300	ug/Kg	100000	11/6/2015 22:09
1,3,5-Trimethylbenzene	ND	U	10100	89300	ug/Kg	100000	11/6/2015 22:09
1,3-Dichlorobenzene	ND	U	9200	89300	ug/Kg	100000	11/6/2015 22:09
1,3-Dichloropropane	ND	U	11600	89300	ug/Kg	100000	11/6/2015 22:09
1,R-Dichlorobenzene	ND	U	11600	89300	ug/Kg	100000	11/6/2015 22:09
2,2-Dichloropropane	ND	U	35100	89300	ug/Kg	100000	11/6/2015 22:09
2-Butanone	ND	U	6R600	2230000	ug/Kg	100000	11/6/2015 22:09
2-Chlorotoluene	ND	U	10100	89300	ug/Kg	100000	11/6/2015 22:09
2-Hexanone	ND	U	65000	RR6000	ug/Kg	100000	11/6/2015 22:09
R-Chlorotoluene	ND	U	11200	89300	ug/Kg	100000	11/6/2015 22:09
R-Isopropyltoluene	ND	U	6840	89300	ug/Kg	100000	11/6/2015 22:09
R-Methyl-2-pentanone	ND	U	R9800	RR6000	ug/Kg	100000	11/6/2015 22:09
Acetone	ND	U	44100	2230000	ug/Kg	100000	11/6/2015 22:09
Benzene	ND	U	10100	89300	ug/Kg	100000	11/6/2015 22:09
Bromobenzene	ND	U	9820	89300	ug/Kg	100000	11/6/2015 22:09
Bromochloromethane	ND	U	18800	89300	ug/Kg	100000	11/6/2015 22:09
Bromo7ichloromethane	ND	U	9820	89300	ug/Kg	100000	11/6/2015 22:09
Bromoform	ND	U	8400	89300	ug/Kg	100000	11/6/2015 22:09
Bromomethane	ND	U	21200	89300	ug/Kg	100000	11/6/2015 22:09
n-Butylbenzene	ND	U	6840	89300	ug/Kg	100000	11/6/2015 22:09
Carbon 7isulfi7e	ND	U	9R60	89300	ug/Kg	100000	11/6/2015 22:09
Carbon tetrachlori7e	ND	U	9020	89300	ug/Kg	100000	11/6/2015 22:09
Chlorobenzene	ND	U	10R00	89300	ug/Kg	100000	11/6/2015 22:09
Chloroethane	ND	U	24800	89300	ug/Kg	100000	11/6/2015 22:09
Chloroform	ND	U	12R00	89300	ug/Kg	100000	11/6/2015 22:09
Chloromethane	ND	U	R0000	89300	ug/Kg	100000	11/6/2015 22:09
Dibromochloromethane	ND	U	12000	89300	ug/Kg	100000	11/6/2015 22:09

Print Date: 11/18/2015

N.C. Certification # R81

v esults of **WCCS-1 (2) A**

Client Sample ID: **WCCS-1 (2) A**
Client Project ID: **VXMy rtleBa Bch8**
Lab Sample ID: 31502068011-A
Lab Project ID: 31502068

Collection Date: 10/24/2015 13:R8
v eceide7 Date: 11/05/2015 11:24
Matrix: Soil-Soli7 as receide7
Soli7s (%):

v esults by **SW-461 401) a**

Parameter	v esult	Qual	DL	LOQ/CL	Units	DF	Date Analyze7
Dibromomethane	ND	U	15000	89300	ug/Kg	100000	11/6/2015 22:09
Dichloro7ifluoromethane	ND	U	15300	RR6000	ug/Kg	100000	11/6/2015 22:09
cis-1,3-Dichloropropene	ND	U	6850	89300	ug/Kg	100000	11/6/2015 22:09
trans-1,3-Dichloropropene	ND	U	4400	89300	ug/Kg	100000	11/6/2015 22:09
Diisopropyl Ether	ND	U	26300	89300	ug/Kg	100000	11/6/2015 22:09
Ethyl Benzene	ND	U	4830	89300	ug/Kg	100000	11/6/2015 22:09
Hexachlorobuta7iene	ND	U	4040	89300	ug/Kg	100000	11/6/2015 22:09
Isopropylbenzene (Cumene)	ND	U	4460	89300	ug/Kg	100000	11/6/2015 22:09
Methyl io7i7e	ND	U	10300	89300	ug/Kg	100000	11/6/2015 22:09
Methylene chlori7e	ND	U	13600	RR6000	ug/Kg	100000	11/6/2015 22:09
Naphthalene	ND	U	4630	89300	ug/Kg	100000	11/6/2015 22:09
Styrene	ND	U	9110	89300	ug/Kg	100000	11/6/2015 22:09
Tetrachloroethene	ND	U	13800	89300	ug/Kg	100000	11/6/2015 22:09
Toluene	ND	U	11900	89300	ug/Kg	100000	11/6/2015 22:09
Trichloroethene	**073))))**		11200	89300	ug/Kg	100000	11/6/2015 22:09
Trichlorofluoromethane	ND	U	12200	89300	ug/Kg	100000	11/6/2015 22:09
Vinyl chlori7e	ND	U	11100	89300	ug/Kg	100000	11/6/2015 22:09
Xylene (total)	ND	U	16300	149000	ug/Kg	100000	11/6/2015 22:09
cis-1,2-Dichloroethene	ND	U	12100	89300	ug/Kg	100000	11/6/2015 22:09
m,p-Xylene	ND	U	16300	149000	ug/Kg	100000	11/6/2015 22:09
n-Propylbenzene	ND	U	10100	89300	ug/Kg	100000	11/6/2015 22:09
o-Xylene	ND	U	4800	89300	ug/Kg	100000	11/6/2015 22:09
sec-Butylbenzene	ND	U	10000	89300	ug/Kg	100000	11/6/2015 22:09
tert-Butyl methyl ether (MTBE)	ND	U	12900	89300	ug/Kg	100000	11/6/2015 22:09
tert-Butylbenzene	ND	U	4630	89300	ug/Kg	100000	11/6/2015 22:09
trans-1,2-Dichloroethene	ND	U	19900	89300	ug/Kg	100000	11/6/2015 22:09
trans-1,R-Dichloro-2-butene	ND	U	34000	RR6000	ug/Kg	100000	11/6/2015 22:09
S5tt. uclBo							
1,2-Dichloroethane-7R	118			55.0-143	%	100000	11/6/2015 22:09
R-Bromofluorobenzene	98.0			23.0-1R1	%	100000	11/6/2015 22:09
Toluene 78	90.0			54.0-13R	%	100000	11/6/2015 22:09

a clh8 gsl. tn clf. s

Analytical Batch: **Xy Si 744**
Analytical Metho7: **SW-461 401) a**
Instrument: **y SD4**
Analyst: **a WS**

Prep Batch: **XMM1) m7**
Prep Metho7: **SW-461 m) i mSy**
Prep Date/Time: **22/) 1/0) 2m 26:i 6**
Prep Initial Wt./Vol.: **229 0 u**
Prep Extract Vol: **2) n L**

Print Date: 11/18/2015

N.C. Certification # R81

Results of **WCCS-4 (41**

Client Sample ID: **WCCS-4 (41**
Client Project ID: **) AV X Myrtl e l Bac**
Lab Sample ID: 31502068012-A
Lab Project ID: 31502068

Collection Date: 10/28/2015 08:04
Received Date: 11/05/2015 11:27
Matrix: Soil-Solid as received
Solids (%):

Results by **SW-4h8 4682e**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	24500	235000	ug/Kg	200000	11/6/2015 23:00
1,1,1-Trichloroethane	ND	U	28. 00	235000	ug/Kg	200000	11/6/2015 23:00
1,1,2,2-Tetrachloroethane	ND	U	36700	235000	ug/Kg	200000	11/6/2015 23:00
1,1,2-Trichloroethane	ND	U	2. 600	235000	ug/Kg	200000	11/6/2015 23:00
1,1-Dichloroethane	ND	U	38800	235000	ug/Kg	200000	11/6/2015 23:00
1,1-Dichloroethene	ND	U	4. . 00	235000	ug/Kg	200000	11/6/2015 23:00
1,1-Dichloropropene	ND	U	20300	235000	ug/Kg	200000	11/6/2015 23:00
1,2,3-Trichlorobenzene	ND	U	25. 00	235000	ug/Kg	200000	11/6/2015 23:00
1,2,3-Trichloropropane	ND	U	4. . 00	235000	ug/Kg	200000	11/6/2015 23:00
1,2,4-Trichlorobenzene	ND	U	21500	235000	ug/Kg	200000	11/6/2015 23:00
1,2,4-Trimethylbenzene	ND	U	22600	235000	ug/Kg	200000	11/6/2015 23:00
1,2-Dibromo-3-chloropropane	ND	U	176000	1180000	ug/Kg	200000	11/6/2015 23:00
1,2-Dibromoethane	ND	U	28200	235000	ug/Kg	200000	11/6/2015 23:00
1,2-Dichlorobenzene	ND	U	32200	235000	ug/Kg	200000	11/6/2015 23:00
1,2-Dichloroethane	ND	U	3. 300	235000	ug/Kg	200000	11/6/2015 23:00
1,2-Dichloropropane	ND	U	38400	235000	ug/Kg	200000	11/6/2015 23:00
1,3,5-Trimethylbenzene	ND	U	26600	235000	ug/Kg	200000	11/6/2015 23:00
1,3-Dichlorobenzene	ND	U	24200	235000	ug/Kg	200000	11/6/2015 23:00
1,3-Dichloropropane	ND	U	30600	235000	ug/Kg	200000	11/6/2015 23:00
1,4-Dichlorobenzene	ND	U	30600	235000	ug/Kg	200000	11/6/2015 23:00
2,2-Dichloropropane	ND	U	. 2500	235000	ug/Kg	200000	11/6/2015 23:00
2-9utanone	ND	U	170000	5880000	ug/Kg	200000	11/6/2015 23:00
2-Chlorotoluene	ND	U	26600	235000	ug/Kg	200000	11/6/2015 23:00
2-Bexanone	ND	U	171000	1180000	ug/Kg	200000	11/6/2015 23:00
4-Chlorotoluene	ND	U	2. 400	235000	ug/Kg	200000	11/6/2015 23:00
4-Isopropyltoluene	ND	U	18100	235000	ug/Kg	200000	11/6/2015 23:00
4-Methyl-2-pentanone	ND	U	131000	1180000	ug/Kg	200000	11/6/2015 23:00
Acetone	ND	U	203000	5880000	ug/Kg	200000	11/6/2015 23:00
9enzene	ND	U	26600	235000	ug/Kg	200000	11/6/2015 23:00
9romobenzene	ND	U	25. 00	235000	ug/Kg	200000	11/6/2015 23:00
9romochloromethane	ND	U	4. 600	235000	ug/Kg	200000	11/6/2015 23:00
9romodichloromethane	ND	U	25. 00	235000	ug/Kg	200000	11/6/2015 23:00
9romoform	ND	U	22. 00	235000	ug/Kg	200000	11/6/2015 23:00
9romomethane	ND	U	55800	235000	ug/Kg	200000	11/6/2015 23:00
n-9utylbenzene	ND	U	18100	235000	ug/Kg	200000	11/6/2015 23:00
Carbon disulfide	ND	U	24. 00	235000	ug/Kg	200000	11/6/2015 23:00
Carbon tetrachloride	ND	U	23800	235000	ug/Kg	200000	11/6/2015 23:00
Chlorobenzene	ND	U	27300	235000	ug/Kg	200000	11/6/2015 23:00
Chloroethane	ND	U	73200	235000	ug/Kg	200000	11/6/2015 23:00
Chloroform	ND	U	32700	235000	ug/Kg	200000	11/6/2015 23:00
Chloromethane	ND	U	105000	235000	ug/Kg	200000	11/6/2015 23:00
Dibromochloromethane	ND	U	31500	235000	ug/Kg	200000	11/6/2015 23:00

Results of **WCCS-4 (41**

Client Sample ID: **WCCS-4 (41**
Client Project ID: **) AV X Myrtl e l Bac**
Lab Sample ID: 31502068012-A
Lab Project ID: 31502068

Collection Date: 10/28/2015 08:04
Received Date: 11/05/2015 11:27
Matrix: Soil-Solid as received
Solids (%):

Results by **SW-4h8 4682e**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dibromomethane	ND	U	3. 500	235000	ug/Kg	200000	11/6/2015 23:00
Dichlorodifluoromethane	ND	U	40200	1180000	ug/Kg	200000	11/6/2015 23:00
cis-1,3-Dichloropropene	ND	U	18000	235000	ug/Kg	200000	11/6/2015 23:00
trans-1,3-Dichloropropene	ND	U	20300	235000	ug/Kg	200000	11/6/2015 23:00
Diisopropyl #ther	ND	U	6. 200	235000	ug/Kg	200000	11/6/2015 23:00
#thyl 9enzene	ND	U	20600	235000	ug/Kg	200000	11/6/2015 23:00
Bexachlorobutadiene	ND	U	18600	235000	ug/Kg	200000	11/6/2015 23:00
Isopropylbenzene (Cumene)	ND	U	20400	235000	ug/Kg	200000	11/6/2015 23:00
Methyl iodide	ND	U	27100	235000	ug/Kg	200000	11/6/2015 23:00
Methylene chloride	ND	U	35800	1180000	ug/Kg	200000	11/6/2015 23:00
Naphthalene	ND	U	20100	235000	ug/Kg	200000	11/6/2015 23:00
Styrene	ND	U	24000	235000	ug/Kg	200000	11/6/2015 23:00
Tetrachloroethene	ND	U	36500	235000	ug/Kg	200000	11/6/2015 23:00
Toluene	ND	U	31300	235000	ug/Kg	200000	11/6/2015 23:00
Trichloroethene	**h042222**		2. 400	235000	ug/Kg	200000	11/6/2015 23:00
Trichlorofluoromethane	ND	U	32200	235000	ug/Kg	200000	11/6/2015 23:00
Einyl chloride	ND	U	2. 200	235000	ug/Kg	200000	11/6/2015 23:00
Vylene (total)	ND	U	42800	471000	ug/Kg	200000	11/6/2015 23:00
cis-1,2-Dichloroethene	**7h4222**	X	32000	235000	ug/Kg	200000	11/6/2015 23:00
m,p-Vylene	ND	U	42800	471000	ug/Kg	200000	11/6/2015 23:00
n-Propylbenzene	ND	U	26600	235000	ug/Kg	200000	11/6/2015 23:00
o-Vylene	ND	U	20600	235000	ug/Kg	200000	11/6/2015 23:00
sec-9utylbenzene	ND	U	26400	235000	ug/Kg	200000	11/6/2015 23:00
tert-9utyl methyl ether (MT9#)	ND	U	33. 00	235000	ug/Kg	200000	11/6/2015 23:00
tert-9utylbenzene	ND	U	20100	235000	ug/Kg	200000	11/6/2015 23:00
trans-1,2-Dichloroethene	ND	U	52500	235000	ug/Kg	200000	11/6/2015 23:00
trans-1,4-Dichloro-2-butene	ND	U	. 7400	1180000	ug/Kg	200000	11/6/2015 23:00
S5yyuoBrl g							
1,2-Dichloroethane-d4	118			55.J0-173	%	200000	11/6/2015 23:00
4-9romofluorobenzene	. 7J0			23.J0-141	%	200000	11/6/2015 23:00
Toluene d8	88.J0			57.J0-134	%	200000	11/6/2015 23:00

e Brac sl ruyf Brrul

Analytical 9atch: **AX S0344**
Analytical Method: **SW-4h8 4682e**
Instrument: **X SD4**
Analyst: **e WS**

Prep 9atch: **AVV82i 3**
Prep Method: **SW-4h8 i 20i SX**
Prep Date/Time: **77/28/627i 7h:0h**
Prep Initial WtJEolJ **4.i o**
Prep #xtract Eol: **72 f L**

4 exQtx oy **WCCS-1 (2) A**

Client Sample ID: **WCCS-1 (2) A**
Client Project ID: **VXMy rtleBa Bch8**
Lab Sample ID: 31502068013-A
Lab Project ID: 31502068

Collection Date: 10/28/2015 08:06
4 eceiRev Date: 11/05/2015 11:2d
7 atriM Soil-Soliv ax receiRev
Solivx s(%

4 exQtx bF **SW-146 106) a**

Parameter	4 exQt	OQal	DL	L) O/CL	u nitx	DU	Date AnalFf ev
1z1z2z2-, etracTloroetTane	h D	u	10500	101000	QNVgN	100000	11/6/2015 22:3K
1z1z1-, ricTloroetTane	h D	u	12K00	101000	QNVgN	100000	11/6/2015 22:3K
1z1z2z2-, etracTloroetTane	h D	u	15800	101000	QNVgN	100000	11/6/2015 22:3K
1z1z2-, ricTloroetTane	h D	u	12d00	101000	QNVgN	100000	11/6/2015 22:3K
1z1-DicTloroetTane	h D	u	16d00	101000	QNVgN	100000	11/6/2015 22:3K
1z1-DicTloroetTene	h D	u	21K00	101000	QNVgN	100000	11/6/2015 22:3K
1z1-DicTloropropene	h D	u	8d20	101000	QNVgN	100000	11/6/2015 22:3K
1z2z3-, ricTlorobenf ene	h D	u	11100	101000	QNVgN	100000	11/6/2015 22:3K
1z2z3-, ricTloropropane	h D	u	21K00	101000	QNVgN	100000	11/6/2015 22:3K
1z2zK-, ricTlorobenf ene	h D	u	. 220	101000	QNVgN	100000	11/6/2015 22:3K
1z2zK-, rimetTFlbenf ene	h D	u	. d10	101000	QNVgN	100000	11/6/2015 22:3K
1z2-Dibromo-3-cTloropropane	h D	u	d5600	505000	QNVgN	100000	11/6/2015 22:3K
1z2-DibromoetTane	h D	u	12100	101000	QNVgN	100000	11/6/2015 22:3K
1z2-DicTlorobenf ene	h D	u	13800	101000	QNVgN	100000	11/6/2015 22:3K
1z2-DicTloroetTane	h D	u	16. 00	101000	QNVgN	100000	11/6/2015 22:3K
1z2-DicTloropropane	h D	u	16500	101000	QNVgN	100000	11/6/2015 22:3K
1z3z5-, rimetTFlbenf ene	h D	u	11K00	101000	QNVgN	100000	11/6/2015 22:3K
1z3-DicTlorobenf ene	h D	u	10K00	101000	QNVgN	100000	11/6/2015 22:3K
1z3-DicTloropropane	h D	u	13100	101000	QNVgN	100000	11/6/2015 22:3K
1zK-DicTlorobenf ene	h D	u	13100	101000	QNVgN	100000	11/6/2015 22:3K
2z2-DicTloropropane	h D	u	3. d00	101000	QNVgN	100000	11/6/2015 22:3K
2-9 Qtanone	h D	u	d3000	2530000	QNVgN	100000	11/6/2015 22:3K
2-CTlorotolQene	h D	u	11K00	101000	QNVgN	100000	11/6/2015 22:3K
2-BeManone	h D	u	d3500	505000	QNVgN	100000	11/6/2015 22:3K
K-CTlorotolQene	h D	u	12600	101000	QNVgN	100000	11/6/2015 22:3K
K-IxopropFltolQene	h D	u	ddd0	101000	QNVgN	100000	11/6/2015 22:3K
K-7 etTFl-2-pentanone	h D	u	56K00	505000	QNVgN	100000	11/6/2015 22:3K
Acetone	h D	u	8d300	2530000	QNVgN	100000	11/6/2015 22:3K
9enf ene	h D	u	11K00	101000	QNVgN	100000	11/6/2015 22:3K
9romobenf ene	h D	u	11100	101000	QNVgN	100000	11/6/2015 22:3K
9romocTlorometTane	h D	u	21300	101000	QNVgN	100000	11/6/2015 22:3K
9romovicTlorometTane	h D	u	11100	101000	QNVgN	100000	11/6/2015 22:3K
9romoyorm	h D	u	. 8K0	101000	QNVgN	100000	11/6/2015 22:3K
9romometTane	h D	u	23. 00	101000	QNVgN	100000	11/6/2015 22:3K
n-9 QtFlbenf ene	h D	u	ddd0	101000	QNVgN	100000	11/6/2015 22:3K
Carbon vixQlyive	h D	u	10d00	101000	QNVgN	100000	11/6/2015 22:3K
Carbon tetracTlorive	h D	u	10200	101000	QNVgN	100000	11/6/2015 22:3K
CTlorobenf ene	h D	u	11d00	101000	QNVgN	100000	11/6/2015 22:3K
CTloroetTane	h D	u	31K00	101000	QNVgN	100000	11/6/2015 22:3K
CTloroyorm	h D	u	1K000	101000	QNVgN	100000	11/6/2015 22:3K
CTlorometTane	h D	u	K5300	101000	QNVgN	100000	11/6/2015 22:3K
DibromocTlorometTane	h D	u	13500	101000	QNVgN	100000	11/6/2015 22:3K

4 exQtx oy **WCCS-1 (2) A**

Client Sample ID: **WCCS-1 (2) A**
Client Project ID: **VXMy rtleBa Bch8**
Lab Sample ID: 31502068013-A
Lab Project ID: 31502068

Collection Date: 10/28/2015 08:06
4 eceiRev Date: 11/05/2015 11:2d
7 atriM Soil-Soliv ax receiRev
Solivx s(%

4 exQtx bF **SW-146 106) a**

Parameter	4 exQt	OQal	DL	L) O/CL	u nitx	DU	Date AnalFf ev
DibromometTane	h D	u	1d000	101000	QN/g N	100000	11/6/2015 22:3K
DicTloroviylQbrometTane	h D	u	1d300	505000	QN/g N	100000	11/6/2015 22:3K
cix-1z3-DicTloropropene	h D	u	dd50	101000	QN/g N	100000	11/6/2015 22:3K
tranx-1z3-DicTloropropene	h D	u	8d10	101000	QN/g N	100000	11/6/2015 22:3K
DiixopropFl #tTer	h D	u	2. d00	101000	QN/g N	100000	11/6/2015 22:3K
#tTFl 9enf ene	h D	u	8860	101000	QN/g N	100000	11/6/2015 22:3K
BeMacTlorobQtaviene	h D	u	8000	101000	QN/g N	100000	11/6/2015 22:3K
IxopropFlbenf ene sCQmene%	h D	u	8d80	101000	QN/g N	100000	11/6/2015 22:3K
7 etTFl iovive	h D	u	11600	101000	QN/g N	100000	11/6/2015 22:3K
7 etTFlene cTlorive	h D	u	15K00	505000	QN/g N	100000	11/6/2015 22:3K
h apTtTalene	h D	u	86K0	101000	QN/g N	100000	11/6/2015 22:3K
StFrene	h D	u	10300	101000	QN/g N	100000	11/6/2015 22:3K
, etracTloroetTene	h D	u	15d00	101000	QN/g N	100000	11/6/2015 22:3K
, olQene	h D	u	13K00	101000	QN/g N	100000	11/6/2015 22:3K
, ricTloroetTene	**047))))**		12600	101000	QN/g N	100000	11/6/2015 22:3K
, ricTloroylQbrometTane	h D	u	13800	101000	QN/g N	100000	11/6/2015 22:3K
EinFl cTlorive	h D	u	12500	101000	QN/g N	100000	11/6/2015 22:3K
VFlene stotal%	h D	u	18K00	202000	QN/g N	100000	11/6/2015 22:3K
cix-1z2-DicTloroetTene	**606))**	X	13d00	101000	QN/g N	100000	11/6/2015 22:3K
mzp-VFlene	h D	u	18K00	202000	QN/g N	100000	11/6/2015 22:3K
n-PropFlbenf ene	h D	u	11K00	101000	QN/g N	100000	11/6/2015 22:3K
o-VFlene	h D	u	8830	101000	QN/g N	100000	11/6/2015 22:3K
xec-9 QtFlbenf ene	h D	u	11300	101000	QN/g N	100000	11/6/2015 22:3K
tert-9 QtFl metTFl etTer s7 , 9#%	h D	u	1K500	101000	QN/g N	100000	11/6/2015 22:3K
tert-9 QtFlbenf ene	h D	u	86K0	101000	QN/g N	100000	11/6/2015 22:3K
tranx-1z2-DicTloroetTene	h D	u	22500	101000	QN/g N	100000	11/6/2015 22:3K
tranx-1zK-DicTloro-2-bQtene	h D	u	K1800	505000	QN/g N	100000	11/6/2015 22:3K
S3tt5. clBu							
1z2-DicTloroetTane-vK	121			55J0-1d3	(	100000	11/6/2015 22:3K
K-9romoylQbrobenf ene	. dJ0			23J0-1K1	(	100000	11/6/2015 22:3K
, olQene v8	. 1J0			5dJ0-13K	(	100000	11/6/2015 22:3K

a clh8 qgs5tl clr5g

AnalFtical 9atcT: **Xy S7m11**
AnalFtical 7 etTov: **SW-146 106) a**
InxtrQment: **y SD1**
AnalFxt: **a WS**

Prep 9atcT: **XMM6) f m**
Prep 7 etTov: **SW-146 f) 7f Sy**
Prep Date/, ime: **22i) 6i0) 2f 24/74**
Prep Initial WtJEolJ: **9 .**
Prep #Mract Eol: **2) l L**

Results of **WCCS-1 (2) A**

Client Sample ID: **WCCS-1 (2) A**
Client Project ID: **VXMy rtleBa Bch8**
Lab Sample ID: 3150206801- A
Lab Project ID: 31502068

Collection Date: 104284 2015 10:10
Received Date: 114054 2015 11:27
Matrix: SoilASolid as received
Solids (%):

Results by **SW-4) 6 4260a**

Parameter	Result	Qual	DL	LOQ4CL	Units	DF	Date / nalyzed
1,1,1,2ATetrachloroethane	ND	U	5.31	51.0	ug4Kg	50	11464 2015 16:09
1,1,1ATrichloroethane	ND	U	6.28	51.0	ug4Kg	50	11464 2015 16:09
1,1,2,2ATetrachloroethane	ND	U	7.96	51.0	ug4Kg	50	11464 2015 16:09
1,1,2ATrichloroethane	ND	U	6.- 3	51.0	ug4Kg	50	11464 2015 16:09
1,1ADichloroethane	ND	U	8.- 2	51.0	ug4Kg	50	11464 2015 16:09
1,1ADichloroethene	ND	U	10.8	51.0	ug4Kg	50	11464 2015 16:09
1,1ADichloropropene	ND	U	- .- 0	51.0	ug4Kg	50	11464 2015 16:09
1,2,3ATrichlorobenzene	ND	U	5.61	51.0	ug4Kg	50	11464 2015 16:09
1,2,3ATrichloropropane	ND	U	10.8	51.0	ug4Kg	50	11464 2015 16:09
1,2,- ATrichlorobenzene	ND	U	- .66	51.0	ug4Kg	50	11464 2015 16:09
1,2,- ATrimethylbenzene	ND	U	- .90	51.0	ug4Kg	50	11464 2015 16:09
1,2ADibromoA3AChloropropane	ND	U	38.2	255	ug4Kg	50	11464 2015 16:09
1,2ADibromoethane	ND	U	6.12	51.0	ug4Kg	50	11464 2015 16:09
1,2ADichlorobenzene	ND	U	6.99	51.0	ug4Kg	50	11464 2015 16:09
1,2ADichloroethane	ND	U	8.52	51.0	ug4Kg	50	11464 2015 16:09
1,2ADichloropropane	ND	U	8.32	51.0	ug4Kg	50	11464 2015 16:09
1,3,5ATrimethylbenzene	ND	U	5.77	51.0	ug4Kg	50	11464 2015 16:09
1,3ADichlorobenzene	ND	U	5.26	51.0	ug4Kg	50	11464 2015 16:09
1,3ADichloropropane	ND	U	6.63	51.0	ug4Kg	50	11464 2015 16:09
1,- ADichlorobenzene	ND	U	6.63	51.0	ug4Kg	50	11464 2015 16:09
2,2ADichloropropane	ND	U	20.1	51.0	ug4Kg	50	11464 2015 16:09
2AButanone	**710**	J	36.9	1280	ug4Kg	50	11464 2015 16:09
2AChlorotoluene	ND	U	5.77	51.0	ug4Kg	50	11464 2015 16:09
2AHexanone	ND	U	37.1	255	ug4Kg	50	11464 2015 16:09
- AChlorotoluene	ND	U	6.38	51.0	ug4Kg	50	11464 2015 16:09
- Asopropyltoluene	ND	U	3.92	51.0	ug4Kg	50	11464 2015 16:09
- AMethylA2APentanone	ND	U	28.5	255	ug4Kg	50	11464 2015 16:09
/ cetone	ND	U	- - .1	1280	ug4Kg	50	11464 2015 16:09
Benzene	ND	U	5.77	51.0	ug4Kg	50	11464 2015 16:09
Bromobenzene	ND	U	5.61	51.0	ug4Kg	50	11464 2015 16:09
Bromochloromethane	ND	U	10.8	51.0	ug4Kg	50	11464 2015 16:09
Bromodichloromethane	ND	U	5.61	51.0	ug4Kg	50	11464 2015 16:09
Bromoform	ND	U	- .97	51.0	ug4Kg	50	11464 2015 16:09
Bromomethane	ND	U	12.1	51.0	ug4Kg	50	11464 2015 16:09
nAButylbenzene	ND	U	3.92	51.0	ug4Kg	50	11464 2015 16:09
Carbon disulfide	ND	U	5.- 1	51.0	ug4Kg	50	11464 2015 16:09
Carbon tetrachloride	ND	U	5.15	51.0	ug4Kg	50	11464 2015 16:09
Chlorobenzene	ND	U	5.92	51.0	ug4Kg	50	11464 2015 16:09
Chloroethane	ND	U	15.9	51.0	ug4Kg	50	11464 2015 16:09
Chloroform	ND	U	7.09	51.0	ug4Kg	50	11464 2015 16:09
Chloromethane	ND	U	22.9	51.0	ug4Kg	50	11464 2015 16:09
Dibromochloromethane	ND	U	6.8-	51.0	ug4Kg	50	11464 2015 16:09

Print Date: 114184 2015

N.C. Certification # - 81

Results of **WCCS-1 (2) A**

Client Sample ID: **WCCS-1 (2) A**
Client Project ID: **VXMy rtleBa Bch8**
Lab Sample ID: 3150206801-A
Lab Project ID: 31502068

Collection Date: 104284 2015 10:10
Received Date: 114054 2015 11:27
Matrix: SoilASolid as received
Solids (%):

Results by **SW-4) 6 4260a**

Parameter	Result	Qual	DL	LOQ4CL	Units	DF	Date / nalyzed
Dibromomethane	ND	U	8.57	51.0	ug4Kg	50	11464 2015 16:09
Dichlorodifluoromethane	ND	U	8.72	255	ug4Kg	50	11464 2015 16:09
cisA1,3ADichloropropene	ND	U	3.91	51.0	ug4Kg	50	11464 2015 16:09
transA1,3ADichloropropene	ND	U	- .- 0	51.0	ug4Kg	50	11464 2015 16:09
Diisopropyl Ether	ND	U	15.0	51.0	ug4Kg	50	11464 2015 16:09
Ethyl Benzene	**306**		- .- 7	51.0	ug4Kg	50	11464 2015 16:09
Hexachlorobutadiene	ND	U	- .0-	51.0	ug4Kg	50	11464 2015 16:09
Isopropylbenzene (Cumene)	ND	U	- .- 3	51.0	ug4Kg	50	11464 2015 16:09
Methyl iodide	ND	U	5.87	51.0	ug4Kg	50	11464 2015 16:09
Methylene chloride	ND	U	7.76	255	ug4Kg	50	11464 2015 16:09
Naphthalene	ND	U	- .36	51.0	ug4Kg	50	11464 2015 16:09
Styrene	ND	U	5.20	51.0	ug4Kg	50	11464 2015 16:09
Tetrachloroethene	ND	U	7.91	51.0	ug4Kg	50	11464 2015 16:09
Toluene	**7256**		6.79	51.0	ug4Kg	50	11464 2015 16:09
Trichloroethene	**. 60**		6.38	51.0	ug4Kg	50	11464 2015 16:09
Trichlorofluoromethane	ND	U	6.99	51.0	ug4Kg	50	11464 2015 16:09
Vinyl chloride	**2657**	J	6.33	51.0	ug4Kg	50	11464 2015 16:09
Xylene (total)	ND	U	9.29	102	ug4Kg	50	11464 2015 16:09
cisA1,2ADichloroethene	**. 03**		6.9-	51.0	ug4Kg	50	11464 2015 16:09
m,pAXylene	ND	U	9.29	102	ug4Kg	50	11464 2015 16:09
nAPropylbenzene	ND	U	5.77	51.0	ug4Kg	50	11464 2015 16:09
oAXylene	ND	U	- .- 6	51.0	ug4Kg	50	11464 2015 16:09
secAButylbenzene	ND	U	5.71	51.0	ug4Kg	50	11464 2015 16:09
tertAButyl methyl ether (MTBE)	ND	U	7.35	51.0	ug4Kg	50	11464 2015 16:09
tertAButylbenzene	ND	U	- .36	51.0	ug4Kg	50	11464 2015 16:09
transA1,2ADichloroethene	ND	U	11.-	51.0	ug4Kg	50	11464 2015 16:09
transA1,- ADichloroA2Abutene	ND	U	21.1	255	ug4Kg	50	11464 2015 16:09
SuttogclBs							
1,2ADichloroethaneAd-	111			55.0A173	%	50	11464 2015 16:09
-ABromofluorobenzene	101			23.0A1- 1	%	50	11464 2015 16:09
Toluene d8	91.0			57.0A13-	%	50	11464 2015 16:09

aclh8 Infotmclion

/ nalytical Batch: **Xy S. / 44**
/ nalytical Method: **SW-4) 6 4260a**
Instrument: **y SD4**
/ nalyst: **aWS**

Prep Batch: **XMM607/**
Prep Method: **SW-4) 6 70. 7 Sy**
Prep Date4Time: **33:06:2037 3) 9)**
Prep Initial Wt.4Vol.: **154 g**
Prep Extract Vol: **30 mL**

Print Date: 114184 2015

N.C. Certification # - 81

4 exQltx oy **WCCS-1 (2) A**

Client Sample ID: **WCCS-1 (2) A**
Client Project ID: **VXM(y rtleB(a Bch8**
Lab Sample ID: 31502068015-A
Lab Project ID: 31502068

Collection Date: 10/28/2015 11:56
4 eceiRev Date: 11/05/2015 11:2d
7 atriM Soil-Soliv ax receiRev
Solivx s(%

4 exQltx bF **SW-460(470 a**

Parameter	4 exQlt	OQal	DL	L) O/CL	unitx	DU	Date AnalFf ev
1z1z2z2-, etracTloroetTane	h D	u	K.95	Kd.6	QN/gN	50	11/6/2015 16:35
1z1z1-, ricTloroetTane	h D	u	5.86	Kd.6	QN/gN	50	11/6/2015 16:35
1z1z2z2-, etracTloroetTane	h D	u	d.K3	Kd.6	QN/gN	50	11/6/2015 16:35
1z1z2-, ricTloroetTane	h D	u	6.00	Kd.6	QN/gN	50	11/6/2015 16:35
1z1-DicTloroetTane	**1 35**	B	d.86	Kd.6	QN/gN	50	11/6/2015 16:35
1z1-DicTloroetTene	h D	u	10.1	Kd.6	QN/gN	50	11/6/2015 16:35
1z1-DicTloropropene	h D	u	K.11	Kd.6	QN/gN	50	11/6/2015 16:35
1z2z3-, ricTlorobenf ene	h D	u	5.2K	Kd.6	QN/gN	50	11/6/2015 16:35
1z2z3-, ricTloropropane	h D	u	10.1	Kd.6	QN/gN	50	11/6/2015 16:35
1z2z4-, ricTlorobenf ene	h D	u	K.35	Kd.6	QN/gN	50	11/6/2015 16:35
1z2z4-, rimetTFlbenf ene	h D	u	K.58	Kd.6	QN/gN	50	11/6/2015 16:35
1z2-Dibromo-3-cTloropropane	h D	u	35.6	238	QN/gN	50	11/6/2015 16:35
1z2-DibromoetTane	h D	u	5.d1	Kd.6	QN/gN	50	11/6/2015 16:35
1z2-DicTlorobenf ene	h D	u	6.52	Kd.6	QN/gN	50	11/6/2015 16:35
1z2-DicTloroetTane	h D	u	d.95	Kd.6	QN/gN	50	11/6/2015 16:35
1z2-DicTloropropane	h D	u	d.d6	Kd.6	QN/gN	50	11/6/2015 16:35
1z3z5-, rimetTFlbenf ene	h D	u	5.38	Kd.6	QN/gN	50	11/6/2015 16:35
1z3-DicTlorobenf ene	h D	u	K.90	Kd.6	QN/gN	50	11/6/2015 16:35
1z3-DicTloropropane	h D	u	6.19	Kd.6	QN/gN	50	11/6/2015 16:35
1z4-DicTlorobenf ene	h D	u	6.19	Kd.6	QN/gN	50	11/6/2015 16:35
2z2-DicTloropropane	h D	u	18.d	Kd.6	QN/gN	50	11/6/2015 16:35
2-J Qtanone	**6.)**	B	3K.K	1190	QN/gN	50	11/6/2015 16:35
2-CTlorotolQene	h D	u	5.38	Kd.6	QN/gN	50	11/6/2015 16:35
2-HeManone	h D	u	3K.d	238	QN/gN	50	11/6/2015 16:35
K-CTlorotolQene	h D	u	5.95	Kd.6	QN/gN	50	11/6/2015 16:35
K-IxopropFltolQene	h D	u	3.66	Kd.6	QN/gN	50	11/6/2015 16:35
K-7 etTFl-2-pentanone	h D	u	26.6	238	QN/gN	50	11/6/2015 16:35
Acetone	h D	u	K1.1	1190	QN/gN	50	11/6/2015 16:35
J enf ene	h D	u	5.38	Kd.6	QN/gN	50	11/6/2015 16:35
J romobenf ene	h D	u	5.2K	Kd.6	QN/gN	50	11/6/2015 16:35
J romocTloromet Tane	h D	u	10.0	Kd.6	QN/gN	50	11/6/2015 16:35
J romovicTloromet Tane	h D	u	5.2K	Kd.6	QN/gN	50	11/6/2015 16:35
J romoyorm	h D	u	K.6K	Kd.6	QN/gN	50	11/6/2015 16:35
J romomet Tane	h D	u	11.3	Kd.6	QN/gN	50	11/6/2015 16:35
n-J QtFlbenf ene	h D	u	3.66	Kd.6	QN/gN	50	11/6/2015 16:35
Carbon vixQlyive	h D	u	5.05	Kd.6	QN/gN	50	11/6/2015 16:35
Carbon tetracTlorive	h D	u	K.81	Kd.6	QN/gN	50	11/6/2015 16:35
CTlorobenf ene	h D	u	5.52	Kd.6	QN/gN	50	11/6/2015 16:35
CTloroet Tane	h D	u	1K.8	Kd.6	QN/gN	50	11/6/2015 16:35
CTloroyorm	h D	u	6.62	Kd.6	QN/gN	50	11/6/2015 16:35
CTloromet Tane	h D	u	21.3	Kd.6	QN/gN	50	11/6/2015 16:35
DibromocTloromet Tane	h D	u	6.38	Kd.6	QN/gN	50	11/6/2015 16:35

Print Date: 11/18/2015

h .C. Certiyication # K81

4 exQtx oy **WCCS-1 (2) A**

Client Sample ID: **WCCS-1 (2) A**
Client Project ID: **VXM(y r tleB(a Bch8**
Lab Sample ID: 31502068015-A
Lab Project ID: 31502068

Collection Date: 10/28/2015 11:56
4 eceiRev Date: 11/05/2015 11:2d
7 atriM Soil-Soliv ax receiRev
Solivx s(%

4 exQtx bF **SW-460(470 a**

Parameter	4 exQt	OQal	DL	L) O/CL	u nitx	DU	Date AnalFf ev
DibromometTane	h D	u	8.00	Kd.6	QN/g N	50	11/6/2015 16:35
DicTloroviylQbrometTane	h D	u	8.1K	238	QN/g N	50	11/6/2015 16:35
cix-1z3-DicTloropropene	h D	u	3.65	Kd.6	QN/g N	50	11/6/2015 16:35
tranx-1z3-DicTloropropene	h D	u	K.10	Kd.6	QN/g N	50	11/6/2015 16:35
DiixopropFl EtTer	h D	u	1K.0	Kd.6	QN/g N	50	11/6/2015 16:35
EtTFl J enf ene	)) 35		K.18	Kd.6	QN/g N	50	11/6/2015 16:35
HeMacTlorobQtaviene	h D	u	3.dd	Kd.6	QN/g N	50	11/6/2015 16:35
IxopropFlbenf ene sCQmene%	h D	u	K.1K	Kd.6	QN/g N	50	11/6/2015 16:35
7 etTFl iovive	h D	u	5.K8	Kd.6	QN/g N	50	11/6/2015 16:35
7 etTFlene cTlorive	h D	u	d.2K	238	QN/g N	50	11/6/2015 16:35
h apTtTalene	h D	u	K.0d	Kd.6	QN/g N	50	11/6/2015 16:35
StFrene	h D	u	K.86	Kd.6	QN/g N	50	11/6/2015 16:35
, etracTloroetTene	h D	u	d.38	Kd.6	QN/g N	50	11/6/2015 16:35
, olQene	513)		6.33	Kd.6	QN/g N	50	11/6/2015 16:35
, ricTloroetTene	1) 7		5.95	Kd.6	QN/g N	50	11/6/2015 16:35
, ricTloroylQbrometTane	h D	u	6.52	Kd.6	QN/g N	50	11/6/2015 16:35
VinFl cTlorive	063		5.90	Kd.6	QN/g N	50	11/6/2015 16:35
XFlene stotal%	1 3	B	8.6d	95.2	QN/g N	50	11/6/2015 16:35
cix-1z2-DicTloroetTene	647		6.K8	Kd.6	QN/g N	50	11/6/2015 16:35
mzp-XFlene	1 3	B	8.6d	95.2	QN/g N	50	11/6/2015 16:35
n-PropFlbenf ene	h D	u	5.38	Kd.6	QN/g N	50	11/6/2015 16:35
o-XFlene	h D	u	K.16	Kd.6	QN/g N	50	11/6/2015 16:35
xec-J QtFlbenf ene	h D	u	5.33	Kd.6	QN/g N	50	11/6/2015 16:35
tert-J QtFl metTFl etTer s7 , J E%	h D	u	6.86	Kd.6	QN/g N	50	11/6/2015 16:35
tert-J QtFlbenf ene	h D	u	K.0d	Kd.6	QN/g N	50	11/6/2015 16:35
tranx-1z2-DicTloroetTene	h D	u	10.6	Kd.6	QN/g N	50	11/6/2015 16:35
tranx-1zK-DicTloro-2-bQtene	h D	u	19.d	238	QN/g N	50	11/6/2015 16:35
SuttogclBs							
1z2-DicTloroetTane-vK	110			55.0-1d3	(	50	11/6/2015 16:35
K-J romoylQbrobenf ene	101			23.0-1K1	(	50	11/6/2015 16:35
, olQene v8	9K.0			5d.0-13K	(	50	11/6/2015 16:35

a clh8(Infotmclion

AnalFtical J atcT: **Xy S. / 44**
AnalFtical 7 etTov: **SW-460(470 a**
InxtrQment: **y SD4**
AnalFxt: **a WS**

Prep J atcT: **XMM0 5/**
Prep 7 etTov: **SW-460(5 . 5(Sy**
Prep Date/, ime: **11: 0:7 15((169 6**
Prep Initial Wt./Vol.: **1 35(g**
Prep EMract Vol: **1 (mL**

Print Date: 11/18/2015

h .C. Certiycation # K81

Results of **WCCS-4 (14) A**

Client Sample ID: **WCCS-4 (14) A**
Client Project ID: **VXM(y r tIeB(a Bch8**
Lab Sample ID: 31502068016-A
Lab Project ID: 31502068

Collection Date: 10/28/2015 15:34
Received Date: 11/05/2015 11:27
Matrix: Soil-Solid as received
Solids (%):

Results by **SW-620(6 07a**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	U	441	4240	ug/Kg	5000	11/6/2015 20:00
1,1,1-Trichloroethane	ND	U	521	4240	ug/Kg	5000	11/6/2015 20:00
1,1,2,2-Tetrachloroethane	ND	U	661	4240	ug/Kg	5000	11/6/2015 20:00
1,1,2-Trichloroethane	ND	U	534	4240	ug/Kg	5000	11/6/2015 20:00
1,1-Dichloroethane	ND	U	699	4240	ug/Kg	5000	11/6/2015 20:00
1,1-Dichloroethene	ND	U	898	4240	ug/Kg	5000	11/6/2015 20:00
1,1-Dichloropropene	ND	U	366	4240	ug/Kg	5000	11/6/2015 20:00
1,2,3-Trichlorobenzene	ND	U	466	4240	ug/Kg	5000	11/6/2015 20:00
1,2,3-Trichloropropane	ND	U	898	4240	ug/Kg	5000	11/6/2015 20:00
1,2,4-Trichlorobenzene	ND	U	387	4240	ug/Kg	5000	11/6/2015 20:00
1,2,4-Trimethylbenzene	ND	U	407	4240	ug/Kg	5000	11/6/2015 20:00
1,2-Dibromo-3-chloropropane	ND	U	3170	21200	ug/Kg	5000	11/6/2015 20:00
1,2-Dibromoethane	ND	U	508	4240	ug/Kg	5000	11/6/2015 20:00
1,2-Dichlorobenzene	ND	U	581	4240	ug/Kg	5000	11/6/2015 20:00
1,2-Dichloroethane	ND	U	708	4240	ug/Kg	5000	11/6/2015 20:00
1,2-Dichloropropane	ND	U	691	4240	ug/Kg	5000	11/6/2015 20:00
1,3,5-Trimethylbenzene	ND	U	479	4240	ug/Kg	5000	11/6/2015 20:00
1,3-Dichlorobenzene	ND	U	436	4240	ug/Kg	5000	11/6/2015 20:00
1,3-Dichloropropane	ND	U	551	4240	ug/Kg	5000	11/6/2015 20:00
1,4-Dichlorobenzene	ND	U	551	4240	ug/Kg	5000	11/6/2015 20:00
2,2-Dichloropropane	ND	U	1670	4240	ug/Kg	5000	11/6/2015 20:00
2-Butanone	ND	U	3060	106000	ug/Kg	5000	11/6/2015 20:00
2-Chlorotoluene	ND	U	479	4240	ug/Kg	5000	11/6/2015 20:00
2-Hexanone	ND	U	3080	21200	ug/Kg	5000	11/6/2015 20:00
4-Chlorotoluene	ND	U	530	4240	ug/Kg	5000	11/6/2015 20:00
4-Isopropyltoluene	ND	U	326	4240	ug/Kg	5000	11/6/2015 20:00
4-Methyl-2-pentanone	ND	U	2360	21200	ug/Kg	5000	11/6/2015 20:00
Acetone	ND	U	3660	106000	ug/Kg	5000	11/6/2015 20:00
Benzene	ND	U	479	4240	ug/Kg	5000	11/6/2015 20:00
Bromobenzene	ND	U	466	4240	ug/Kg	5000	11/6/2015 20:00
Bromochloromethane	ND	U	894	4240	ug/Kg	5000	11/6/2015 20:00
Bromodichloromethane	ND	U	466	4240	ug/Kg	5000	11/6/2015 20:00
Bromoform	ND	U	413	4240	ug/Kg	5000	11/6/2015 20:00
Bromomethane	ND	U	1000	4240	ug/Kg	5000	11/6/2015 20:00
n-Butylbenzene	ND	U	326	4240	ug/Kg	5000	11/6/2015 20:00
Carbon disulfide	ND	U	449	4240	ug/Kg	5000	11/6/2015 20:00
Carbon tetrachloride	ND	U	428	4240	ug/Kg	5000	11/6/2015 20:00
Chlorobenzene	ND	U	492	4240	ug/Kg	5000	11/6/2015 20:00
Chloroethane	ND	U	1320	4240	ug/Kg	5000	11/6/2015 20:00
Chloroform	ND	U	589	4240	ug/Kg	5000	11/6/2015 20:00
Chloromethane	ND	U	1900	4240	ug/Kg	5000	11/6/2015 20:00
Dibromochloromethane	ND	U	568	4240	ug/Kg	5000	11/6/2015 20:00

Results of **WCCS-4 (14) A**

Client Sample ID: **WCCS-4 (14) A**
Client Project ID: **VXM(y r tIeB(a Bch8**
Lab Sample ID: 31502068016-A
Lab Project ID: 31502068

Collection Date: 10/28/2015 15:34
Received Date: 11/05/2015 11:27
Matrix: Soil-Solid as received
Solids (%):

Results by **SW-620(6 07a**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
Dibromomethane	ND	U	712	4240	ug/Kg	5000	11/6/2015 20:00
Dichlorodifluoromethane	ND	U	725	21200	ug/Kg	5000	11/6/2015 20:00
cis-1,3-Dichloropropene	ND	U	325	4240	ug/Kg	5000	11/6/2015 20:00
trans-1,3-Dichloropropene	ND	U	365	4240	ug/Kg	5000	11/6/2015 20:00
Diisopropyl Ether	ND	U	1250	4240	ug/Kg	5000	11/6/2015 20:00
Ethyl Benzene	ND	U	372	4240	ug/Kg	5000	11/6/2015 20:00
Hexachlorobutadiene	ND	U	336	4240	ug/Kg	5000	11/6/2015 20:00
Isopropylbenzene (Cumene)	ND	U	368	4240	ug/Kg	5000	11/6/2015 20:00
Methyl iodide	ND	U	487	4240	ug/Kg	5000	11/6/2015 20:00
Methylene chloride	ND	U	644	21200	ug/Kg	5000	11/6/2015 20:00
Naphthalene	ND	U	362	4240	ug/Kg	5000	11/6/2015 20:00
Styrene	ND	U	432	4240	ug/Kg	5000	11/6/2015 20:00
Tetrachloroethene	ND	U	657	4240	ug/Kg	5000	11/6/2015 20:00
Toluene	ND	U	564	4240	ug/Kg	5000	11/6/2015 20:00
Trichloroethene	**65677**		530	4240	ug/Kg	5000	11/6/2015 20:00
Trichlorofluoromethane	ND	U	581	4240	ug/Kg	5000	11/6/2015 20:00
Vinyl chloride	ND	U	525	4240	ug/Kg	5000	11/6/2015 20:00
Xylene (total)	ND	U	771	8470	ug/Kg	5000	11/6/2015 20:00
cis-1,2-Dichloroethene	**4) 77**		576	4240	ug/Kg	5000	11/6/2015 20:00
m,p-Xylene	ND	U	771	8470	ug/Kg	5000	11/6/2015 20:00
n-Propylbenzene	ND	U	479	4240	ug/Kg	5000	11/6/2015 20:00
o-Xylene	ND	U	370	4240	ug/Kg	5000	11/6/2015 20:00
sec-Butylbenzene	ND	U	475	4240	ug/Kg	5000	11/6/2015 20:00
tert-Butyl methyl ether (MTBE)	ND	U	610	4240	ug/Kg	5000	11/6/2015 20:00
tert-Butylbenzene	ND	U	362	4240	ug/Kg	5000	11/6/2015 20:00
trans-1,2-Dichloroethene	ND	U	945	4240	ug/Kg	5000	11/6/2015 20:00
trans-1,4-Dichloro-2-butene	ND	U	1750	21200	ug/Kg	5000	11/6/2015 20:00
SuttogclBs							
1,2-Dichloroethane-d4	116			55.0-173	%	5000	11/6/2015 20:00
4-Bromofluorobenzene	97.0			23.0-141	%	5000	11/6/2015 20:00
Toluene d8	92.0			57.0-134	%	5000	11/6/2015 20:00

a clh8(Infotmclion

Analytical Batch: **Xy S3566**
Analytical Method: **SW-620(6 07a**
Instrument: **y SD6**
Analyst: **a WS**

Prep Batch: **XMM07) 5**
Prep Method: **SW-620() 73) (Sy**
Prep Date/Time: **44/70/ 74) ((42:32**
Prep Initial Wt./Vol.: **44.6(g**
Prep Extract Vol: **47(mL**

Print Date: 11/18/2015

N.C. Certification # 481

v esults of **WCCS-4 (1) AV**

Client Sample ID: **WCCS-4 (1) AV**
Client Project ID: **XMy(r t leBa(c ah86**
Lab Sample ID: 3150206801-A
Lab Project ID: 31502068

Collection Date: 104R42015 0R:08
v eceide7 Date: 114054-2015 11:2-
Matrix: SoilASoli7 as receide7
Soli7s (%):

v esults by **SW-A20(A) 07c**

Parameter	v esult	Qual	DL	LOQ4CL	Units	DF	Date / nalyze7
1,1,1,2ATetrachloroethane	ND	U	605	5810	ug4Kg	5000	11464-2015 20:26
1,1,1ATrichloroethane	ND	U	-15	5810	ug4Kg	5000	11464-2015 20:26
1,1,2,2ATetrachloroethane	ND	U	R0-	5810	ug4Kg	5000	11464-2015 20:26
1,1,2ATrichloroethane	ND	U	-33	5810	ug4Kg	5000	11464-2015 20:26
1,1ADichloroethane	ND	U	R5R	5810	ug4Kg	5000	11464-2015 20:26
1,1ADichloroethene	ND	U	1230	5810	ug4Kg	5000	11464-2015 20:26
1,1ADichloropropene	ND	U	502	5810	ug4Kg	5000	11464-2015 20:26
1,2,3ATrichlorobenzene	ND	U	690	5810	ug4Kg	5000	11464-2015 20:26
1,2,3ATrichloropropane	ND	U	1230	5810	ug4Kg	5000	11464-2015 20:26
1,2,9ATrichlorobenzene	ND	U	531	5810	ug4Kg	5000	11464-2015 20:26
1,2,9ATrimethylbenzene	ND	U	55R	5810	ug4Kg	5000	11464-2015 20:26
1,2ADibromoA3Achloropropane	ND	U	9350	2R100	ug4Kg	5000	11464-2015 20:26
1,2ADibromoethane	ND	U	6R8	5810	ug4Kg	5000	11464-2015 20:26
1,2ADichlorobenzene	ND	U	-R-	5810	ug4Kg	5000	11464-2015 20:26
1,2ADichloroethane	ND	U	R-1	5810	ug4Kg	5000	11464-2015 20:26
1,2ADichloropropane	ND	U	R98	5810	ug4Kg	5000	11464-2015 20:26
1,3,5ATrimethylbenzene	ND	U	65-	5810	ug4Kg	5000	11464-2015 20:26
1,3ADichlorobenzene	ND	U	5RR	5810	ug4Kg	5000	11464-2015 20:26
1,3ADichloropropane	ND	U	-56	5810	ug4Kg	5000	11464-2015 20:26
1,9ADichlorobenzene	ND	U	-56	5810	ug4Kg	5000	11464-2015 20:26
2,2ADichloropropane	ND	U	2280	5810	ug4Kg	5000	11464-2015 20:26
2AButanone	ND	U	9200	195000	ug4Kg	5000	11464-2015 20:26
2AChlorotoluene	ND	U	65-	5810	ug4Kg	5000	11464-2015 20:26
2AHexanone	ND	U	9230	2R100	ug4Kg	5000	11464-2015 20:26
9AChlorotoluene	ND	U	-2-	5810	ug4Kg	5000	11464-2015 20:26
9Asopropyltoluene	ND	U	99-	5810	ug4Kg	5000	11464-2015 20:26
9AMethylA2Apentanone	ND	U	3290	2R100	ug4Kg	5000	11464-2015 20:26
/ cetone	ND	U	5020	195000	ug4Kg	5000	11464-2015 20:26
Benzene	ND	U	65-	5810	ug4Kg	5000	11464-2015 20:26
Bromobenzene	ND	U	690	5810	ug4Kg	5000	11464-2015 20:26
Bromochloromethane	ND	U	1230	5810	ug4Kg	5000	11464-2015 20:26
Bromo7ichloromethane	ND	U	690	5810	ug4Kg	5000	11464-2015 20:26
Bromoform	ND	U	566	5810	ug4Kg	5000	11464-2015 20:26
Bromomethane	ND	U	1380	5810	ug4Kg	5000	11464-2015 20:26
nAButylbenzene	ND	U	99-	5810	ug4Kg	5000	11464-2015 20:26
Carbon 7isulfi7e	ND	U	616	5810	ug4Kg	5000	11464-2015 20:26
Carbon tetrachlori7e	ND	U	58-	5810	ug4Kg	5000	11464-2015 20:26
Chlorobenzene	ND	U	6-9	5810	ug4Kg	5000	11464-2015 20:26
Chloroethane	ND	U	1810	5810	ug4Kg	5000	11464-2015 20:26
Chloroform	ND	U	808	5810	ug4Kg	5000	11464-2015 20:26
Chloromethane	ND	U	2600	5810	ug4Kg	5000	11464-2015 20:26
Dibromochloromethane	ND	U	--R	5810	ug4Kg	5000	11464-2015 20:26

Print Date: 114184-2015

N.C. Certification # 981

v esults of **WCCS-4 (1) AV**

Client Sample ID: **WCCS-4 (1) AV**
Client Project ID: **XMy(r t leBa(c ah86**
Lab Sample ID: 3150206801-A
Lab Project ID: 31502068

Collection Date: 104-2R-2015 0R:08
v eceide7 Date: 114054-2015 11:2-
Matrix: SoilASoli7 as receide7
Soli7s (%):

v esults by **SW-A20(A) 07c**

Parameter	v esult	Qual	DL	LOQ4CL	Units	DF	Date / nalyze7
Dibromomethane	ND	U	R- -	5810	ug4Kg	5000	11464-2015 20:26
Dichloro7ifluoromethane	ND	U	RR9	2R100	ug4Kg	5000	11464-2015 20:26
cisA1,3ADichloropropene	ND	U	996	5810	ug4Kg	5000	11464-2015 20:26
transA1,3ADichloropropene	ND	U	501	5810	ug4Kg	5000	11464-2015 20:26
Diisopropyl Ether	ND	U	1-10	5810	ug4Kg	5000	11464-2015 20:26
Ethyl Benzene	ND	U	510	5810	ug4Kg	5000	11464-2015 20:26
Hexachlorobuta7iene	ND	U	960	5810	ug4Kg	5000	11464-2015 20:26
Isopropylbenzene (Cumene)	ND	U	505	5810	ug4Kg	5000	11464-2015 20:26
Methyl io7i7e	ND	U	66R	5810	ug4Kg	5000	11464-2015 20:26
Methylene chlori7e	ND	U	889	2R100	ug4Kg	5000	11464-2015 20:26
Naphthalene	ND	U	9R-	5810	ug4Kg	5000	11464-2015 20:26
Styrene	ND	U	5R3	5810	ug4Kg	5000	11464-2015 20:26
Tetrachloroethene	ND	U	R01	5810	ug4Kg	5000	11464-2015 20:26
Toluene	ND	U	- - 3	5810	ug4Kg	5000	11464-2015 20:26
Trichloroethene	**445777**		- 2-	5810	ug4Kg	5000	11464-2015 20:26
Trichlorofluoromethane	ND	U	- R-	5810	ug4Kg	5000	11464-2015 20:26
Vinyl chlori7e	ND	U	- 21	5810	ug4Kg	5000	11464-2015 20:26
Xylene (total)	ND	U	1060	11600	ug4Kg	5000	11464-2015 20:26
cisA1,2ADichloroethene	**u0077**		- R1	5810	ug4Kg	5000	11464-2015 20:26
m,pAXylene	ND	U	1060	11600	ug4Kg	5000	11464-2015 20:26
nAPropylbenzene	ND	U	65-	5810	ug4Kg	5000	11464-2015 20:26
oAXylene	ND	U	508	5810	ug4Kg	5000	11464-2015 20:26
secAButylbenzene	ND	U	651	5810	ug4Kg	5000	11464-2015 20:26
tertAButyl methyl ether (MTBE)	ND	U	83-	5810	ug4Kg	5000	11464-2015 20:26
tertAButylbenzene	ND	U	9R-	5810	ug4Kg	5000	11464-2015 20:26
transA1,2ADichloroethene	ND	U	1300	5810	ug4Kg	5000	11464-2015 20:26
transA1,9ADichloroA2Abutene	ND	U	2910	2R100	ug4Kg	5000	11464-2015 20:26
Sollgsheal							
1,2ADichloroethaneA79	116			55.0A1-3	%	5000	11464-2015 20:26
9ABromofluorobenzene	R6.0			23.0A191	%	5000	11464-2015 20:26
Toluene 78	8R0			5- .0A139	%	5000	11464-2015 20:26

c he86(rf rngli he3gf

/ nalytical Batch: **Mr S uAA**
/ nalytical Metho7: **SW-A20(A) 07c**
Instrument: **r SDA**
/ nalyst: **c WS**

Prep Batch: **Myy075u**
Prep Metho7: **SW-A20(57 5(Sr**
Prep Date4Time: **44/70/) 745((42: 2**
Prep Initial Wt.4Vol.: **A.0(s**
Prep Extract Vol: **47(i L**

Print Date: 114184-2015

N.C. Certification # 981

v e(Ut(ozWCCS-4 (1) AV

Client Sample ID: **WCCS-4 (1) AV**
Client Project ID: **XMy(r t IeBa(c ah86**
Lab Sample ID: 31502068018-A
Lab Project ID: 31502068

Collection Date: 10/24/2015 1R:R6
v eceide7 Date: 11/05/2015 11:2M
x atris: Soil-Soli7 a(receide7
Soli7(%, O

v e(Ut(bf **SW-2 0(270Ac**

Parameter	v e(Ut	u Ual	DL	LQu /CL	Fnit(	Dy	Date Analf , e7
1T1T12-hetracNoroetNane	g D	F	25R0	2RR00	UK/. K	20000	11/6/2015 21:R3
1T1T1-hricNoroetNane	**4) 7AA**	9	3000	2RR00	UK/. K	20000	11/6/2015 21:R3
1T12T2-hetracNoroetNane	g D	F	3800	2RR00	UK/. K	20000	11/6/2015 21:R3
1T12-hricNoroetNane	g D	F	30M0	2RR00	UK/. K	20000	11/6/2015 21:R3
1T1-DicNoroetNane	g D	F	R020	2RR00	UK/. K	20000	11/6/2015 21:R3
1T1-DicNoroetNene	g D	F	51M0	2RR00	UK/. K	20000	11/6/2015 21:R3
1T1-DicNoropropene	g D	F	2100	2RR00	UK/. K	20000	11/6/2015 21:R3
1T2T3-hricNoroben, ene	g D	F	2680	2RR00	UK/. K	20000	11/6/2015 21:R3
1T2T3-hricNoropropane	g D	F	51M0	2RR00	UK/. K	20000	11/6/2015 21:R3
1T2TR-hricNoroben, ene	g D	F	2230	2RR00	UK/. K	20000	11/6/2015 21:R3
1T2TR-hrimetNf lben, ene	g D	F	23R0	2RR00	UK/. K	20000	11/6/2015 21:R3
1T2-Dibromo-3-cNoropropane	g D	F	18200	122000	UK/. K	20000	11/6/2015 21:R3
1T2-DibromoetNane	g D	F	2430	2RR00	UK/. K	20000	11/6/2015 21:R3
1T2-DicNoroben, ene	g D	F	33R0	2RR00	UK/. K	20000	11/6/2015 21:R3
1T2-DicNoroetNane	g D	F	R0M0	2RR00	UK/. K	20000	11/6/2015 21:R3
1T2-DicNoropropane	g D	F	3480	2RR00	UK/. K	20000	11/6/2015 21:R3
1T3T5-hrimetNf lben, ene	g D	F	2M60	2RR00	UK/. K	20000	11/6/2015 21:R3
1T3-DicNoroben, ene	g D	F	2510	2RR00	UK/. K	20000	11/6/2015 21:R3
1T3-DicNoropropane	g D	F	31M0	2RR00	UK/. K	20000	11/6/2015 21:R3
1TR-DicNoroben, ene	g D	F	31M0	2RR00	UK/. K	20000	11/6/2015 21:R3
2T2-DicNoropropane	g D	F	4540	2RR00	UK/. K	20000	11/6/2015 21:R3
2-BUtanone	g D	F	1M600	610000	UK/. K	20000	11/6/2015 21:R3
2-CNorotolUene	g D	F	2M60	2RR00	UK/. K	20000	11/6/2015 21:R3
2-J esanone	g D	F	1M800	122000	UK/. K	20000	11/6/2015 21:R3
R-CNorotolUene	g D	F	3050	2RR00	UK/. K	20000	11/6/2015 21:R3
R-I(opropf ltolUene	g D	F	1880	2RR00	UK/. K	20000	11/6/2015 21:R3
R-x etNf l-2-pentanone	g D	F	13600	122000	UK/. K	20000	11/6/2015 21:R3
Acetone	g D	F	21100	610000	UK/. K	20000	11/6/2015 21:R3
Ben, ene	g D	F	2M60	2RR00	UK/. K	20000	11/6/2015 21:R3
Bromoben, ene	g D	F	2680	2RR00	UK/. K	20000	11/6/2015 21:R3
BromocNorometNane	g D	F	5150	2RR00	UK/. K	20000	11/6/2015 21:R3
Bromo7icNorometNane	g D	F	2680	2RR00	UK/. K	20000	11/6/2015 21:R3
Bromozorm	g D	F	2380	2RR00	UK/. K	20000	11/6/2015 21:R3
BromometNane	g D	F	5M80	2RR00	UK/. K	20000	11/6/2015 21:R3
n-BUtf lben, ene	g D	F	1880	2RR00	UK/. K	20000	11/6/2015 21:R3
Carbon 7i(Uzi7e	g D	F	2540	2RR00	UK/. K	20000	11/6/2015 21:R3
Carbon tetracNori7e	g D	F	2R60	2RR00	UK/. K	20000	11/6/2015 21:R3
CNoroben, ene	g D	F	2830	2RR00	UK/. K	20000	11/6/2015 21:R3
CNoroetNane	g D	F	M540	2RR00	UK/. K	20000	11/6/2015 21:R3
CNorozorm	g D	F	3340	2RR00	UK/. K	20000	11/6/2015 21:R3
CNorometNane	g D	F	10400	2RR00	UK/. K	20000	11/6/2015 21:R3
DibromocNorometNane	g D	F	32M0	2RR00	UK/. K	20000	11/6/2015 21:R3

v e(Ut(ozWCCS-4 (1) AV

Client Sample ID: **WCCS-4 (1) AV**
Client Project ID: **XMy(r t leBa(c ah86**
Lab Sample ID: 31502068018-A
Lab Project ID: 31502068

Collection Date: 10/24/2015 1R:R6
v eceide7 Date: 11/05/2015 11:2M
x atris: Soil-Soli7 a(receide7
Soli7(%; O

v e(Ut(bf **SW-2 0(270Ac**

Parameter	v e(Ut	u Ual	DL	LQu /CL	Fnit(	Dy	Date Analf , e7
DibromometNane	g D	F	R100	2RR00	UK/. K	20000	11/6/2015 21:R3
DicNoro7izUbrometNane	g D	F	R1M0	122000	UK/. K	20000	11/6/2015 21:R3
ci(-1T3-DicNoropropene	g D	F	18M0	2RR00	UK/. K	20000	11/6/2015 21:R3
tran(-1T3-DicNoropropene	g D	F	2100	2RR00	UK/. K	20000	11/6/2015 21:R3
Dii(opropf l EtNer	g D	F	M1M0	2RR00	UK/. K	20000	11/6/2015 21:R3
EtNf l Ben, ene	g D	F	21R0	2RR00	UK/. K	20000	11/6/2015 21:R3
J esacNorobUta7iene	g D	F	1430	2RR00	UK/. K	20000	11/6/2015 21:R3
I(opropf lben, ene %;UmeneO	g D	F	2120	2RR00	UK/. K	20000	11/6/2015 21:R3
x etNf l io7i7e	g D	F	2800	2RR00	UK/. K	20000	11/6/2015 21:R3
x etNf lene cNori7e	g D	F	3M10	122000	UK/. K	20000	11/6/2015 21:R3
g apNtNalene	g D	F	2040	2RR00	UK/. K	20000	11/6/2015 21:R3
Stf rene	g D	F	2R40	2RR00	UK/. K	20000	11/6/2015 21:R3
hetracNoroetNene	g D	F	3M80	2RR00	UK/. K	20000	11/6/2015 21:R3
holUene	g D	F	32R0	2RR00	UK/. K	20000	11/6/2015 21:R3
hricNoroetNene	**AAAAA**		3050	2RR00	UK/. K	20000	11/6/2015 21:R3
hricNoroz Ubrometane	g D	F	33R0	2RR00	UK/. K	20000	11/6/2015 21:R3
Vinf l cNori7e	g D	F	3020	2RR00	UK/. K	20000	11/6/2015 21:R3
Xf lene %otalO	g D	F	RRR0	R8800	UK/. K	20000	11/6/2015 21:R3
ci(-1T2-DicNoroetNene	**77AAA**	9	3320	2RR00	UK/. K	20000	11/6/2015 21:R3
mTp-Xf lene	g D	F	RRR0	R8800	UK/. K	20000	11/6/2015 21:R3
n-Propf lben, ene	g D	F	2M60	2RR00	UK/. K	20000	11/6/2015 21:R3
o-Xf lene	g D	F	2130	2RR00	UK/. K	20000	11/6/2015 21:R3
(ec-BUtf lben, ene	g D	F	2M80	2RR00	UK/. K	20000	11/6/2015 21:R3
tert-BUtf l metNf l etNer %; hBEO	g D	F	3510	2RR00	UK/. K	20000	11/6/2015 21:R3
tert-BUtf lben, ene	g D	F	2040	2RR00	UK/. K	20000	11/6/2015 21:R3
tran(-1T2-DicNoroetNene	g D	F	5RR0	2RR00	UK/. K	20000	11/6/2015 21:R3
tran(-1TR-DicNoro-2-bUtene	g D	F	10100	122000	UK/. K	20000	11/6/2015 21:R3
S5lluoheag							
1T2-DicNoroetNane-7R	115			55H0-1M3	)	20000	11/6/2015 21:R3
R-BromozUbroben, ene	46H0			23H0-1R1	)	20000	11/6/2015 21:R3
holUene 78	88H0			5M0-13R	)	20000	11/6/2015 21:R3

c he86(sl nulf hemul

Analf tical BatcN: **Mr S) 322**
Analf tical x etNo7: **SW-2 0(270Ac**
In(trUment: **r SD2**
Analf (t: **c WS**

Prep BatcN: **Myy0Ai 3**
Prep x etNo7: **SW-2 0(i A) i (Sr**
Prep Date/hime: **44/A0/7A4i ((4 :)**
Prep Initial WtHVolH: **2.7(o**
Prep Estract Vol: **4A(f L**

Results of **WCCS-4 (1) AV**

Client Sample ID: **WCCS-4 (1) AV**
Client Project ID: **XMy(r t leBa(c ah86**
Lab Sample ID: 3150206801-A
Lab Project ID: 31502068

Collection Date: 104-42015 16:58
Received Date: 114054-2015 11:27
Matrix: SoilASolid as received
Solids (%):

Results by **SW-20 (2) Ac**

Parameter	Result	Qual	DL	LOQ4CL	Units	DF	Date / nalyzed
1,1,1,2ATetrachloroethane	ND	U	353	33-0	ug4Kg	9000	11464-2015 1-:39
1,1,1ATrichloroethane	ND	U	917	33-0	ug4Kg	9000	11464-2015 1-:39
1,1,2,2ATetrachloroethane	ND	U	52-	33-0	ug4Kg	9000	11464-2015 1-:39
1,1,2ATrichloroethane	ND	U	927	33-0	ug4Kg	9000	11464-2015 1-:39
1,1ADichloroethane	ND	U	55-	33-0	ug4Kg	9000	11464-2015 1-:39
1,1ADichloroethene	ND	U	71-	33-0	ug4Kg	9000	11464-2015 1-:39
1,1ADichloropropene	ND	U	2-3	33-0	ug4Kg	9000	11464-2015 1-:39
1,2,3ATrichlorobenzene	ND	U	373	33-0	ug4Kg	9000	11464-2015 1-:39
1,2,3ATrichloropropane	ND	U	71-	33-0	ug4Kg	9000	11464-2015 1-:39
1,2,9ATrichlorobenzene	ND	U	30-	33-0	ug4Kg	9000	11464-2015 1-:39
1,2,9ATrimethylbenzene	ND	U	326	33-0	ug4Kg	9000	11464-2015 1-:39
1,2ADibromoA3Achloropropane	ND	U	2590	16-00	ug4Kg	9000	11464-2015 1-:39
1,2ADibromoethane	ND	U	907	33-0	ug4Kg	9000	11464-2015 1-:39
1,2ADichlorobenzene	ND	U	969	33-0	ug4Kg	9000	11464-2015 1-:39
1,2ADichloroethane	ND	U	566	33-0	ug4Kg	9000	11464-2015 1-:39
1,2ADichloropropane	ND	U	553	33-0	ug4Kg	9000	11464-2015 1-:39
1,3,5ATrimethylbenzene	ND	U	383	33-0	ug4Kg	9000	11464-2015 1-:39
1,3ADichlorobenzene	ND	U	39-	33-0	ug4Kg	9000	11464-2015 1-:39
1,3ADichloropropane	ND	U	991	33-0	ug4Kg	9000	11464-2015 1-:39
1,9ADichlorobenzene	ND	U	991	33-0	ug4Kg	9000	11464-2015 1-:39
2,2ADichloropropane	ND	U	1330	33-0	ug4Kg	9000	11464-2015 1-:39
2AButanone	ND	U	2950	89700	ug4Kg	9000	11464-2015 1-:39
2AChlorotoluene	ND	U	383	33-0	ug4Kg	9000	11464-2015 1-:39
2AHexanone	ND	U	2970	16-00	ug4Kg	9000	11464-2015 1-:39
9AChlorotoluene	ND	U	929	33-0	ug4Kg	9000	11464-2015 1-:39
9Asopropyltoluene	ND	U	261	33-0	ug4Kg	9000	11464-2015 1-:39
9AMethylA2Apentanone	ND	U	18-0	16-00	ug4Kg	9000	11464-2015 1-:39
/ cetone	ND	U	2-30	89700	ug4Kg	9000	11464-2015 1-:39
Benzene	ND	U	383	33-0	ug4Kg	9000	11464-2015 1-:39
Bromobenzene	ND	U	373	33-0	ug4Kg	9000	11464-2015 1-:39
Bromochloromethane	ND	U	715	33-0	ug4Kg	9000	11464-2015 1-:39
Bromodichloromethane	ND	U	373	33-0	ug4Kg	9000	11464-2015 1-:39
Bromoform	ND	U	330	33-0	ug4Kg	9000	11464-2015 1-:39
Bromomethane	ND	U	803	33-0	ug4Kg	9000	11464-2015 1-:39
nAButylbenzene	ND	U	261	33-0	ug4Kg	9000	11464-2015 1-:39
Carbon disulfide	ND	U	35-	33-0	ug4Kg	9000	11464-2015 1-:39
Carbon tetrachloride	ND	U	392	33-0	ug4Kg	9000	11464-2015 1-:39
Chlorobenzene	ND	U	3-3	33-0	ug4Kg	9000	11464-2015 1-:39
Chloroethane	ND	U	1050	33-0	ug4Kg	9000	11464-2015 1-:39
Chloroform	ND	U	971	33-0	ug4Kg	9000	11464-2015 1-:39
Chloromethane	ND	U	1520	33-0	ug4Kg	9000	11464-2015 1-:39
Dibromochloromethane	ND	U	959	33-0	ug4Kg	9000	11464-2015 1-:39

Print Date: 114184-2015

N.C. Certification # 981

Results of **WCCS-4 (1) AV**

Client Sample ID: **WCCS-4 (1) AV**
Client Project ID: **XMy(r t leBa(c ah86**
Lab Sample ID: 3150206801-A
Lab Project ID: 31502068

Collection Date: 104-42015 16:58
Received Date: 114054-2015 11:27
Matrix: SoilASolid as received
Solids (%):

Results by **SW-20 (2) Ac**

Parameter	Result	Qual	DL	LOQ4CL	Units	DF	Date / nalyzed
Dibromomethane	ND	U	56-	33-0	ug4Kg	9000	11464-2015 1-:39
Dichlorodifluoromethane	ND	U	580	16-00	ug4Kg	9000	11464-2015 1-:39
cisA1,3ADichloropropene	ND	U	260	33-0	ug4Kg	9000	11464-2015 1-:39
transA1,3ADichloropropene	ND	U	2-2	33-0	ug4Kg	9000	11464-2015 1-:39
Diisopropyl Ether	ND	U	--7	33-0	ug4Kg	9000	11464-2015 1-:39
Ethyl Benzene	ND	U	2-7	33-0	ug4Kg	9000	11464-2015 1-:39
Hexachlorobutadiene	ND	U	268	33-0	ug4Kg	9000	11464-2015 1-:39
Isopropylbenzene (Cumene)	ND	U	2-5	33-0	ug4Kg	9000	11464-2015 1-:39
Methyl iodide	ND	U	3-0	33-0	ug4Kg	9000	11464-2015 1-:39
Methylene chloride	ND	U	515	16-00	ug4Kg	9000	11464-2015 1-:39
Naphthalene	ND	U	2-0	33-0	ug4Kg	9000	11464-2015 1-:39
Styrene	ND	U	396	33-0	ug4Kg	9000	11464-2015 1-:39
Tetrachloroethene	ND	U	525	33-0	ug4Kg	9000	11464-2015 1-:39
Toluene	ND	U	951	33-0	ug4Kg	9000	11464-2015 1-:39
Trichloroethene	**75) AA**		929	33-0	ug4Kg	9000	11464-2015 1-:39
Trichlorofluoromethane	ND	U	969	33-0	ug4Kg	9000	11464-2015 1-:39
Vinyl chloride	ND	U	920	33-0	ug4Kg	9000	11464-2015 1-:39
Xylene (total)	ND	U	617	6780	ug4Kg	9000	11464-2015 1-:39
cisA1,2ADichloroethene	**270A**		961	33-0	ug4Kg	9000	11464-2015 1-:39
m,pAXylene	ND	U	617	6780	ug4Kg	9000	11464-2015 1-:39
nAPropylbenzene	ND	U	383	33-0	ug4Kg	9000	11464-2015 1-:39
oAXylene	ND	U	2-6	33-0	ug4Kg	9000	11464-2015 1-:39
secAButylbenzene	ND	U	380	33-0	ug4Kg	9000	11464-2015 1-:39
tertAButyl methyl ether (MTBE)	ND	U	988	33-0	ug4Kg	9000	11464-2015 1-:39
tertAButylbenzene	ND	U	2-0	33-0	ug4Kg	9000	11464-2015 1-:39
transA1,2ADichloroethene	ND	U	756	33-0	ug4Kg	9000	11464-2015 1-:39
transA1,9ADichloroA2Abutene	ND	U	1900	16-00	ug4Kg	9000	11464-2015 1-:39
Sul logheas							
1,2ADichloroethaneAd9	117			55.0A173	%	9000	11464-2015 1-:39
9ABromofluorobenzene	-7.0			23.0A191	%	9000	11464-2015 1-:39
Toluene d8	-1.0			57.0A139	%	9000	11464-2015 1-:39

c he86(Infol mheion

/ nalytical Batch: **Mr S5322**
/ nalytical Method: **SW-20 (2) Ac**
Instrument: **r SD2**
/ nalyst: **c WS**

Prep Batch: **Myy A73**
Prep Method: **SW-20 (7A57(Sr**
Prep Date4Time: **44/A /) A47((40:50**
Prep Initial Wt.4Vol.: **44.2(g**
Prep Extract Vol: **4A(mL**

Print Date: 114184-2015

N.C. Certification # 981

Results of **IDW-1 (110415)**

Client Sample ID: **IDW-1 (110415)**
Client Project ID: **AVX Myrtle Beach**
Lab Sample ID: 31502068020-A
Lab Project ID: 31502068

Collection Date: 11/04/2015 12:00
Received Date: 11/05/2015 11:27
Matrix: Soil-Solid as dry weight
Solids (%): 75.60

Results by **SW-846 8260B-TCLP**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
1,1-Dichloroethene	ND	U	1.29	10.0	ug/L	10	11/10/2015 12:52
1,2-Dichloroethane	ND	U	0.910	10.0	ug/L	10	11/10/2015 12:52
1,4-Dichlorobenzene	ND	U	1.31	10.0	ug/L	10	11/10/2015 12:52
2-Butanone	ND	U	7.29	250	ug/L	10	11/10/2015 12:52
Benzene	ND	U	1.36	10.0	ug/L	10	11/10/2015 12:52
Carbon tetrachloride	ND	U	1.65	10.0	ug/L	10	11/10/2015 12:52
Chlorobenzene	ND	U	1.08	10.0	ug/L	10	11/10/2015 12:52
Chloroform	ND	U	1.20	10.0	ug/L	10	11/10/2015 12:52
Tetrachloroethene	ND	U	1.89	10.0	ug/L	10	11/10/2015 12:52
Trichloroethene	**41.1**		1.10	10.0	ug/L	10	11/10/2015 12:52
Vinyl chloride	ND	U	1.49	10.0	ug/L	10	11/10/2015 12:52
Surrogates							
1,2-Dichloroethane-d4	103			64.0-140	%	10	11/10/2015 12:52
4-Bromofluorobenzene	102			85.0-115	%	10	11/10/2015 12:52
Toluene d8	94.0			82.0-117	%	10	11/10/2015 12:52

Batch Information

Analytical Batch: **VMS3790**
Analytical Method: **SW-846 8260B-TCLP**
Instrument: **MSD8**
Analyst: **BWS**

Prep Batch: **VXX6062**
Prep Method: **SW-846 5030B TCLP**
Prep Date/Time: **11/10/2015 11:40**
Prep Initial Wt./Vol.: **40 mL**
Prep Extract Vol: **40 mL**

Batch Summary

Analytical Method: SW-846 8260B

Prep Method: SW-846 5035 SM
Prep Batch: VXX6057
Prep Date: 11/06/2015 09:18

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
MB-S for HBN 97152 [VXX/6057]	185376	11/06/2015 14:53	VMS3788	MSD8	BWS
LCS-S for HBN 97152 [VXX/6057]	185377	11/06/2015 13:36	VMS3788	MSD8	BWS
LCSD-S for HBN 97152 [VXX/6057	185378	11/06/2015 14:01	VMS3788	MSD8	BWS
WCCS-8 (8)(185248MS)	185403	11/06/2015 23:25	VMS3788	MSD8	BWS
WCCS-8 (8)(185248MSD)	185404	11/06/2015 23:51	VMS3788	MSD8	BWS
WCSS-1 (2)	31502068001	11/06/2015 17:01	VMS3788	MSD8	BWS
WCSS-1 (10)	31502068002	11/06/2015 20:52	VMS3788	MSD8	BWS
WCSS-1 (20)	31502068003	11/06/2015 17:52	VMS3788	MSD8	BWS
WCCS-3 (8)	31502068004	11/06/2015 18:43	VMS3788	MSD8	BWS
WCCS-3 (13)	31502068005	11/06/2015 15:18	VMS3788	MSD8	BWS
WCCS-4 (11)	31502068006	11/06/2015 19:09	VMS3788	MSD8	BWS
WCCS-4 (22)	31502068007	11/06/2015 15:44	VMS3788	MSD8	BWS
WCCS-4 (27)	31502068008	11/06/2015 18:17	VMS3788	MSD8	BWS
WCCS-5 (15)	31502068009	11/06/2015 17:26	VMS3788	MSD8	BWS
WCCS-5 (24)	31502068010	11/06/2015 21:18	VMS3788	MSD8	BWS
WCCS-6 (10)	31502068011	11/06/2015 22:09	VMS3788	MSD8	BWS
WCCS-8 (8)	31502068012	11/06/2015 23:00	VMS3788	MSD8	BWS
WCCS-8 (10)	31502068013	11/06/2015 22:34	VMS3788	MSD8	BWS
WCCS-9 (24)	31502068014	11/06/2015 16:09	VMS3788	MSD8	BWS
WCCS-10 (9)	31502068015	11/06/2015 16:35	VMS3788	MSD8	BWS
WCCS-12 (15)	31502068016	11/06/2015 20:00	VMS3788	MSD8	BWS
WCCS-13 (28)	31502068017	11/06/2015 20:26	VMS3788	MSD8	BWS
WCCS-14 (30)	31502068018	11/06/2015 21:43	VMS3788	MSD8	BWS
WCCS-16 (20)	31502068019	11/06/2015 19:34	VMS3788	MSD8	BWS

Method Blank

Blank ID: MB-S for HBN 97152 [VXX/6057]
Matrix: Soil-Solid as dry weight
Blank Lab ID: 185376
QC for Samples:
31502068001, 31502068002, 31502068003, 31502068004, 31502068005, 31502068006, 31502068007, 31502068008, 31502068009, 31502068010, 31502068011, 31502068012, 31502068013, 31502068014, 31502068015, 31502068016, 31502068017, 31502068018, 31502068019

Results by **SW-846 8260B**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Dichlorodifluoromethane	ND	U	8.55	250	ug/Kg	50
Chloromethane	ND	U	22.4	50.0	ug/Kg	50
Vinyl chloride	ND	U	6.20	50.0	ug/Kg	50
Bromomethane	ND	U	11.9	50.0	ug/Kg	50
Chloroethane	ND	U	15.6	50.0	ug/Kg	50
Trichlorofluoromethane	ND	U	6.85	50.0	ug/Kg	50
1,1-Dichloroethene	ND	U	10.6	50.0	ug/Kg	50
Acetone	ND	U	43.2	1250	ug/Kg	50
Methylene chloride	ND	U	7.60	250	ug/Kg	50
trans-1,2-Dichloroethene	ND	U	11.2	50.0	ug/Kg	50
tert-Butyl methyl ether (MTBE)	ND	U	7.20	50.0	ug/Kg	50
1,1-Dichloroethane	ND	U	8.25	50.0	ug/Kg	50
Diisopropyl Ether	ND	U	14.7	50.0	ug/Kg	50
2,2-Dichloropropane	ND	U	19.7	50.0	ug/Kg	50
cis-1,2-Dichloroethene	ND	U	6.80	50.0	ug/Kg	50
2-Butanone	ND	U	36.2	1250	ug/Kg	50
Bromochloromethane	ND	U	10.6	50.0	ug/Kg	50
Chloroform	ND	U	6.95	50.0	ug/Kg	50
1,1,1-Trichloroethane	ND	U	6.15	50.0	ug/Kg	50
Carbon tetrachloride	ND	U	5.05	50.0	ug/Kg	50
1,1-Dichloropropene	ND	U	4.32	50.0	ug/Kg	50
Benzene	ND	U	5.65	50.0	ug/Kg	50
1,2-Dichloroethane	ND	U	8.35	50.0	ug/Kg	50
Trichloroethene	ND	U	6.25	50.0	ug/Kg	50
1,2-Dichloropropane	ND	U	8.15	50.0	ug/Kg	50
Dibromomethane	ND	U	8.40	50.0	ug/Kg	50
Bromodichloromethane	ND	U	5.50	50.0	ug/Kg	50
cis-1,3-Dichloropropene	ND	U	3.84	50.0	ug/Kg	50
4-Methyl-2-pentanone	ND	U	27.9	250	ug/Kg	50
Toluene	ND	U	6.65	50.0	ug/Kg	50
Methyl iodide	ND	U	5.75	50.0	ug/Kg	50
trans-1,3-Dichloropropene	ND	U	4.31	50.0	ug/Kg	50
Carbon disulfide	ND	U	5.30	50.0	ug/Kg	50
1,1,2-Trichloroethane	ND	U	6.30	50.0	ug/Kg	50
Tetrachloroethene	ND	U	7.75	50.0	ug/Kg	50
1,3-Dichloropropane	ND	U	6.50	50.0	ug/Kg	50
2-Hexanone	ND	U	36.4	250	ug/Kg	50
Dibromochloromethane	ND	U	6.70	50.0	ug/Kg	50
1,2-Dibromoethane	ND	U	6.00	50.0	ug/Kg	50
Chlorobenzene	ND	U	5.80	50.0	ug/Kg	50
1,1,1,2-Tetrachloroethane	ND	U	5.20	50.0	ug/Kg	50

Method Blank

Blank ID: MB-S for HBN 97152 [VXX/6057]
Matrix: Soil-Solid as dry weight
Blank Lab ID: 185376
QC for Samples:
31502068001, 31502068002, 31502068003, 31502068004, 31502068005, 31502068006, 31502068007, 31502068008, 31502068009, 31502068010, 31502068011, 31502068012, 31502068013, 31502068014, 31502068015, 31502068016, 31502068017, 31502068018, 31502068019

Results by **SW-846 8260B**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Bromoform	ND	U	4.87	50.0	ug/Kg	50
Bromobenzene	ND	U	5.50	50.0	ug/Kg	50
1,1,2,2-Tetrachloroethane	ND	U	7.80	50.0	ug/Kg	50
1,2,3-Trichloropropane	ND	U	10.6	50.0	ug/Kg	50
Ethyl Benzene	ND	U	4.39	50.0	ug/Kg	50
m,p-Xylene	ND	U	9.10	100	ug/Kg	50
Styrene	ND	U	5.10	50.0	ug/Kg	50
o-Xylene	ND	U	4.37	50.0	ug/Kg	50
Xylene (total)	ND	U	9.10	100	ug/Kg	50
Isopropylbenzene (Cumene)	ND	U	4.35	50.0	ug/Kg	50
n-Propylbenzene	ND	U	5.65	50.0	ug/Kg	50
2-Chlorotoluene	ND	U	5.65	50.0	ug/Kg	50
4-Chlorotoluene	ND	U	6.25	50.0	ug/Kg	50
1,3,5-Trimethylbenzene	ND	U	5.65	50.0	ug/Kg	50
tert-Butylbenzene	ND	U	4.28	50.0	ug/Kg	50
1,2,4-Trimethylbenzene	ND	U	4.81	50.0	ug/Kg	50
sec-Butylbenzene	ND	U	5.60	50.0	ug/Kg	50
1,3-Dichlorobenzene	ND	U	5.15	50.0	ug/Kg	50
4-Isopropyltoluene	ND	U	3.85	50.0	ug/Kg	50
1,4-Dichlorobenzene	ND	U	6.50	50.0	ug/Kg	50
1,2-Dichlorobenzene	ND	U	6.85	50.0	ug/Kg	50
n-Butylbenzene	ND	U	3.85	50.0	ug/Kg	50
1,2-Dibromo-3-chloropropane	ND	U	37.4	250	ug/Kg	50
1,2,4-Trichlorobenzene	ND	U	4.57	50.0	ug/Kg	50
Hexachlorobutadiene	ND	U	3.96	50.0	ug/Kg	50
Naphthalene	ND	U	4.28	50.0	ug/Kg	50
trans-1,4-Dichloro-2-butene	ND	U	20.7	250	ug/Kg	50
1,2,3-Trichlorobenzene	ND	U	5.50	50.0	ug/Kg	50
Surrogates						
1,2-Dichloroethane-d4	114			55.0-173	%	50
Toluene d8	91.0			57.0-134	%	50
4-Bromofluorobenzene	99.0			23.0-141	%	50

Batch Information

Analytical Batch: VMS3788
Analytical Method: SW-846 8260B
Instrument: MSD8
Analyst: BWS

Prep Batch: VXX6057
Prep Method: SW-846 5035 SM
Prep Date/Time: 11/6/2015 9:18:10AM
Prep Initial Wt./Vol.: 5 g
Prep Extract Vol: 5 mL

Print Date: 11/18/2015

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 97152 [VXX/6057]
Blank Spike Lab ID: 185377
Date Analyzed: 11/06/2015 13:36

Spike Duplicate ID: LCSD-S for HBN 97152 [VXX/6057
Spike Duplicate Lab ID: 185378
Date Analyzed: 11/06/2015 14:01
Matrix: Soil-Solid as dry weight

QC for Samples: 31502068001, 31502068002, 31502068003, 31502068004, 31502068005, 31502068006, 31502068007, 31502068008, 31502068009, 31502068010, 31502068011, 31502068012, 31502068013, 31502068014, 31502068015, 31502068016, 31502068017, 31502068018, 31502068019

Results by **SW-846 8260B**

	Blank Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Dichlorodifluoromethane	250	274	109	250	261	104	70.0-130	4.9	30.00
Chloromethane	250	224	90	250	225	90	70.0-130	0.45	30.00
Vinyl chloride	250	225	90	250	217	87	70.0-130	3.6	30.00
Bromomethane	250	207	83	250	185	74	70.0-130	11	30.00
Chloroethane	250	214	85	250	215	86	70.0-130	0.47	30.00
Trichlorofluoromethane	250	302	121	250	296	118	70.0-130	2.0	30.00
1,1-Dichloroethene	250	223	89	250	219	87	70.0-130	1.8	30.00
Acetone	1250	1140	91	1250	1140	91	70.0-130	0.0	30.00
Methylene chloride	250	250	100	250	255	102	70.0-130	2.0	30.00
trans-1,2-Dichloroethene	250	257	103	250	244	97	70.0-130	5.2	30.00
tert-Butyl methyl ether (MTBE)	250	249	100	250	238	95	70.0-130	4.5	30.00
1,1-Dichloroethane	250	271	108	250	268	107	70.0-130	1.1	30.00
Diisopropyl Ether	250	234	94	250	231	92	70.0-130	1.3	30.00
2,2-Dichloropropane	250	319	128	250	303	121	70.0-130	5.1	30.00
cis-1,2-Dichloroethene	250	254	102	250	244	97	70.0-130	4.0	30.00
2-Butanone	1250	1210	97	1250	1180	95	70.0-130	2.5	30.00
Bromochloromethane	250	254	102	250	250	100	70.0-130	1.6	30.00
Chloroform	250	287	115	250	293	117	70.0-130	2.1	30.00
1,1,1-Trichloroethane	250	323	129	250	297	119	70.0-130	8.4	30.00
Carbon tetrachloride	250	321	128	250	312	125	70.0-130	2.8	30.00
1,1-Dichloropropene	250	260	104	250	247	99	70.0-130	5.1	30.00
Benzene	250	243	97	250	236	94	70.0-130	2.9	30.00
1,2-Dichloroethane	250	307	123	250	309	123	70.0-130	0.65	30.00
Trichloroethene	250	249	100	250	244	98	70.0-130	2.0	30.00
1,2-Dichloropropane	250	250	100	250	236	94	70.0-130	5.8	30.00
Dibromomethane	250	275	110	250	265	106	70.0-130	3.7	30.00
Bromodichloromethane	250	303	121	250	294	117	70.0-130	3.0	30.00
cis-1,3-Dichloropropene	250	269	107	250	263	105	70.0-130	2.3	30.00
4-Methyl-2-pentanone	1250	1320	106	1250	1300	104	70.0-130	1.5	30.00
Toluene	250	255	102	250	243	97	70.0-130	4.8	30.00
Methyl iodide	250	247	99	250	246	98	70.0-130	0.41	30.00
trans-1,3-Dichloropropene	250	269	107	250	263	105	70.0-130	2.3	30.00

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 97152 [VXX/6057]
Blank Spike Lab ID: 185377
Date Analyzed: 11/06/2015 13:36

Spike Duplicate ID: LCSD-S for HBN 97152 [VXX/6057
Spike Duplicate Lab ID: 185378
Date Analyzed: 11/06/2015 14:01
Matrix: Soil-Solid as dry weight

QC for Samples: 31502068001, 31502068002, 31502068003, 31502068004, 31502068005, 31502068006, 31502068007, 31502068008, 31502068009, 31502068010, 31502068011, 31502068012, 31502068013, 31502068014, 31502068015, 31502068016, 31502068017, 31502068018, 31502068019

Results by **SW-846 8260B**

	Blank Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Carbon disulfide	250	179	71	250	175	70	70.0-130	2.3	30.00
1,1,2-Trichloroethane	250	257	103	250	267	107	70.0-130	3.8	30.00
Tetrachloroethene	250	267	107	250	258	103	70.0-130	3.4	30.00
1,3-Dichloropropane	250	265	106	250	264	105	70.0-130	0.38	30.00
2-Hexanone	1250	1320	105	1250	1300	104	70.0-130	1.5	30.00
Dibromochloromethane	250	294	118	250	282	113	70.0-130	4.2	30.00
1,2-Dibromoethane	250	272	109	250	263	105	70.0-130	3.4	30.00
Chlorobenzene	250	255	102	250	252	101	70.0-130	1.2	30.00
1,1,1,2-Tetrachloroethane	250	295	118	250	281	112	70.0-130	4.9	30.00
Bromoform	250	329	**132***	250	320	128	70.0-130	2.8	30.00
Bromobenzene	250	264	106	250	269	107	70.0-130	1.9	30.00
1,1,2,2-Tetrachloroethane	250	297	119	250	292	117	70.0-130	1.7	30.00
1,2,3-Trichloropropane	250	294	118	250	300	120	70.0-130	2.0	30.00
Ethyl Benzene	250	252	101	250	249	100	70.0-130	1.2	30.00
m,p-Xylene	500	532	106	500	509	102	70.0-130	4.4	30.00
Styrene	250	290	116	250	273	109	70.0-130	6.0	30.00
o-Xylene	250	246	98	250	244	98	70.0-130	0.82	30.00
Isopropylbenzene (Cumene)	250	270	108	250	261	104	70.0-130	3.4	30.00
n-Propylbenzene	250	276	110	250	265	106	70.0-130	4.1	30.00
2-Chlorotoluene	250	271	108	250	274	110	70.0-130	1.1	30.00
4-Chlorotoluene	250	274	110	250	263	105	70.0-130	4.1	30.00
1,3,5-Trimethylbenzene	250	286	114	250	271	108	70.0-130	5.4	30.00
tert-Butylbenzene	250	279	112	250	265	106	70.0-130	5.1	30.00
1,2,4-Trimethylbenzene	250	291	116	250	278	111	70.0-130	4.6	30.00
sec-Butylbenzene	250	276	110	250	265	106	70.0-130	4.1	30.00
1,3-Dichlorobenzene	250	279	112	250	268	107	70.0-130	4.0	30.00
4-Isopropyltoluene	250	305	122	250	292	117	70.0-130	4.4	30.00
1,4-Dichlorobenzene	250	280	112	250	267	107	70.0-130	4.8	30.00
1,2-Dichlorobenzene	250	289	116	250	276	110	70.0-130	4.6	30.00
n-Butylbenzene	250	299	119	250	283	113	70.0-130	5.5	30.00
1,2-Dibromo-3-chloropropane	1500	2120	**141***	1500	2000	**133***	70.0-130	5.8	30.00
1,2,4-Trichlorobenzene	250	275	110	250	254	102	70.0-130	7.9	30.00

Print Date: 11/18/2015

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS-S for HBN 97152 [VXX/6057]
Blank Spike Lab ID: 185377
Date Analyzed: 11/06/2015 13:36

Spike Duplicate ID: LCSD-S for HBN 97152 [VXX/6057
Spike Duplicate Lab ID: 185378
Date Analyzed: 11/06/2015 14:01
Matrix: Soil-Solid as dry weight

QC for Samples: 31502068001, 31502068002, 31502068003, 31502068004, 31502068005, 31502068006, 31502068007, 31502068008, 31502068009, 31502068010, 31502068011, 31502068012, 31502068013, 31502068014, 31502068015, 31502068016, 31502068017, 31502068018, 31502068019

Results by **SW-846 8260B**

	Blank Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Hexachlorobutadiene	250	301	120	250	278	111	70.0-130	7.9	30.00
Naphthalene	250	295	118	250	276	110	70.0-130	6.7	30.00
trans-1,4-Dichloro-2-butene	1250	1710	**137***	1250	1710	**136***	70.0-130	0.0	30.00
1,2,3-Trichlorobenzene	250	300	120	250	287	115	70.0-130	4.4	30.00
Surrogates									
1,2-Dichloroethane-d4			110			112	55.0-173		
Toluene d8			96			96	57.0-134		
4-Bromofluorobenzene			99			100	23.0-141		

Batch Information

Analytical Batch: **VMS3788**
Analytical Method: **SW-846 8260B**
Instrument: **MSD8**
Analyst: **BWS**

Prep Batch: **VXX6057**
Prep Method: **SW-846 5035 SM**
Prep Date/Time: **11/06/2015 09:18**
Spike Init Wt./Vol.: **5 g** Extract Vol: **5 mL**
Dupe Init Wt./Vol.: **5 g** Extract Vol: **5 mL**

Matrix Spike Summary

Original Sample ID: 31502068012 (WCCS-8 (8))
MS Sample ID: 185403
MSD Sample ID: 185404

Analysis Date: 11/06/2015 23:00
Analysis Date: 11/06/2015 23:25
Analysis Date: 11/06/2015 23:51
Matrix: Soil-Solid as received

QC for Samples: 31502068001, 31502068002, 31502068003, 31502068004, 31502068005, 31502068006, 31502068007, 31502068008, 31502068009, 31502068010, 31502068011, 31502068012, 31502068013, 31502068014, 31502068015, 31502068016, 31502068017, 31502068018, 31502068019

Results by **SW-846 8260B**

		Matrix Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
1,1,1,2-Tetrachloroethane	ND	588000	682000	116	588000	669000	114	69.0-120	1.9	30.00
1,1,1-Trichloroethane	ND	588000	776000	132 *	588000	739000	126 *	78.0-121	4.9	30.00
1,1,2,2-Tetrachloroethane	ND	588000	618000	105	588000	595000	101	76.0-136	3.8	30.00
1,1,2-Trichloroethane	ND	588000	618000	105	588000	619000	105	65.0-128	0.16	30.00
1,1-Dichloroethane	ND	588000	659000	112	588000	645000	110	72.0-139	2.1	30.00
1,1-Dichloroethene	ND	588000	532000	90	588000	519000	88	72.0-135	2.5	30.00
1,1-Dichloropropene	ND	588000	586000	100	588000	559000	95	69.0-137	4.7	30.00
1,2,3-Trichlorobenzene	ND	588000	625000	106	588000	613000	104	61.0-126	1.9	30.00
1,2,3-Trichloropropane	ND	588000	664000	113	588000	647000	110	10.0-218	2.6	30.00
1,2,4-Trichlorobenzene	ND	588000	555000	94	588000	564000	96	61.0-125	1.6	30.00
1,2,4-Trimethylbenzene	ND	588000	642000	109	588000	625000	106	31.0-172	2.7	30.00
1,2-Dibromo-3-chloropropane	ND	3530000	4750000	134	3530000	4580000	130	43.0-229	3.6	30.00
1,2-Dibromoethane	ND	588000	595000	101	588000	587000	100	78.0-148	1.4	30.00
1,2-Dichlorobenzene	ND	588000	651000	111	588000	648000	110	58.0-148	0.46	30.00
1,2-Dichloroethane	ND	588000	785000	133	588000	752000	128	73.0-146	4.3	30.00
1,2-Dichloropropane	ND	588000	576000	98	588000	574000	98	76.0-136	0.35	30.00
1,3,5-Trimethylbenzene	ND	588000	629000	107	588000	613000	104	68.0-132	2.6	30.00
1,3-Dichlorobenzene	ND	588000	633000	108	588000	612000	104	55.0-145	3.4	30.00
1,3-Dichloropropane	ND	588000	596000	101	588000	586000	100	33.0-137	1.7	30.00
1,4-Dichlorobenzene	ND	588000	634000	108	588000	615000	105	53.0-146	3.0	30.00
2,2-Dichloropropane	ND	588000	654000	111	588000	611000	104	58.0-150	6.8	30.00
2-Butanone	ND	2940000	2430000	83	2940000	2270000	77	41.0-256	6.8	30.00
2-Chlorotoluene	ND	588000	635000	108	588000	620000	105	60.0-144	2.4	30.00
2-Hexanone	ND	2940000	2710000	92	2940000	2480000	84	42.0-111	8.9	30.00
4-Chlorotoluene	ND	588000	600000	102	588000	599000	102	59.0-141	0.17	30.00
4-Isopropyltoluene	ND	588000	645000	110	588000	649000	110	75.0-122	0.62	30.00
4-Methyl-2-pentanone	ND	2940000	2790000	95	2940000	2520000	86	6.90-166	10	30.00
Acetone	ND	2940000	2590000	88	2940000	2430000	83	6.80-355	6.4	30.00
Benzene	ND	588000	572000	97	588000	541000	92	75.0-133	5.6	30.00
Bromobenzene	ND	588000	608000	103	588000	593000	101	66.0-140	2.5	30.00
Bromochloromethane	ND	588000	626000	106	588000	625000	106	85.0-136	0.16	30.00
Bromodichloromethane	ND	588000	702000	119	588000	694000	118	77.0-140	1.1	30.00
Bromoform	ND	588000	721000	123	588000	681000	116	75.0-151	5.7	30.00
Bromomethane	ND	588000	448000	76	588000	516000	88	30.0-127	14	30.00
n-Butylbenzene	ND	588000	639000	109	588000	632000	107	41.0-147	1.1	30.00
Carbon disulfide	ND	588000	453000	77	588000	429000	73	64.0-145	5.4	30.00

Print Date: 11/18/2015

N.C. Certification # 481

Matrix Spike Summary

Original Sample ID: 31502068012 (WCCS-8 (8))
MS Sample ID: 185403
MSD Sample ID: 185404

Analysis Date: 11/06/2015 23:00
Analysis Date: 11/06/2015 23:25
Analysis Date: 11/06/2015 23:51
Matrix: Soil-Solid as received

QC for Samples: 31502068001, 31502068002, 31502068003, 31502068004, 31502068005, 31502068006, 31502068007, 31502068008, 31502068009, 31502068010, 31502068011, 31502068012, 31502068013, 31502068014, 31502068015, 31502068016, 31502068017, 31502068018, 31502068019

Results by **SW-846 8260B**

		Matrix Spike (ug/Kg)			Spike Duplicate (ug/Kg)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Carbon tetrachloride	ND	588000	758000	129	588000	758000	129	64.0-142	0.0	30.00
Chlorobenzene	ND	588000	574000	98	588000	571000	97	66.0-135	0.52	30.00
Chloroethane	ND	588000	605000	103	588000	584000	99	21.0-182	3.5	30.00
Chloroform	ND	588000	726000	123	588000	698000	119	71.0-143	3.9	30.00
Chloromethane	ND	588000	556000	95	588000	589000	100	69.0-138	5.8	30.00
Dibromochloromethane	ND	588000	625000	106	588000	654000	111	78.0-141	4.5	30.00
Dibromomethane	ND	588000	695000	118	588000	642000	109	80.0-150	7.9	30.00
Dichlorodifluoromethane	ND	588000	685000	116	588000	667000	113	82.0-130	2.7	30.00
cis-1,3-Dichloropropene	ND	588000	606000	103	588000	602000	102	72.0-146	0.66	30.00
trans-1,3-Dichloropropene	ND	588000	606000	103	588000	602000	102	45.0-144	0.66	30.00
Diisopropyl Ether	ND	588000	495000	84	588000	493000	84	79.0-122	0.40	30.00
Ethyl Benzene	ND	588000	546000	93	588000	548000	93	74.0-126	0.37	30.00
Hexachlorobutadiene	ND	588000	655000	111	588000	631000	107	52.0-134	3.7	30.00
Isopropylbenzene (Cumene)	ND	588000	575000	98	588000	585000	99	74.0-123	1.7	30.00
Methyl iodide	ND	588000	594000	101	588000	592000	101	41.0-126	0.34	30.00
Methylene chloride	ND	588000	646000	110	588000	600000	102	49.0-155	7.4	30.00
Naphthalene	ND	588000	566000	96	588000	559000	95	55.0-140	1.2	30.00
Styrene	ND	588000	629000	107	588000	633000	108	73.0-123	0.63	30.00
Tetrachloroethene	ND	588000	634000	108	588000	606000	103	46.0-153	4.5	30.00
Toluene	ND	588000	611000	104	588000	574000	98	66.0-128	6.2	30.00
Trichloroethene	4380000	588000	2790000	-270 *	588000	2730000	-280 *	85.0-136	2.2	30.00
Trichlorofluoromethane	ND	588000	774000	132	588000	733000	125	77.0-132	5.4	30.00
Vinyl chloride	ND	588000	527000	90	588000	525000	89	68.0-137	0.38	30.00
cis-1,2-Dichloroethene	148000	588000	631000	107	588000	606000	103	77.0-134	4.0	30.00
m,p-Xylene	ND	1180000	1190000	101	1180000	1160000	99	80.0-118	2.6	30.00
n-Propylbenzene	ND	588000	618000	105	588000	618000	105	72.0-128	0.0	30.00
o-Xylene	ND	588000	522000	89	588000	512000	87	80.0-121	1.9	30.00
sec-Butylbenzene	ND	588000	616000	105	588000	605000	103	57.0-138	1.8	30.00
tert-Butyl methyl ether (MTBE)	ND	588000	531000	90	588000	515000	88	67.0-135	3.1	30.00
tert-Butylbenzene	ND	588000	599000	102	588000	586000	100	61.0-142	2.2	30.00
trans-1,2-Dichloroethene	ND	588000	574000	98	588000	562000	96	72.0-135	2.1	30.00
trans-1,4-Dichloro-2-butene	ND	2940000	3690000	126	2940000	3630000	123	49.0-211	1.6	30.00
Surrogates										
1,2-Dichloroethane-d4				118			115	55.0-173		
4-Bromofluorobenzene				96			98	23.0-141		
Toluene d8				96			94	57.0-134		

Print Date: 11/18/2015

N.C. Certification # 481

Matrix Spike Summary

Original Sample ID: 31502068012 (WCCS-8 (8))
MS Sample ID: 185403
MSD Sample ID: 185404

Analysis Date: 11/06/2015 23:00
Analysis Date: 11/06/2015 23:25
Analysis Date: 11/06/2015 23:51
Matrix: Soil-Solid as received

QC for Samples: 31502068001, 31502068002, 31502068003, 31502068004, 31502068005, 31502068006, 31502068007, 31502068008, 31502068009, 31502068010, 31502068011, 31502068012, 31502068013, 31502068014, 31502068015, 31502068016, 31502068017, 31502068018, 31502068019

Results by **SW-846 8260B**

		Matrix Spike (%)			Spike Duplicate (%)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL

Batch Information

Analytical Batch: **VMS3788**
Analytical Method: **SW-846 8260B**
Instrument: **MSD8**
Analyst: **BWS**

Prep Batch: **VXX6057**
Prep Method: **SW-846 5035 SM**
Prep Date/Time: **11/06/2015 14:34**
MS Init Wt./Vol.: **8.5 g** Extract Vol.: **5 mL**
MSD Init Wt./Vol.: **8.5 g** Extract Vol.: **5 mL**

Batch Summary

Analytical Method: SW-846 8260B-TCLP

Prep Method: SW-846 5030B TCLP
Prep Batch: VXX6062
Prep Date: 11/10/2015 11:40

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
TCLP-B for HBN 97349 [LCH/1693	185407	11/10/2015 12:27	VMS3790	MSD8	BWS
LCS for HBN 97660 [VXX/6062]	185538	11/10/2015 04:02	VMS3790	MSD8	JHL
LCSD for HBN 97660 [VXX/6062]	185539	11/10/2015 04:28	VMS3790	MSD8	JHL
MB for HBN 97660 [VXX/6062]	185540	11/10/2015 05:19	VMS3790	MSD8	JHL
Red Moutain RT 29...(185339MS)	185548	11/10/2015 15:00	VMS3790	MSD8	BWS
Red Moutain RT 2...(185339MSD)	185549	11/10/2015 15:26	VMS3790	MSD8	BWS
IDW-1 (110415)	31502068020	11/10/2015 12:52	VMS3790	MSD8	BWS

Method Blank

Blank ID: TCLP-B for HBN 97349 [LCH/1693
Blank Lab ID: 185407
QC for Samples:
31502068020

Matrix: Water

Results by **SW-846 8260B-TCLP**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Vinyl chloride	ND	U	1.49	10.0	ug/L	10
1,1-Dichloroethene	ND	U	1.29	10.0	ug/L	10
2-Butanone	ND	U	7.29	250	ug/L	10
Chloroform	ND	U	1.20	10.0	ug/L	10
Carbon tetrachloride	ND	U	1.65	10.0	ug/L	10
Benzene	ND	U	1.36	10.0	ug/L	10
1,2-Dichloroethane	ND	U	0.910	10.0	ug/L	10
Trichloroethene	ND	U	1.10	10.0	ug/L	10
Tetrachloroethene	ND	U	1.89	10.0	ug/L	10
Chlorobenzene	ND	U	1.08	10.0	ug/L	10
1,4-Dichlorobenzene	ND	U	1.31	10.0	ug/L	10
Surrogates						
1,2-Dichloroethane-d4	101			64.0-140	%	10
Toluene d8	95.0			82.0-117	%	10
4-Bromofluorobenzene	103			85.0-115	%	10

Batch Information

Analytical Batch: VMS3790
Analytical Method: SW-846 8260B-TCLP
Instrument: MSD8
Analyst: BWS

Prep Batch: VXX6062
Prep Method: SW-846 5030B TCLP
Prep Date/Time: 11/10/2015 11:40:34AM
Prep Initial Wt./Vol.: 40 mL
Prep Extract Vol: 40 mL

Method Blank

Blank ID: MB for HBN 97660 [VXX/6062]
Blank Lab ID: 185540
QC for Samples:
31502068020

Matrix: Water

Results by **SW-846 8260B-TCLP**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
Vinyl chloride	ND	U	0.149	1.00	ug/L	1
1,1-Dichloroethene	ND	U	0.129	1.00	ug/L	1
2-Butanone	ND	U	0.729	25.0	ug/L	1
Chloroform	ND	U	0.120	1.00	ug/L	1
Carbon tetrachloride	ND	U	0.165	1.00	ug/L	1
Benzene	ND	U	0.136	1.00	ug/L	1
1,2-Dichloroethane	ND	U	0.0910	1.00	ug/L	1
Trichloroethene	ND	U	0.110	1.00	ug/L	1
Tetrachloroethene	ND	U	0.189	1.00	ug/L	1
Chlorobenzene	ND	U	0.108	1.00	ug/L	1
1,4-Dichlorobenzene	ND	U	0.131	1.00	ug/L	1
Surrogates						
1,2-Dichloroethane-d4	103			64.0-140	%	1
Toluene d8	95.0			82.0-117	%	1
4-Bromofluorobenzene	101			85.0-115	%	1

Batch Information

Analytical Batch: VMS3790
Analytical Method: SW-846 8260B-TCLP
Instrument: MSD8
Analyst: JHL

Prep Batch: VXX6062
Prep Method: SW-846 5030B
Prep Date/Time: 11/10/2015 11:14:42AM
Prep Initial Wt./Vol.: 40 mL
Prep Extract Vol: 40 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 97660 [VXX/6062]
Blank Spike Lab ID: 185538
Date Analyzed: 11/10/2015 04:02

Spike Duplicate ID: LCSD for HBN 97660 [VXX/6062]
Spike Duplicate Lab ID: 185539
Date Analyzed: 11/10/2015 04:28
Matrix: Water

QC for Samples: 31502068020

Results by **SW-846 8260B-TCLP**

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Vinyl chloride	5.00	4.82	96	5.00	4.96	99	59.0-138	2.9	30.00
1,1-Dichloroethene	5.00	5.10	102	5.00	5.09	102	71.0-128	0.20	30.00
2-Butanone	25.0	25.4	101	25.0	24.4	98	58.0-134	4.0	30.00
Chloroform	5.00	4.76	95	5.00	4.97	99	74.0-124	4.3	30.00
Carbon tetrachloride	5.00	4.96	99	5.00	4.96	99	75.0-120	0.0	30.00
Benzene	5.00	5.11	102	5.00	5.24	105	76.0-124	2.5	30.00
1,2-Dichloroethane	5.00	4.66	93	5.00	4.74	95	76.0-119	1.7	30.00
Trichloroethene	5.00	4.98	100	5.00	4.94	99	74.0-121	0.81	30.00
Tetrachloroethene	5.00	4.96	99	5.00	5.03	101	59.0-112	1.4	30.00
Chlorobenzene	5.00	4.86	97	5.00	4.97	99	74.0-120	2.2	30.00
1,4-Dichlorobenzene	5.00	5.06	101	5.00	5.29	106	70.0-125	4.4	30.00
Surrogates									
1,2-Dichloroethane-d4			96			98	64.0-140		
Toluene d8			100			101	82.0-117		
4-Bromofluorobenzene			100			101	85.0-115		

Batch Information

Analytical Batch: **VMS3790**
Analytical Method: **SW-846 8260B-TCLP**
Instrument: **MSD8**
Analyst: **JHL**

Prep Batch: **VXX6062**
Prep Method: **SW-846 5030B**
Prep Date/Time: **11/10/2015 11:14**
Spike Init Wt./Vol.: **40 mL** Extract Vol: **40 mL**
Dupe Init Wt./Vol.: **40 mL** Extract Vol: **40 mL**

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 16, 2015

Michael Page
SGS North America, Inc.
5500 Business Dr.
Willmington NC 28405

TEL: (910) 350-1903
FAX:

RE: 31502068

Dear Michael Page: Order No: 1511667

Analytical Environmental Services, Inc. received 1 samples on 11/6/2015 9:45:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative. AES' certifications are as follows:
-South Carolina Certification number 98016003 for Clean Water Act and for Solid and Hazardous Waste, effective until 6/30/16.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Ioana Pacurar

Ioana Pacurar
Project Manager

1511667

SGS CHAIN OF CUSTODY | TRACE & SHALE

PROJECT INFO:
PROJECT: 31502068
P.O. #:
QUOTE #:
SITE REF:
TURN AROUND TIME: 11/19/15
REPORT LEVEL: (see reverse) ☐ Level I ☐ Level II ☐ Level IV
SPECIAL DELIVERABLES: ☐ State of Origin: ☐ EDD: ☐ DoD: ☐ Other:

SEND DOCUMENTATION / RESULTS TO:
COMPANY: SGS Wilmington
CONTACT: Michael Page
ADDRESS:
PHONE: 910 350 1903
EMAIL: michael.page@sgs.com

INVOICE TO: (☐ CHECK IF SAME)
COMPANY: CONTACT:
ADDRESS:
PHONE:
EMAIL:

SPECIAL INSTRUCTIONS / COMMENTS:

LAB ID	SAMPLE ID / DESCRIPTION	DATE	TIME	QC MS	QC MSD	QC DUP	TYPE (C, G)	MATRIX	CONT. QTY	PRESERVATIVE	ANALYSIS & METHOD: XTCLP 8270	REMARKS
	31502068020	11/4/15	1200					S	1		X	

COLLECTED/RELINQUISHED BY (1):	DATE: 11/5/15	TIME: 1449	RECEIVED BY: 11/5/15 9:45
RELINQUISHED BY (2):	DATE:	TIME:	RECEIVED BY:

RECEIVED BY LABORATORY: DATE: TIME:
COC SEAL: ☐ INTACT ☐ BROKEN ☐ ABSENT
SAMPLE RECEIPT TEMP: °C
CARRIER: TRACKING #:
NOTES:

White - Retained by Lab
Yellow - Retained by Client

SGS-00055 (01/15)

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	SGS North America, Inc.	**Client Sample ID:**	31502068020
Project Name:	31502068	**Collection Date:**	11/4/2015 12:00:00 PM
Lab ID:	1511667-001	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
SEMIVOLATILES ORGANICS, TCLP	**SW1311/8270D**				**(SW3510C)**				
1,4-Dichlorobenzene	BRL		0.012	0.10	mg/L	215783	1	11/13/2015 12:54	YH
2,4,5-Trichlorophenol	BRL		0.017	0.10	mg/L	215783	1	11/13/2015 12:54	YH
2,4,6-Trichlorophenol	BRL		0.015	0.10	mg/L	215783	1	11/13/2015 12:54	YH
2,4-Dinitrotoluene	BRL		0.0088	0.10	mg/L	215783	1	11/13/2015 12:54	YH
Hexachlorobenzene	BRL		0.016	0.10	mg/L	215783	1	11/13/2015 12:54	YH
Hexachlorobutadiene	BRL		0.013	0.10	mg/L	215783	1	11/13/2015 12:54	YH
Hexachloroethane	BRL		0.014	0.10	mg/L	215783	1	11/13/2015 12:54	YH
m,p-Cresol	BRL		0.011	0.10	mg/L	215783	1	11/13/2015 12:54	YH
Nitrobenzene	BRL		0.012	0.10	mg/L	215783	1	11/13/2015 12:54	YH
o-Cresol	BRL		0.0074	0.10	mg/L	215783	1	11/13/2015 12:54	YH
Pentachlorophenol	BRL		0.0093	0.50	mg/L	215783	1	11/13/2015 12:54	YH
Pyridine	BRL		0.036	0.10	mg/L	215783	1	11/13/2015 12:54	YH
Cresols, Total	BRL		0.018	0.10	mg/L	215783	1	11/13/2015 12:54	YH
Surr: 2,4,6-Tribromophenol	93.4		0	52.5-139	%REC	215783	1	11/13/2015 12:54	YH
Surr: 2-Fluorobiphenyl	95.9		0	56-128	%REC	215783	1	11/13/2015 12:54	YH
Surr: 2-Fluorophenol	91.8		0	49.4-119	%REC	215783	1	11/13/2015 12:54	YH
Surr: 4-Terphenyl-d14	96.3		0	58.7-137	%REC	215783	1	11/13/2015 12:54	YH
Surr: Nitrobenzene-d5	95.2		0	49.8-126	%REC	215783	1	11/13/2015 12:54	YH
Surr: Phenol-d5	94		0	46-121	%REC	215783	1	11/13/2015 12:54	YH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client SGS Work Order Number 1511667

Checklist completed by [signature] 11/6/15
Signature Date

Carrier name: FedEx ✓ UPS __ Courier __ Client __ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.7 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes __ No ✓

Proceed with Standard TAT as per project history? Yes ✓ No __ Not Applicable __

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Client: SGS North America, Inc.
Project Name: 31502068
Workorder: 1511667

ANALYTICAL QC SUMMARY REPORT

BatchID: 215783

Sample ID: **MB-215783** Client ID: Units: **mg/L** Prep Date: **11/12/2015** Run No: **304341**
SampleType: **MBLK** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **215783** Analysis Date: **11/13/2015** Seq No: **6515751**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	BRL	0.10									
2,4,5-Trichlorophenol	BRL	0.10									
2,4,6-Trichlorophenol	BRL	0.10									
2,4-Dinitrotoluene	BRL	0.10									
Cresols, Total	BRL	0.10									
Hexachlorobenzene	BRL	0.10									
Hexachlorobutadiene	BRL	0.10									
Hexachloroethane	BRL	0.10									
m,p-Cresol	BRL	0.10									
Nitrobenzene	BRL	0.10									
o-Cresol	BRL	0.10									
Pentachlorophenol	BRL	0.50									
Pyridine	BRL	0.10									
Surr: 2,4,6-Tribromophenol	0.8787	0	1.000		87.9	52.5	139				
Surr: 2-Fluorobiphenyl	0.4458	0	0.5000		89.2	56	128				
Surr: 2-Fluorophenol	0.8677	0	1.000		86.8	49.4	119				
Surr: 4-Terphenyl-d14	0.4473	0	0.5000		89.5	58.7	137				
Surr: Nitrobenzene-d5	0.4502	0	0.5000		90.0	49.8	126				
Surr: Phenol-d5	0.8835	0	1.000		88.4	46	121				

Sample ID: **LCS-215783** Client ID: Units: **mg/L** Prep Date: **11/12/2015** Run No: **304341**
SampleType: **LCS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **215783** Analysis Date: **11/13/2015** Seq No: **6515752**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	1.070	0.10	1.000		107	60.6	120				
2,4,5-Trichlorophenol	1.066	0.10	1.000		107	65.3	130				
2,4,6-Trichlorophenol	1.116	0.10	1.000		112	73.4	128				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: SGS North America, Inc.
Project Name: 31502068
Workorder: 1511667

ANALYTICAL QC SUMMARY REPORT

BatchID: 215783

Sample ID: **LCS-215783** Client ID: Units: **mg/L** Prep Date: **11/12/2015** Run No: **304341**
SampleType: **LCS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **215783** Analysis Date: **11/13/2015** Seq No: **6515752**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4-Dinitrotoluene	1.104	0.10	1.000		110	67.6	121				
Cresols, Total	3.418	0.10	3.000		114	65.5	119				
Hexachlorobenzene	1.139	0.10	1.000		114	70.7	130				
Hexachlorobutadiene	1.064	0.10	1.000		106	58.2	122				
Hexachloroethane	1.100	0.10	1.000		110	58.5	120				
m,p-Cresol	2.317	0.10	2.000		116	65.5	120				
Nitrobenzene	1.123	0.10	1.000		112	66.1	120				
o-Cresol	1.101	0.10	1.000		110	64.1	119				
Pentachlorophenol	0.7317	0.50	1.000		73.2	53.2	143				
Pyridine	0.1076	0.10	1.000		10.8	10	123				
Surr: 2,4,6-Tribromophenol	1.007	0	1.000		101	52.5	139				
Surr: 2-Fluorobiphenyl	0.5091	0	0.5000		102	56	128				
Surr: 2-Fluorophenol	0.9790	0	1.000		97.9	49.4	119				
Surr: 4-Terphenyl-d14	0.5204	0	0.5000		104	58.7	137				
Surr: Nitrobenzene-d5	0.5244	0	0.5000		105	49.8	126				
Surr: Phenol-d5	1.043	0	1.000		104	46	121				

Sample ID: **1511667-001AMS** Client ID: **31502068020** Units: **mg/L** Prep Date: **11/12/2015** Run No: **304341**
SampleType: **MS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **215783** Analysis Date: **11/13/2015** Seq No: **6517157**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	0.6478	0.10	1.000		64.8	57.9	120				
2,4,5-Trichlorophenol	0.6401	0.10	1.000		64.0	54.2	126				
2,4,6-Trichlorophenol	0.6674	0.10	1.000		66.7	61.7	123				
2,4-Dinitrotoluene	0.6669	0.10	1.000		66.7	54.6	118				
Cresols, Total	2.051	0.10	3.000		68.4	38.2	136				
Hexachlorobenzene	0.6765	0.10	1.000		67.6	53.6	123				
Hexachlorobutadiene	0.6576	0.10	1.000		65.8	48.3	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: SGS North America, Inc.
Project Name: 31502068
Workorder: 1511667

ANALYTICAL QC SUMMARY REPORT

BatchID: 215783

Sample ID: **1511667-001AMS** Client ID: **31502068020** Units: **mg/L** Prep Date: **11/12/2015** Run No: **304341**
SampleType: **MS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **215783** Analysis Date: **11/13/2015** Seq No: **6517157**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Hexachloroethane	0.6691	0.10	1.000		66.9	49.5	120				
m,p-Cresol	1.397	0.10	2.000		69.8	54	120				
Nitrobenzene	0.7135	0.10	1.000		71.4	55.8	120				
o-Cresol	0.6544	0.10	1.000		65.4	41.1	133				
Pentachlorophenol	0.3280	0.50	1.000		32.8	46.4	141				JS
Pyridine	0.1430	0.10	1.000		14.3	10	120				
Surr: 2,4,6-Tribromophenol	0.5723	0	1.000		57.2	52.5	139				
Surr: 2-Fluorobiphenyl	0.3083	0	0.5000		61.7	56	128				
Surr: 2-Fluorophenol	0.5794	0	1.000		57.9	49.4	119				
Surr: 4-Terphenyl-d14	0.3099	0	0.5000		62.0	58.7	137				
Surr: Nitrobenzene-d5	0.3046	0	0.5000		60.9	49.8	126				
Surr: Phenol-d5	0.5977	0	1.000		59.8	46	121				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

SGS CHAIN OF CUSTODY | TRACE & SHALE

315020068

PROJECT INFO:
PROJECT: AVX - MYRTLE BEACH
P.O. #: B0007393.0002.00016
QUOTE #:
SITE REF:
TURN AROUND TIME: STANDARD
REPORT LEVEL: (see reverse) ☐ Level I ☐ Level II ☐ Level IV
SPECIAL DELIVERABLES: ☐ State of Origin: ☐ EDD: ☐ DoD: ☐ Other:

SEND DOCUMENTATION / RESULTS TO:
COMPANY: ARCADIS
CONTACT: TOM DARBY
ADDRESS: 30 PATEWOOD DR. STE 155 GREENVILLE, SC 29615
PHONE: (864) 987-3918
EMAIL: THOMAS.DARBY@ARCADIS-US.COM

INVOICE TO: (☑ CHECK IF SAME)
COMPANY: CONTACT:
ADDRESS:
PHONE:
EMAIL:

SPECIAL INSTRUCTIONS / COMMENTS:
5035 Methanol extraction aliquots. Contact Chris Harrell 352.328.4754 for instructions, list of weights / extract volumes

LAB ID	SAMPLE ID / DESCRIPTION	DATE	TIME	QC MS	QC MSD	QC DUP	TYPE (C, G)	MATRIX	CONT. QTY	PRESERVATIVE: MEOH	ANALYSIS & METHOD: VOCs	REMARKS
	WCSS-1(2)	10/26/15	1415				G	Meoh extract	1		✓	
	WCSS-1(10)	10/26/15	1424				G		1		✓	
	WCSS-1(20)	10/26/15	1435				G		1		✓	
	WCSS-3(8)	10/27/15	0836				G		1		✓	
	WCSS-3(13)	10/27/15	0842				G		1		✓	
	WCSS-4(11)	10/27/15	1015				G		1		✓	
	WCSS-4(22)	10/27/15	1023				G		1		✓	
	WCSS-4(27)	10/27/15	1040				G		1		✓	
	WCSS-5(15)	10/27/15	1122				G		1		✓	
	WCSS-5(24)	10/27/15	1130				G		1		✓	

COLLECTED/RELINQUISHED BY (1):	DATE:	TIME:	RECEIVED BY:
[signature]	11/4/15	1530	
RELINQUISHED BY (2):	DATE:	TIME:	RECEIVED BY:

RECEIVED BY LABORATORY: [signature] DATE: 11/5/15 TIME: 11:27
COC SEAL: ☑ INTACT ☐ BROKEN ☐ ABSENT
SAMPLE RECEIPT TEMP: °C 0.9
CARRIER: TRACKING #:
NOTES:

White - Retained by Lab
Yellow - Retained by Client

SGS ENVIRONMENTAL SERVICES | TRACE LABORATORY 5500 Business Drive Wilmington, NC 28405 910 350 1903 | 910 794 1613 www.sgs.com

Member of the SGS Group (SGS SA)

SGS-00055 (01/15)

SGS CHAIN OF CUSTODY | TRACE & SHALE

31502068

PROJECT INFO:

PROJECT: AVX - MYRTLE BEACH

P.O. #: B0007393.0002.00016

QUOTE #:

SITE REF:

TURN AROUND TIME: STANDARD

REPORT LEVEL: (see reverse) ☐ Level I ☐ Level II ☐ Level IV

SPECIAL DELIVERABLES: ☐ State of Origin: ☐ EDD: ☐ DoD: ☐ Other:

SEND DOCUMENTATION / RESULTS TO:

COMPANY: ARCADIS

CONTACT: TOM DARBY

ADDRESS: 30 PATEWOOD DR. STE. 155 GREENVILLE, SC 29615

PHONE: (864) 987-3918

EMAIL: THOMAS.DARBY@ARCADIS-US.COM

INVOICE TO: (☑ CHECK IF SAME)

COMPANY: CONTACT:

ADDRESS:

PHONE:

EMAIL:

SPECIAL INSTRUCTIONS / COMMENTS:

LAB ID	SAMPLE ID / DESCRIPTION	DATE	TIME	QC MS	QC MSD	QC DUP	TYPE (C, G)	MATRIX	CONT. QTY	PRESERVATIVE: MEOH	PRESERVATIVE: NONE	PRESERVATIVE: NONE	ANALYSIS & METHOD: VOCs	ANALYSIS & METHOD: TCLP VOCs	ANALYSIS & METHOD: TCLP SVOCs	REMARKS
	WCSS-6(10)	10/27/15	1348				G	MEOH EXTRACT	1		✓					
	WCSS-8(8)	10/28/15	0804				G		1		✓					
	WCSS-8(10)	10/28/15	0806				G		1		✓					
	WCSS-9(24)	10/28/15	1010				G		1		✓					
	WCSS-10(9)	10/28/15	1156				G		1		✓					
	WCSS-12(15)	10/28/15	1534				G		1		✓					
	WCSS-13(28)	10/29/15	0908				G		1		✓					
	WCSS-14(30)	10/29/15	1446				G		1		✓					
	WCSS-16(20)	10/29/15	1658				G		1		✓					
	IDW-1(110415)	11/4/15	1700				C	SOIL	2			✓		✓		

COLLECTED/RELINQUISHED BY (1):	DATE:	TIME:	RECEIVED BY:
[signature]	11/4/15	1530	
RELINQUISHED BY (2):	DATE:	TIME:	RECEIVED BY:

RECEIVED BY LABORATORY: P. Kearney DATE: 11/5/15 TIME: 11:27

COC SEAL: ☑ INTACT ☐ BROKEN ☐ ABSENT

SAMPLE RECEIPT TEMP: °C 0.9

CARRIER: TRACKING #:

NOTES:

White - Retained by Lab
Yellow - Retained by Client

SGS ENVIRONMENTAL SERVICES | TRACE LABORATORY 5500 Business Drive Wilmington, NC 28405 910 350 1903 | 910 794 1613 www.sgs.com

Member of the SGS Group (SGS SA)

SGS-00055 (01/15)

SGS North America Inc.

Sample Receipt Checklist (SRC)

Client: **Arcadis** Work Order No.: **31502068**

1. _X_ Shipped
   ___ Hand Delivered

2. _X_ COC Present on Receipt
   ___ No COC
   ___ Additional Transmittal Forms

3. _X_ Custody Tape on Container
   ___ No Custody Tape

4. _X_ Samples Intact
   ___ Samples Broken / Leaking

5. _X_ Chilled on Receipt Actual Temp.(s) in °C: 0.9 Thermometer ID#: Login2D
   ___ Ambient on Receipt
   ___ Walk-in on Ice; Coming down to temp.
   ___ Temperature Blank Present

6. _X_ Sufficient Sample Submitted
   ___ Insufficient Sample Submitted

7. ___ Chlorine absent
   ___ HNO3 < 2
   ___ HCL < 2
   ___ Additional Preservatives verified (see notes)

8. _X_ Received Within Holding Time
   ___ Not Received Within Holding Time

9. _X_ No Discrepancies Noted
   ___ Discrepancies Noted
   ___ NCDENR notified of Discrepancies*

10. _X_ No Headspace present in VOC vials
    ___ Headspace present in VOC vials >6mm

Notes:

Comments:

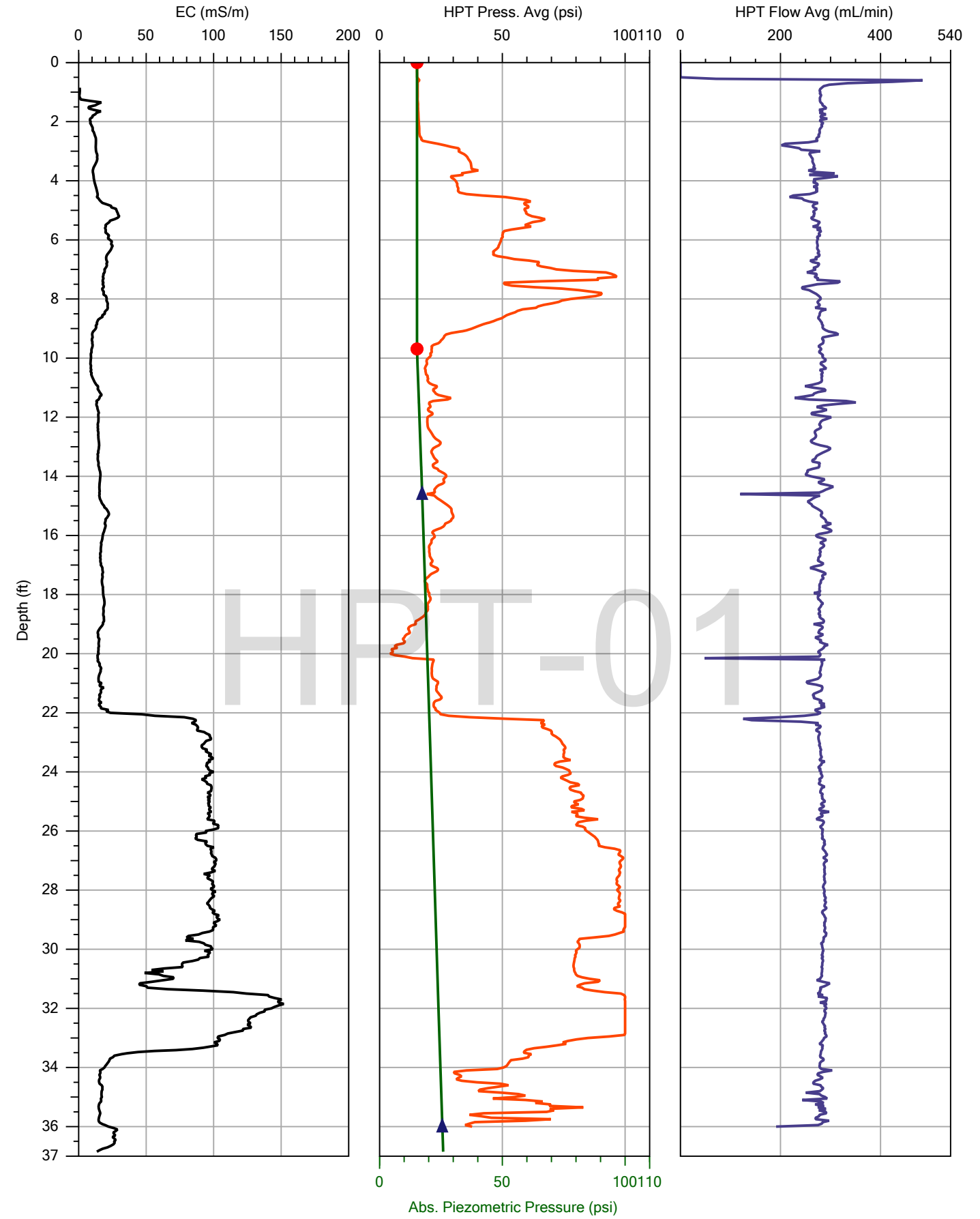
Inspected and Logged in by: Phantashia Kearney
Date: 11/5/2015

*NCDENR must be notified when collection, holding time or preservation requirements are not met.

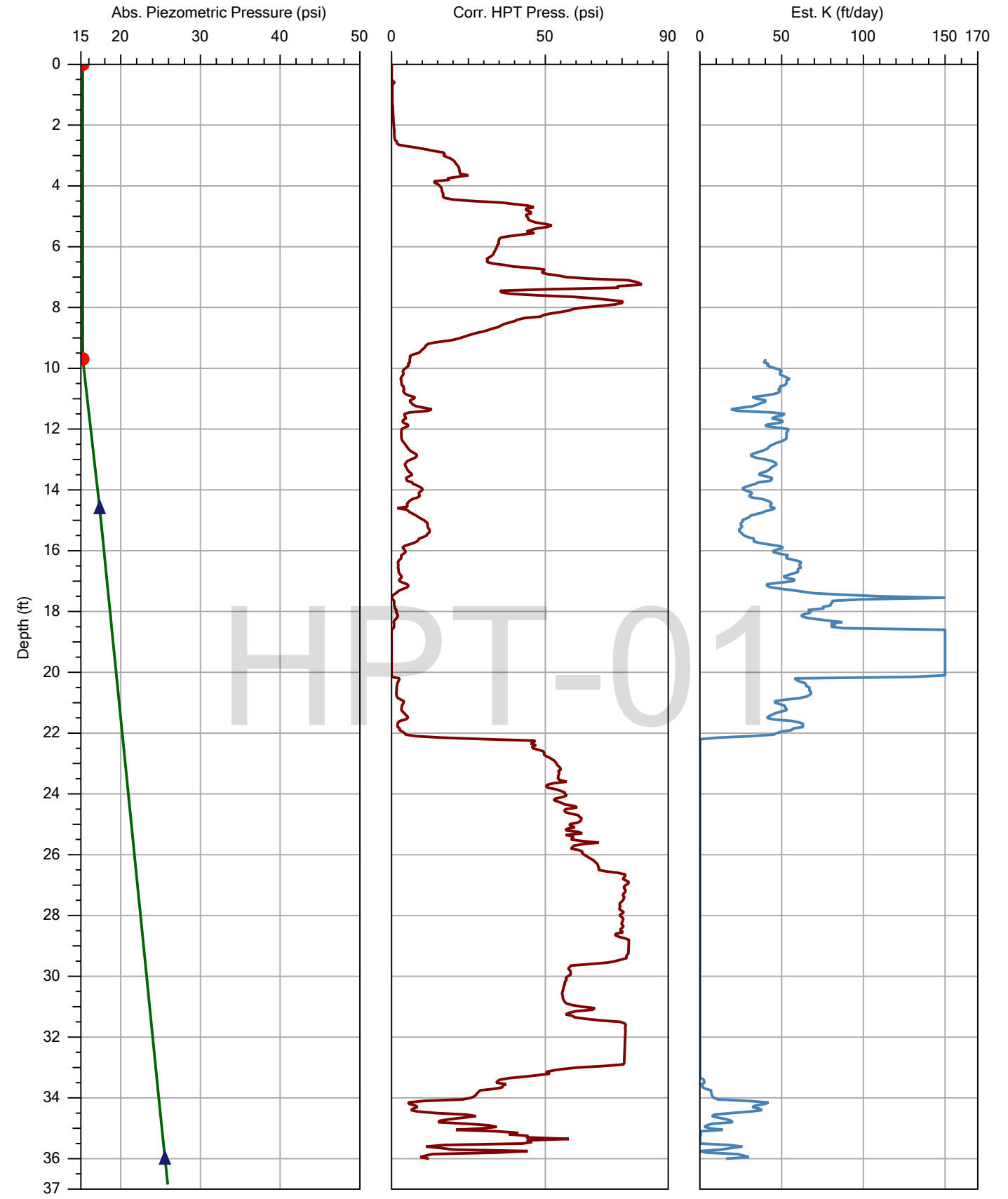
MI_11.9

APPENDIX C

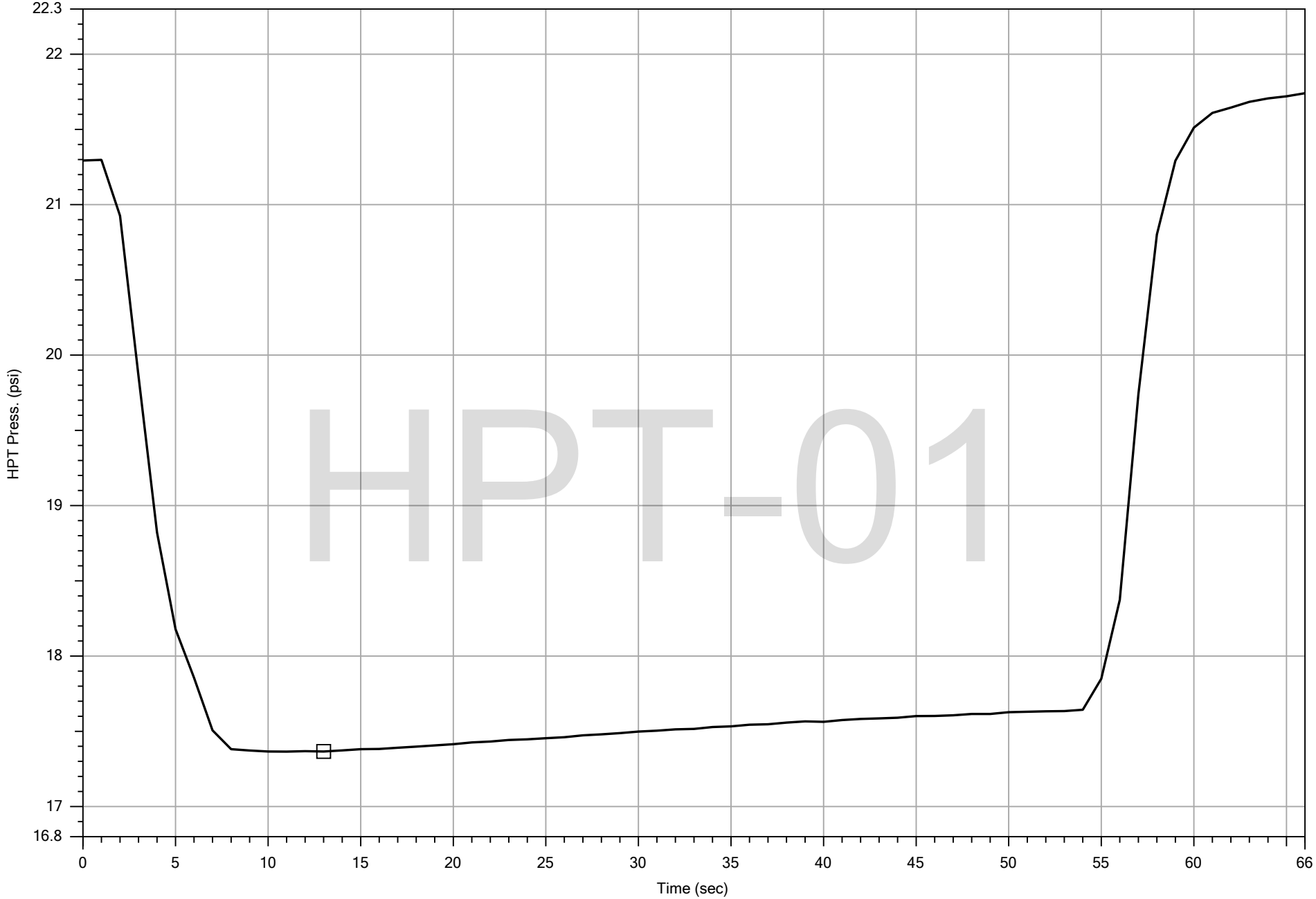
Hydraulic Profiling Tool Logs



		File: HPT-1.HPT
Company: Zebra	Operator: Mickey Ritter	Date: 10/26/2015
Project ID: AVX	Client: Arcadis	Location:

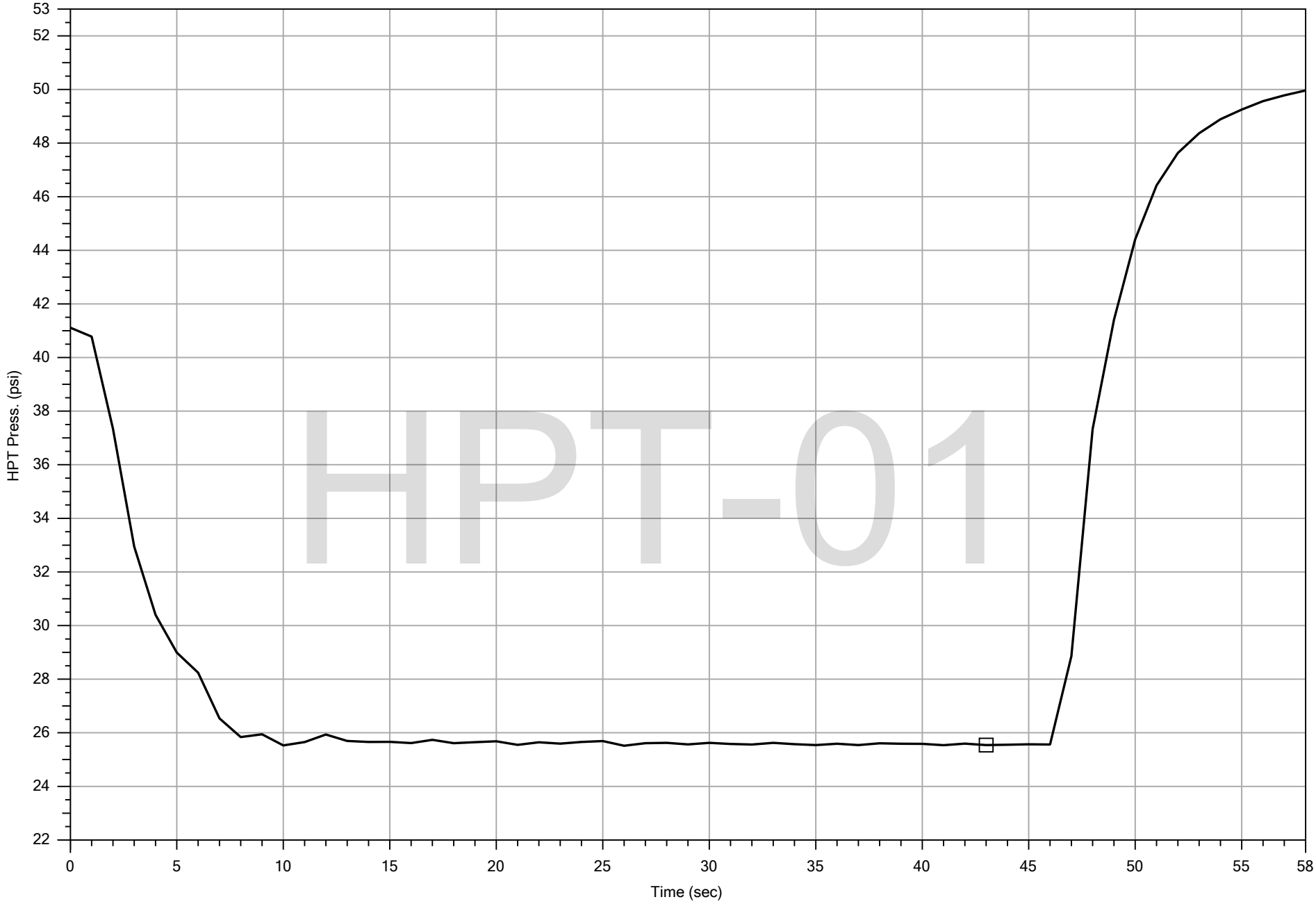


			File: HPT-1.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 10/26/2015
Project ID: AVX	Client: Arcadis		Location:



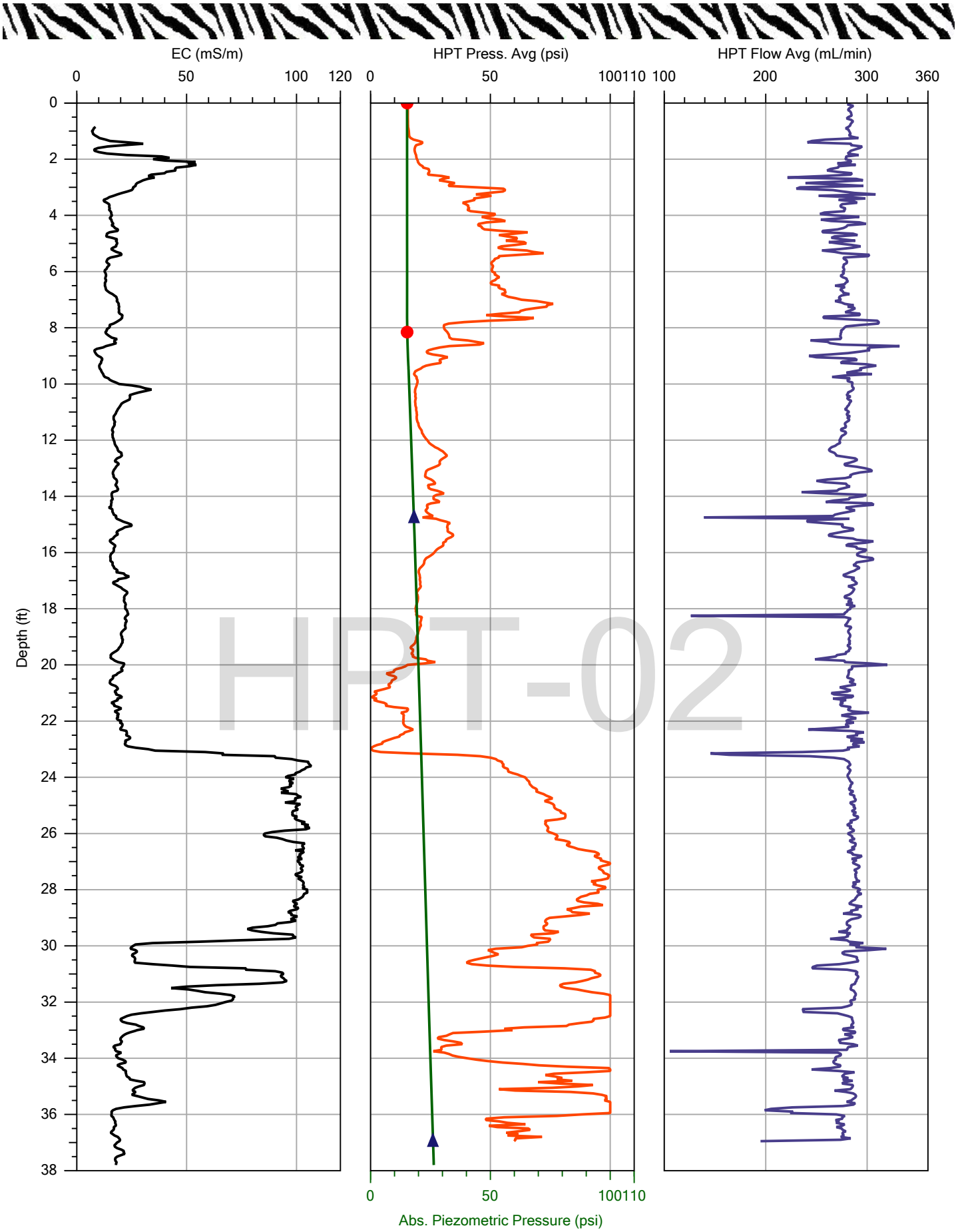
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-1.TIM	Date: 10/26/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 14.60 ft	Test: 1

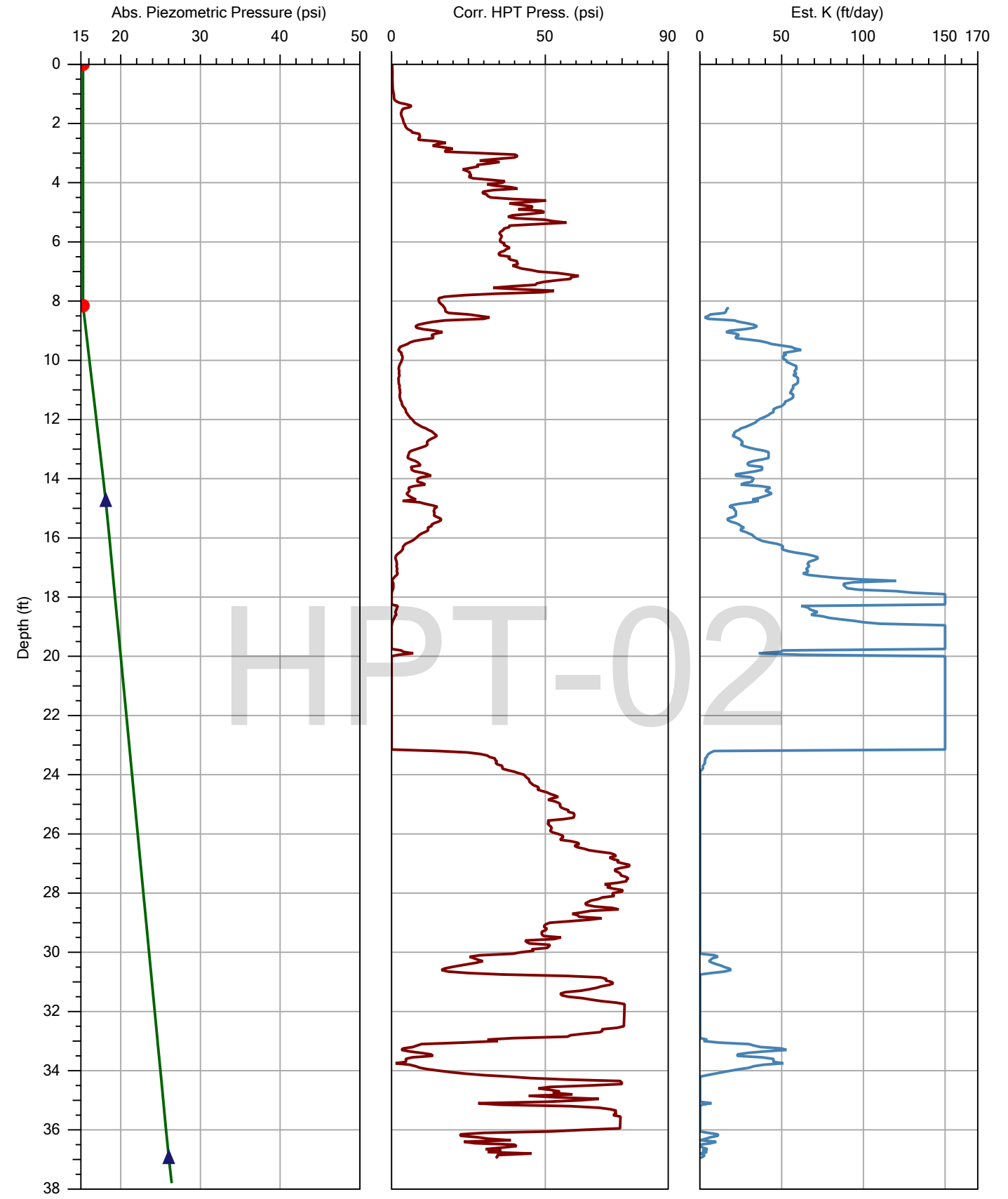


HPT DISSIPATION (SINGLE CASE)

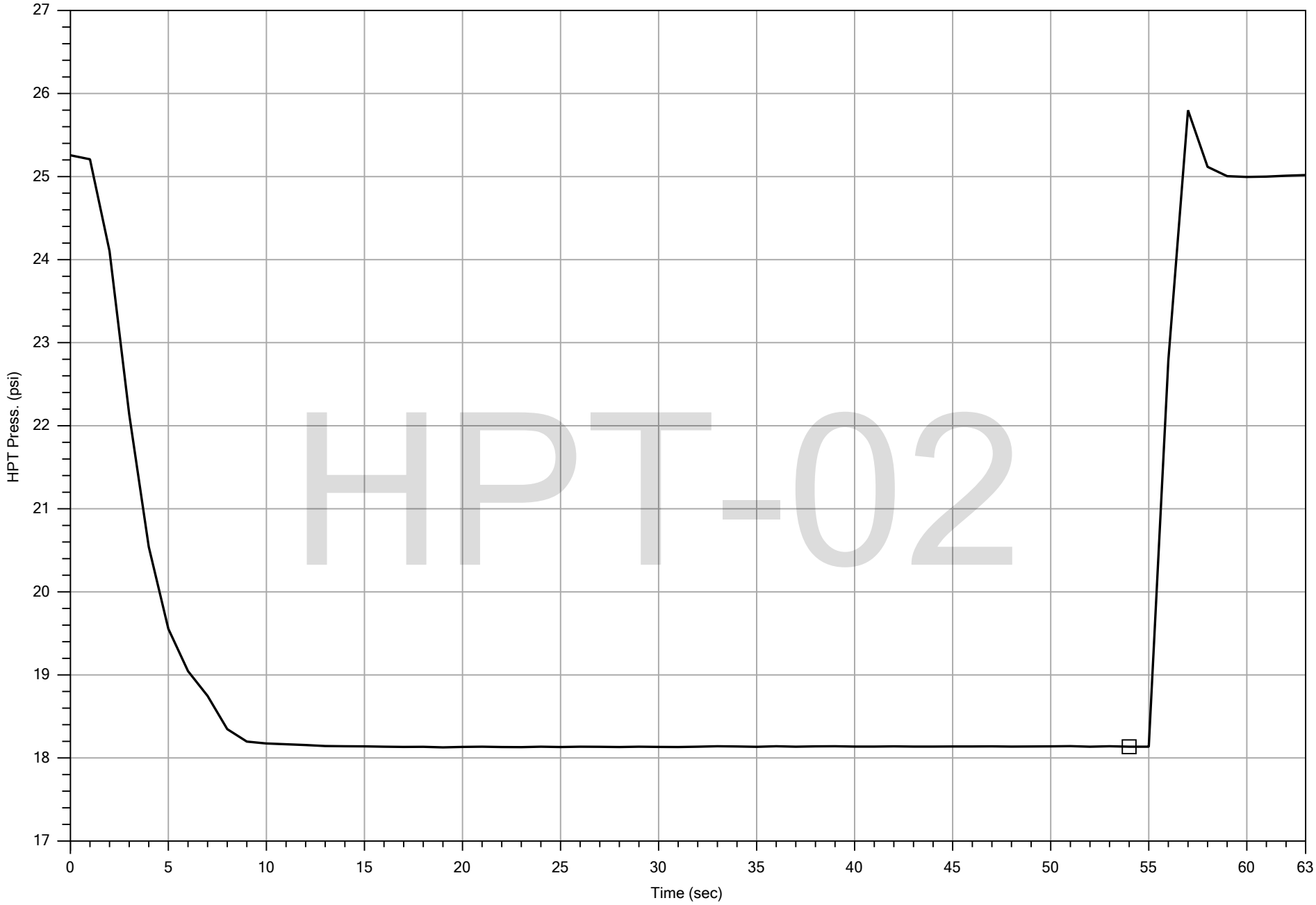
Company: Zebra	Operator: Mickey Ritter	File: HPT-1.TIM	Date: 10/26/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 36.00 ft	Test: 1



		File: HPT-2.HPT
Company: Zebra	Operator: Mickey Ritter	Date: 10/26/2015
Project ID: AVX	Client: Arcadis	Location:



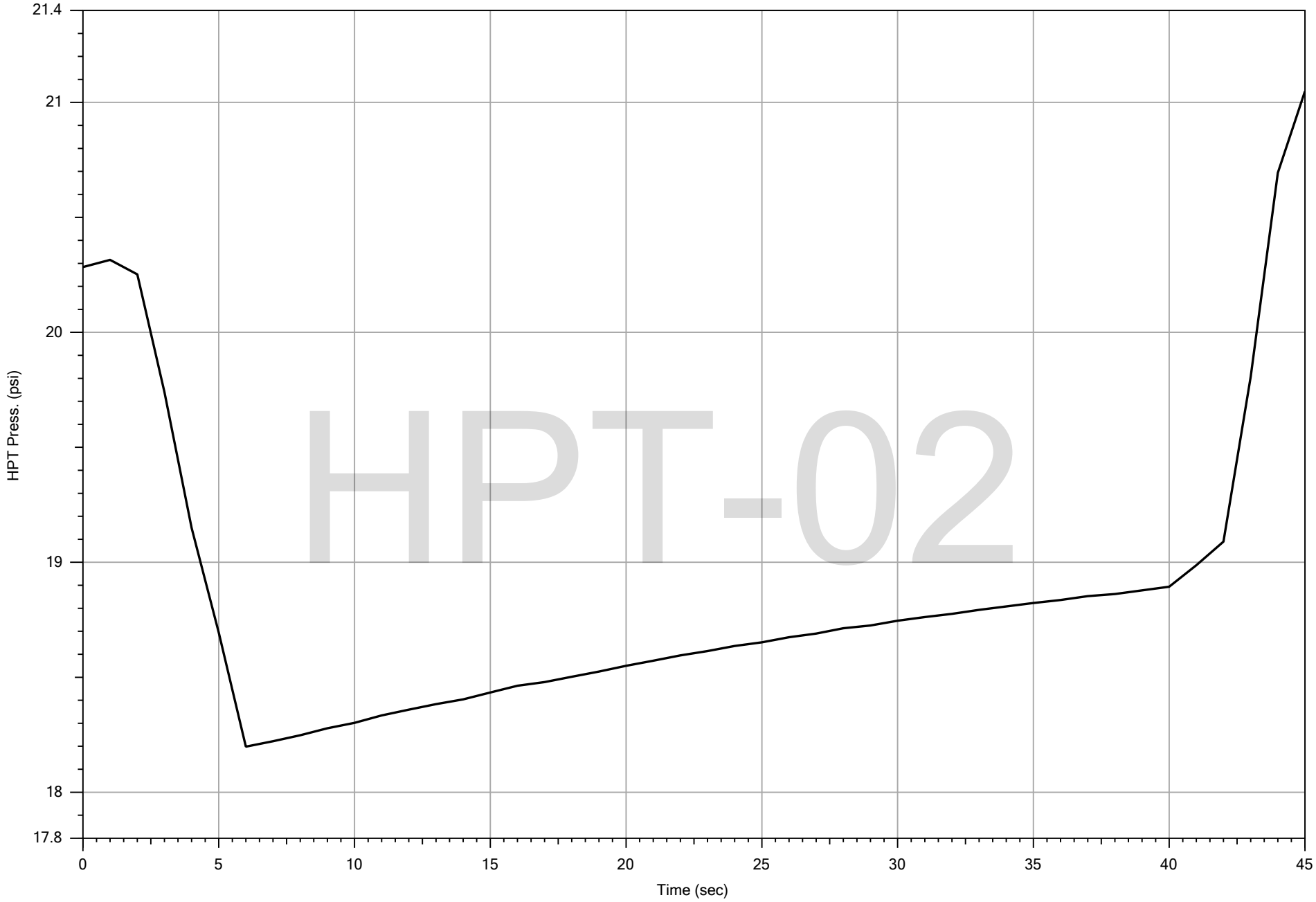
		File: HPT-2.HPT
Company: Zebra	Operator: Mickey Ritter	Date: 10/26/2015
Project ID: AVX	Client: Arcadis	Location:



ZEBRA

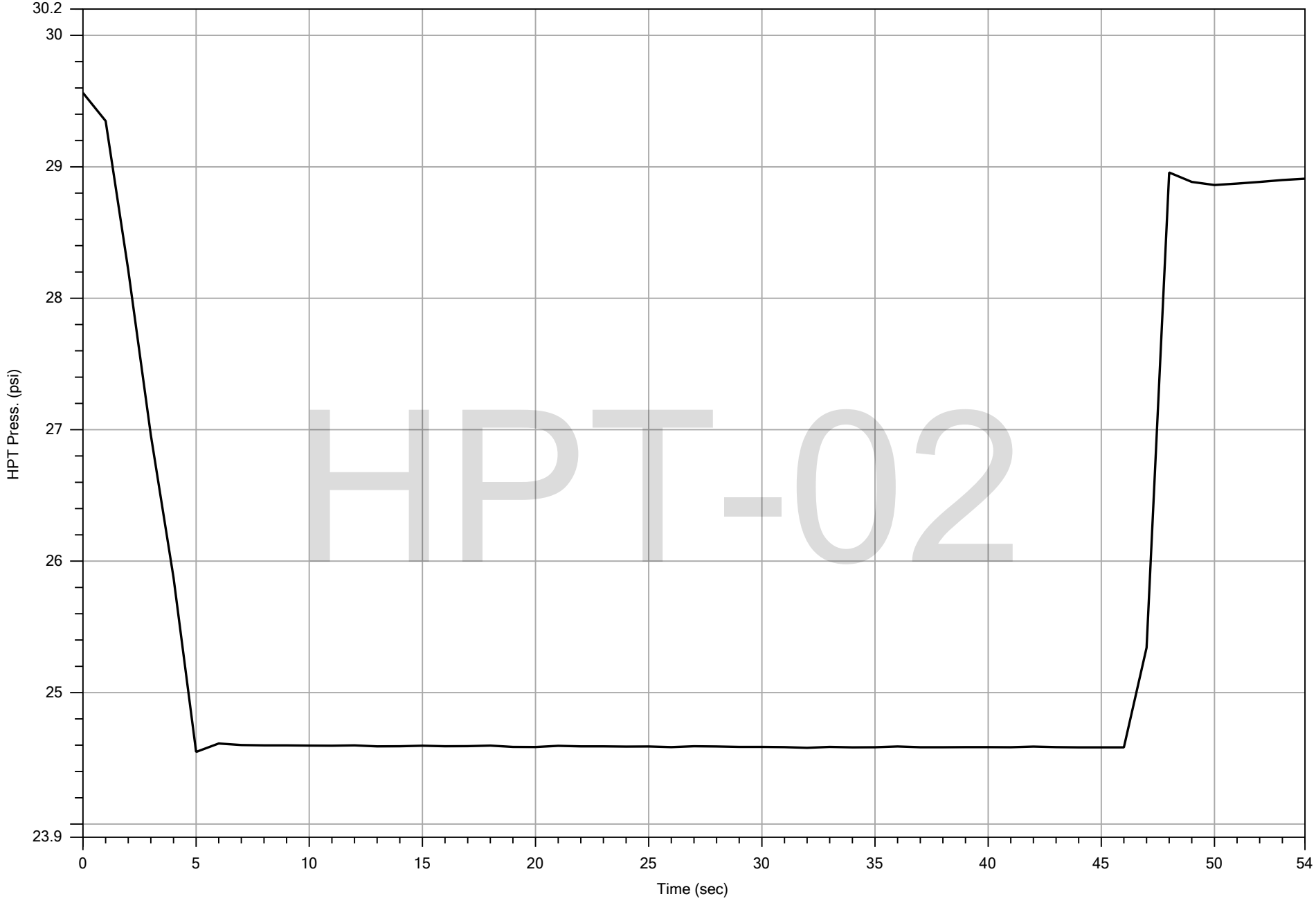
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-2.TIM	Date: 10/26/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 14.75 ft	Test: 1



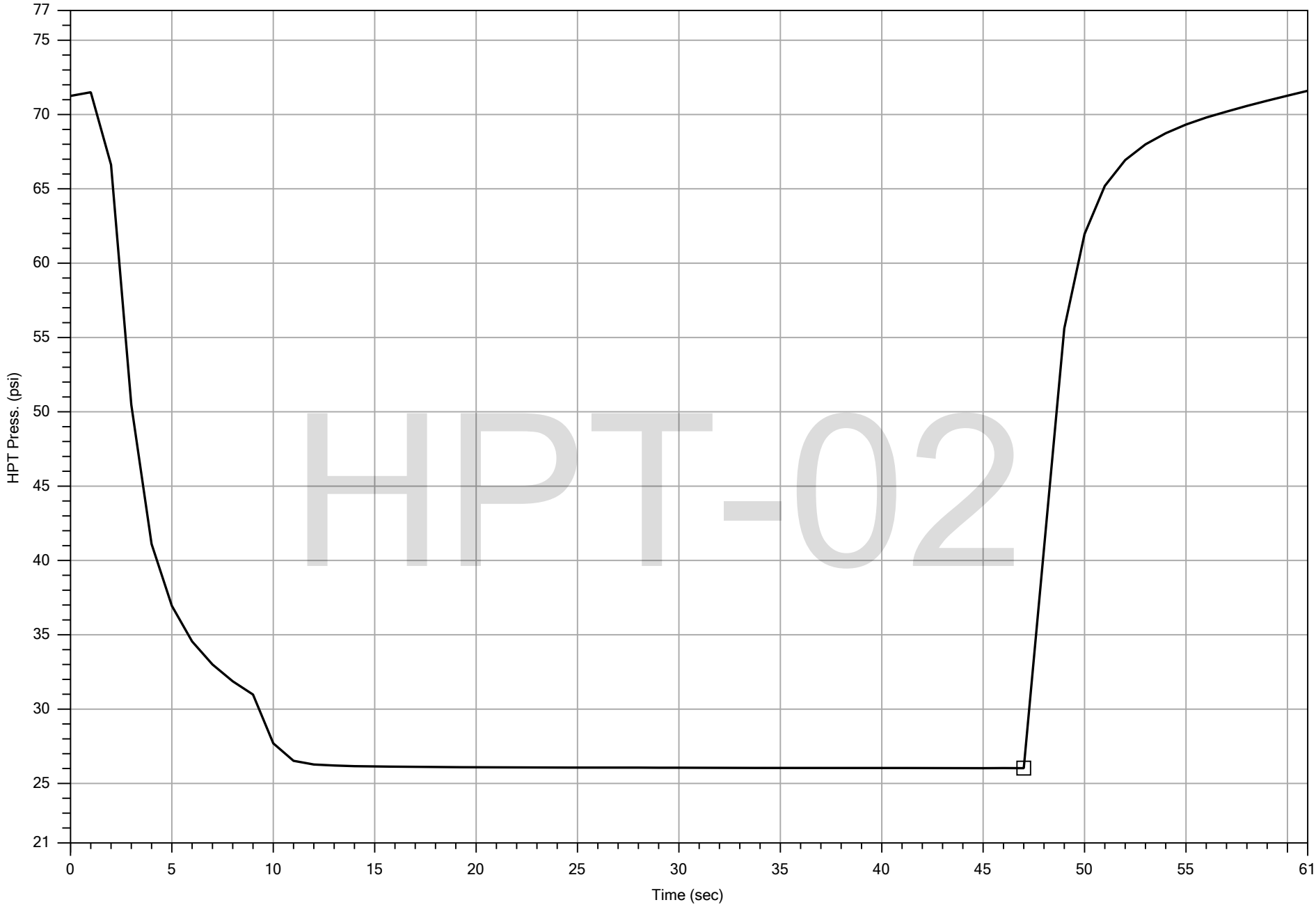
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-2.TIM	Date: 10/26/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 18.25 ft	Test: 1



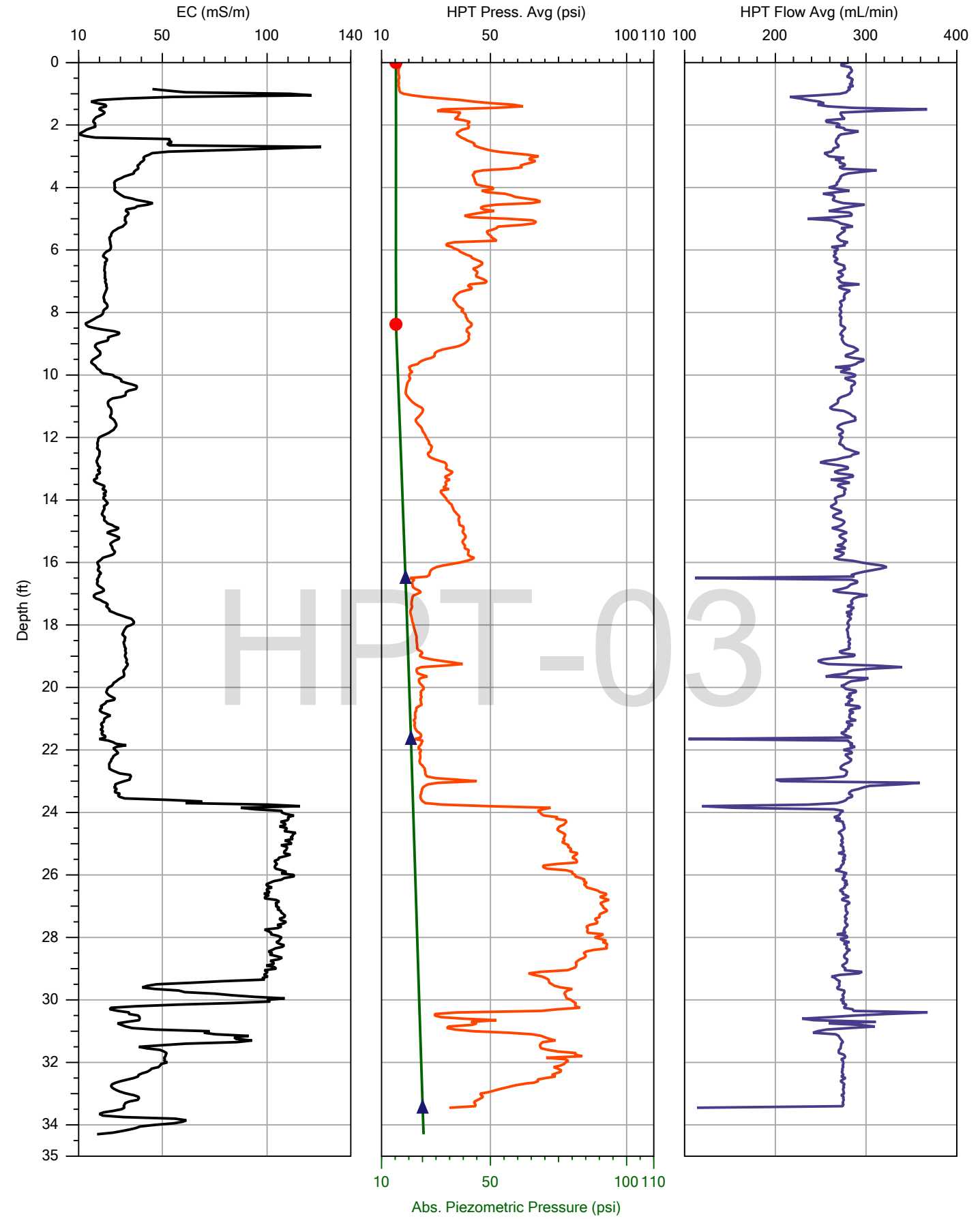
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-2.TIM	Date: 10/26/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 33.67 ft	Test: 1

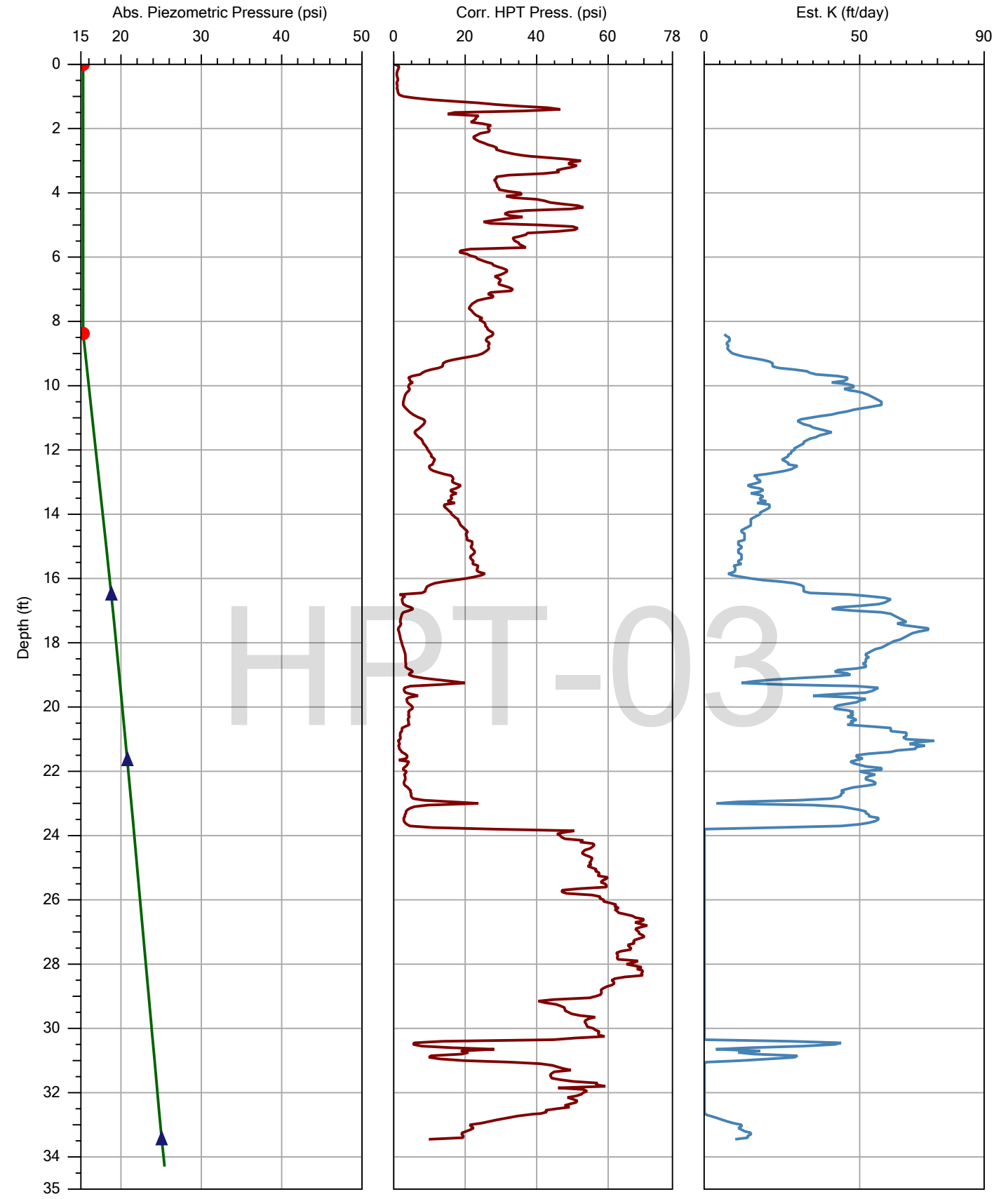


HPT DISSIPATION (SINGLE CASE)

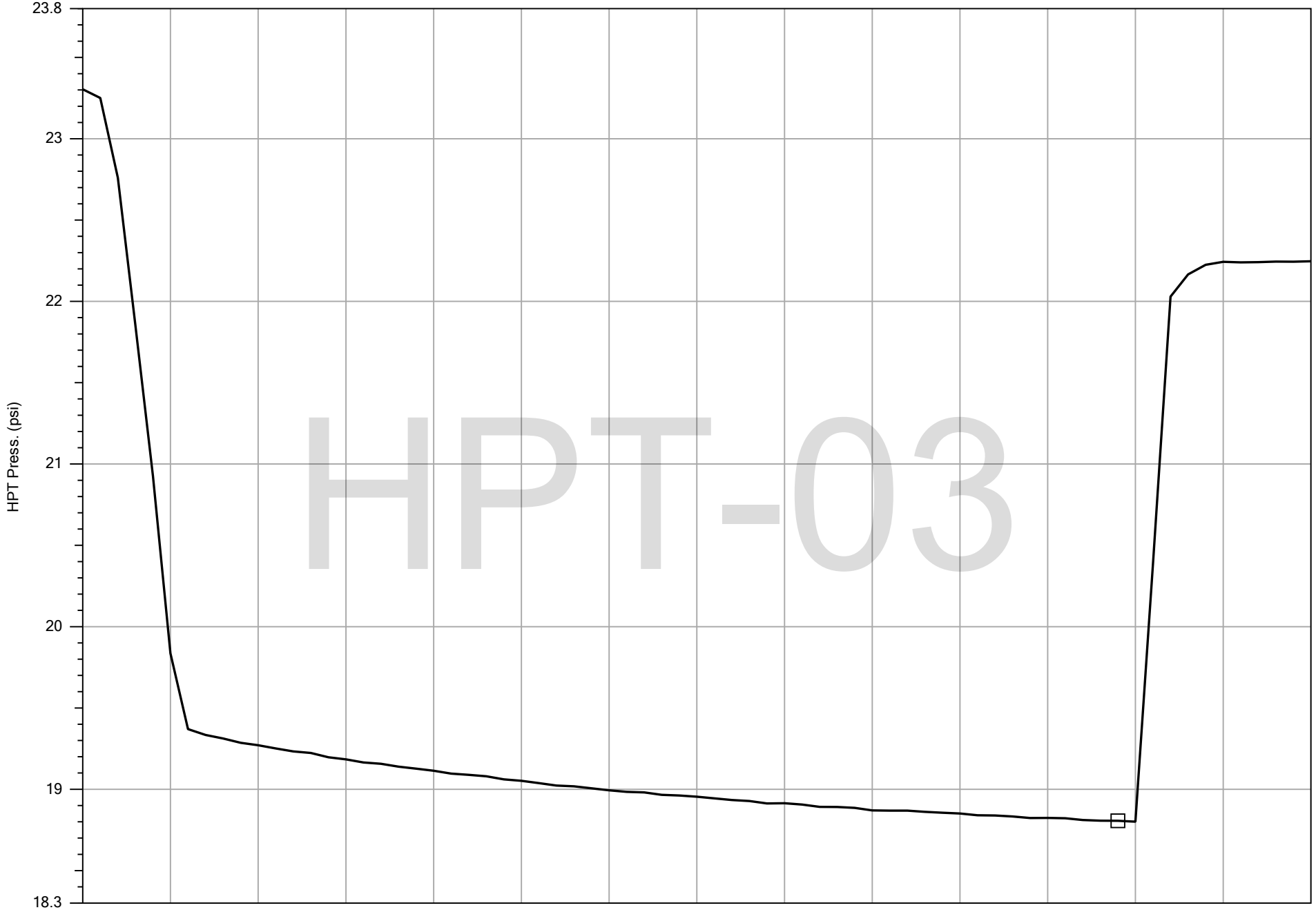
Company: Zebra	Operator: Mickey Ritter	File: HPT-2.TIM	Date: 10/26/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 36.95 ft	Test: 1



			File: HPT-3.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 10/27/2015
Project ID: AVX	Client: Arcadis		Location:

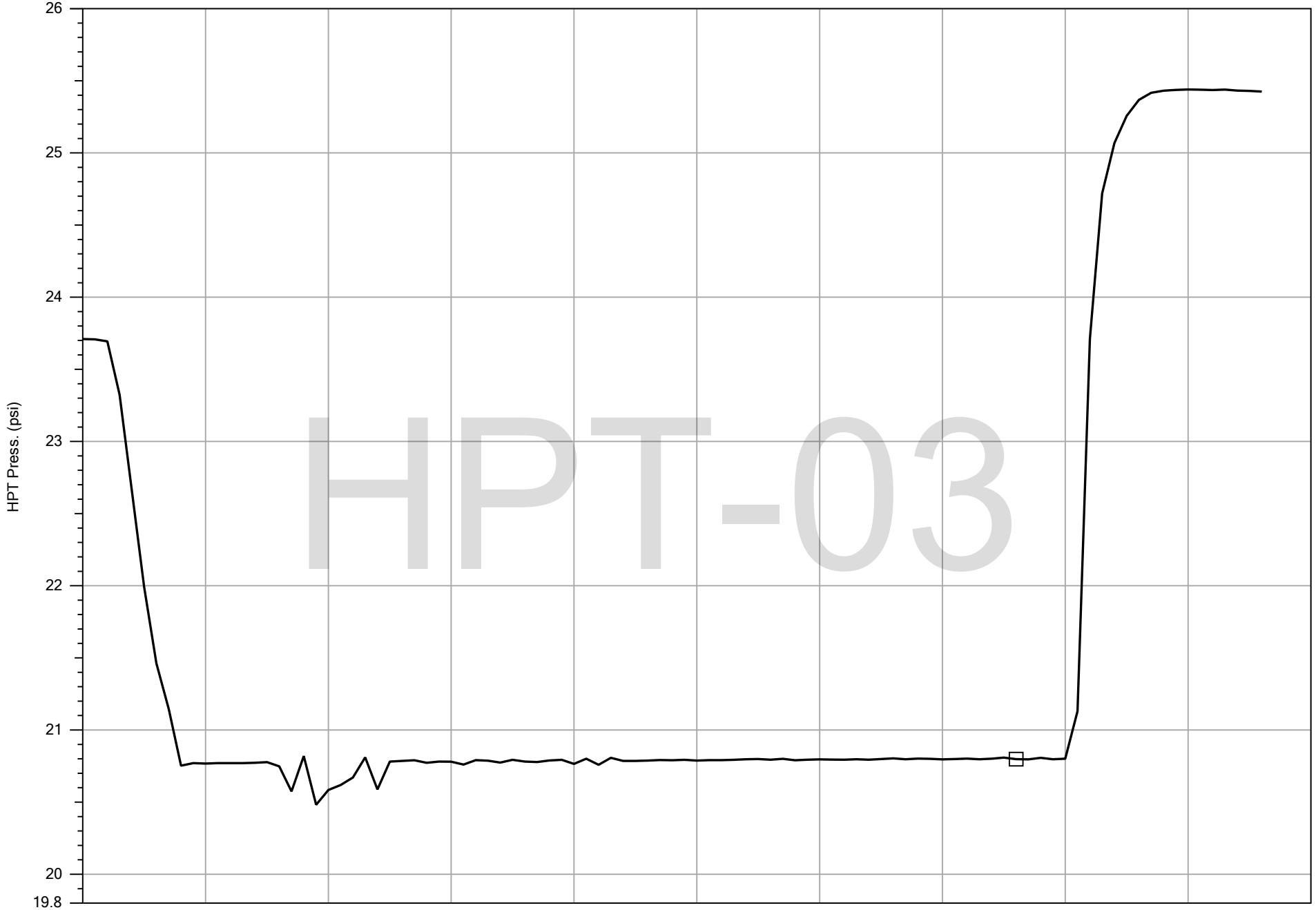


			File: HPT-3.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 10/27/2015
Project ID: AVX	Client: Arcadis		Location:



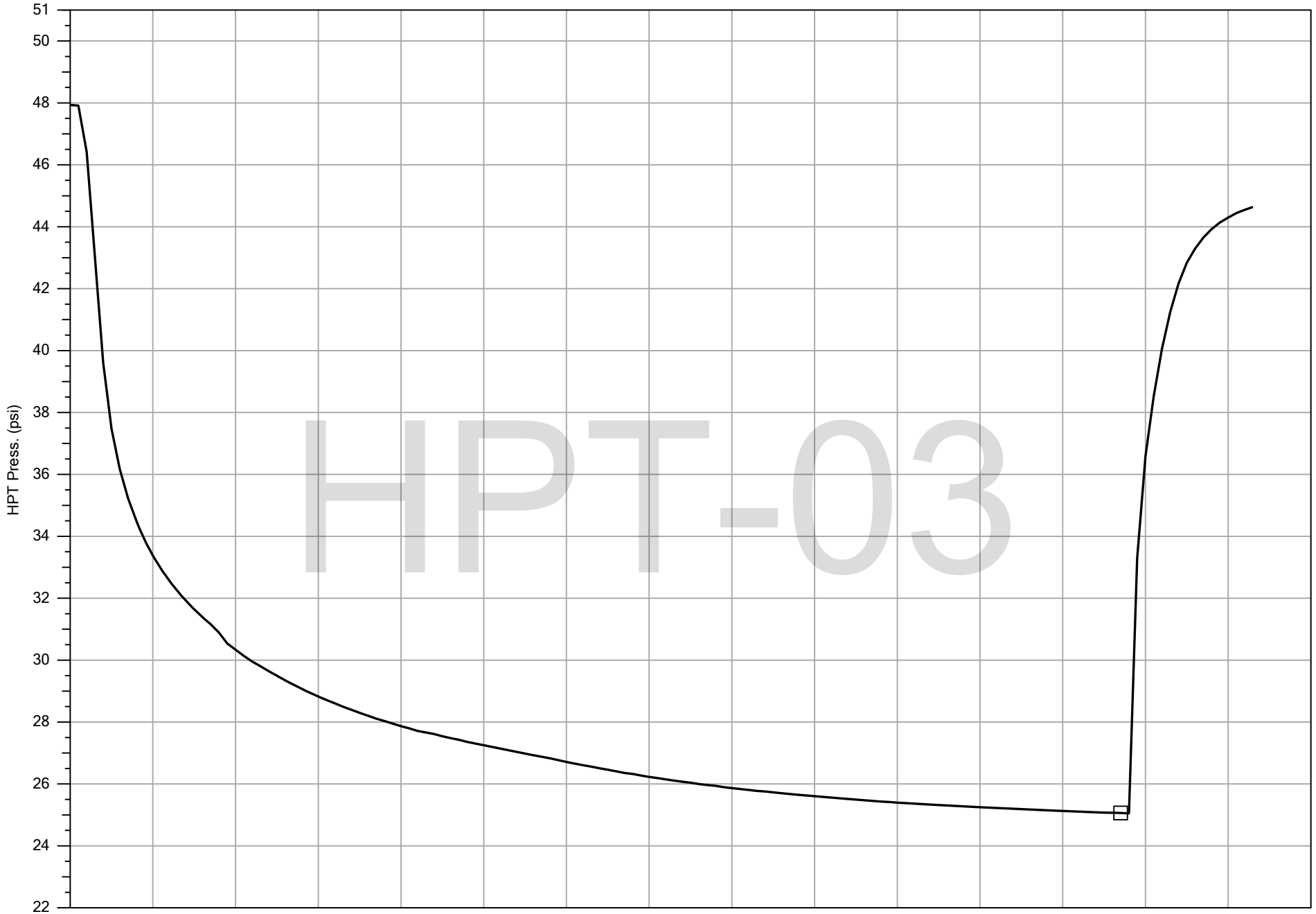
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 16.50 ft	Test: 1
		File: HPT-3.TIM	Date: 10/27/2015



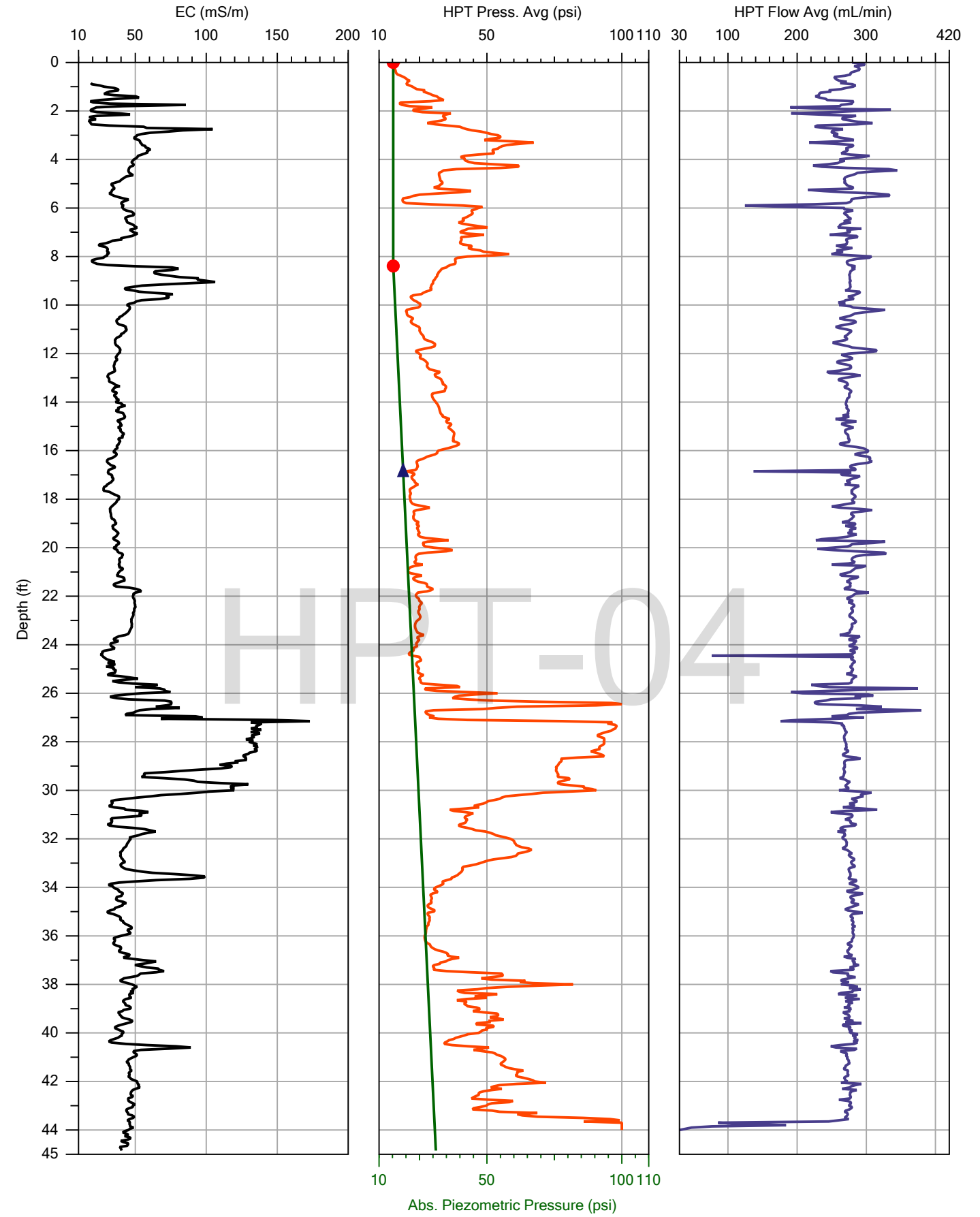
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-3.TIM	Date: 10/27/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 21.65 ft	Test: 1

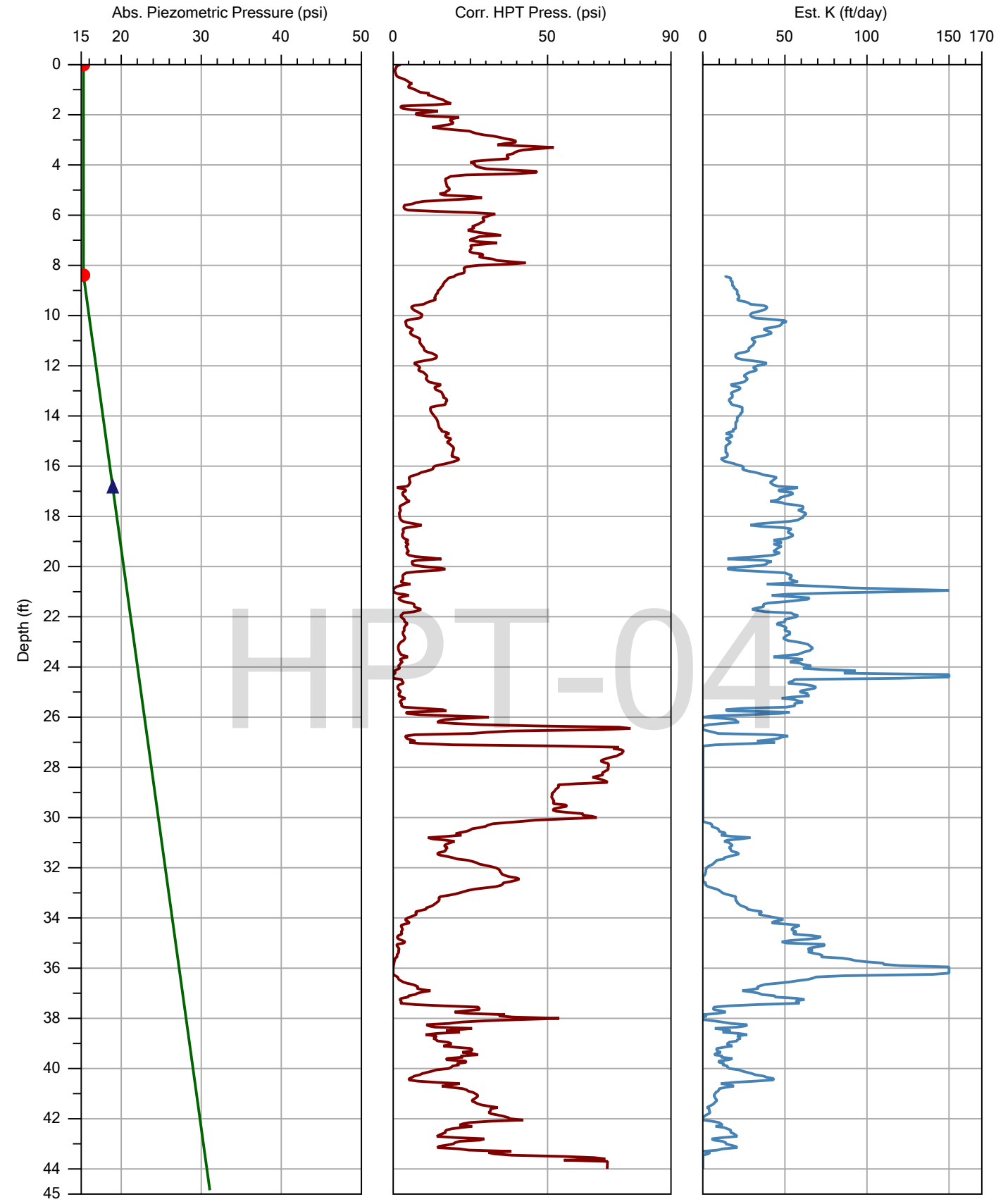


HPT DISSIPATION (SINGLE CASE)

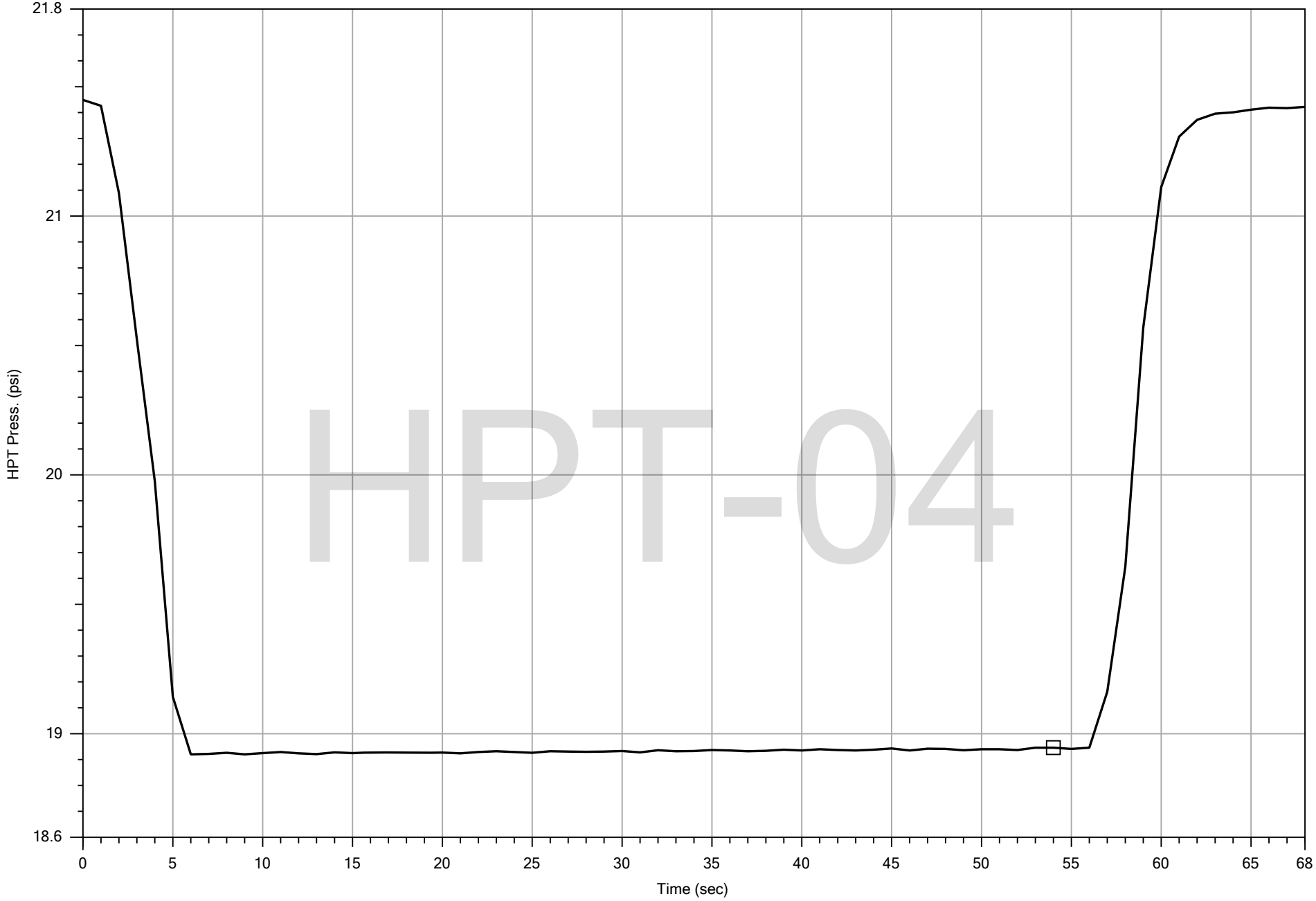
Company: Zebra	Operator: Mickey Ritter	File: HPT-3.TIM	Date: 10/27/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 33.45 ft	Test: 1



		File: HPT-4.HPT
Company: Zebra	Operator: Mickey Ritter	Date: 10/27/2015
Project ID: AVX	Client: Arcadis	Location:

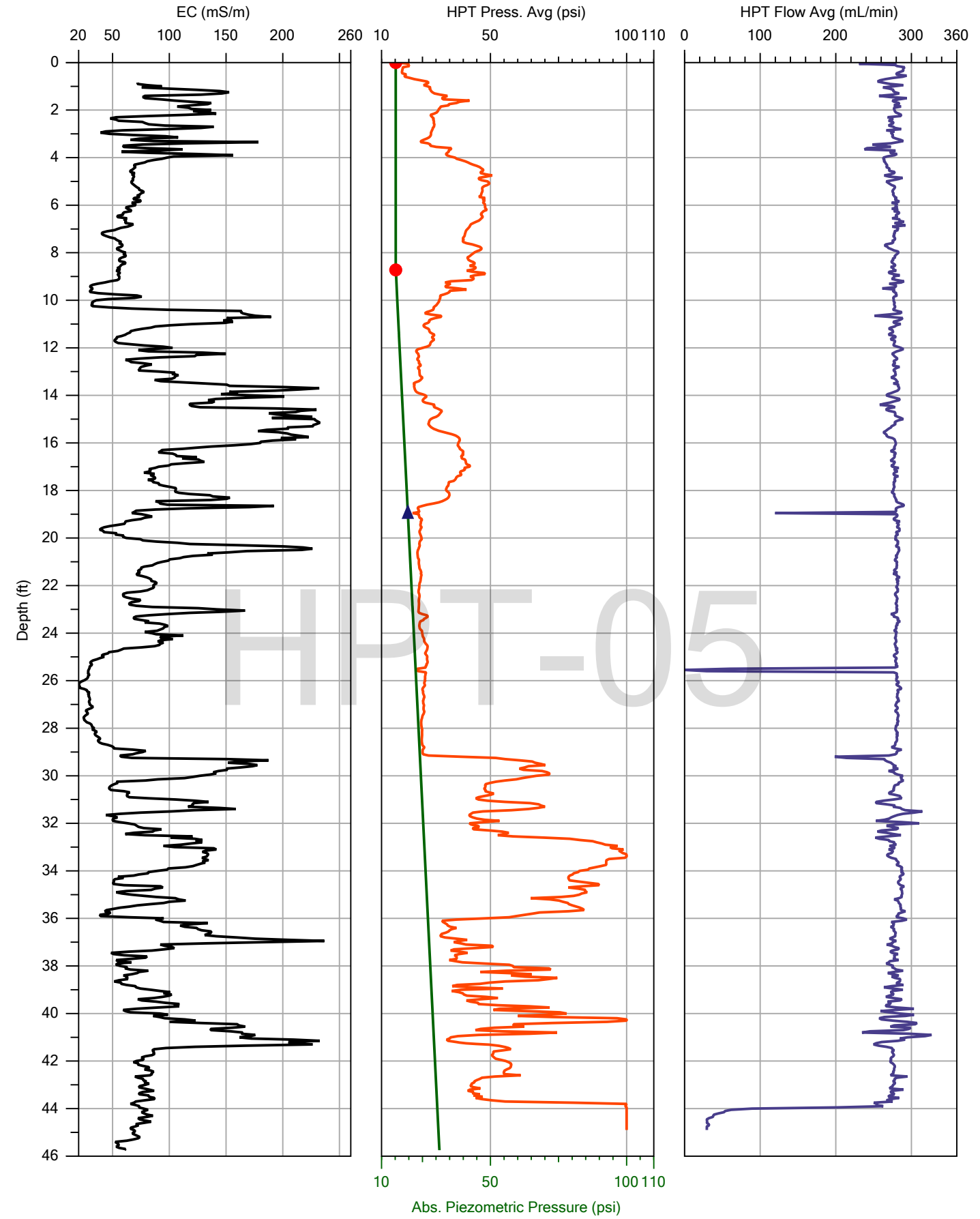


			File: HPT-4.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 10/27/2015
Project ID: AVX	Client: Arcadis		Location:

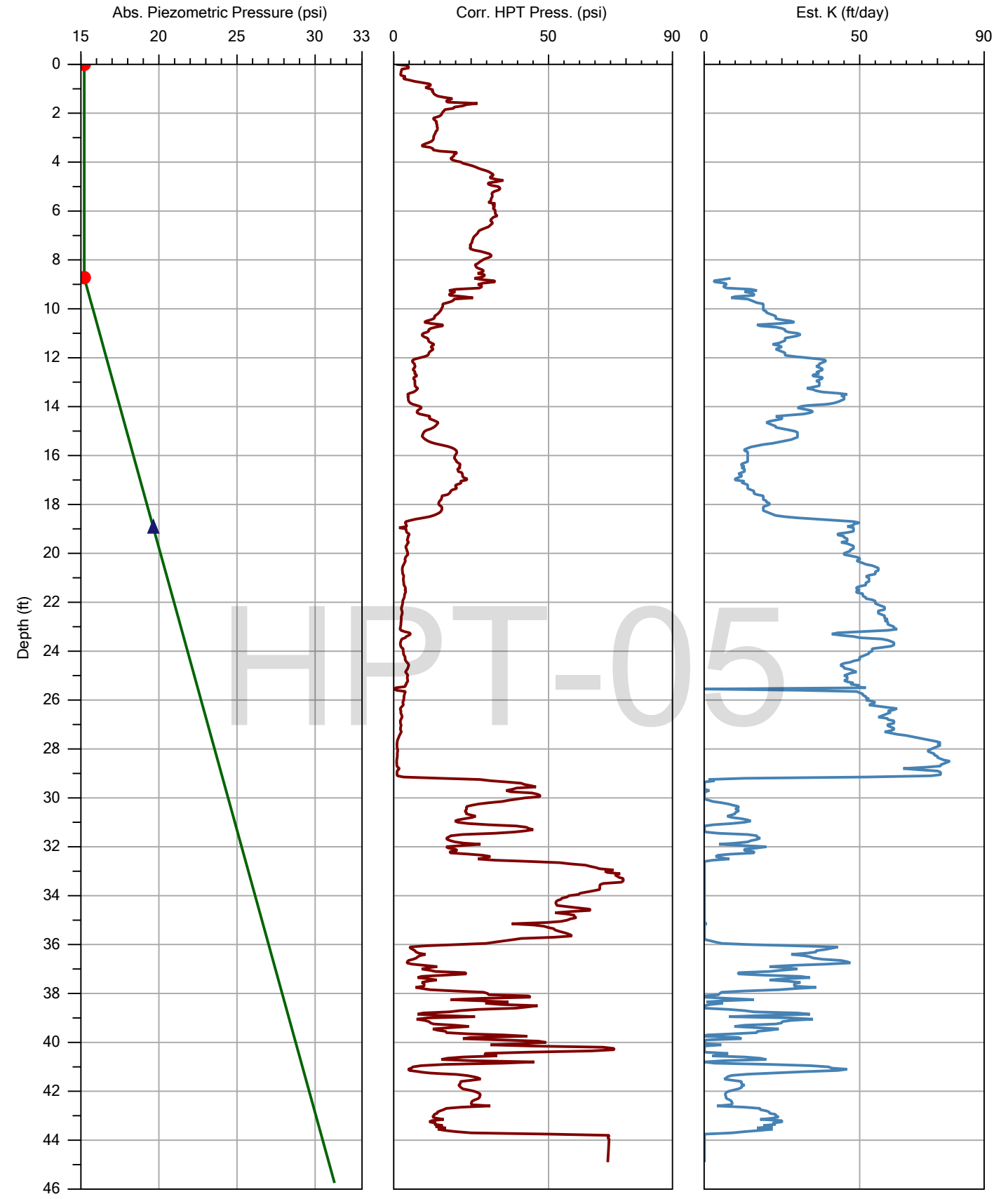


HPT DISSIPATION (SINGLE CASE)

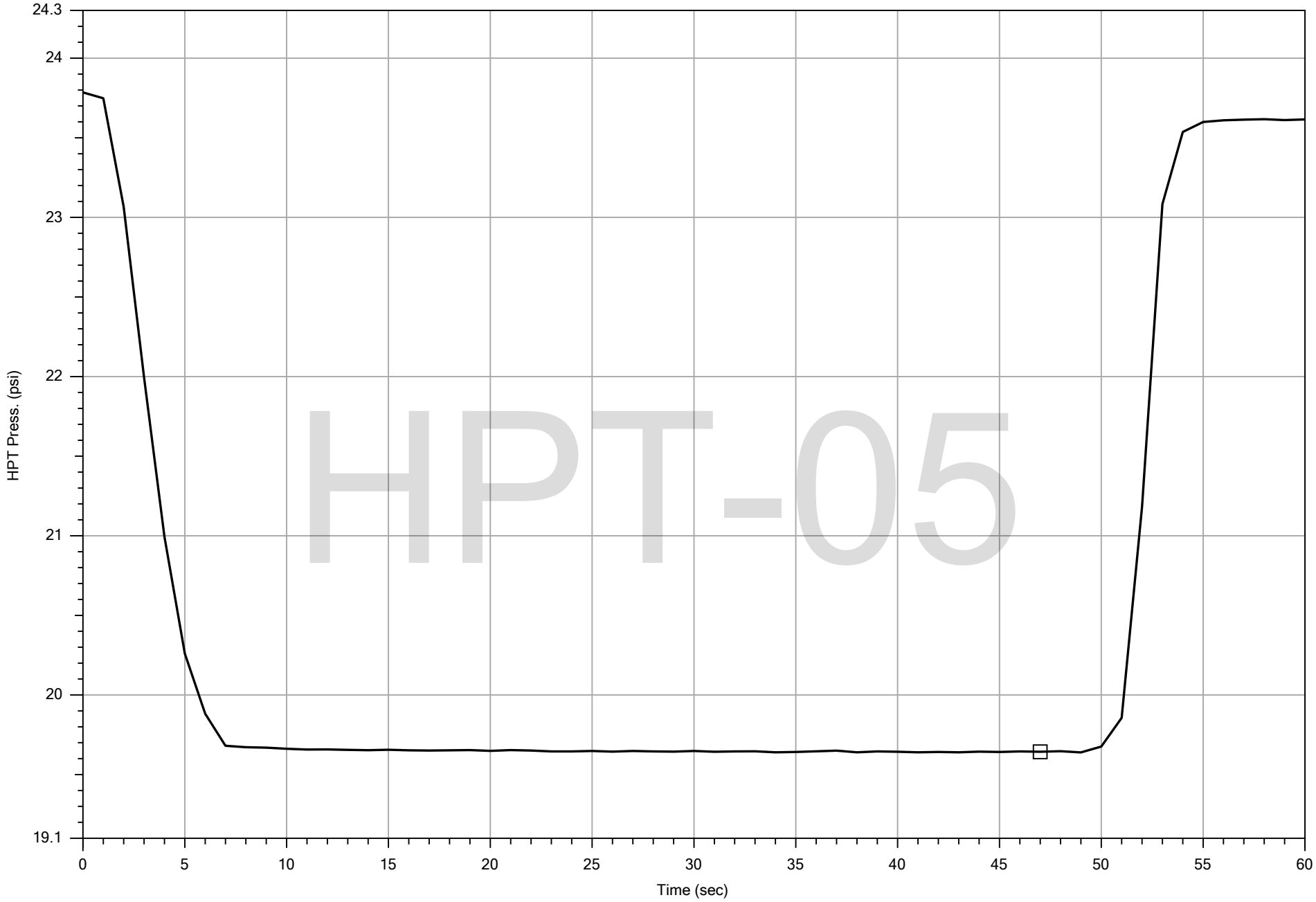
Company: Zebra	Operator: Mickey Ritter	File: HPT-4.TIM	Date: 10/27/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 16.85 ft	Test: 1



		File: HPT-5.HPT
Company: Zebra	Operator: Mickey Ritter	Date: 10/27/2015
Project ID: AVX	Client: Arcadis	Location:

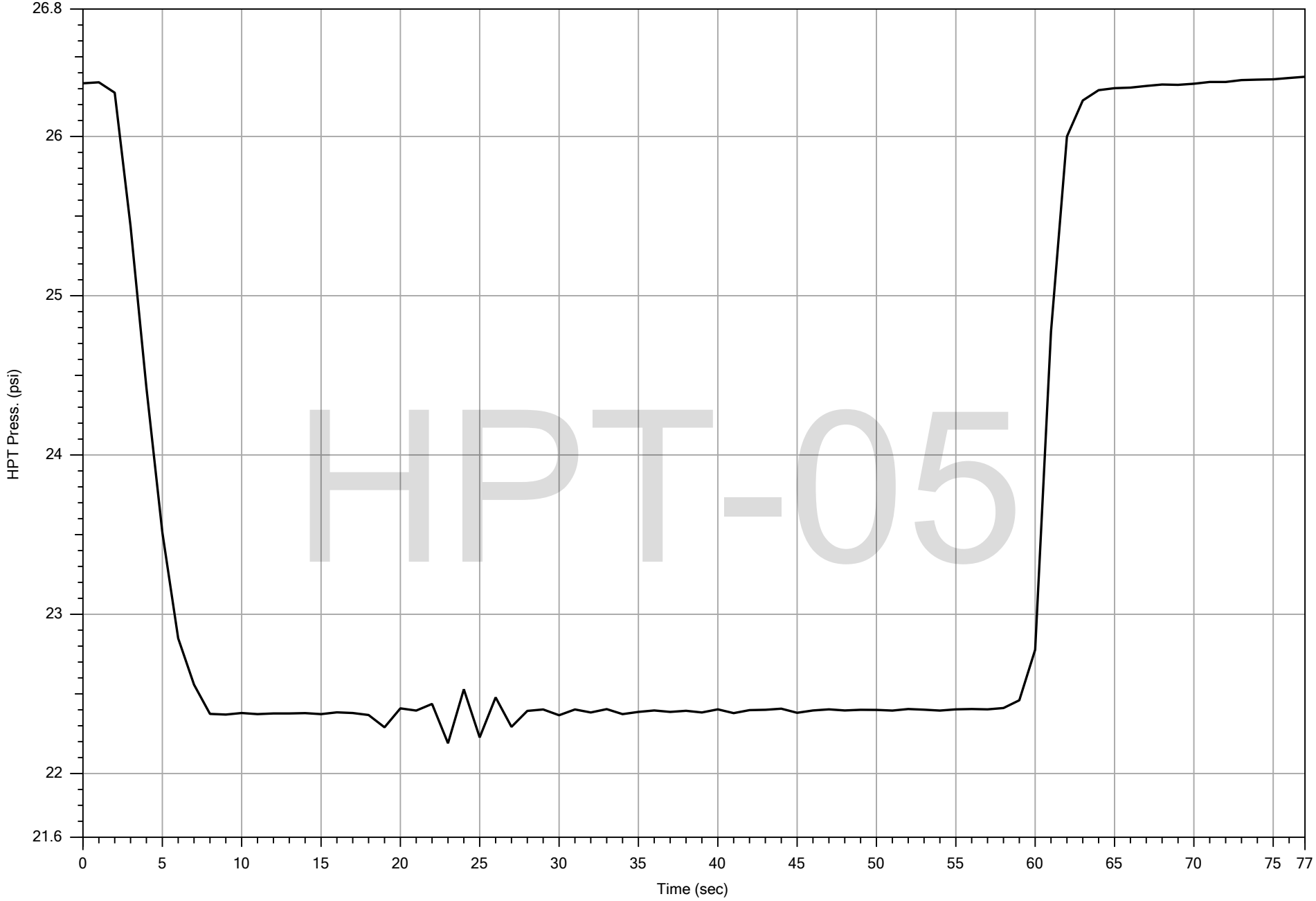


			File: HPT-5.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 10/27/2015
Project ID: AVX	Client: Arcadis		Location:



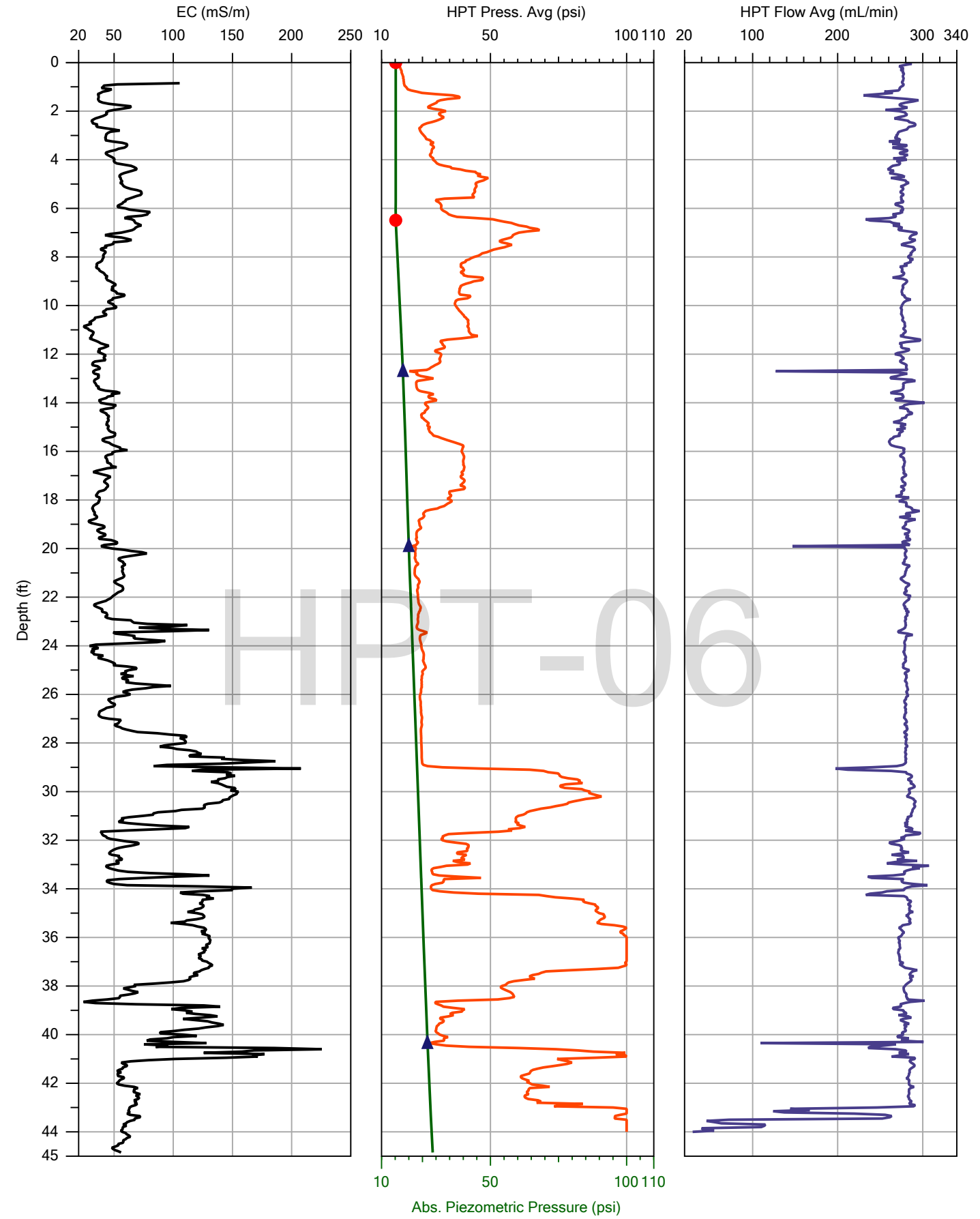
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-5.TIM	Date: 10/27/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 18.95 ft	Test: 1

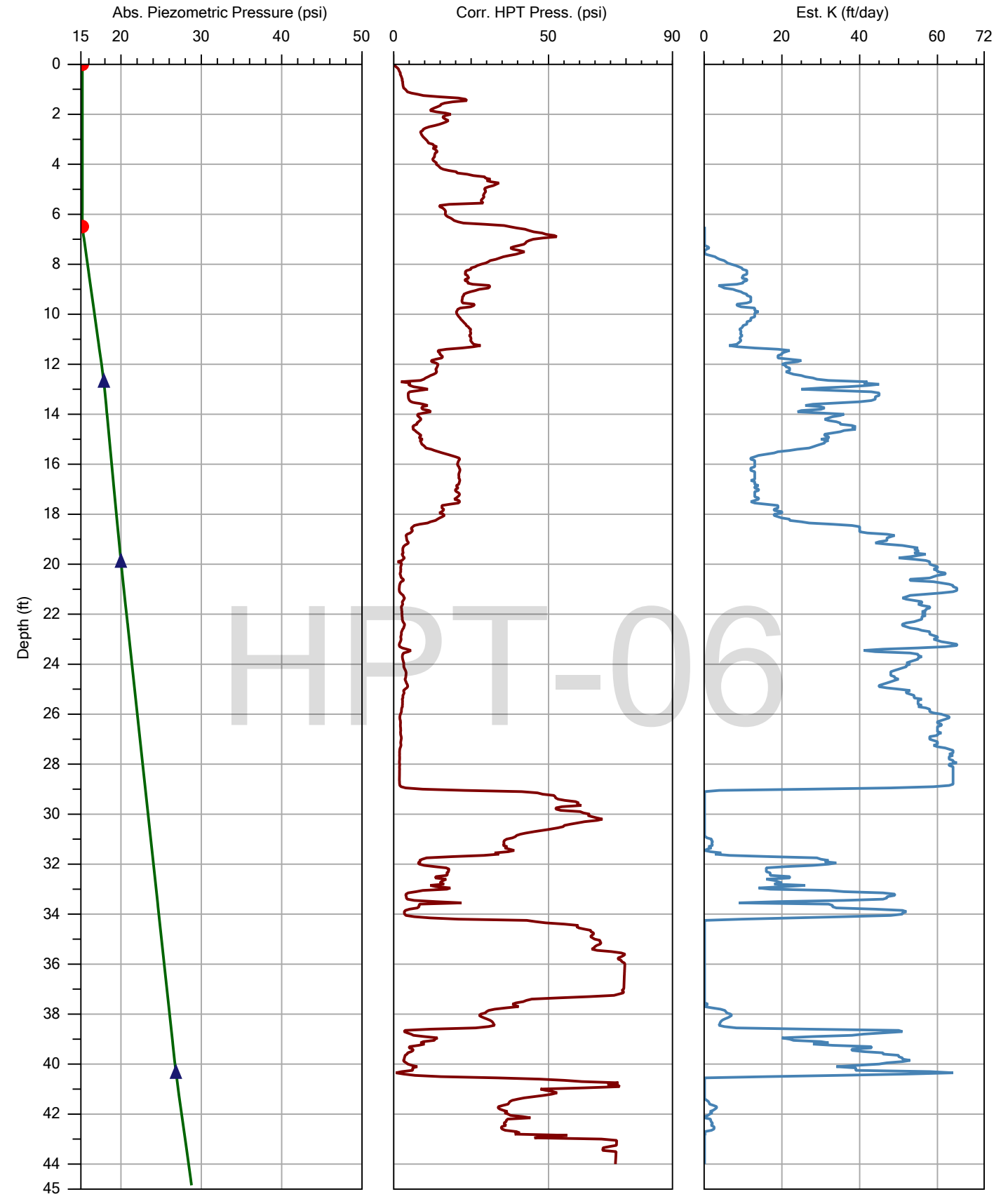


HPT DISSIPATION (SINGLE CASE)

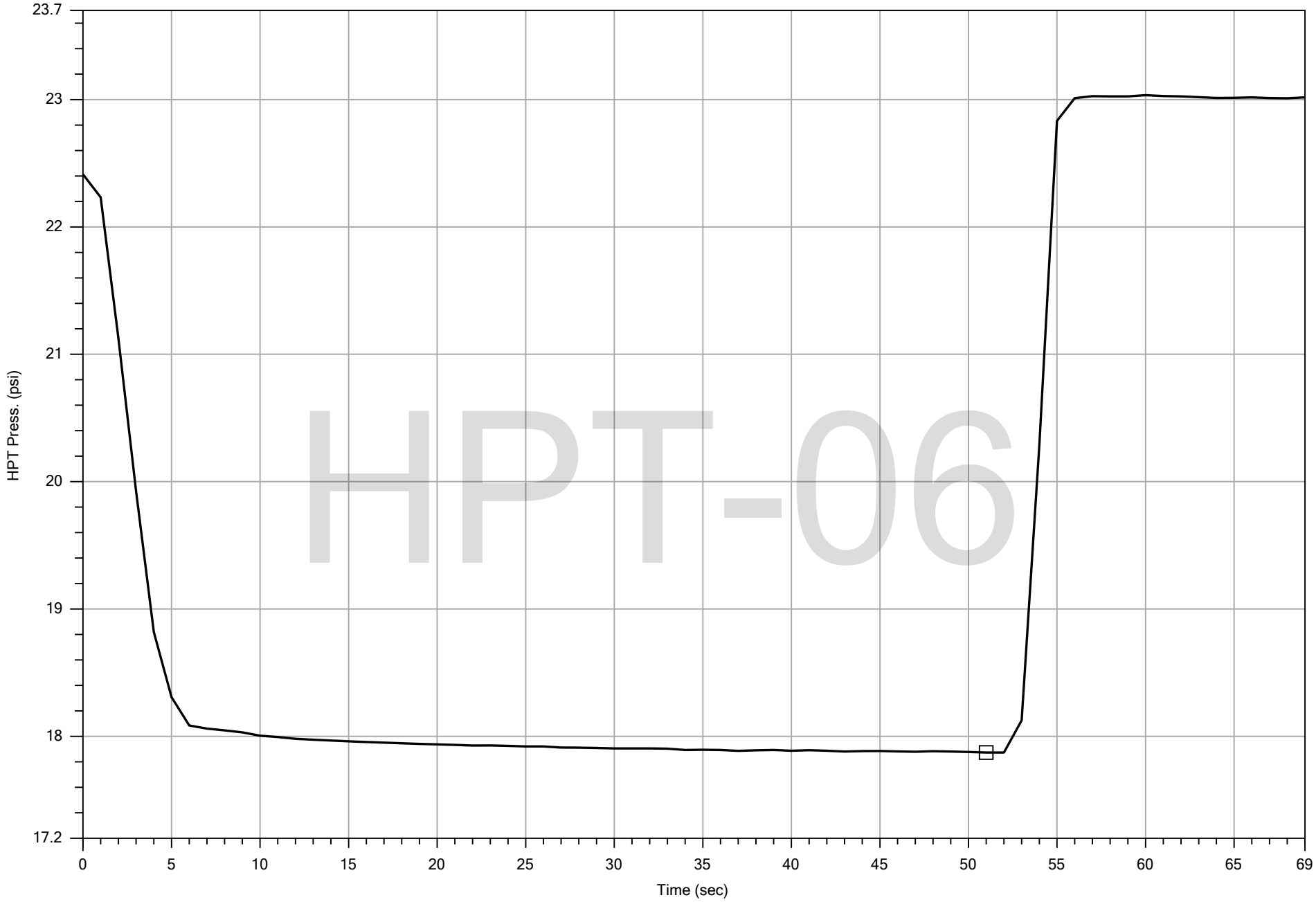
Company: Zebra	Operator: Mickey Ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 25.50 ft	Test: 1
		File: HPT-5.TIM	Date: 10/27/2015



		File: HPT-6.HPT
Company: Zebra	Operator: Mickey Ritter	Date: 10/27/2015
Project ID: AVX	Client: Arcadis	Location:

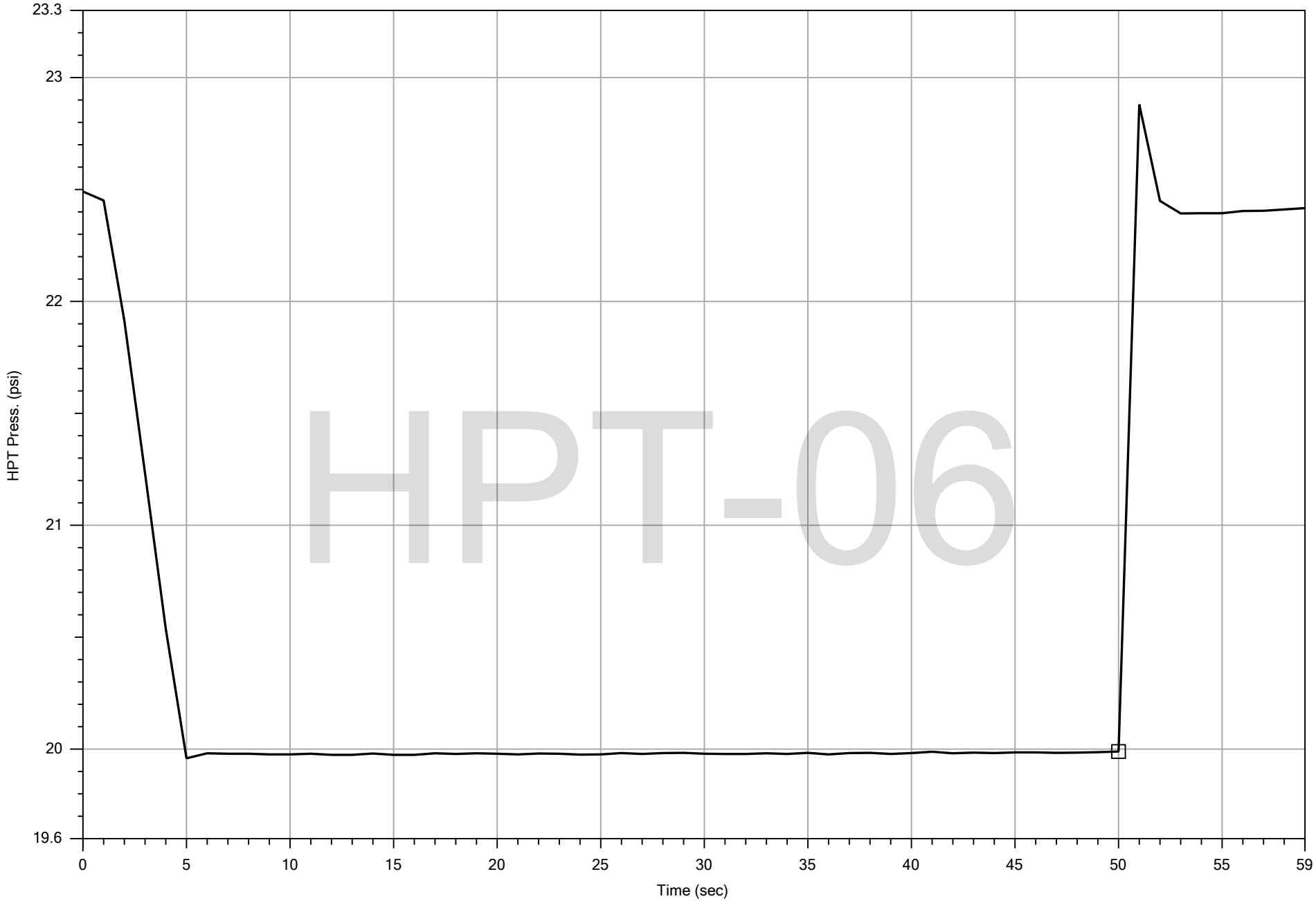


			File: HPT-6.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 10/27/2015
Project ID: AVX	Client: Arcadis		Location:



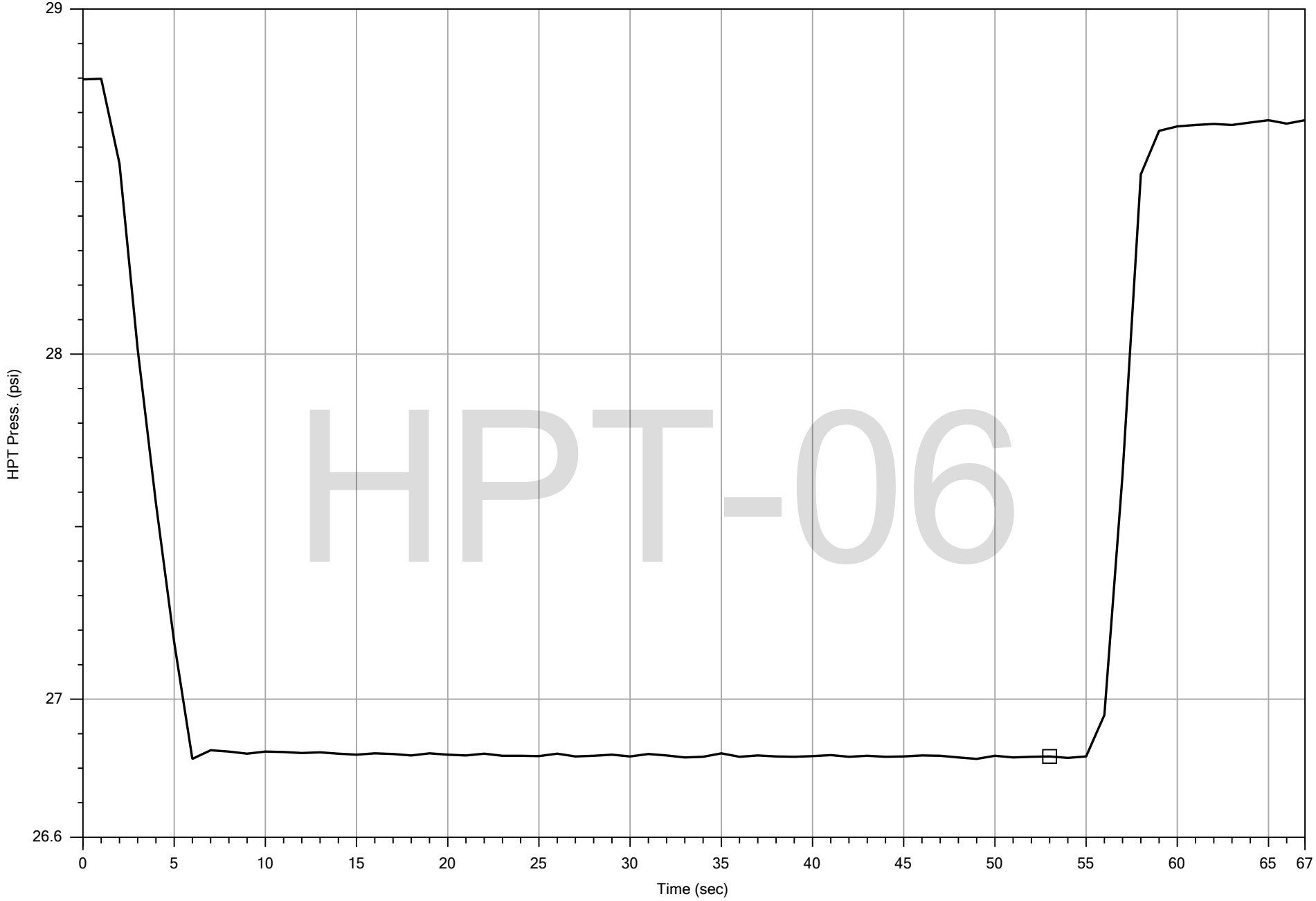
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-6.TIM	Date: 10/27/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 12.70 ft	Test: 1



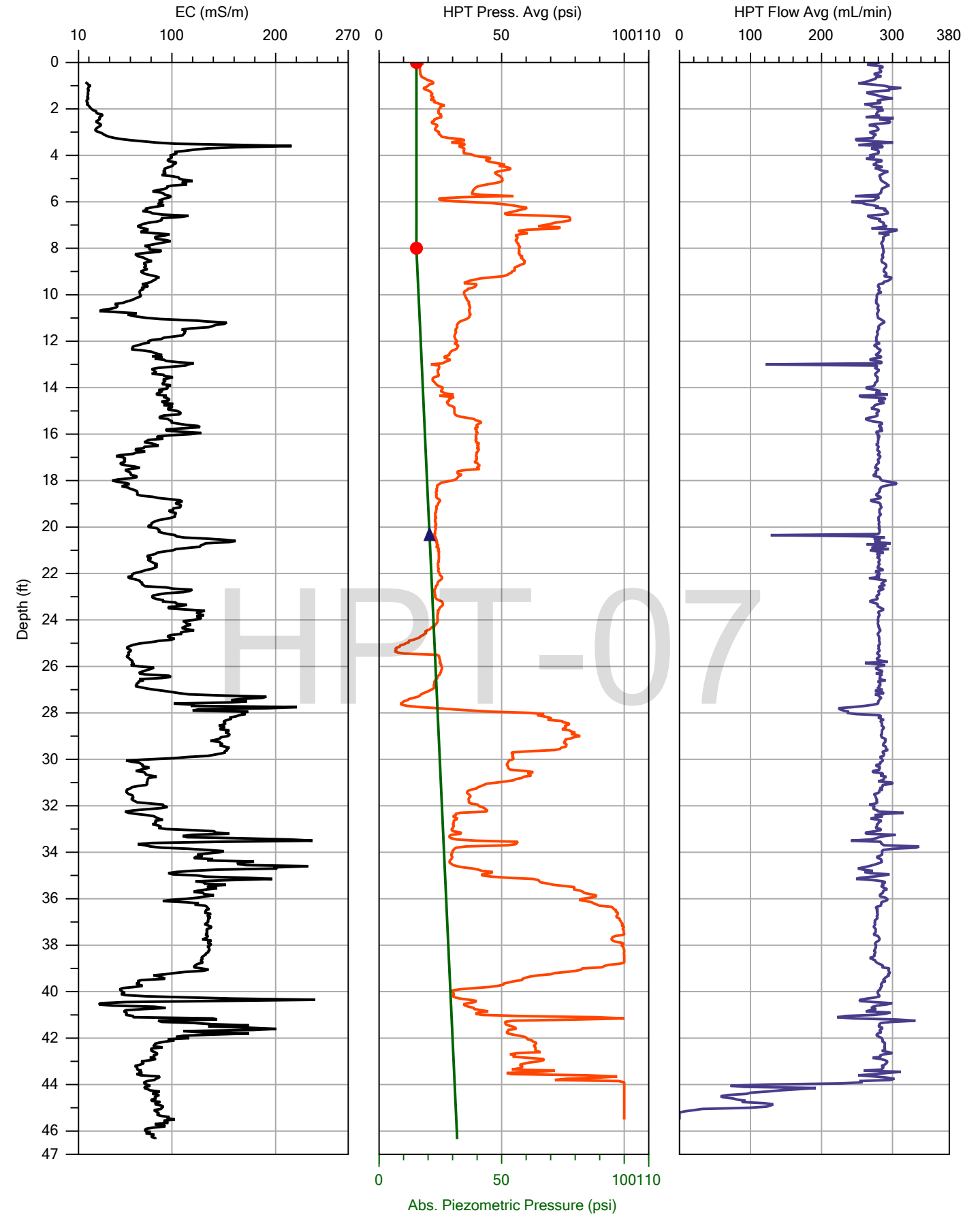
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-6.TIM	Date: 10/27/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 19.90 ft	Test: 1

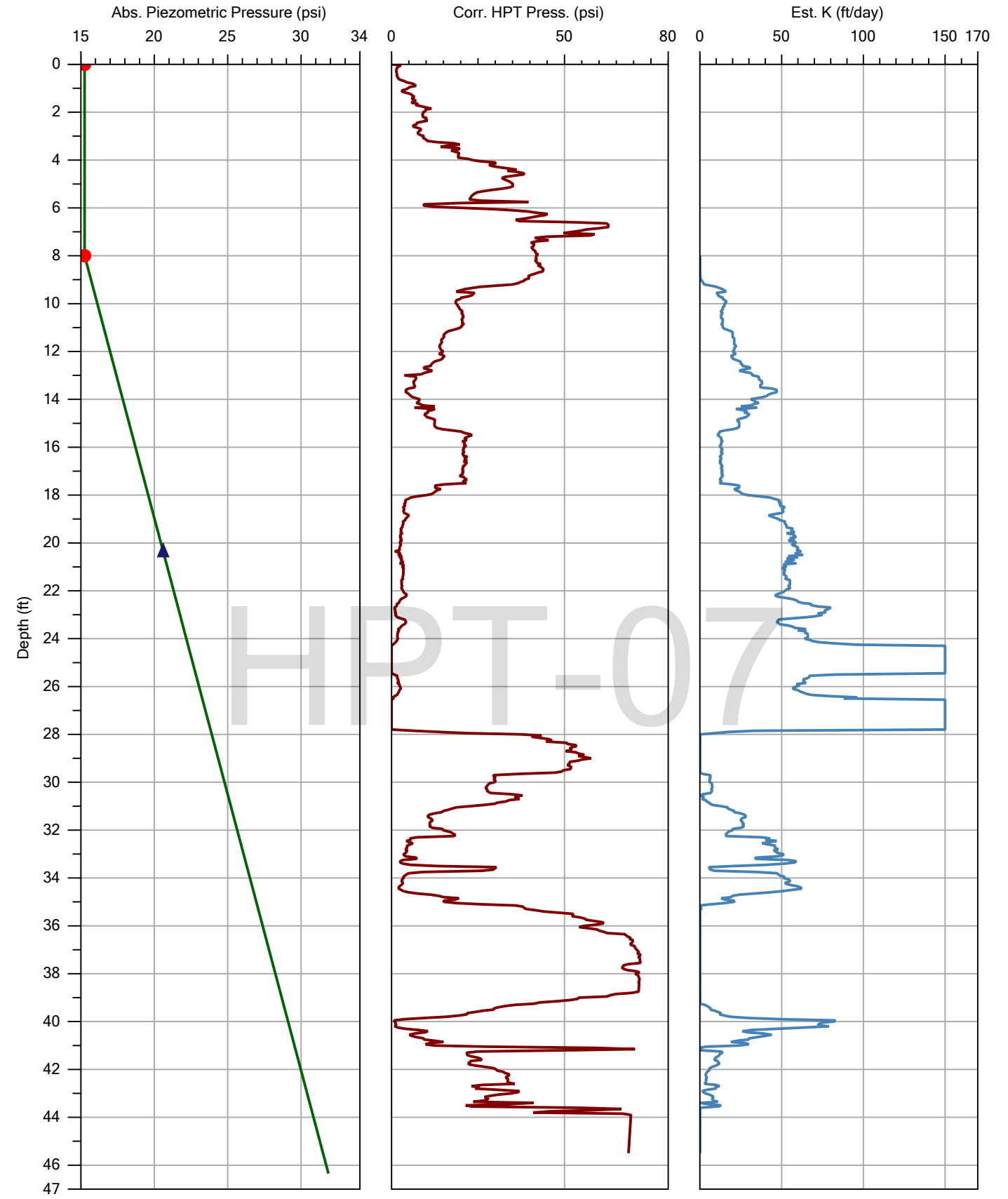


HPT DISSIPATION (SINGLE CASE)

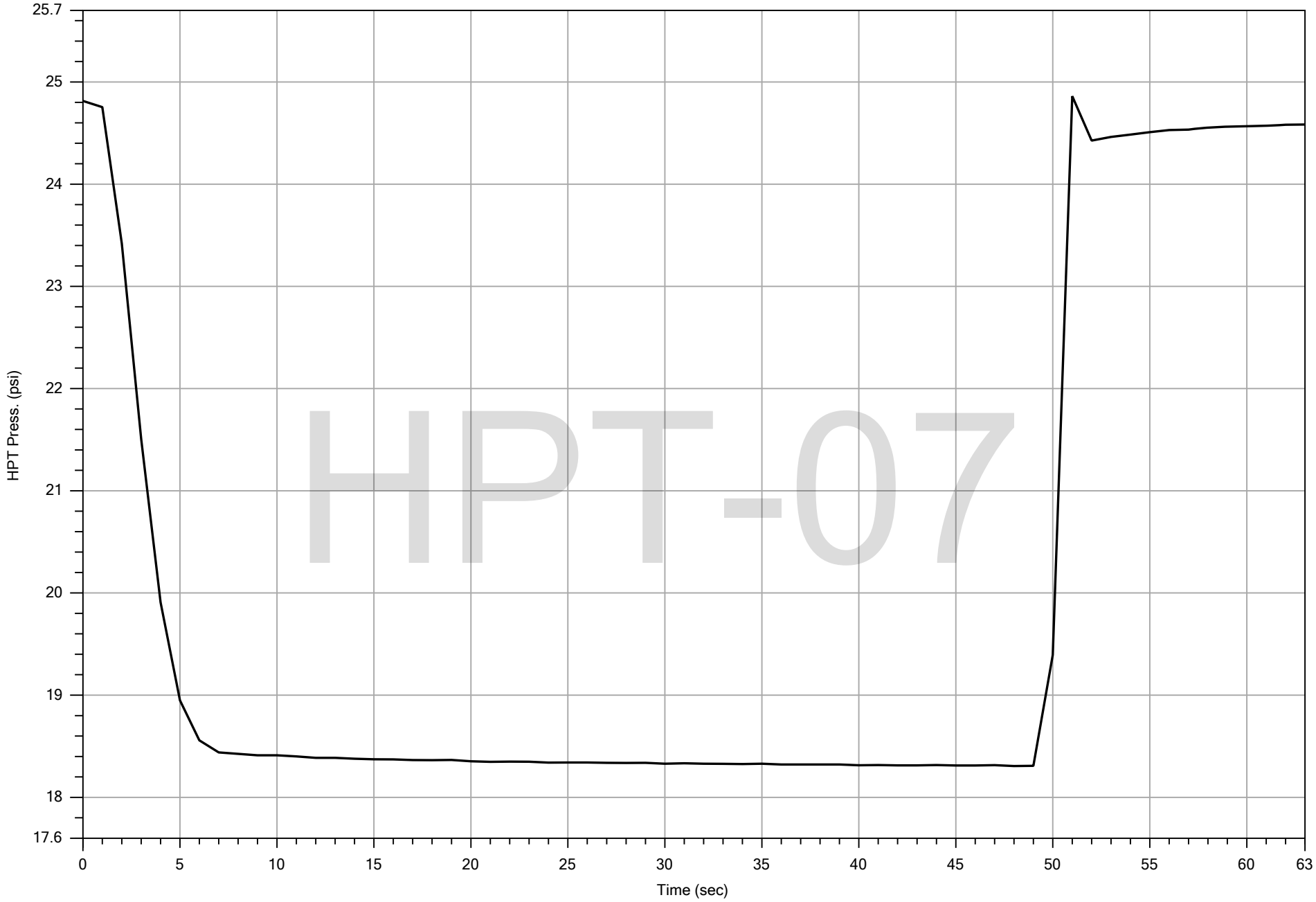
Company: Zebra	Operator: Mickey Ritter	File: HPT-6.TIM	Date: 10/27/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 40.35 ft	Test: 1



			File: HPT-7.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 10/27/2015
Project ID: AVX	Client: Arcadis		Location:

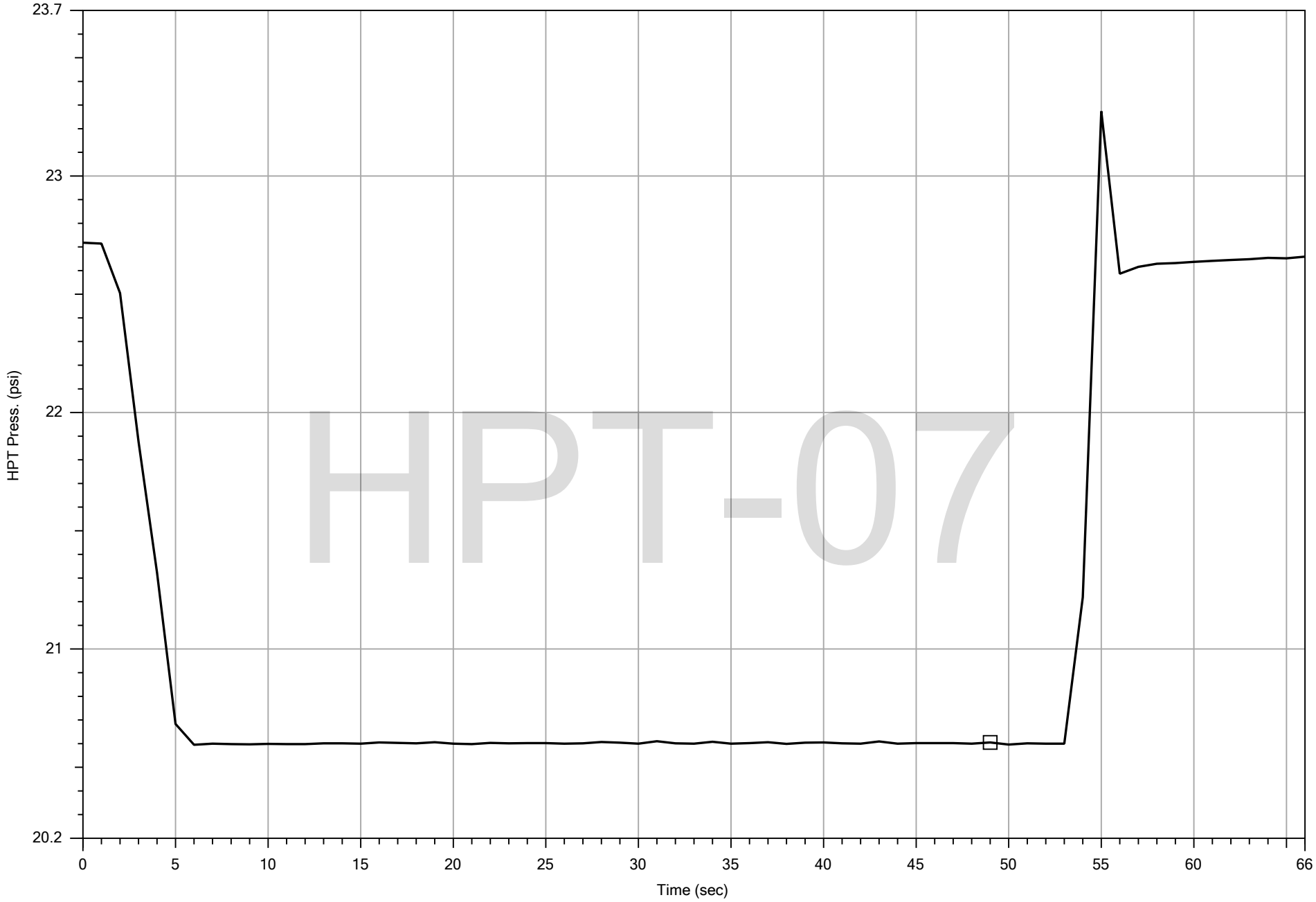


			File: HPT-7.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 10/27/2015
Project ID: AVX	Client: Arcadis		Location:



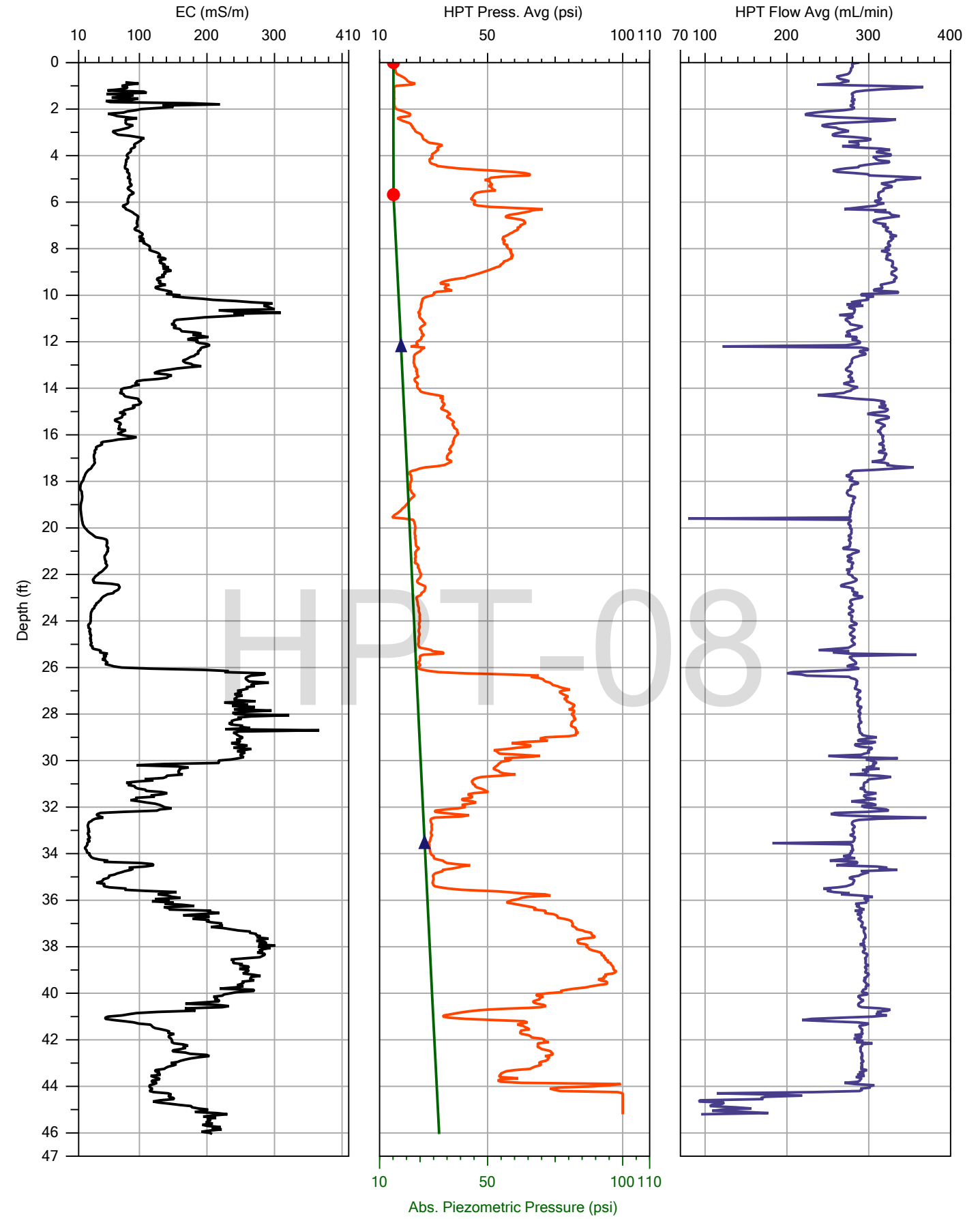
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-7.TIM	Date: 10/27/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 13.00 ft	Test: 1

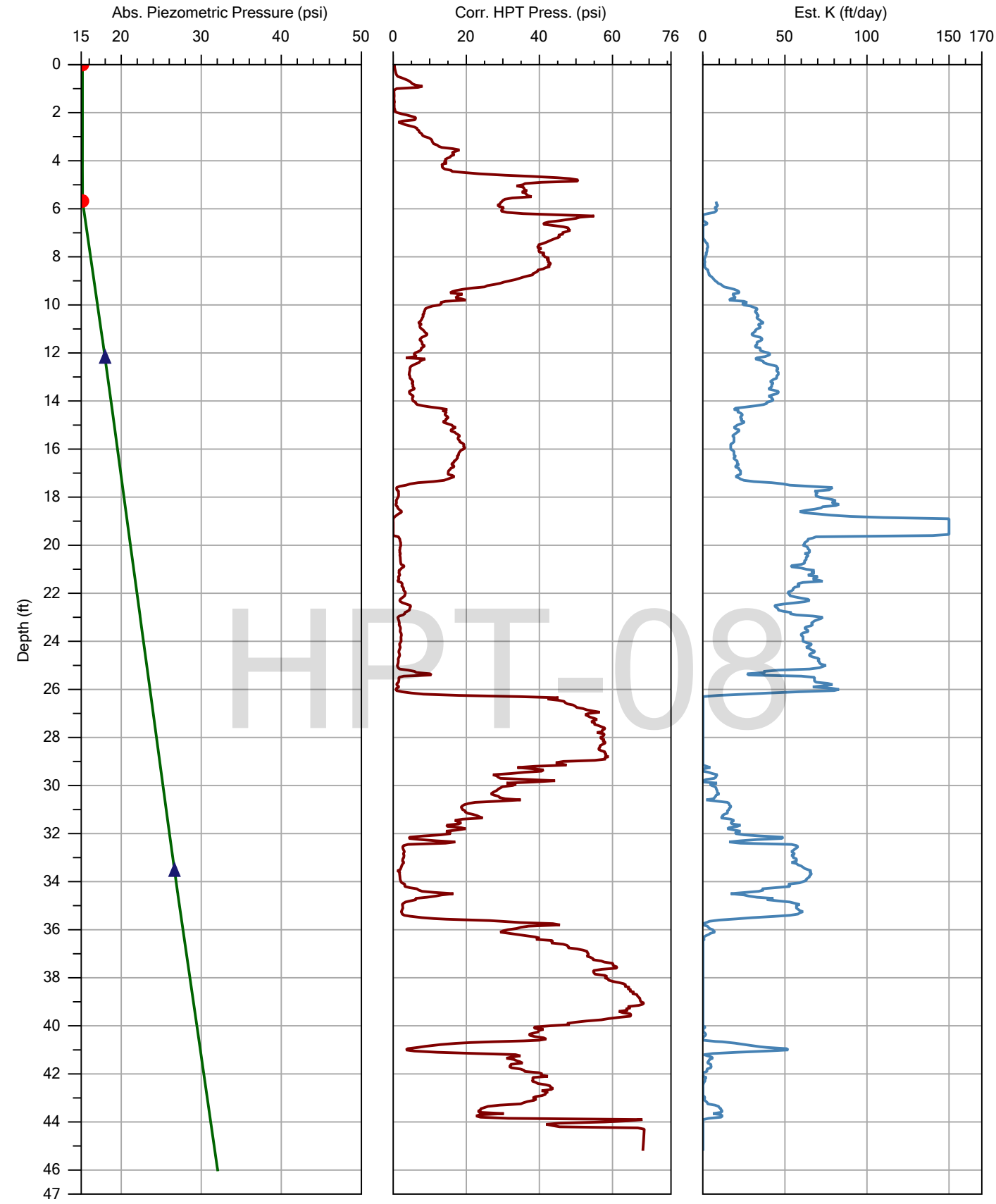


HPT DISSIPATION (SINGLE CASE)

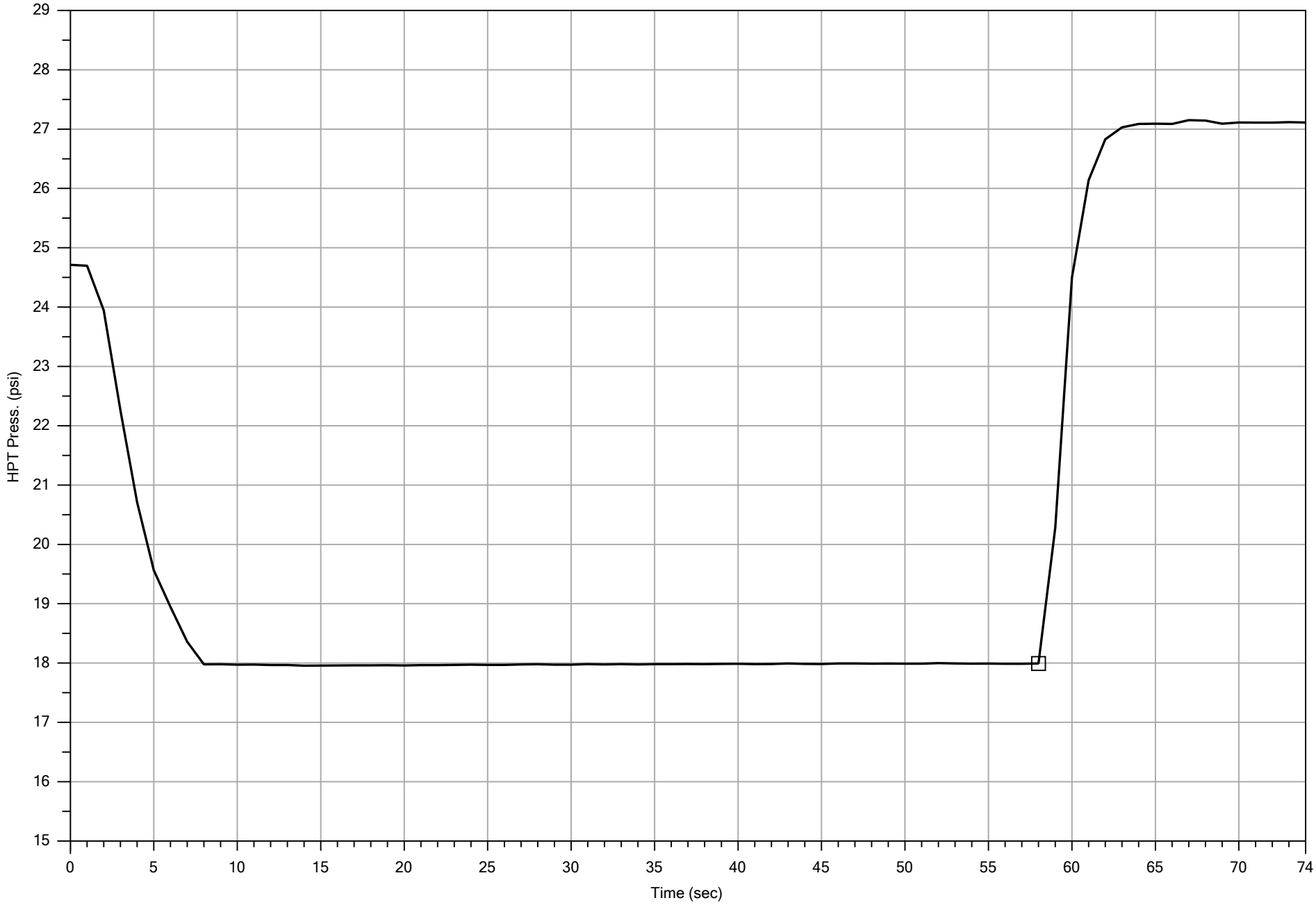
Company: Zebra	Operator: Mickey Ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 20.35 ft	Test: 1
File: HPT-7.TIM			Date: 10/27/2015



			File: HPT-8.HPT
Company: Zebra	Operator: Mickey ritter		Date: 10/28/2015
Project ID: AVX	Client: Arcadis		Location:

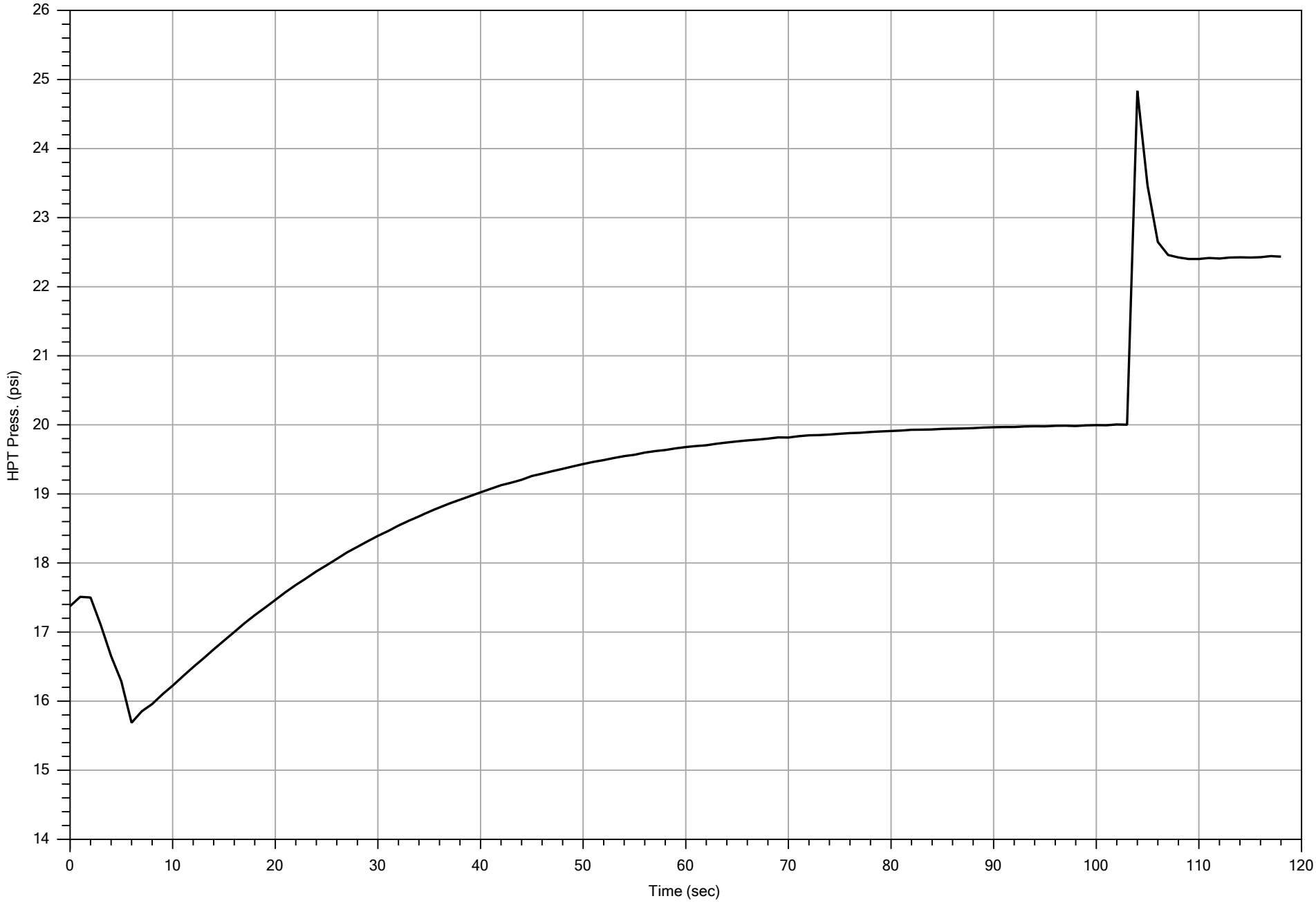


			File: HPT-8.HPT
Company: Zebra		Operator: Mickey ritter	Date: 10/28/2015
Project ID: AVX		Client: Arcadis	Location:



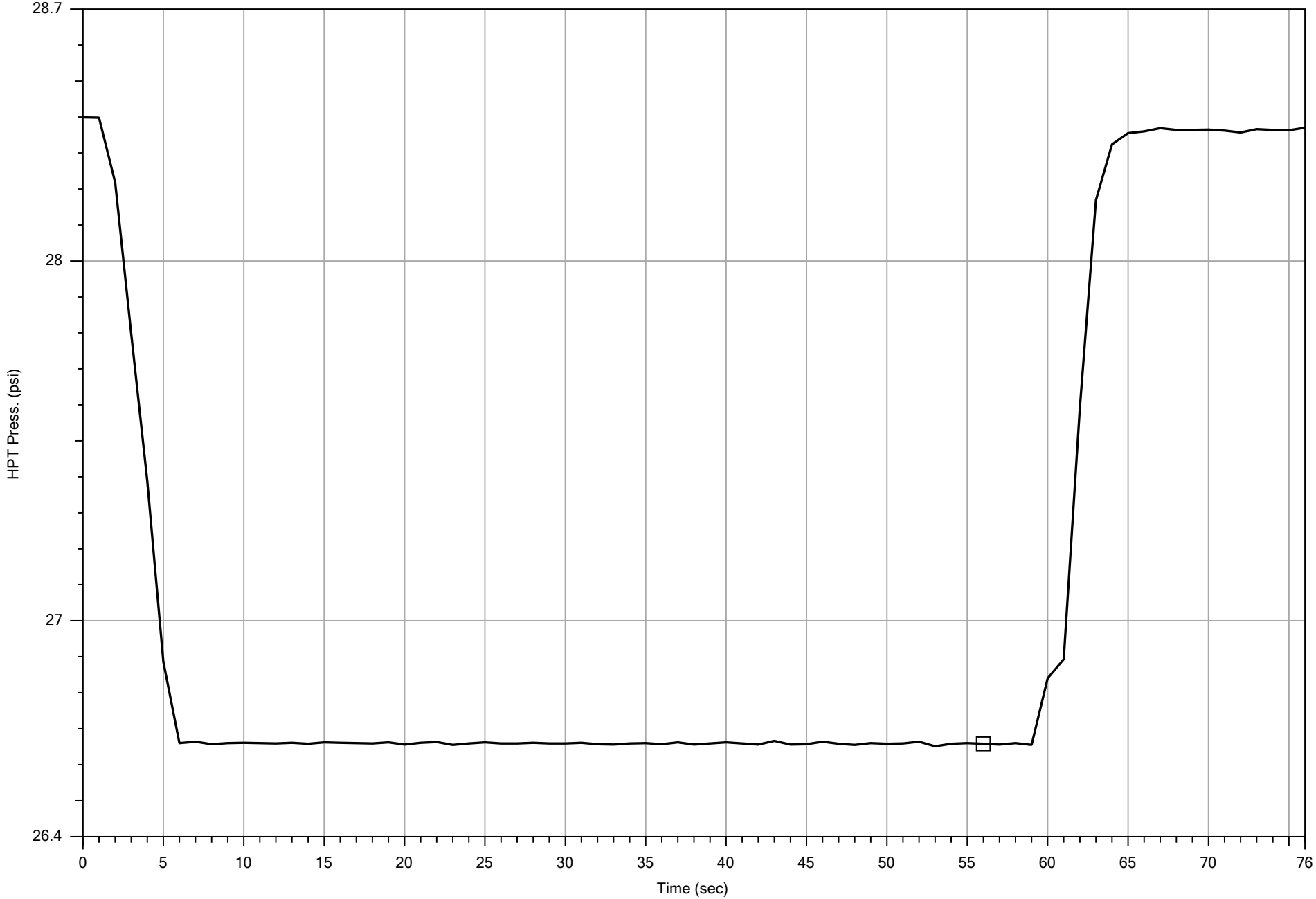
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 12.20 ft	Test: 1
File: HPT-8.TIM			Date: 10/28/2015



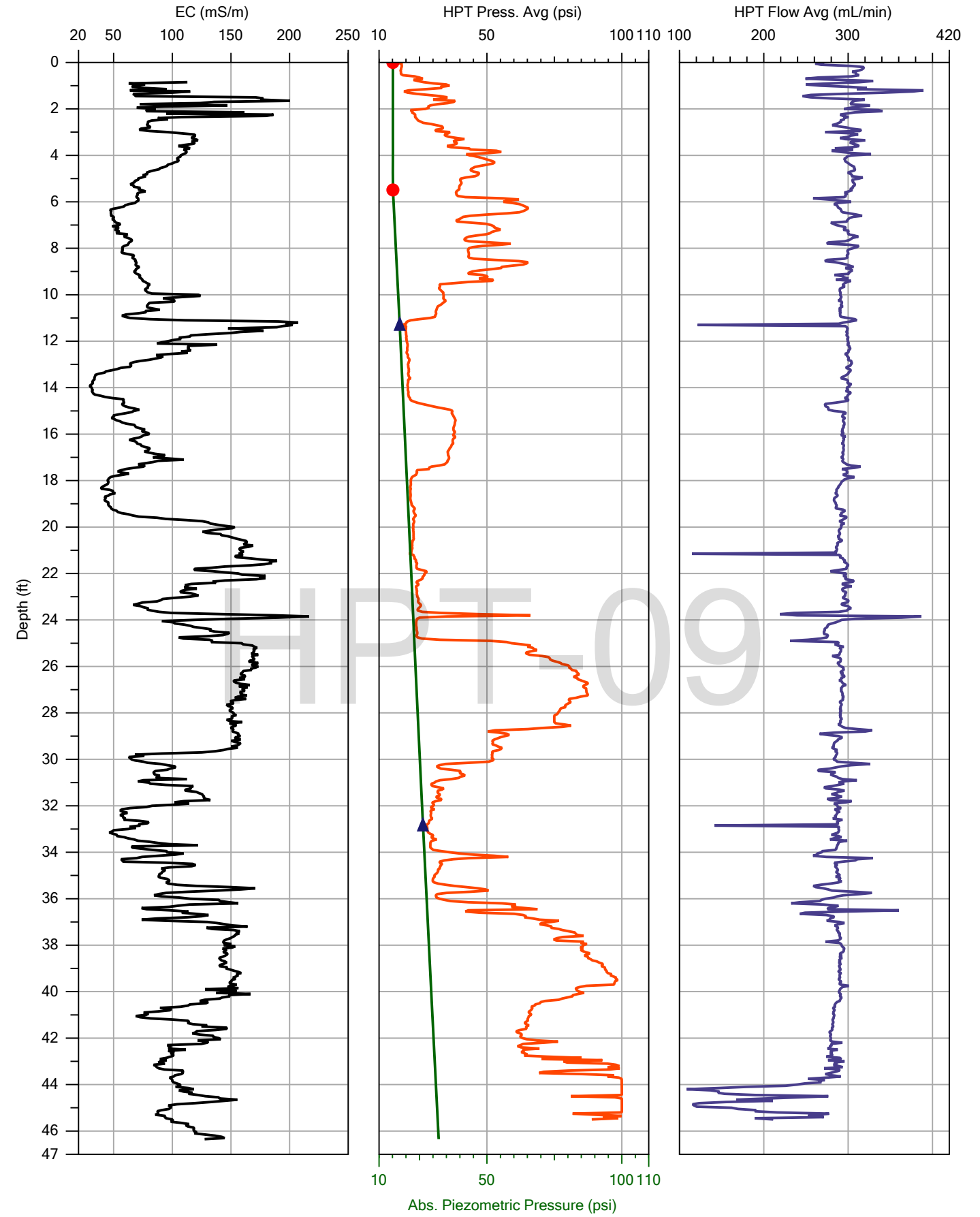
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 19.60 ft	Test: 1
File: HPT-8.TIM			Date: 10/28/2015

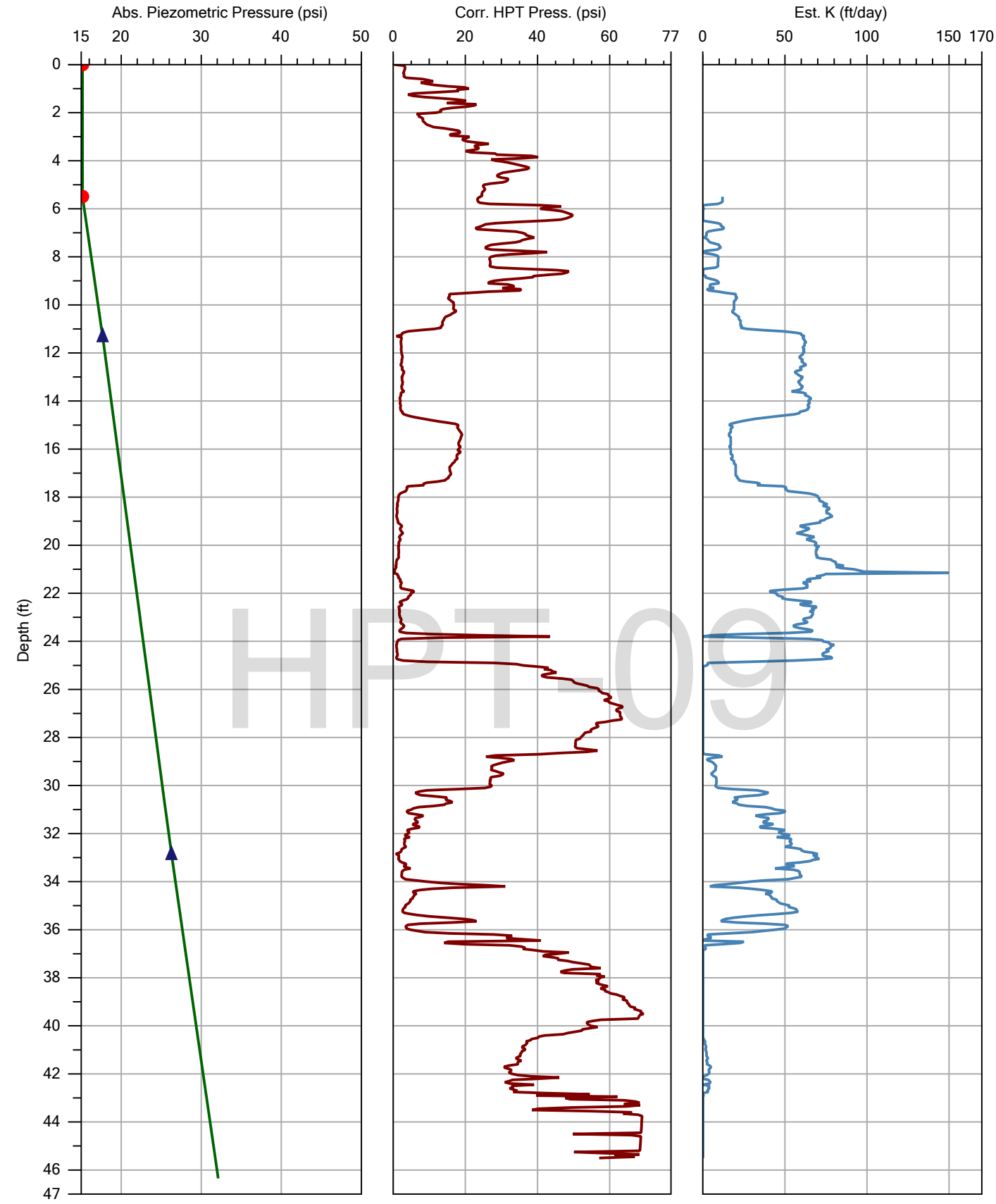


HPT DISSIPATION (SINGLE CASE)

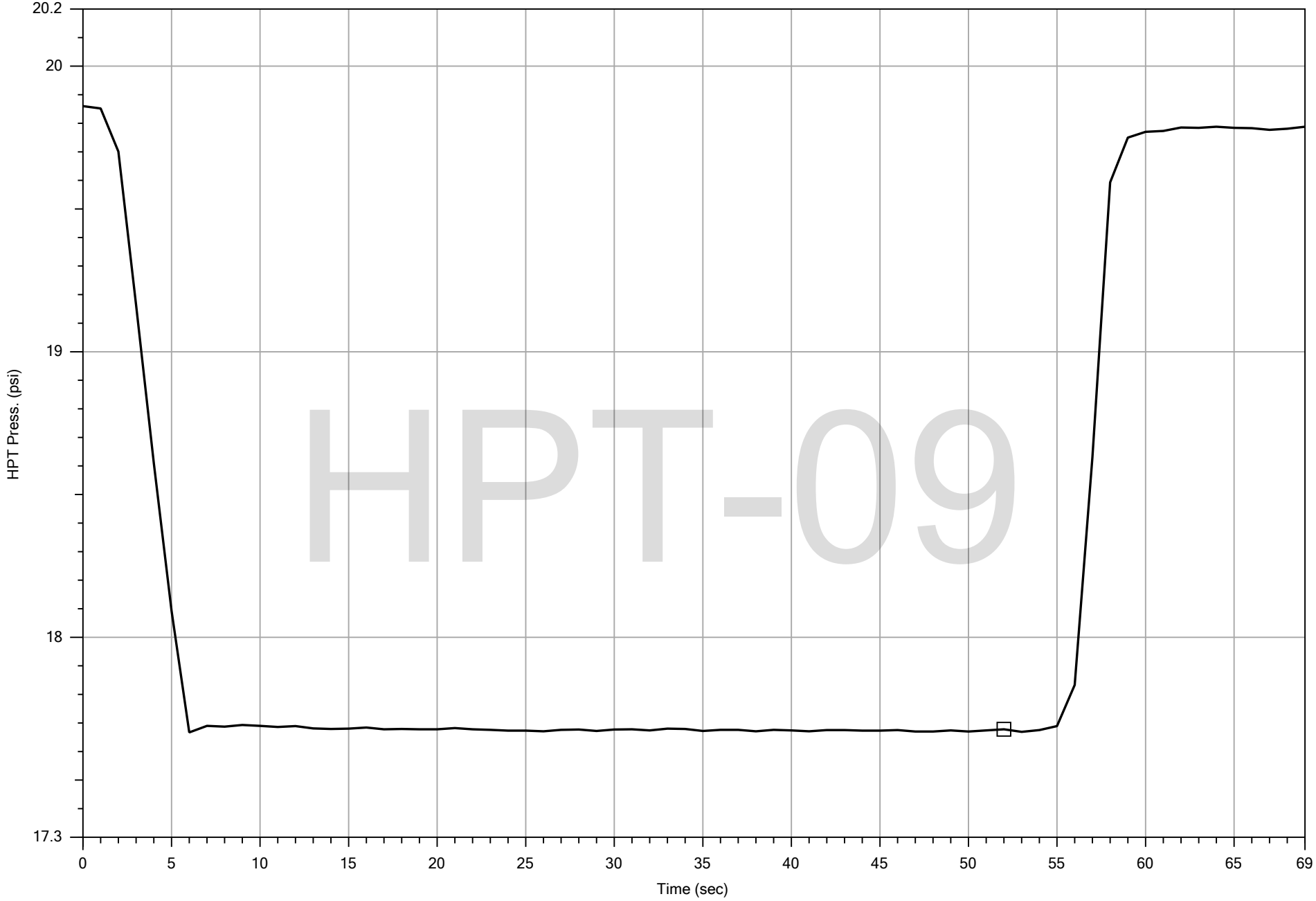
Company: Zebra	Operator: Mickey ritter	File: HPT-8.TIM	Date: 10/28/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 33.55 ft	Test: 1



		File: HPT-9.HPT
Company: Zebra	Operator: Mickey ritter	Date: 10/28/2015
Project ID: AVX	Client: Arcadis	Location:

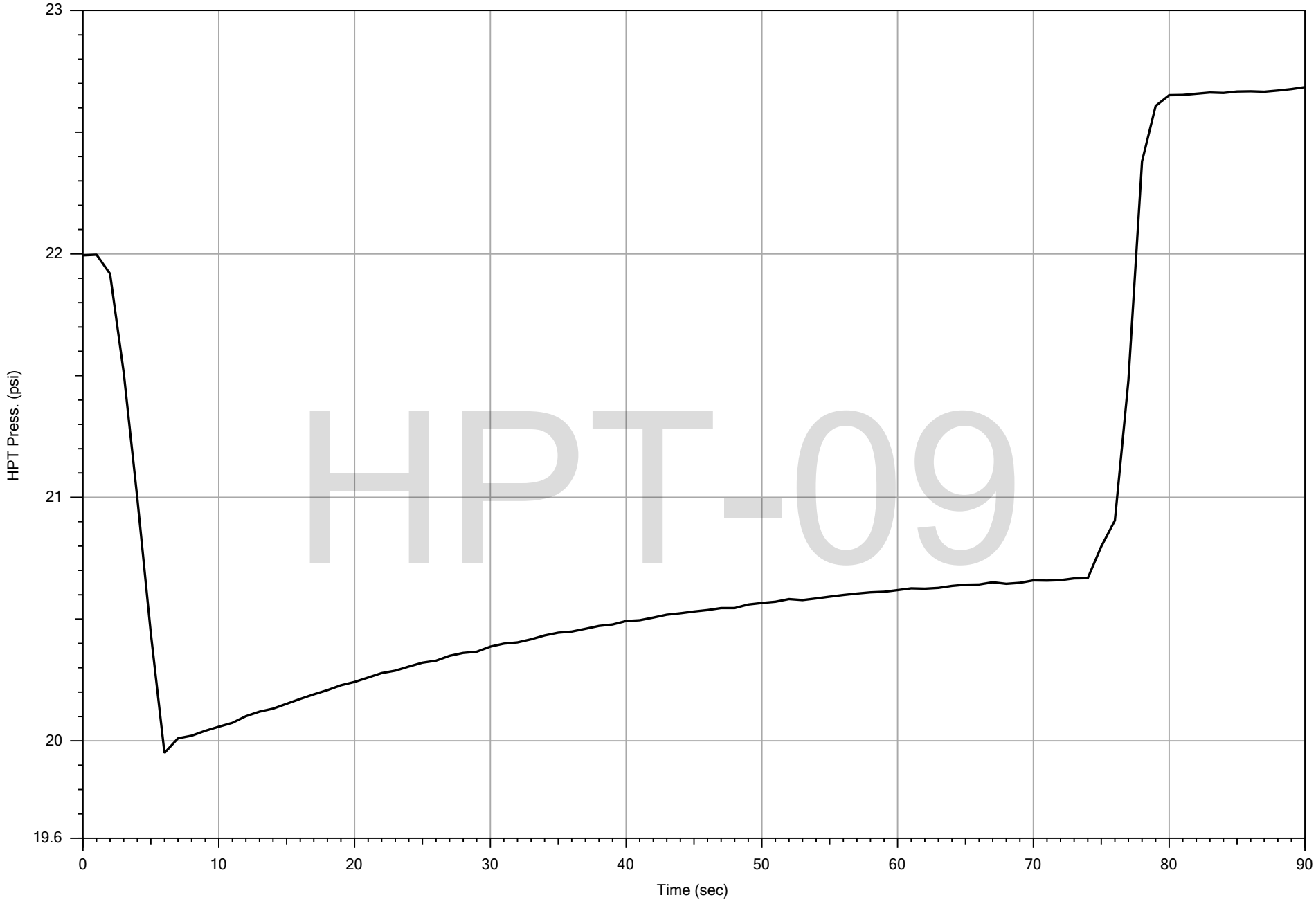


			File: HPT-9.HPT
Company: Zebra		Operator: Mickey ritter	Date: 10/28/2015
Project ID: AVX		Client: Arcadis	Location:



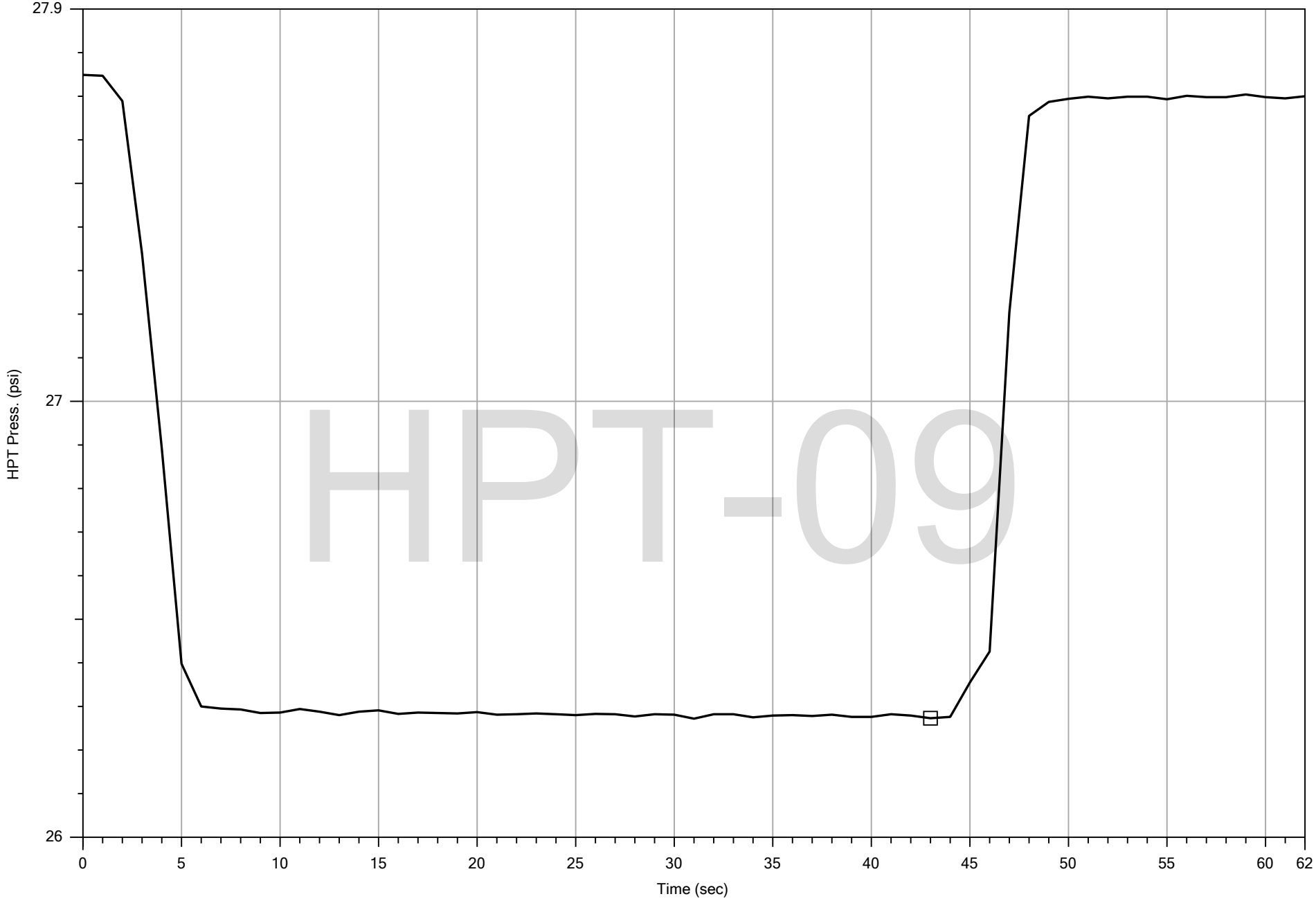
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 11.30 ft	Test: 1
File: HPT-9.TIM			Date: 10/28/2015



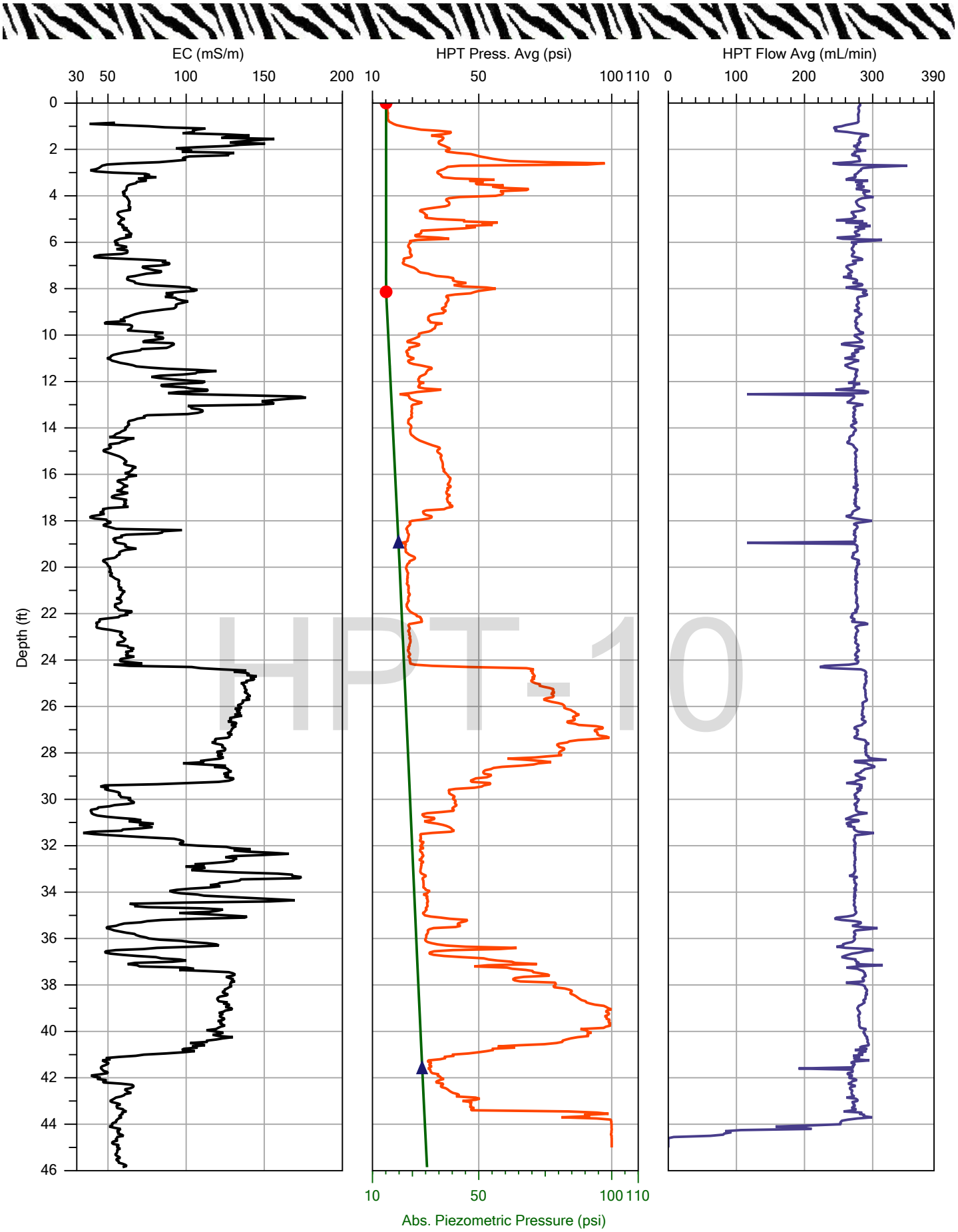
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey ritter	File: HPT-9.TIM	Date: 10/28/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 21.15 ft	Test: 1

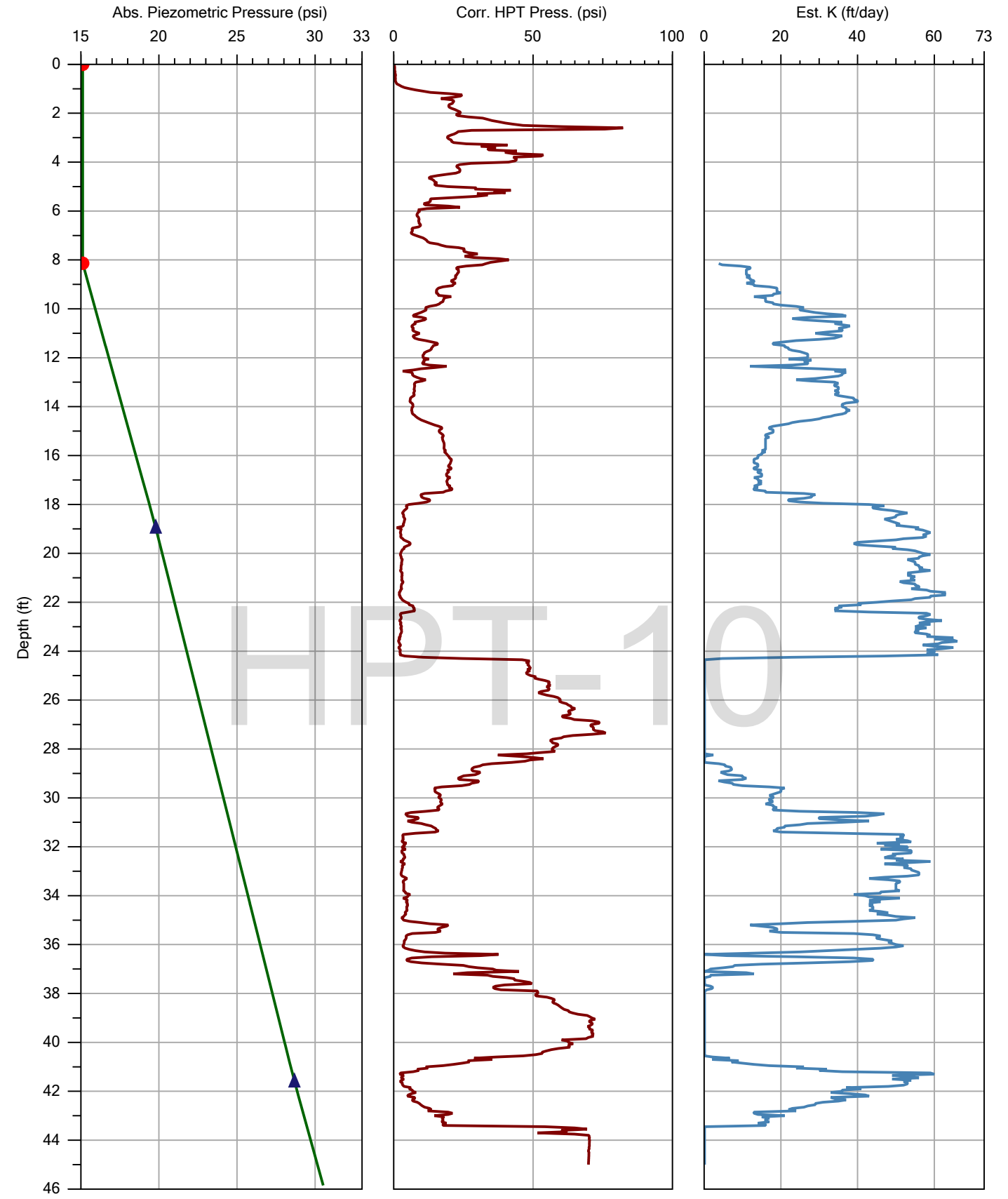


HPT DISSIPATION (SINGLE CASE)

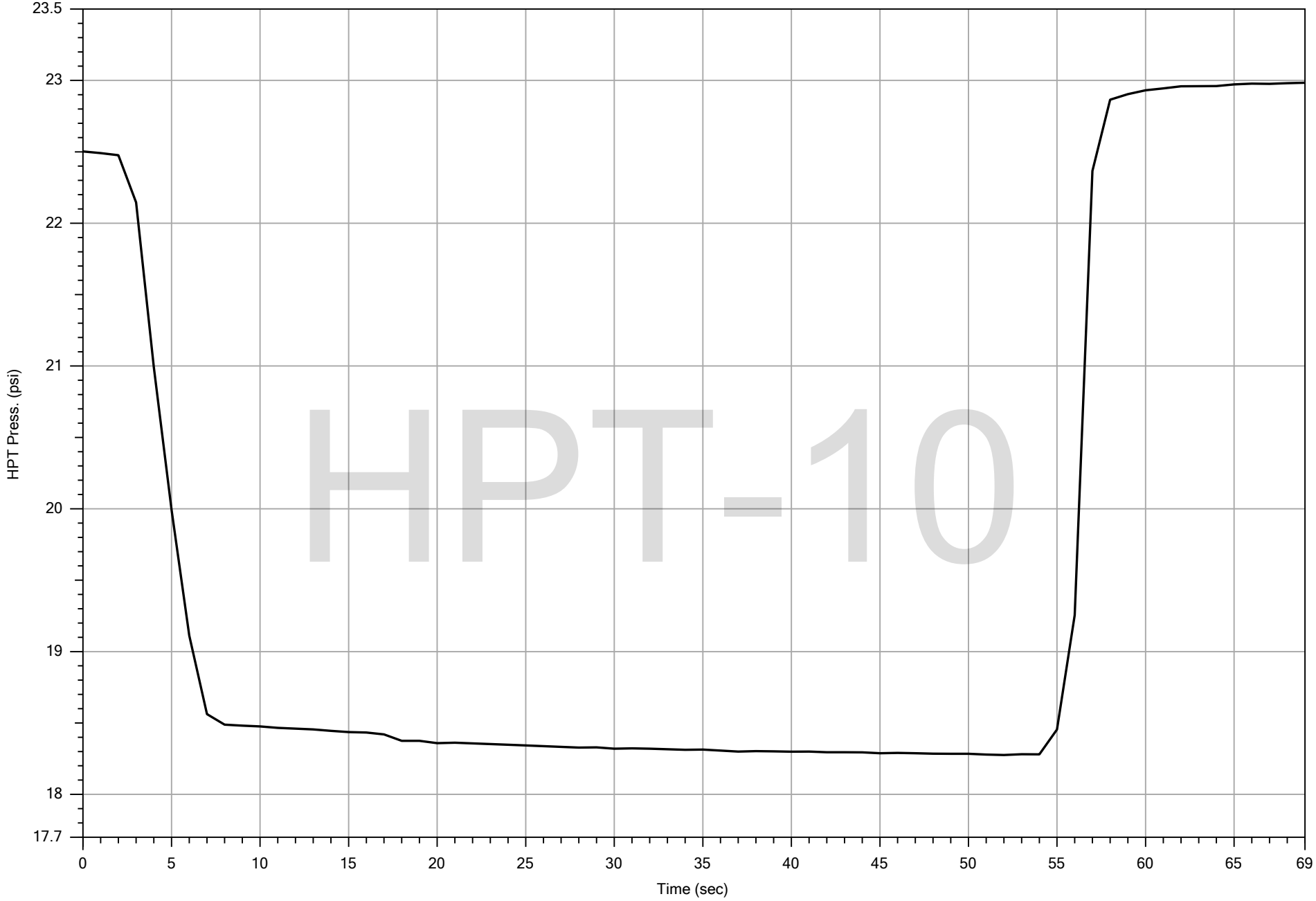
Company: Zebra	Operator: Mickey ritter	File: HPT-9.TIM	Date: 10/28/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 32.85 ft	Test: 1



		File: HPT-10.HPT
Company: Zebra	Operator: Mickey ritter	Date: 10/28/2015
Project ID: AVX	Client: Arcadis	Location:

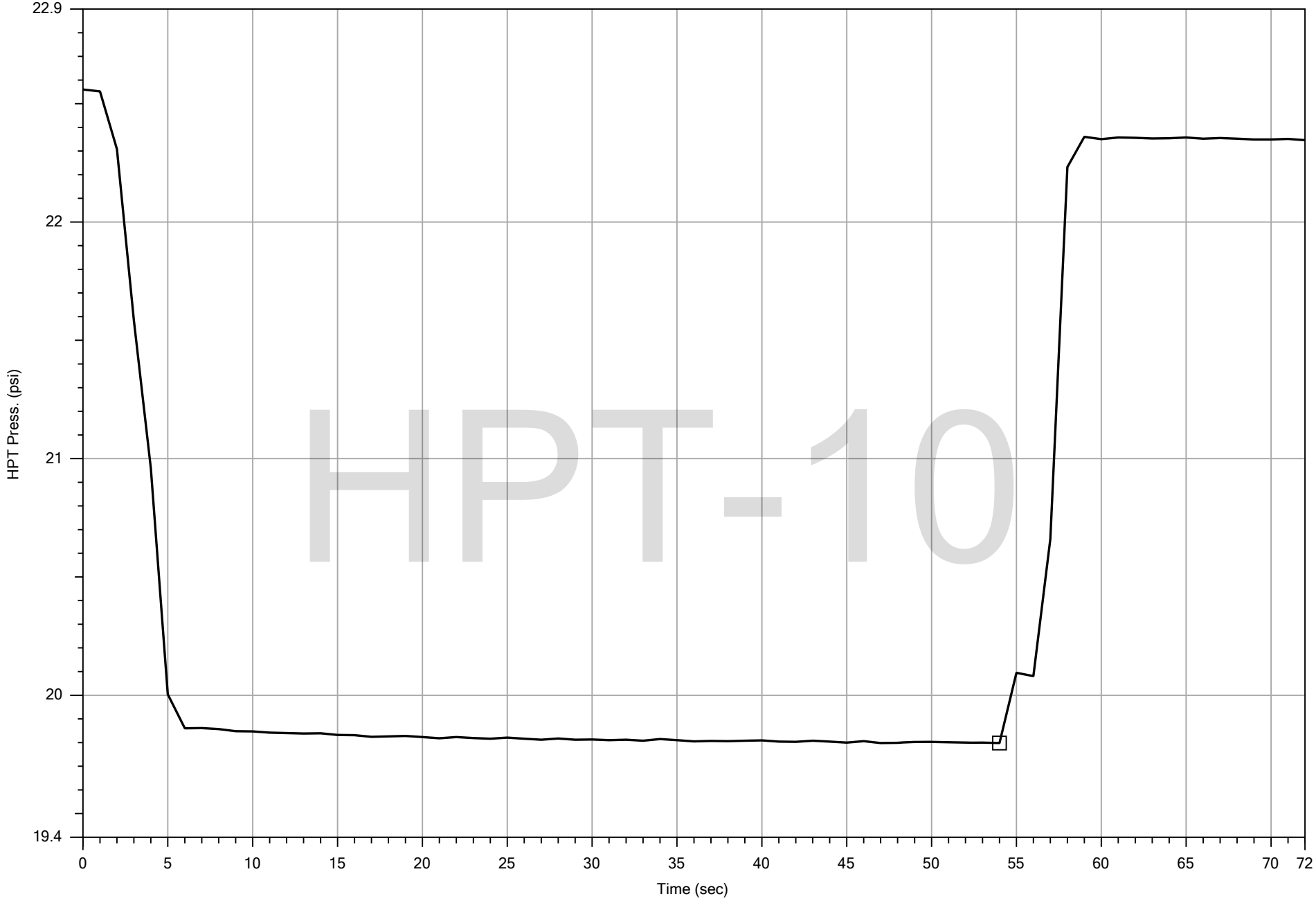


			File: HPT-10.HPT
Company: Zebra		Operator: Mickey ritter	Date: 10/28/2015
Project ID: AVX		Client: Arcadis	Location:



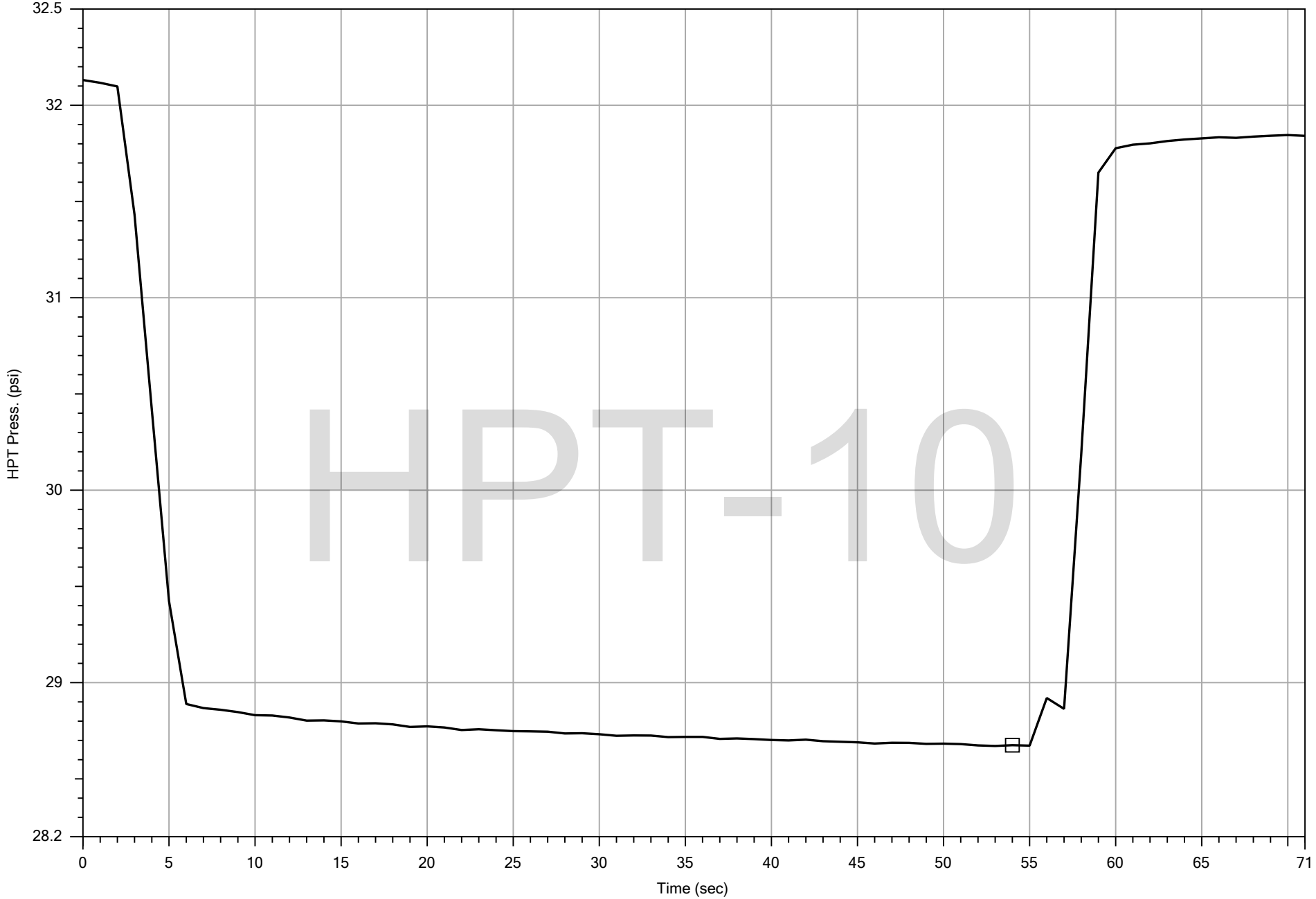
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey ritter	File: HPT-10.TIM	Date: 10/28/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 12.55 ft	Test: 1



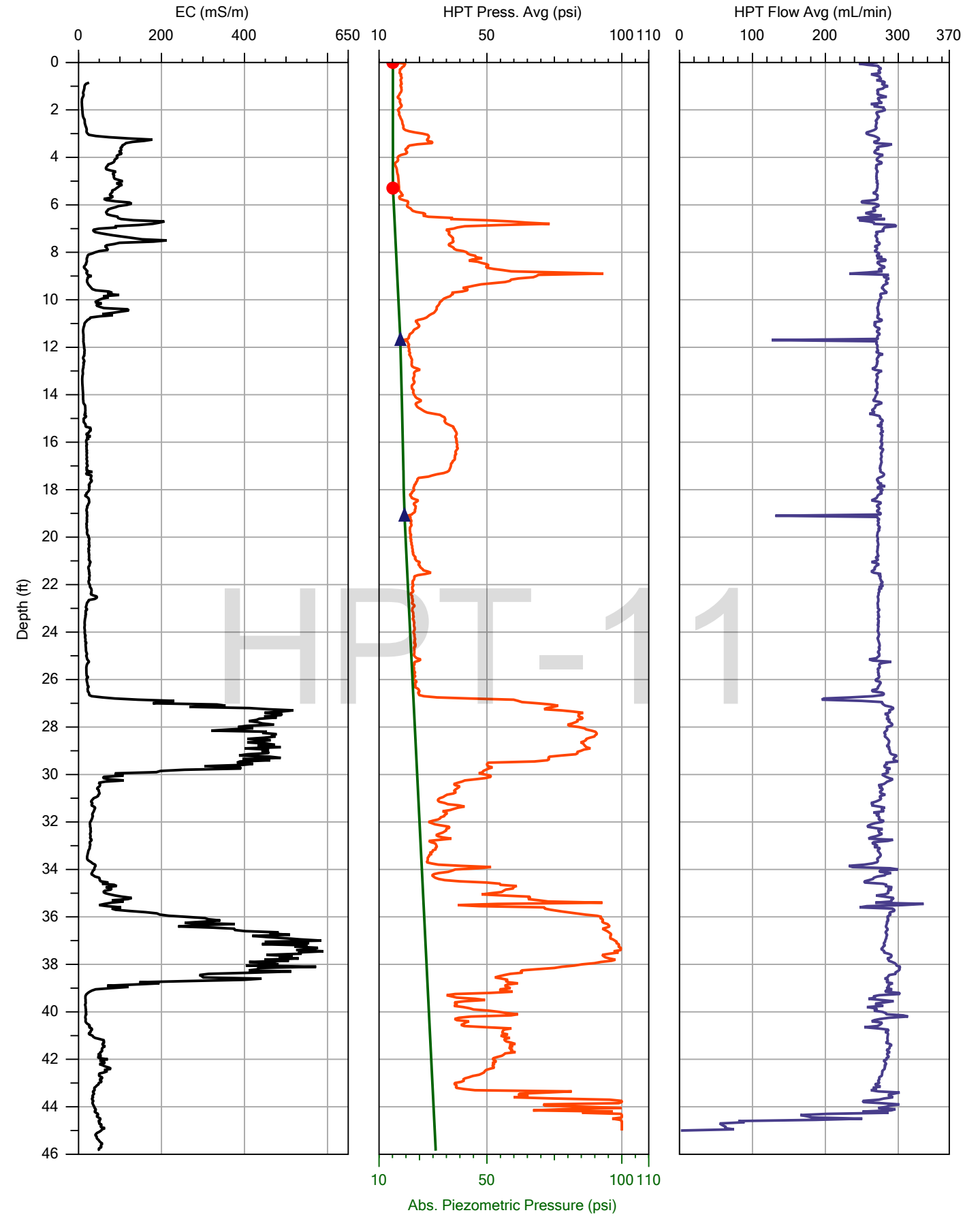
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey ritter	File: HPT-10.TIM	Date: 10/28/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 18.95 ft	Test: 1

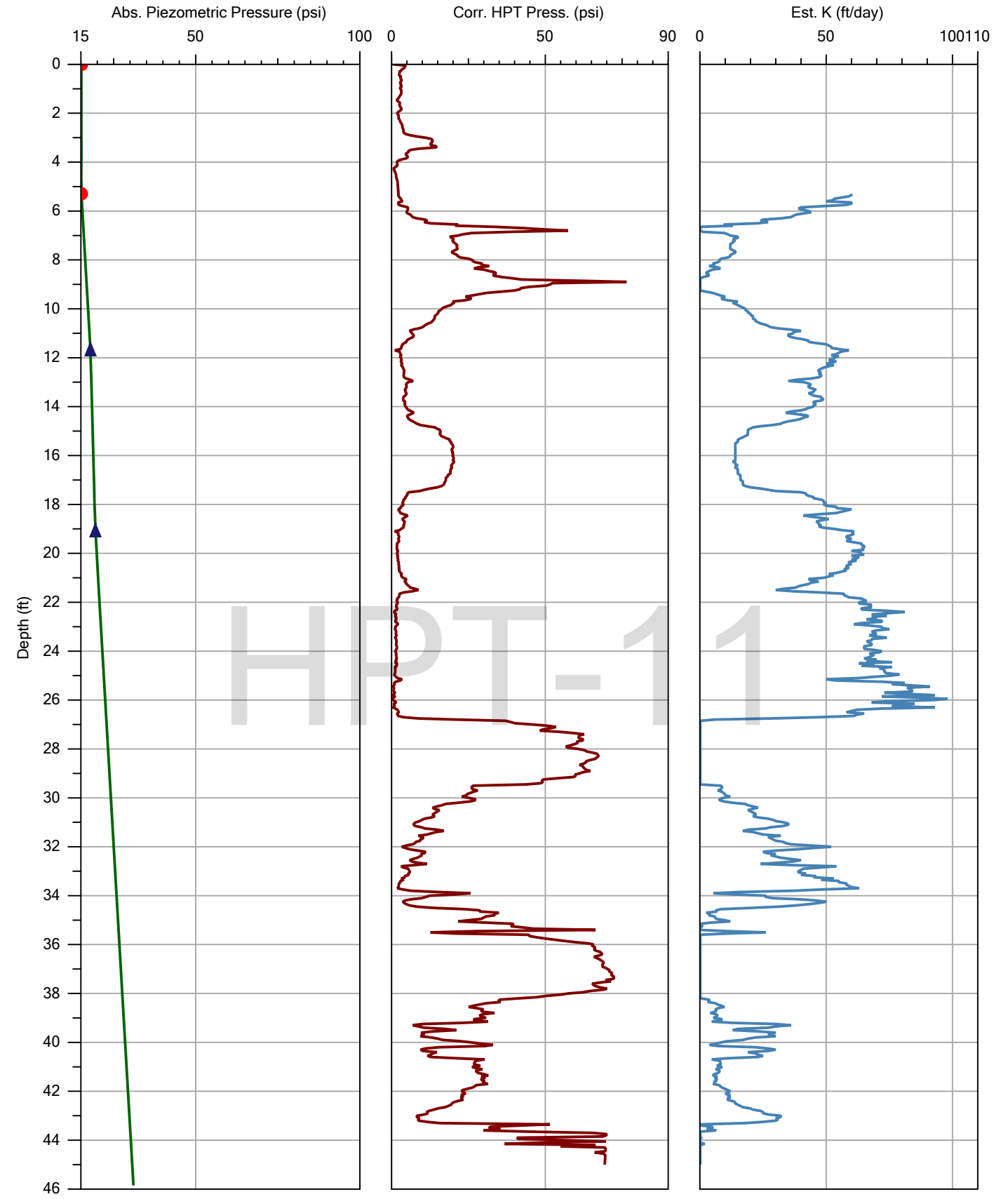


HPT DISSIPATION (SINGLE CASE)

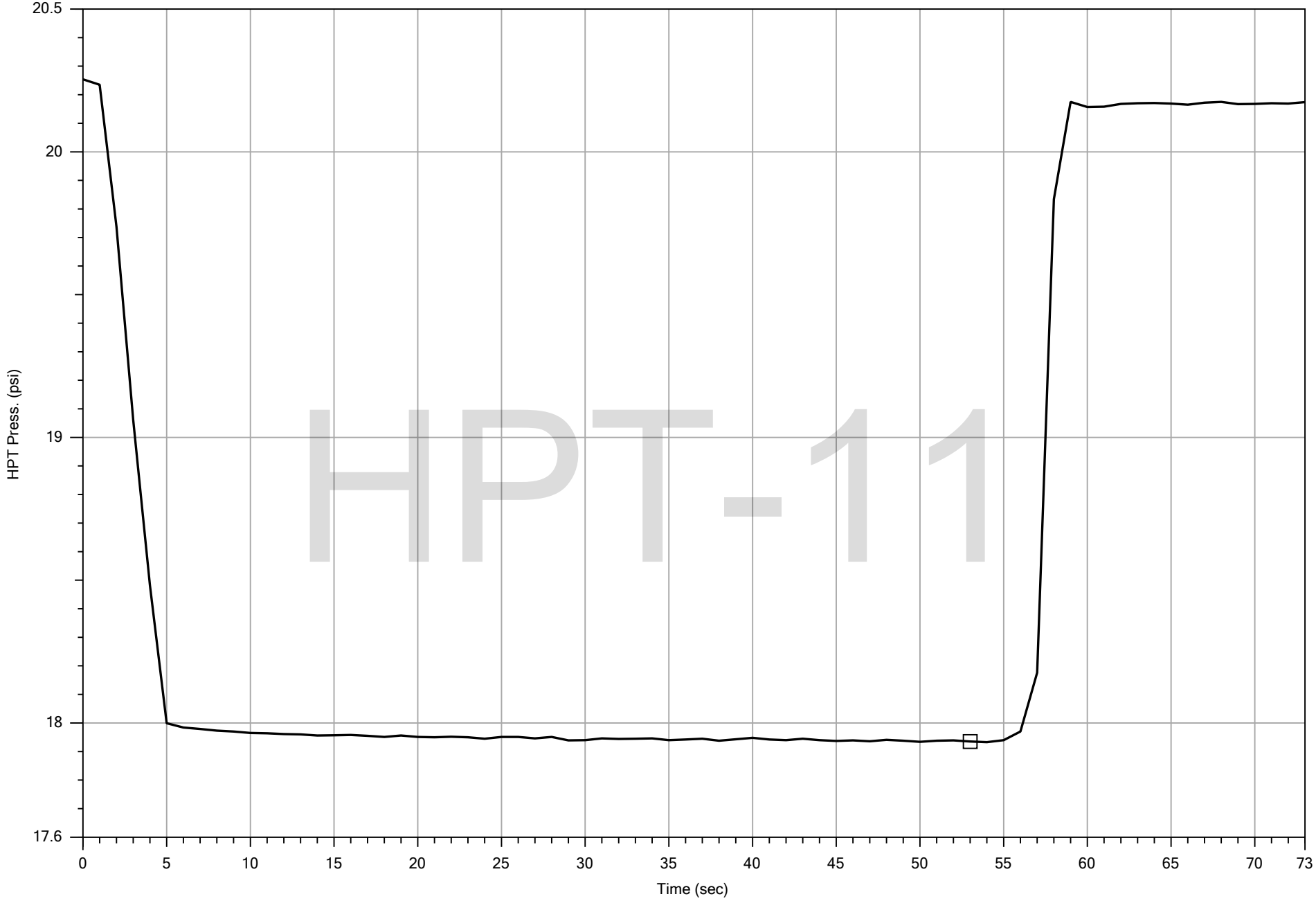
Company: Zebra	Operator: Mickey ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 41.60 ft	Test: 1
File: HPT-10.TIM			Date: 10/28/2015



			File: HPT-11.HPT
Company: Zebra	Operator: Mickey ritter		Date: 10/28/2015
Project ID: AVX	Client: Arcadis		Location:

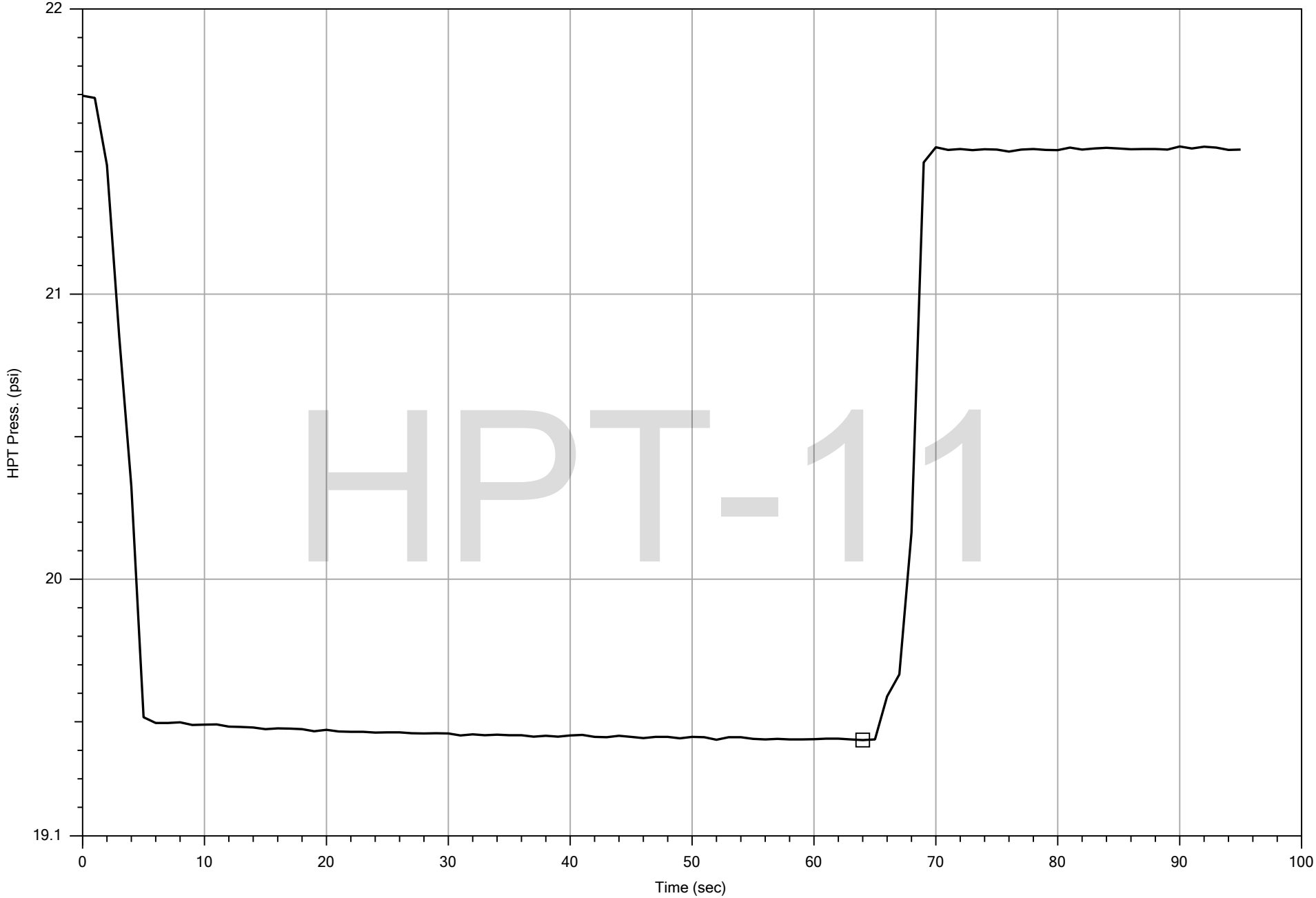


			File: HPT-11.HPT
Company: Zebra		Operator: Mickey ritter	Date: 10/28/2015
Project ID: AVX		Client: Arcadis	Location:



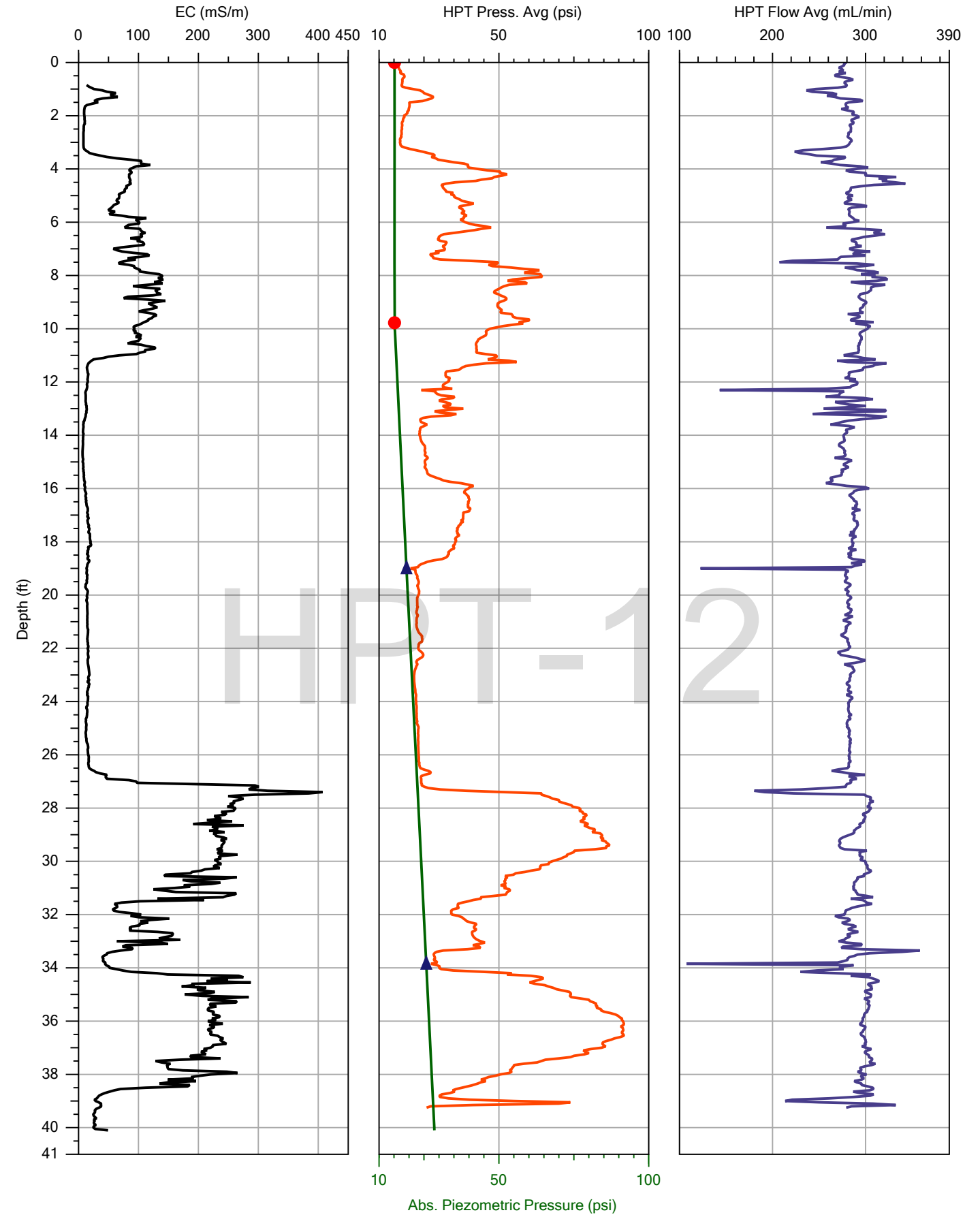
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey ritter	File: HPT-11.TIM	Date: 10/28/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 11.70 ft	Test: 1

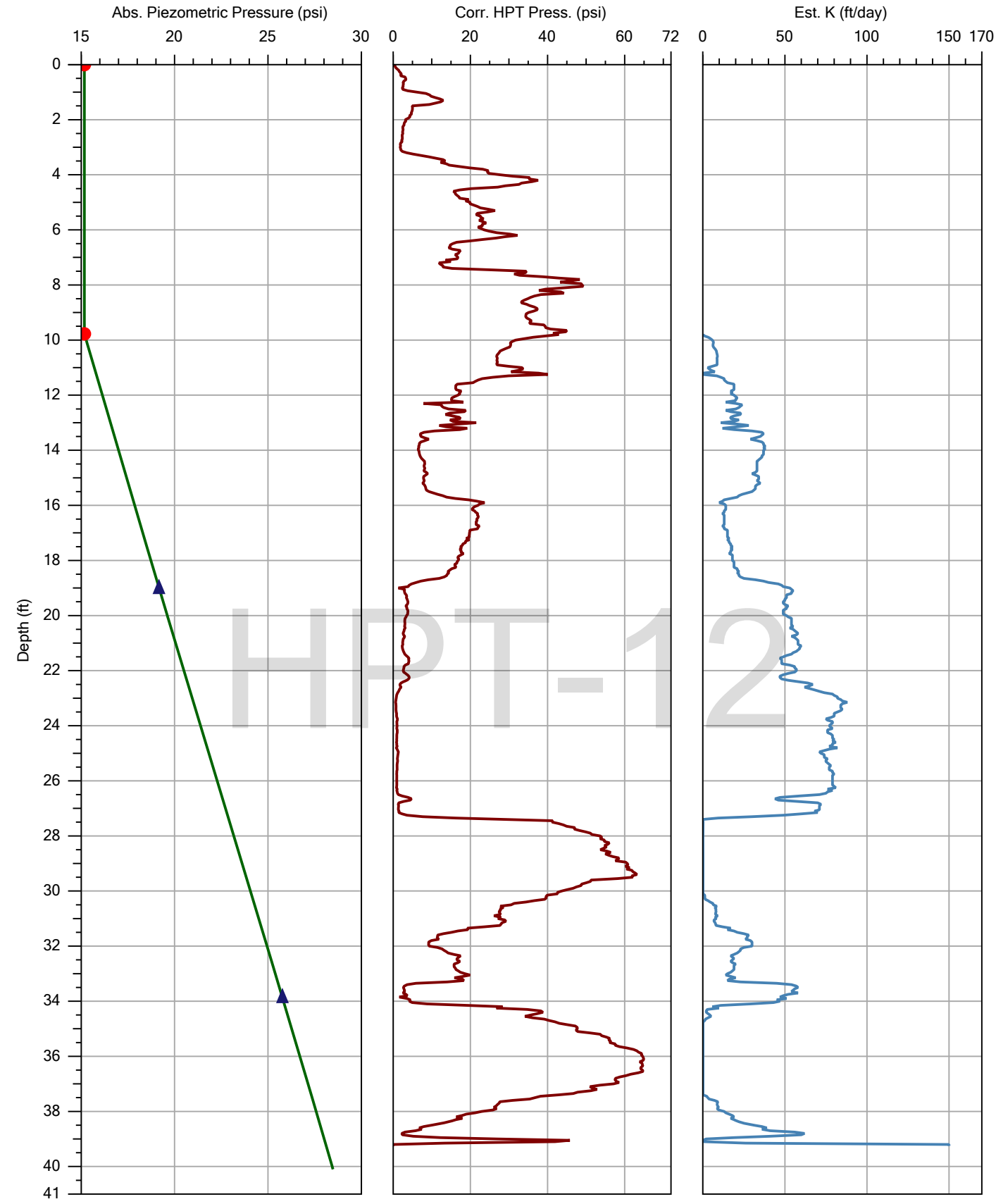


HPT DISSIPATION (SINGLE CASE)

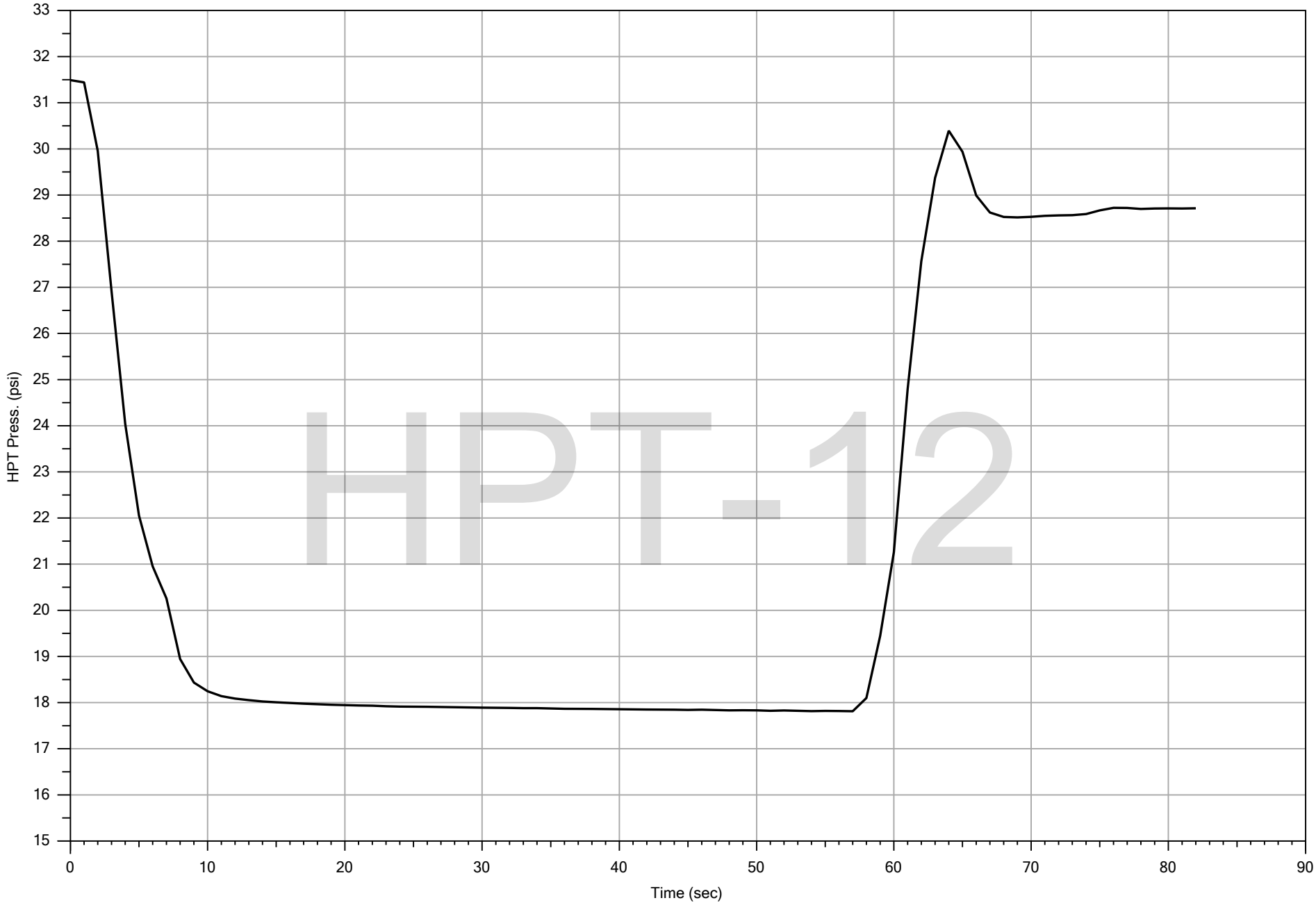
Company: Zebra	Operator: Mickey ritter	File: HPT-11.TIM	Date: 10/28/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 19.10 ft	Test: 1



			File: HPT-12.HPT
Company: ZEBRA	Operator: Mickey Ritter		Date: 10/29/2015
Project ID: AVX	Client: Arcadis		Location:

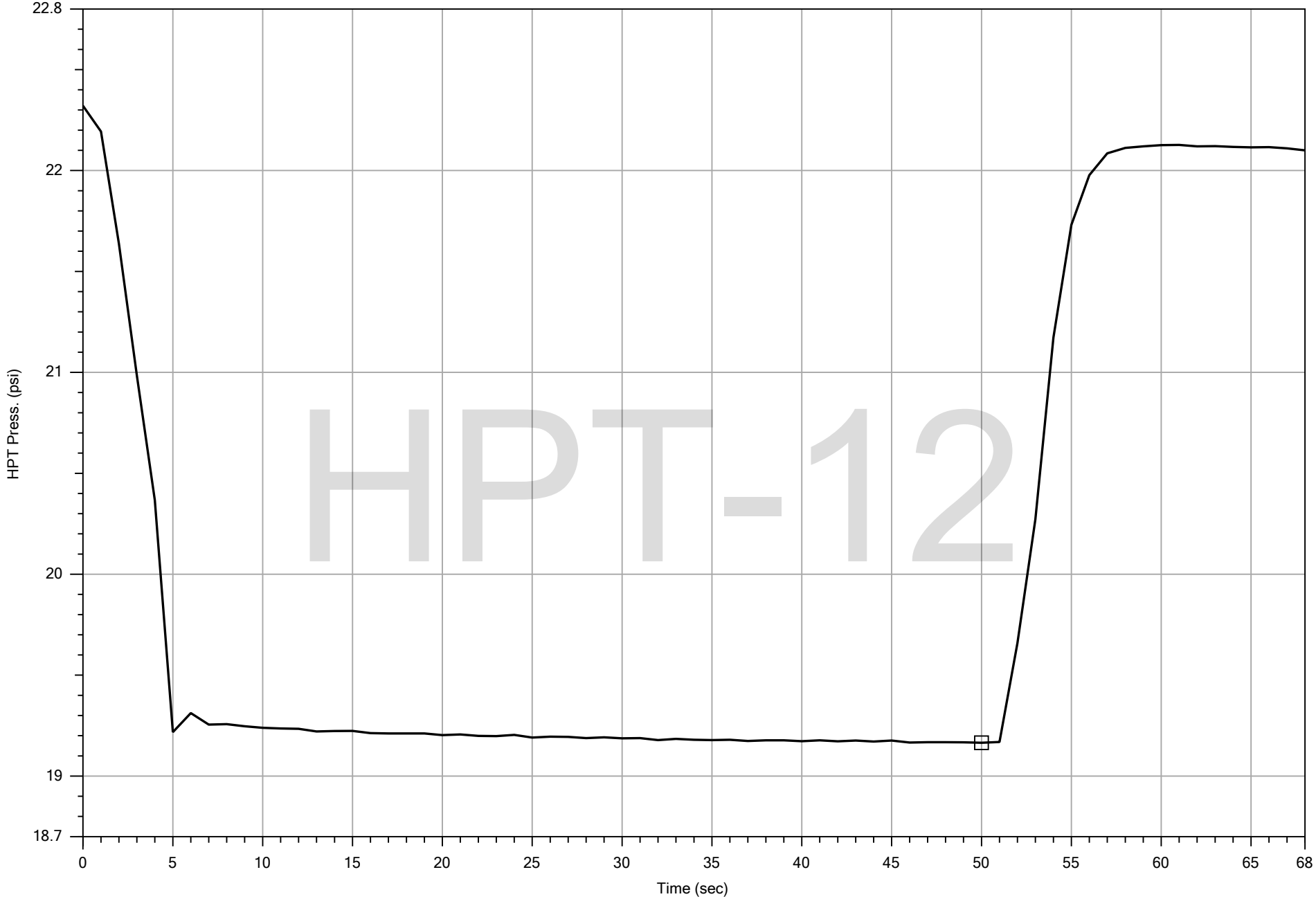


			File: HPT-12.HPT
Company: ZEBRA	Operator: Mickey Ritter		Date: 10/29/2015
Project ID: AVX	Client: Arcadis		Location:



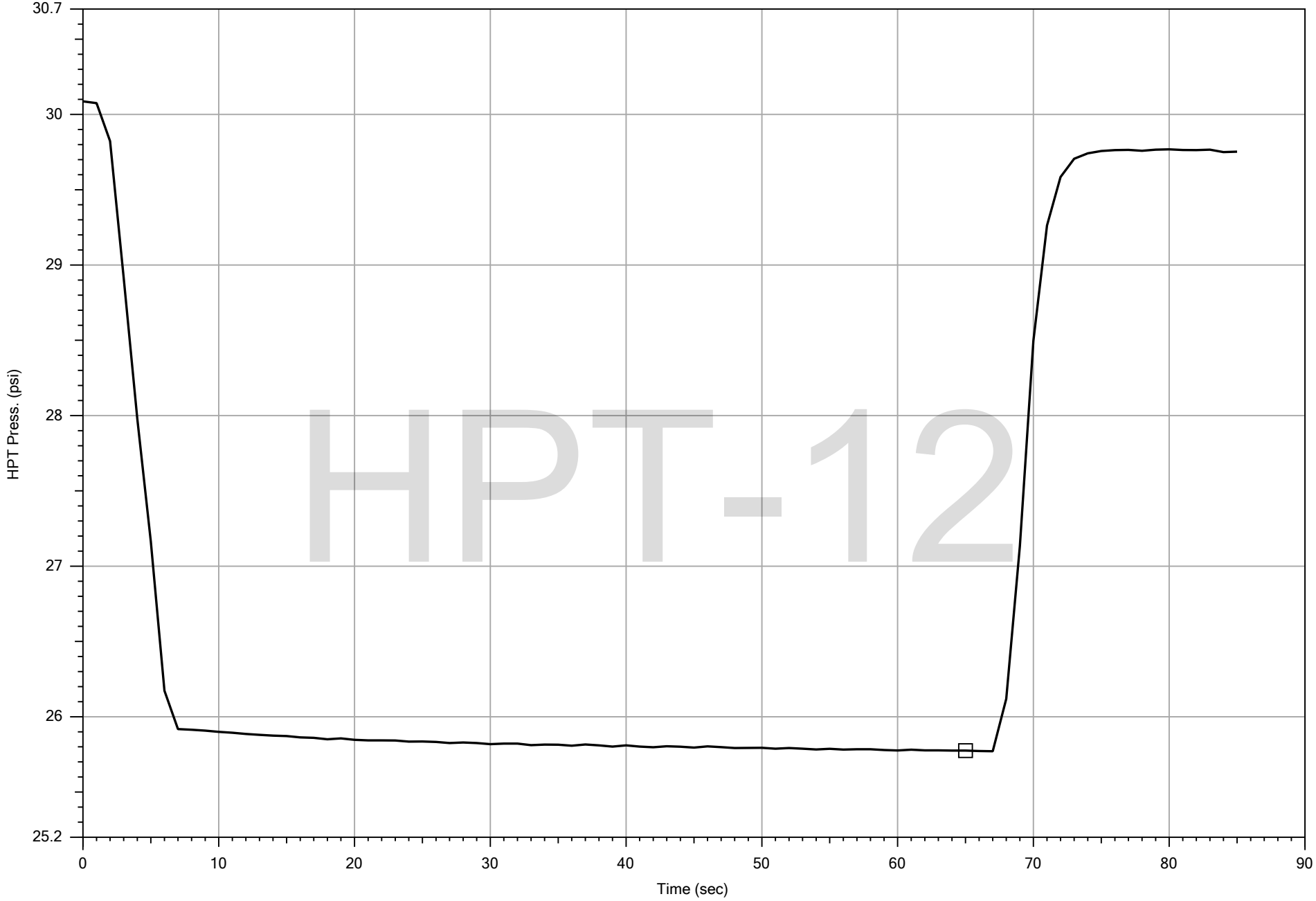
HPT DISSIPATION (SINGLE CASE)

Company: ZEBRA	Operator: Mickey Ritter	File: HPT-12.TIM	Date: 10/29/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 12.30 ft	Test: 1



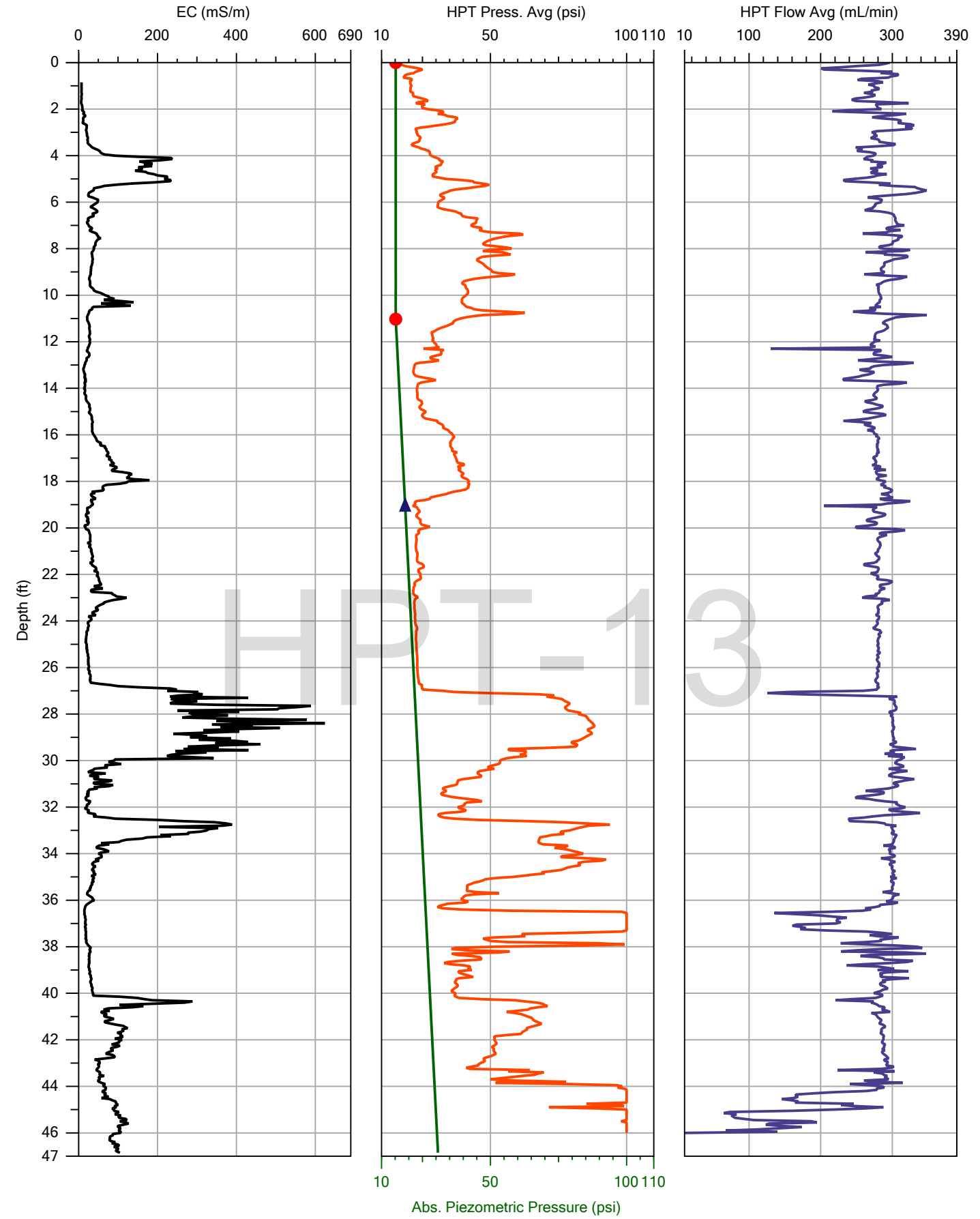
HPT DISSIPATION (SINGLE CASE)

Company: ZEBRA	Operator: Mickey Ritter	File: HPT-12.TIM	Date: 10/29/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 19.00 ft	Test: 1

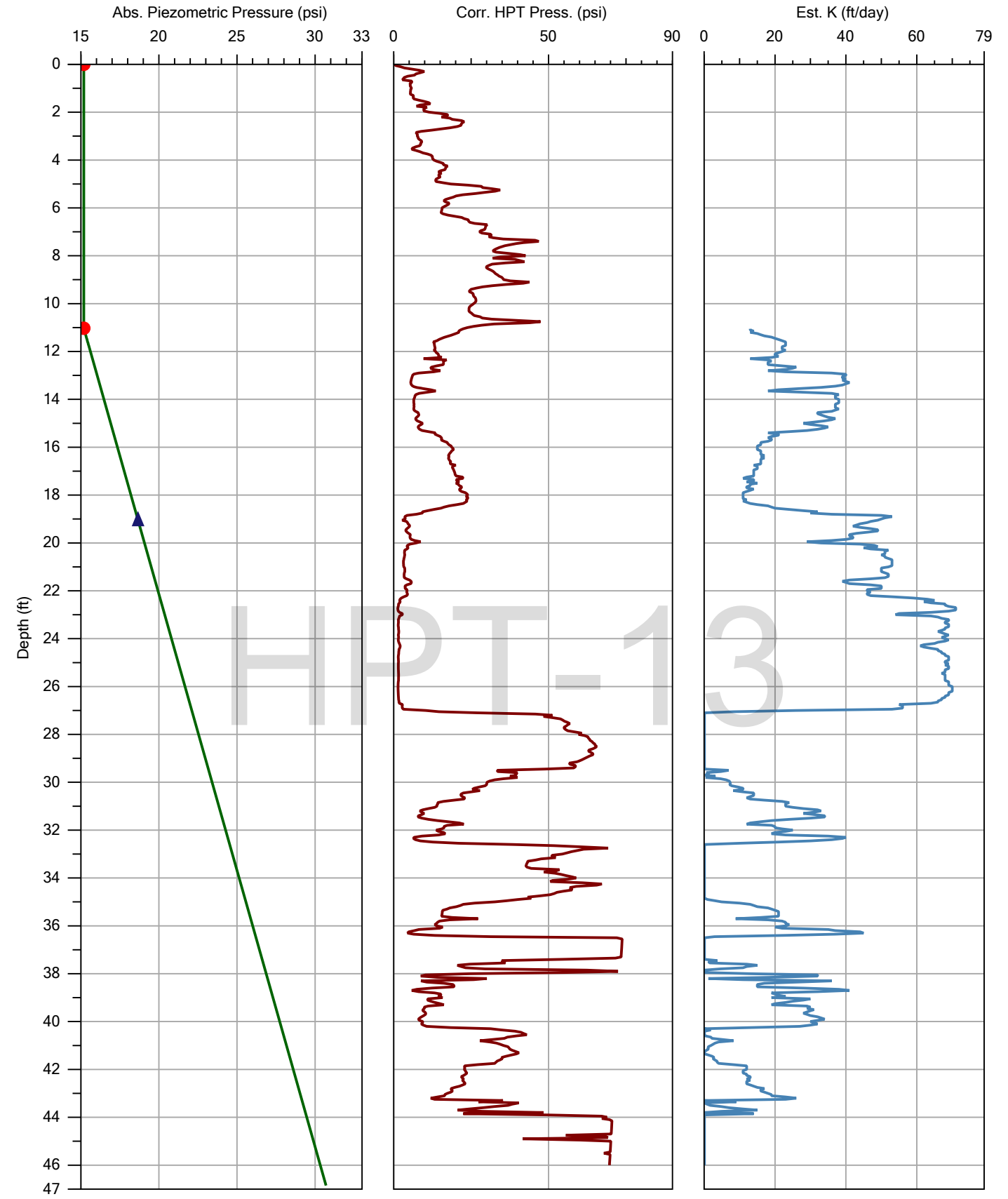


HPT DISSIPATION (SINGLE CASE)

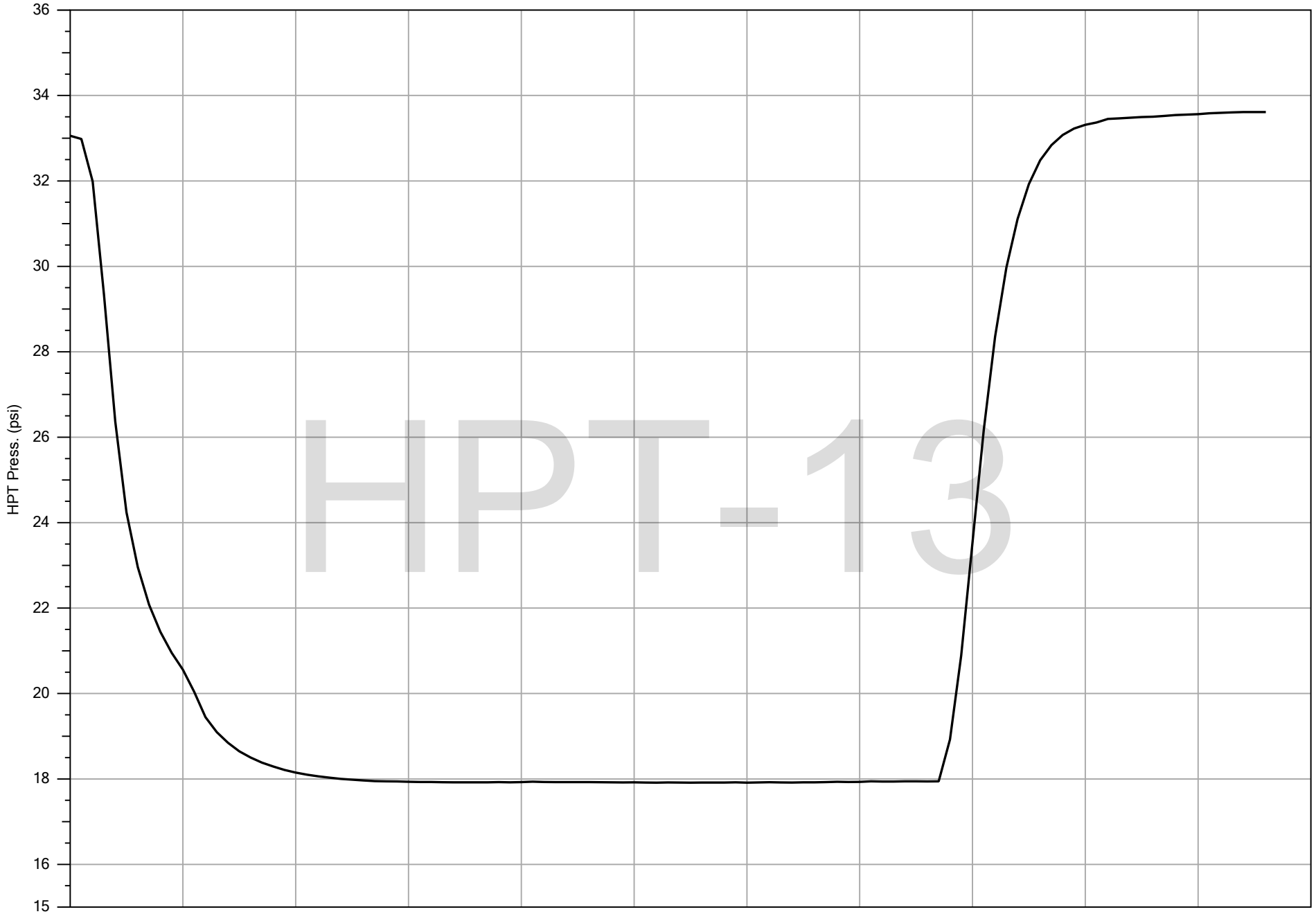
Company: ZEBRA	Operator: Mickey Ritter	File: HPT-12.TIM	Date: 10/29/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 33.85 ft	Test: 1



			File: HPT-13.HPT
Company: ZEBRA	Operator: Mickey Ritter		Date: 10/29/2015
Project ID: AVX	Client: Arcadis		Location:

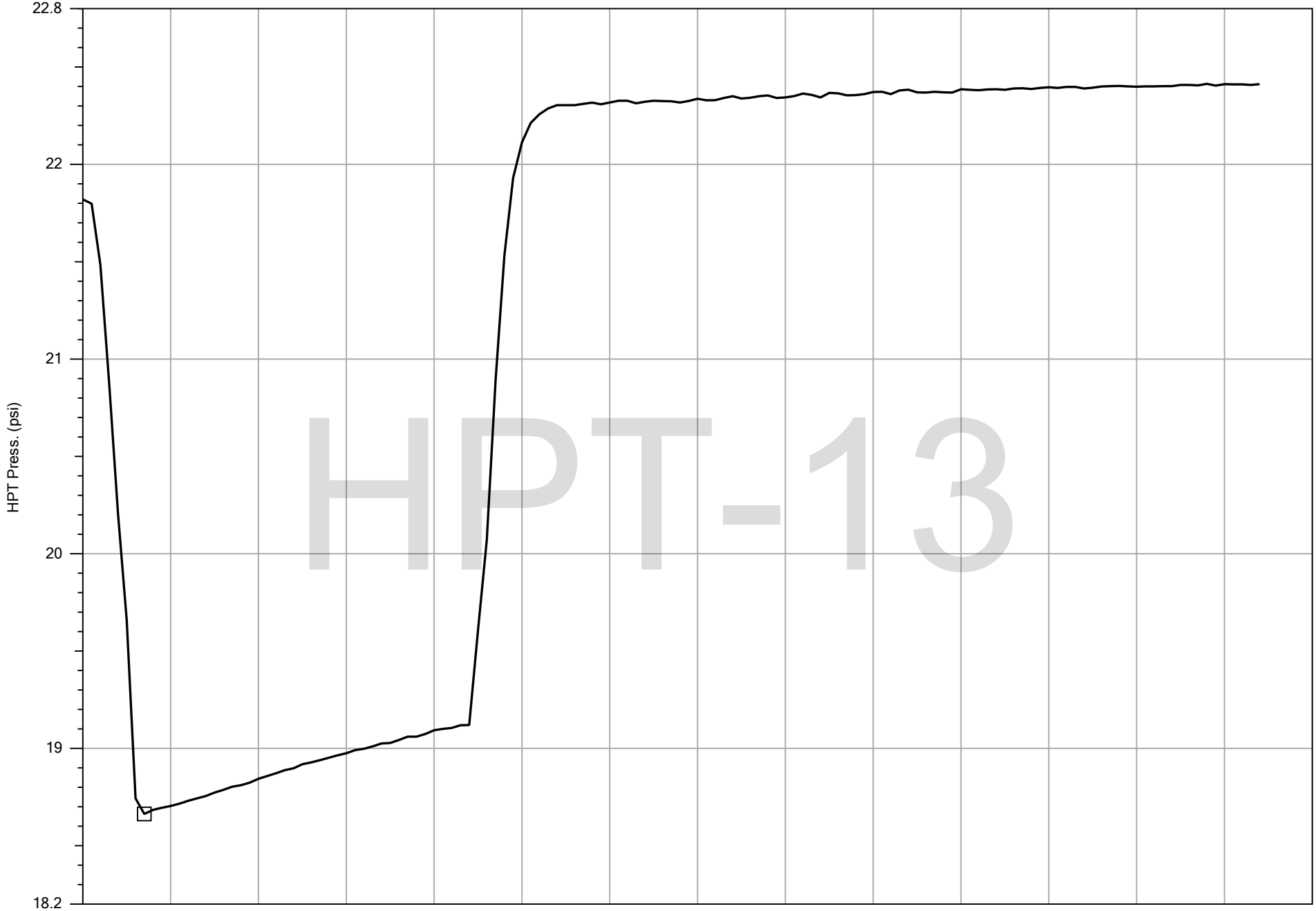


			File: HPT-13.HPT
Company: ZEBRA	Operator: Mickey Ritter		Date: 10/29/2015
Project ID: AVX	Client: Arcadis		Location:



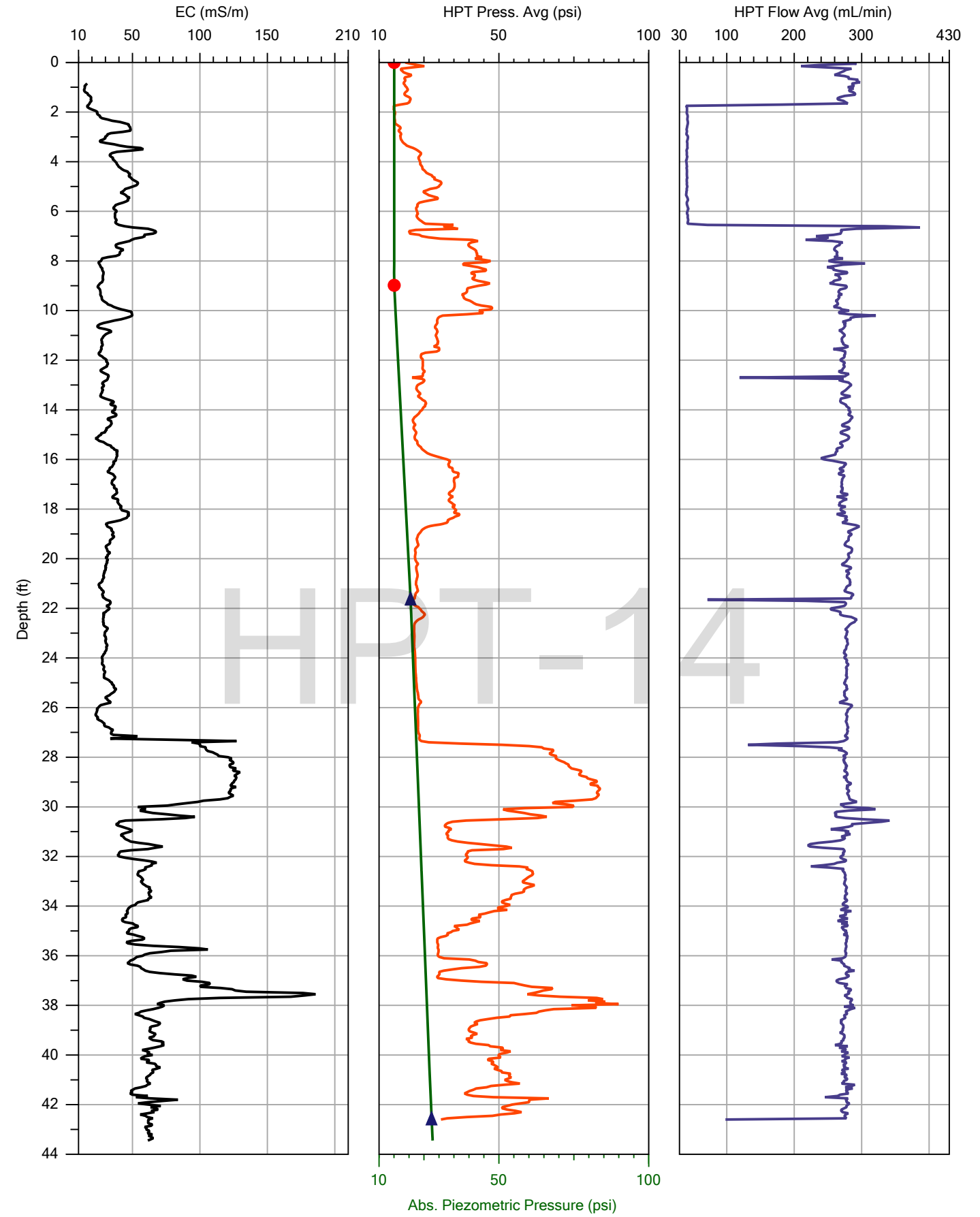
HPT DISSIPATION (SINGLE CASE)

Company: ZEBRA	Operator: Mickey Ritter	File: HPT-13.TIM	Date: 10/29/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 12.30 ft	Test: 1

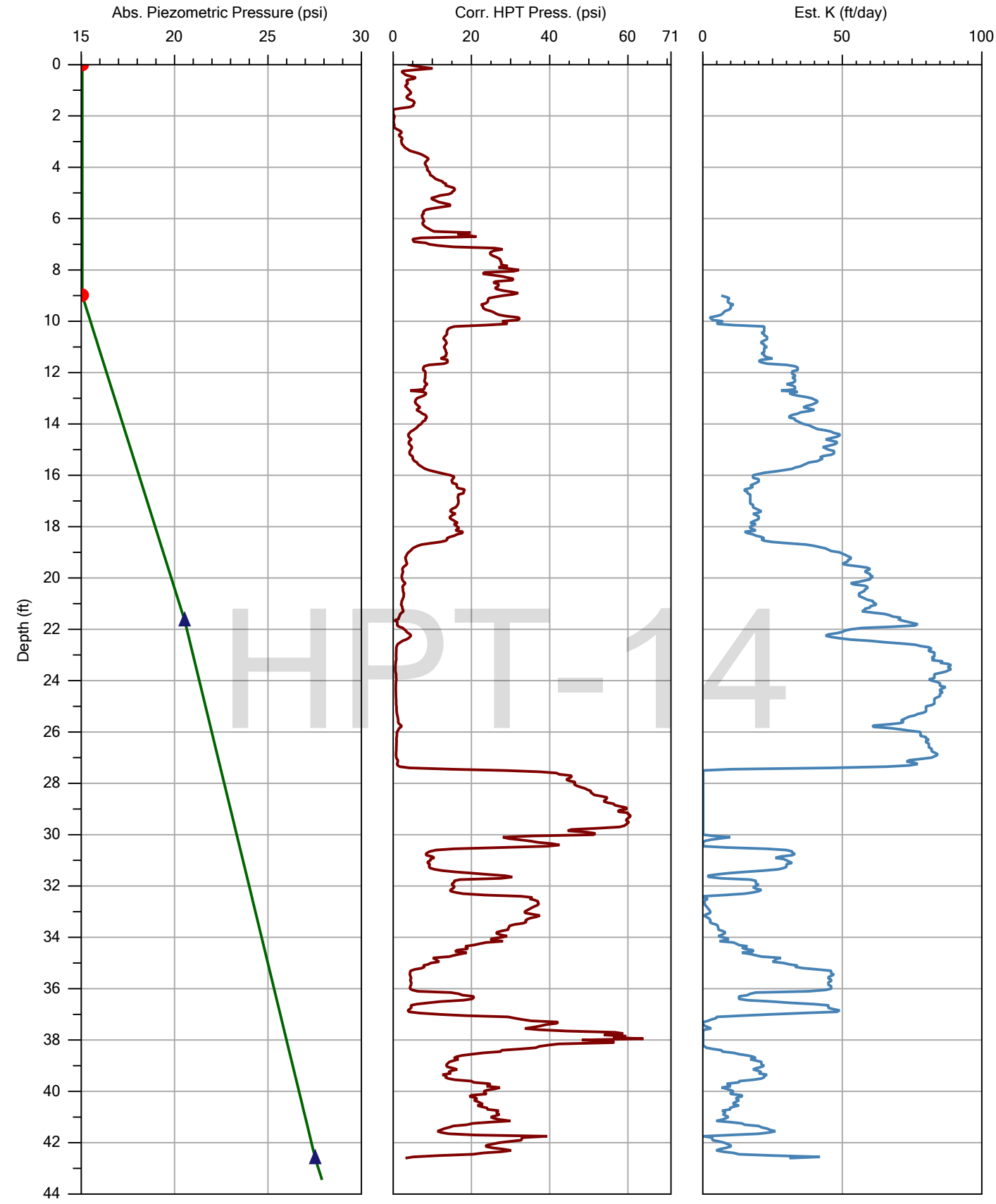


HPT DISSIPATION (SINGLE CASE)

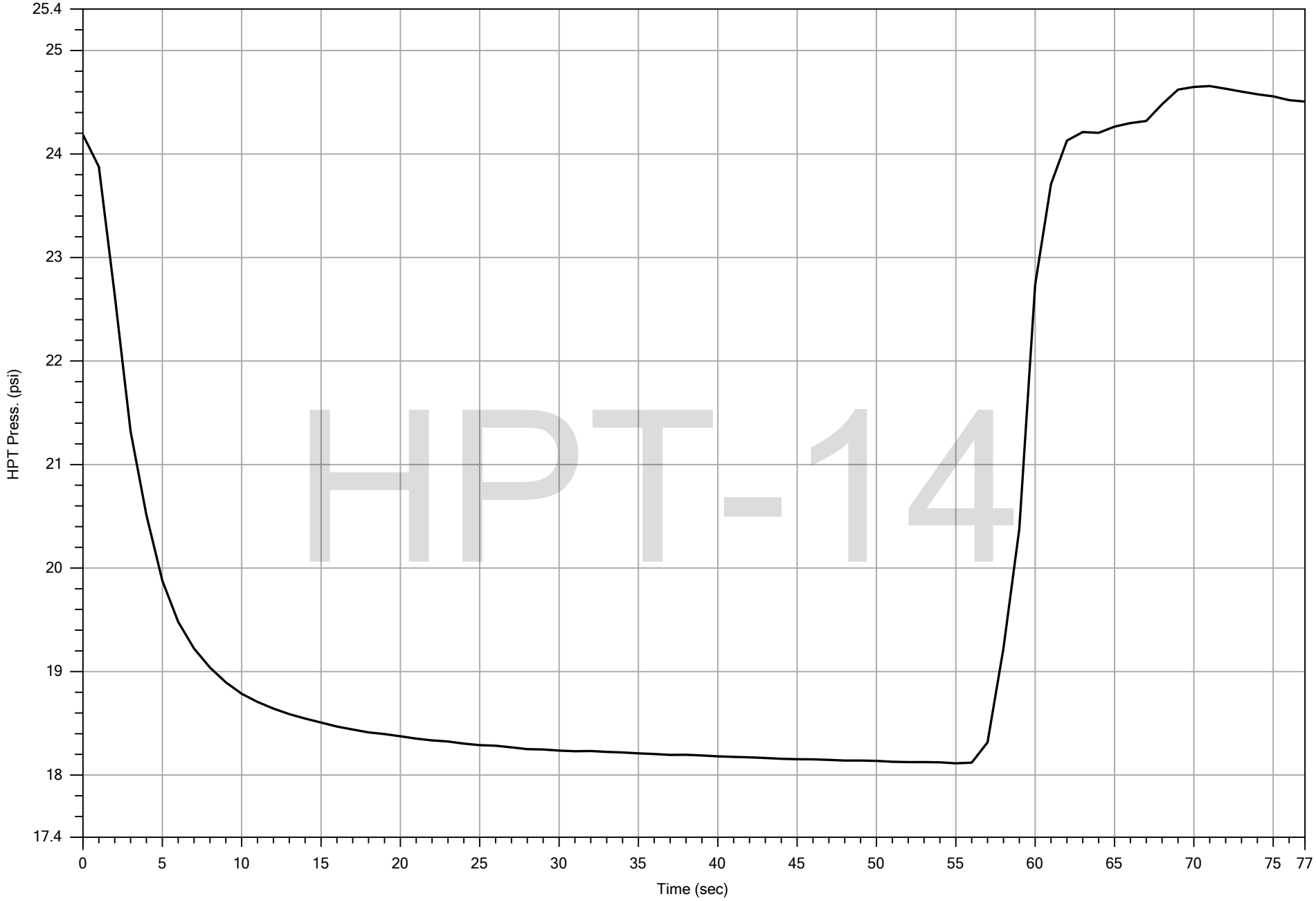
Company: ZEBRA	Operator: Mickey Ritter	File: HPT-13.TIM	Date: 10/29/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 19.05 ft	Test: 1



			File: HPT-14.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 10/29/2015
Project ID: AVX	Client: Arcadis		Location:

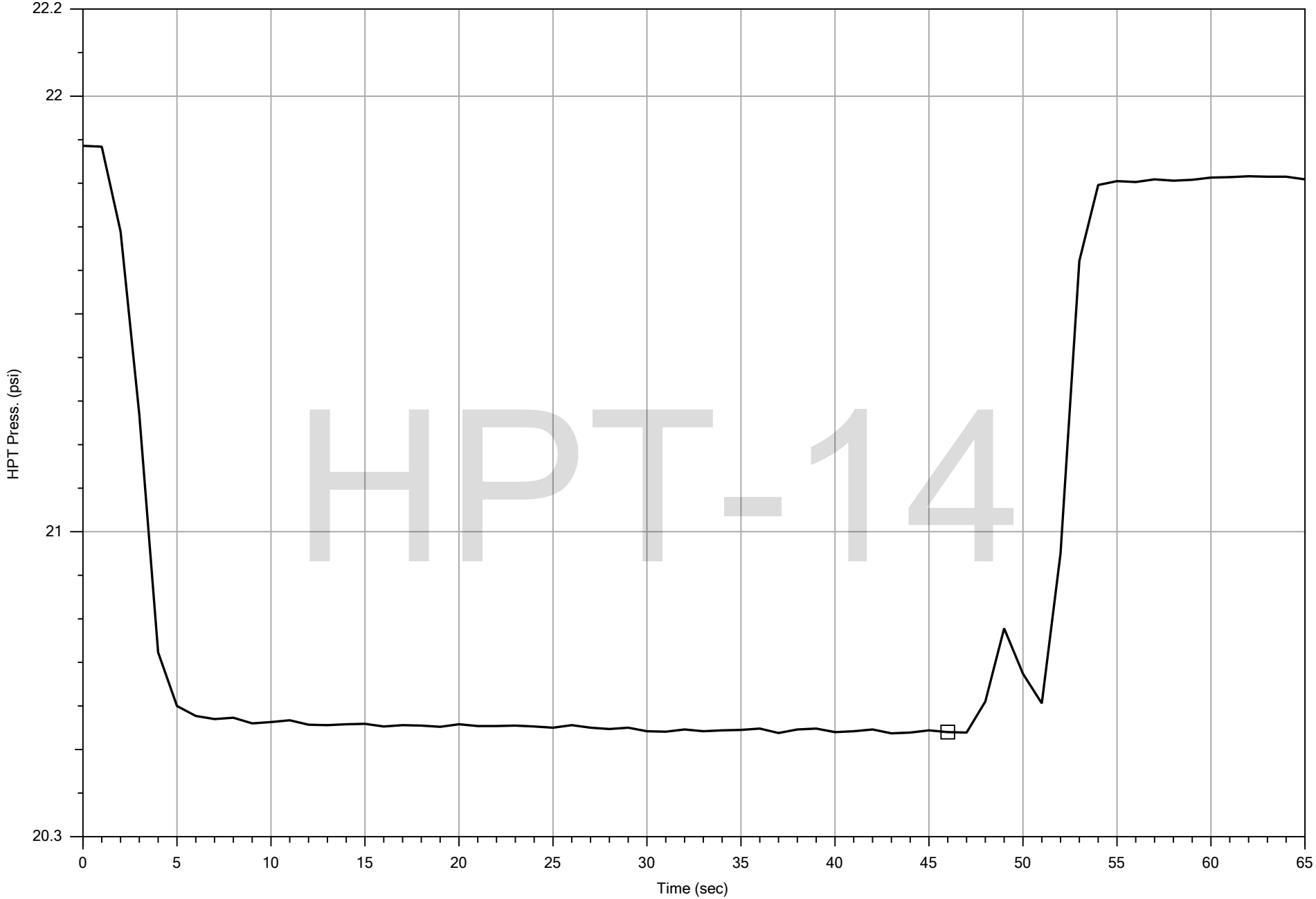


			File: HPT-14.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 10/29/2015
Project ID: AVX	Client: Arcadis		Location:



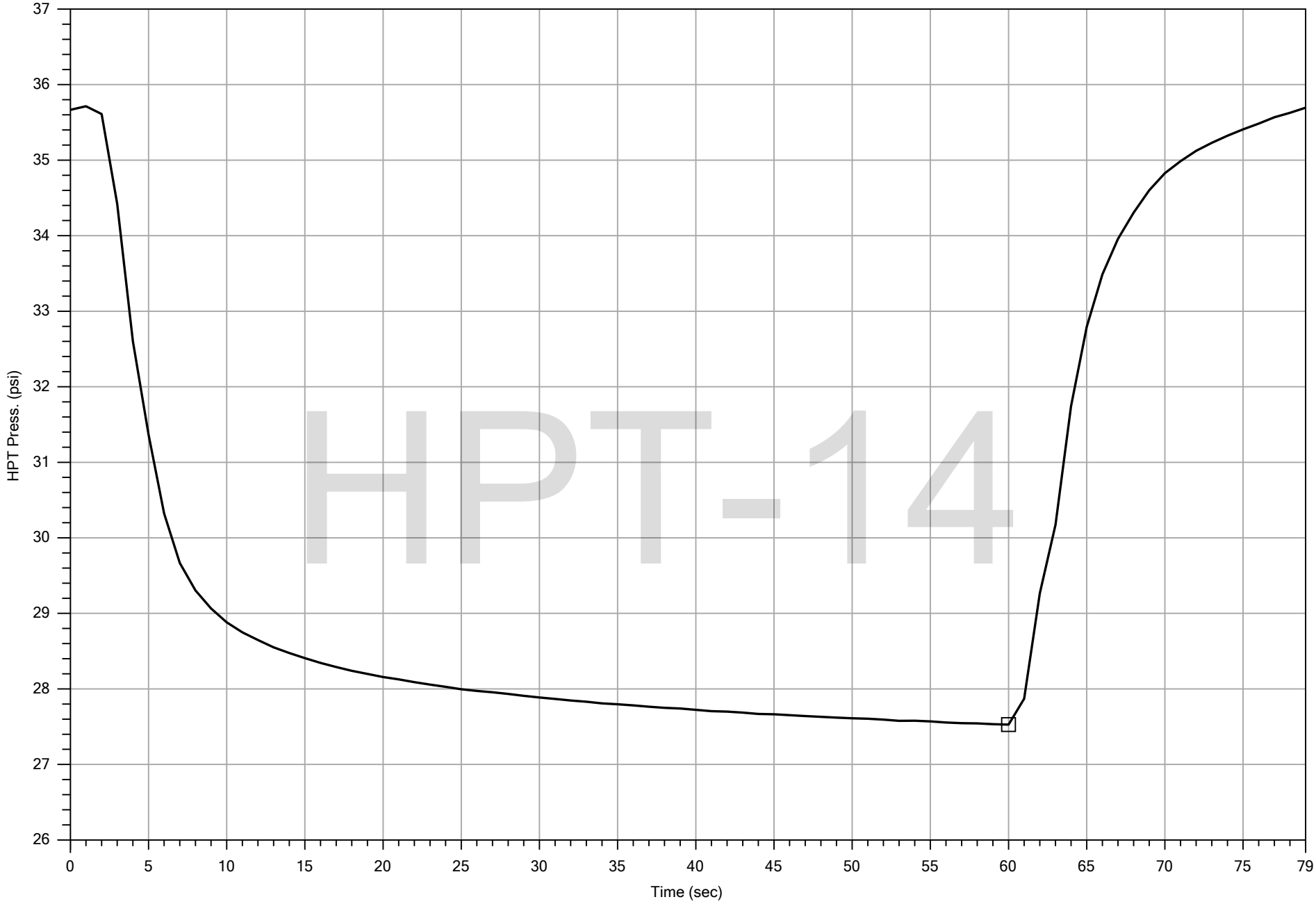
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 12.70 ft	Test: 1
		File: HPT-14.TIM	Date: 10/29/2015



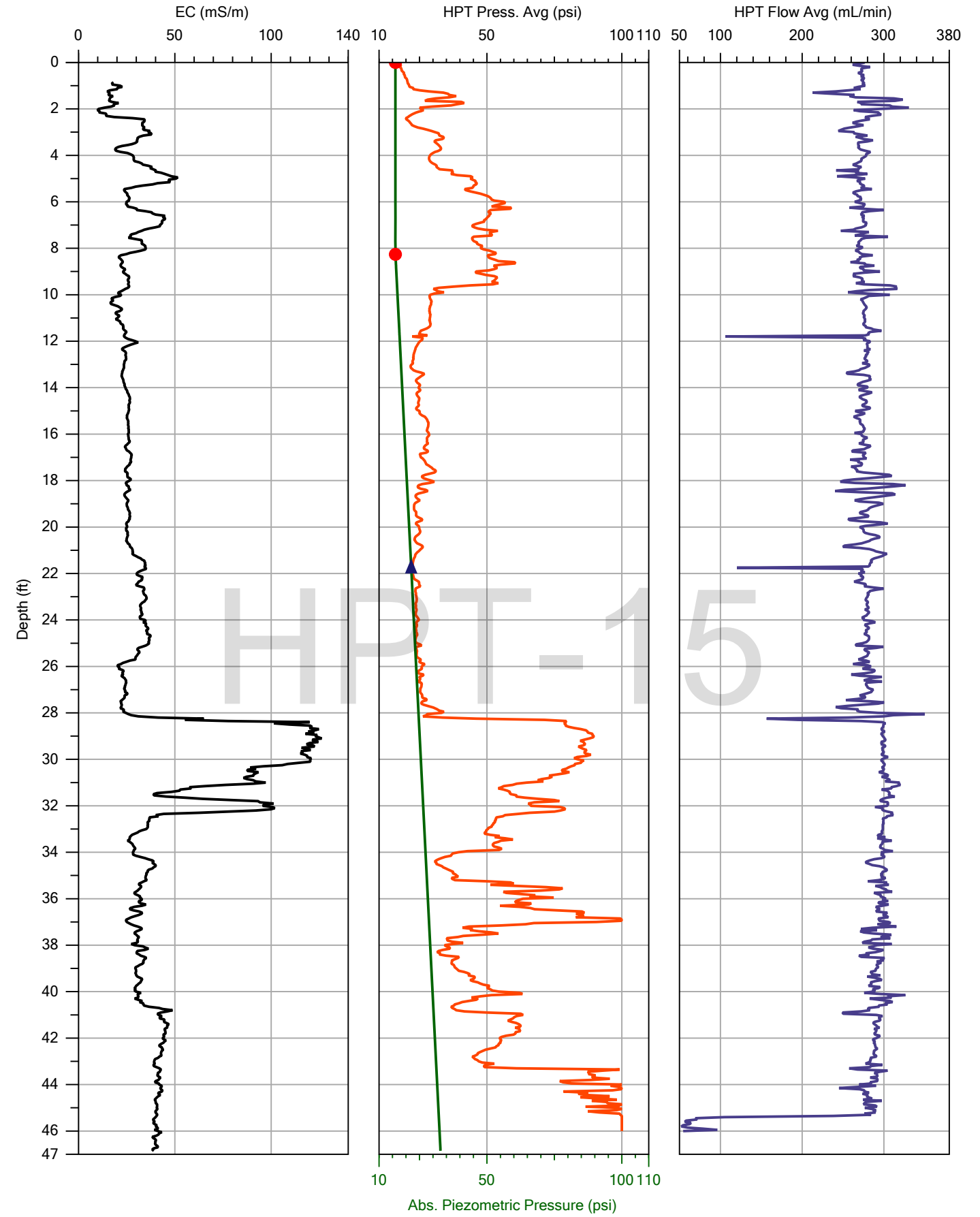
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-14.TIM	Date: 10/29/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 21.65 ft	Test: 1

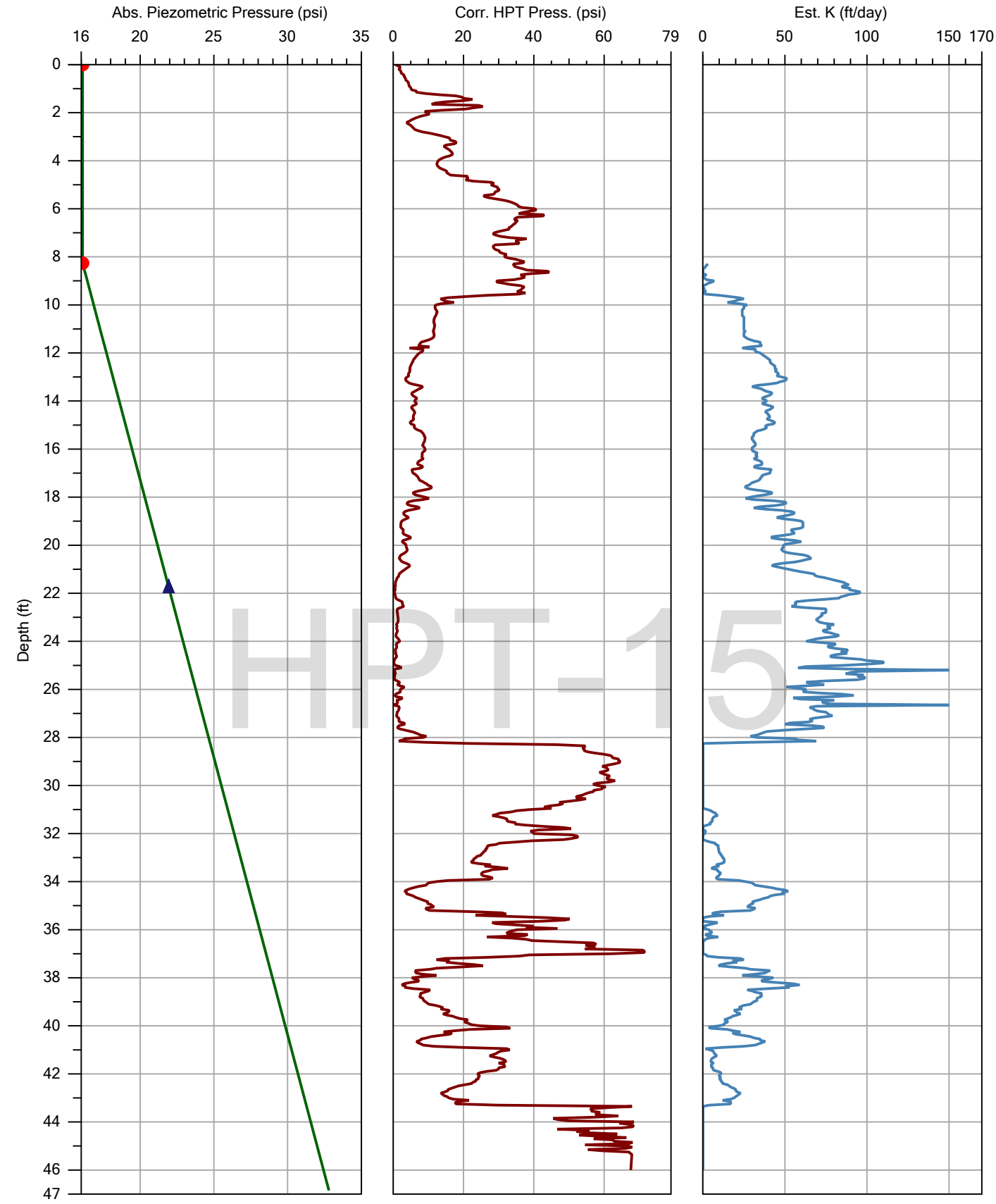


HPT DISSIPATION (SINGLE CASE)

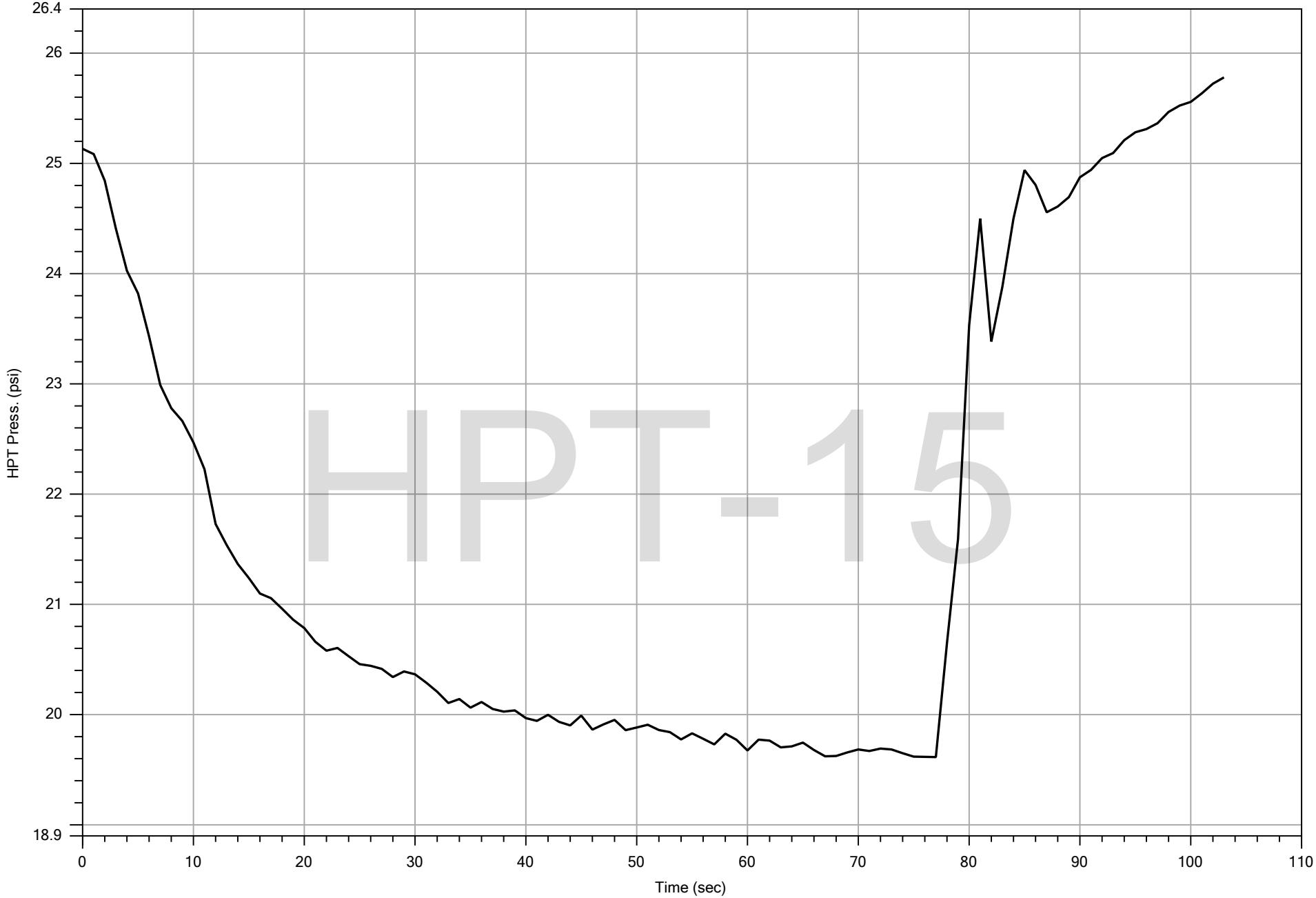
Company: Zebra	Operator: Mickey Ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 42.60 ft	Test: 1
File: HPT-14.TIM			Date: 10/29/2015



			File: HPT-15.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 10/30/2015
Project ID: AVX	Client: Arcadis		Location:

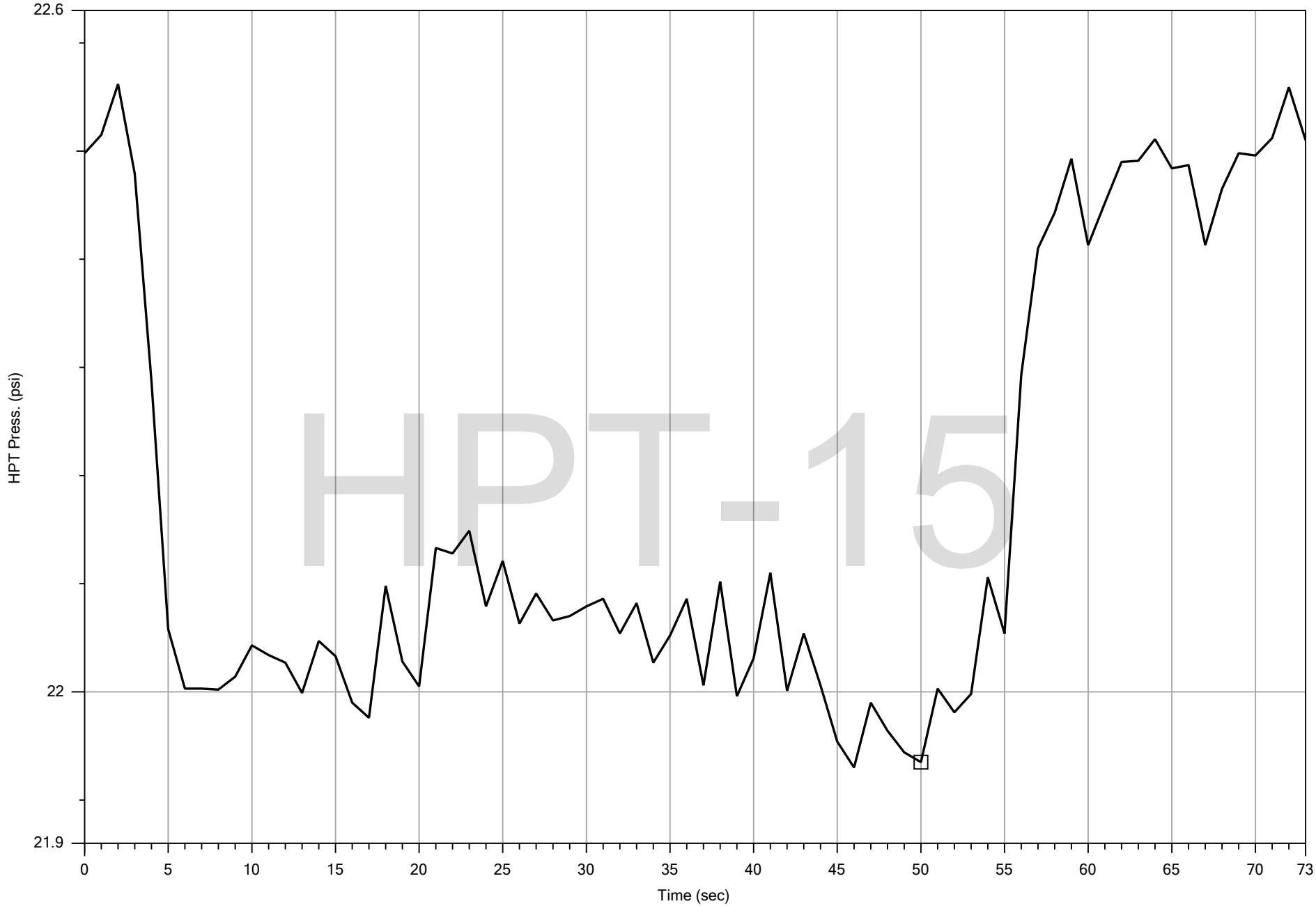


			File: HPT-15.HPT
Company: Zebra		Operator: Mickey Ritter	Date: 10/30/2015
Project ID: AVX		Client: Arcadis	Location:



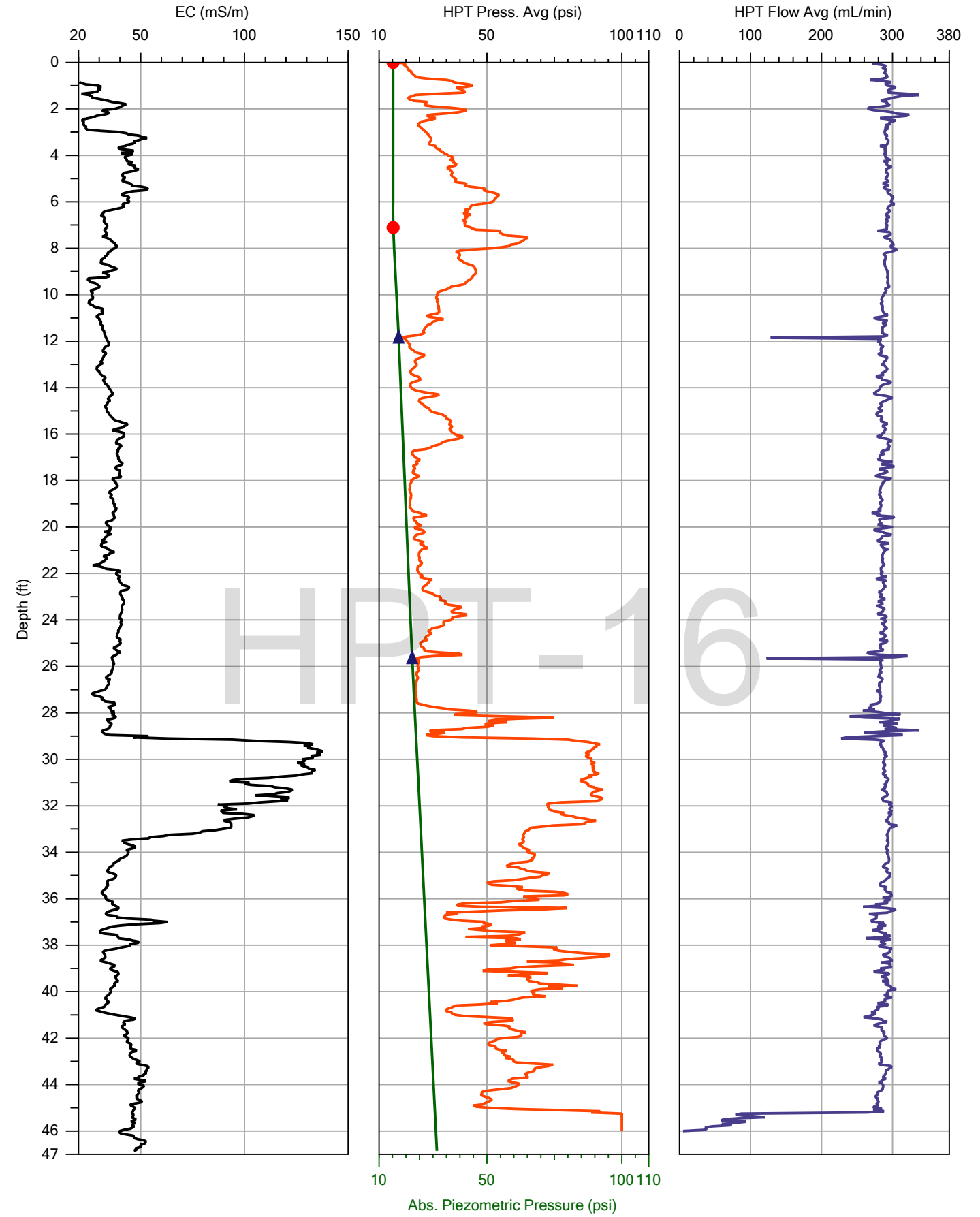
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-15.TIM	Date: 10/30/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 11.80 ft	Test: 1

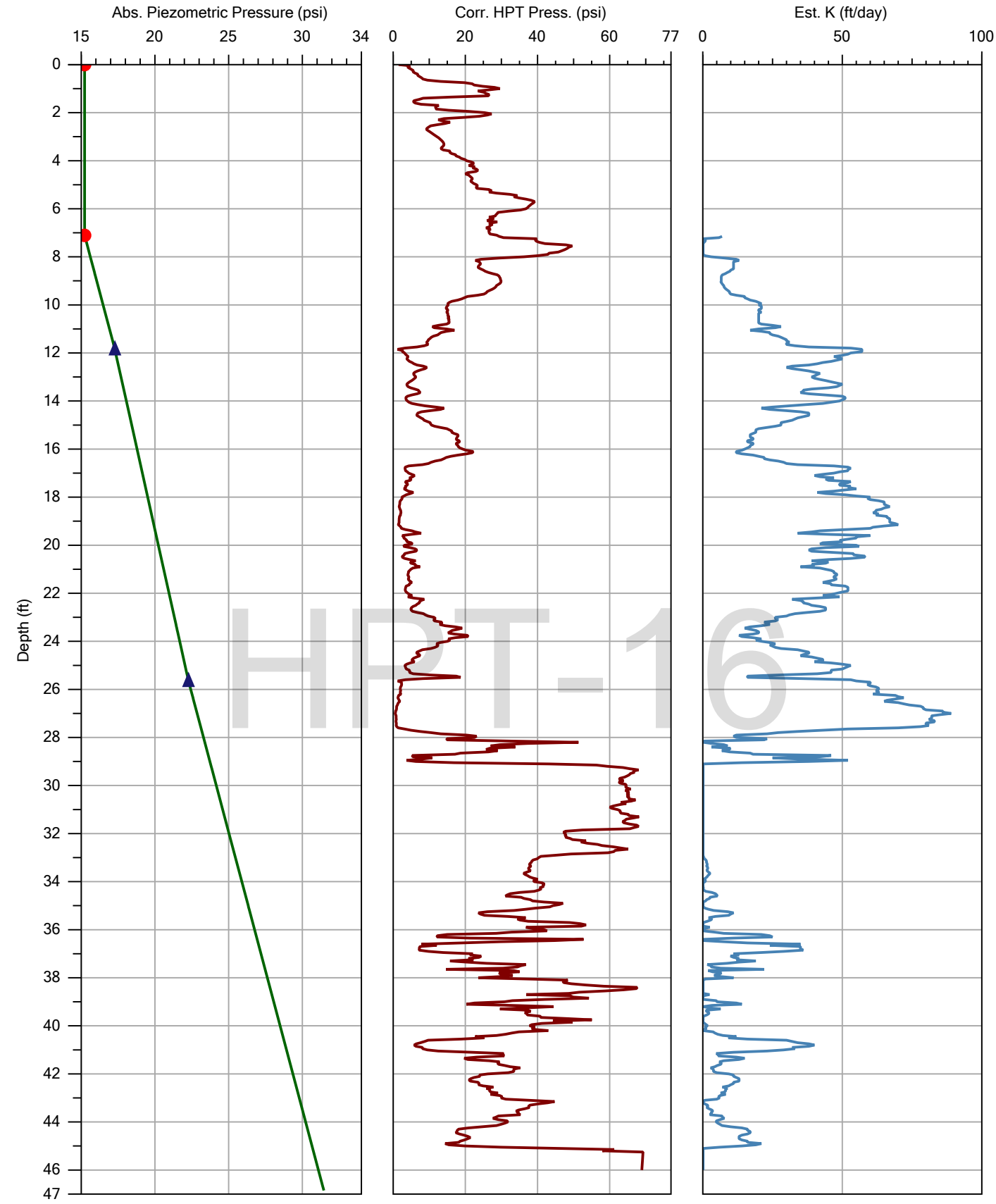


HPT DISSIPATION (SINGLE CASE)

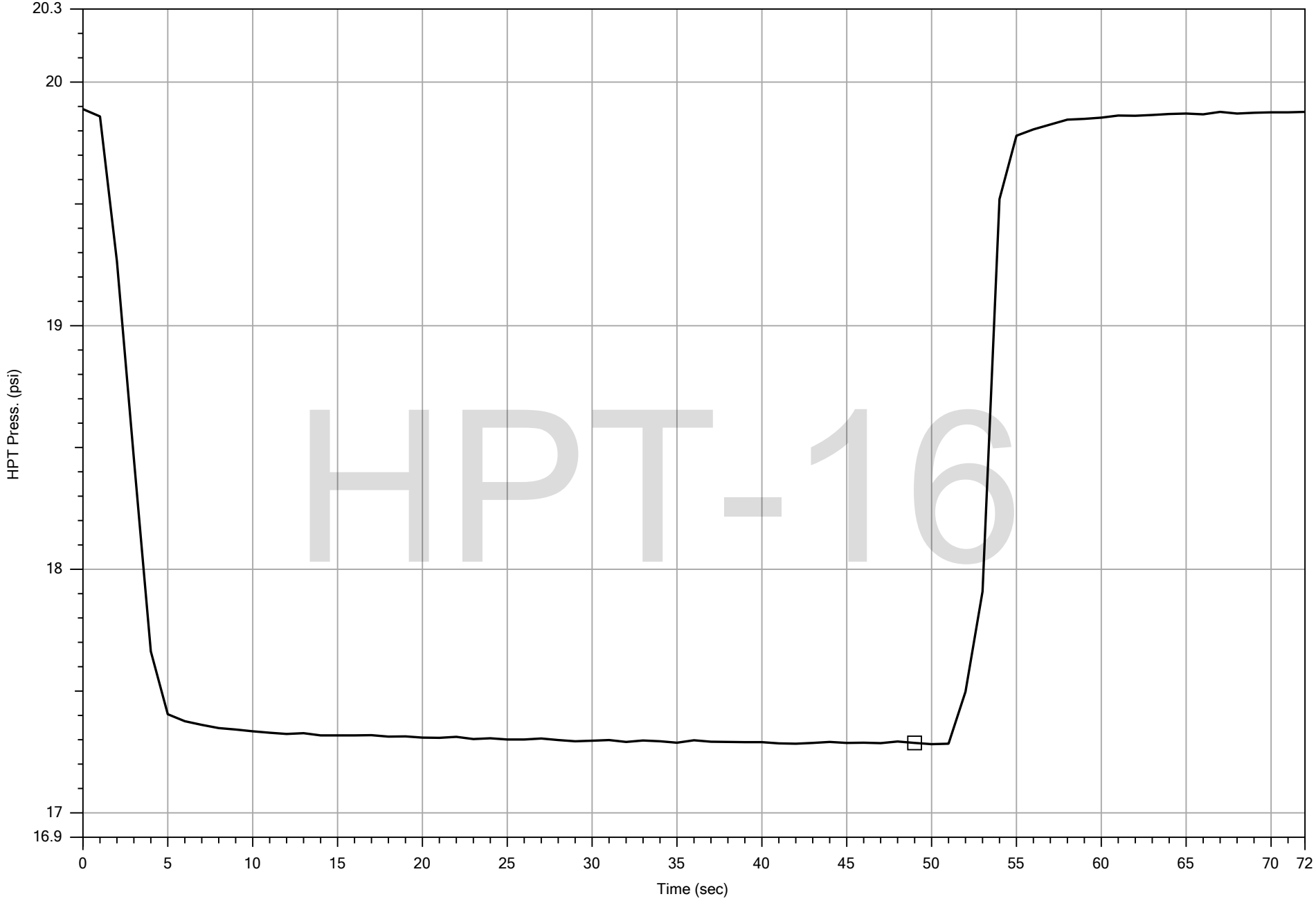
Company: Zebra	Operator: Mickey Ritter	File: HPT-15.TIM	Date: 10/30/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 21.75 ft	Test: 1



			File: HPT-16.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 10/30/2015
Project ID: AVX	Client: Arcadis		Location:

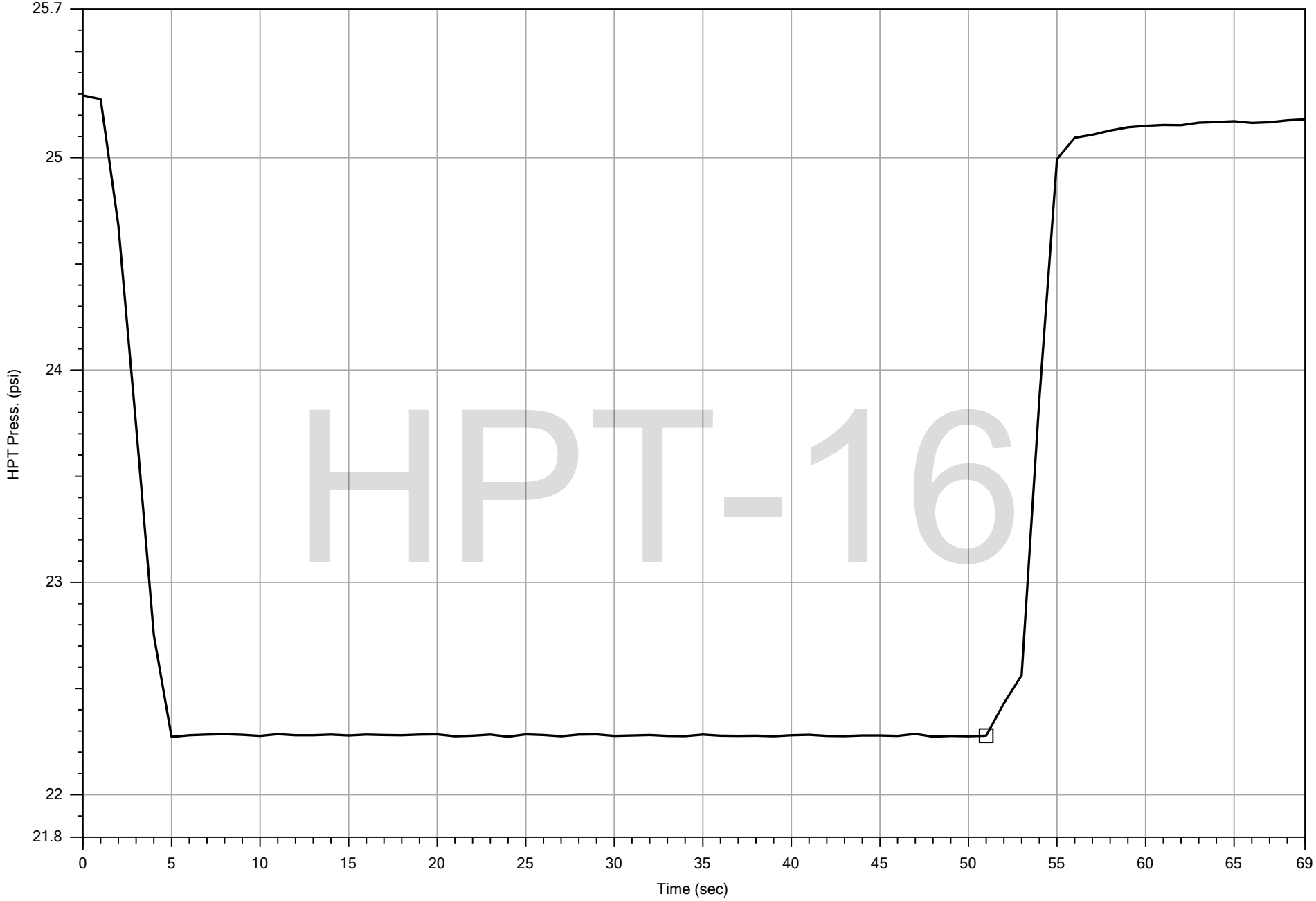


			File: HPT-16.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 10/30/2015
Project ID: AVX	Client: Arcadis		Location:



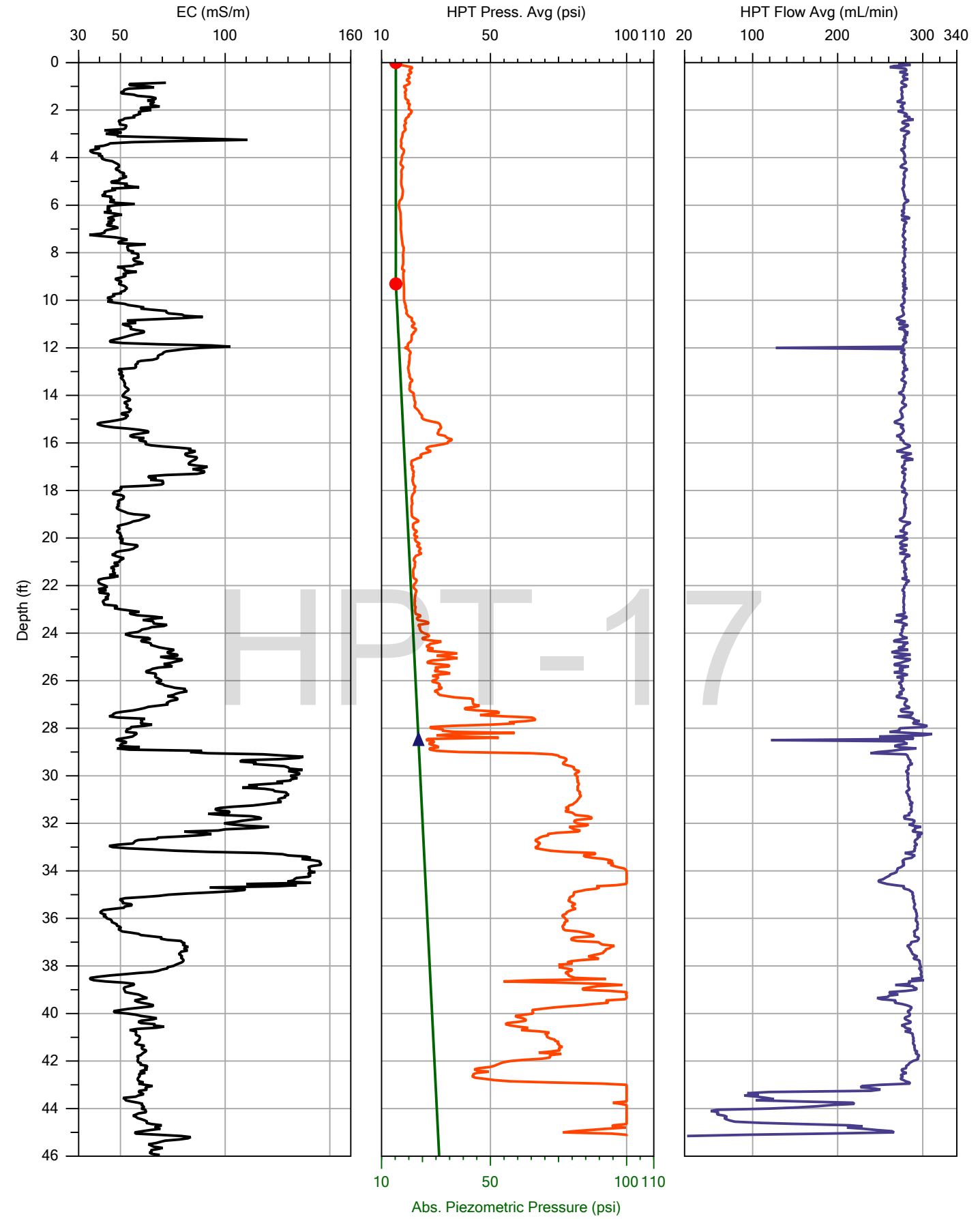
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-16.TIM	Date: 10/30/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 11.85 ft	Test: 1

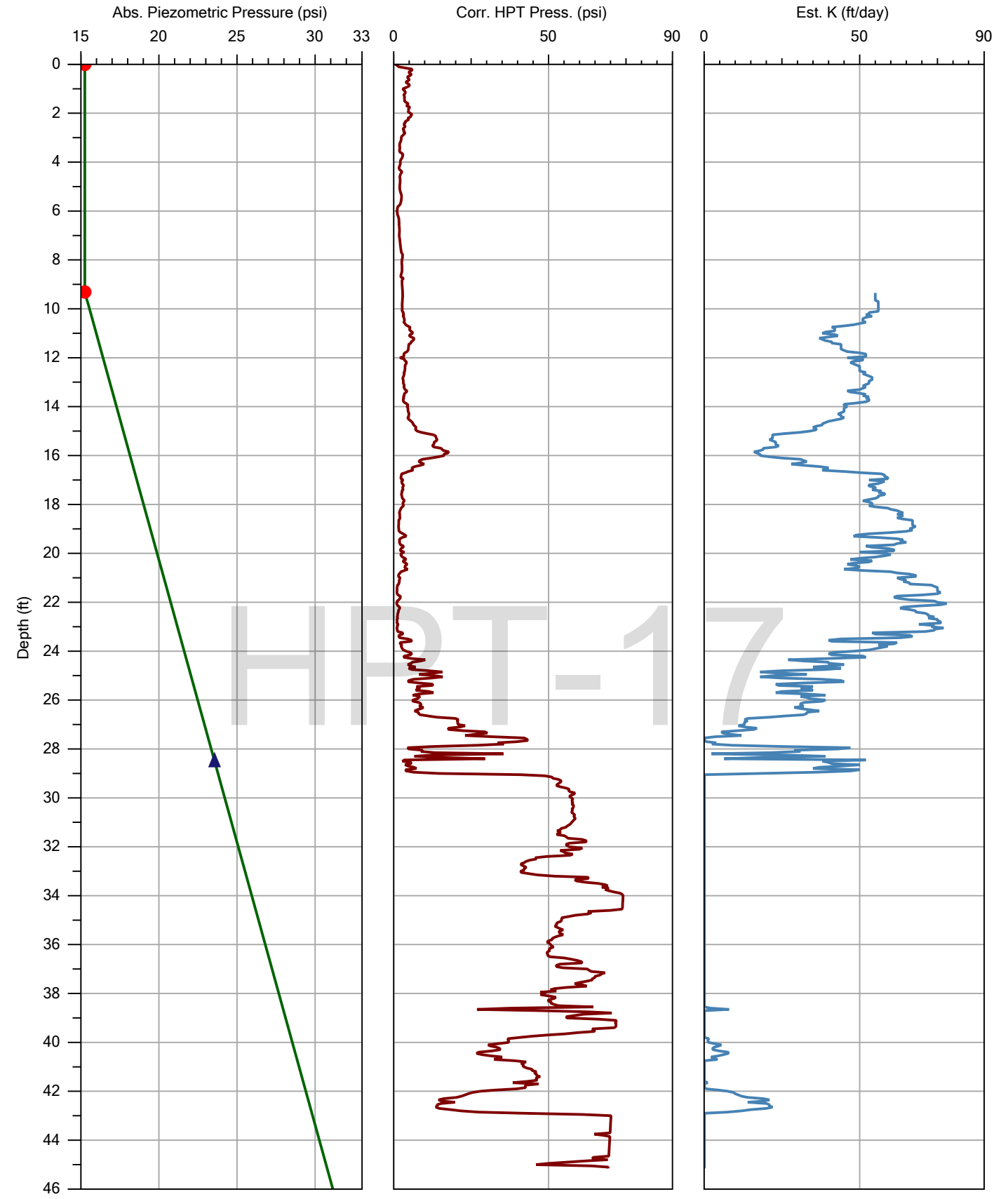


HPT DISSIPATION (SINGLE CASE)

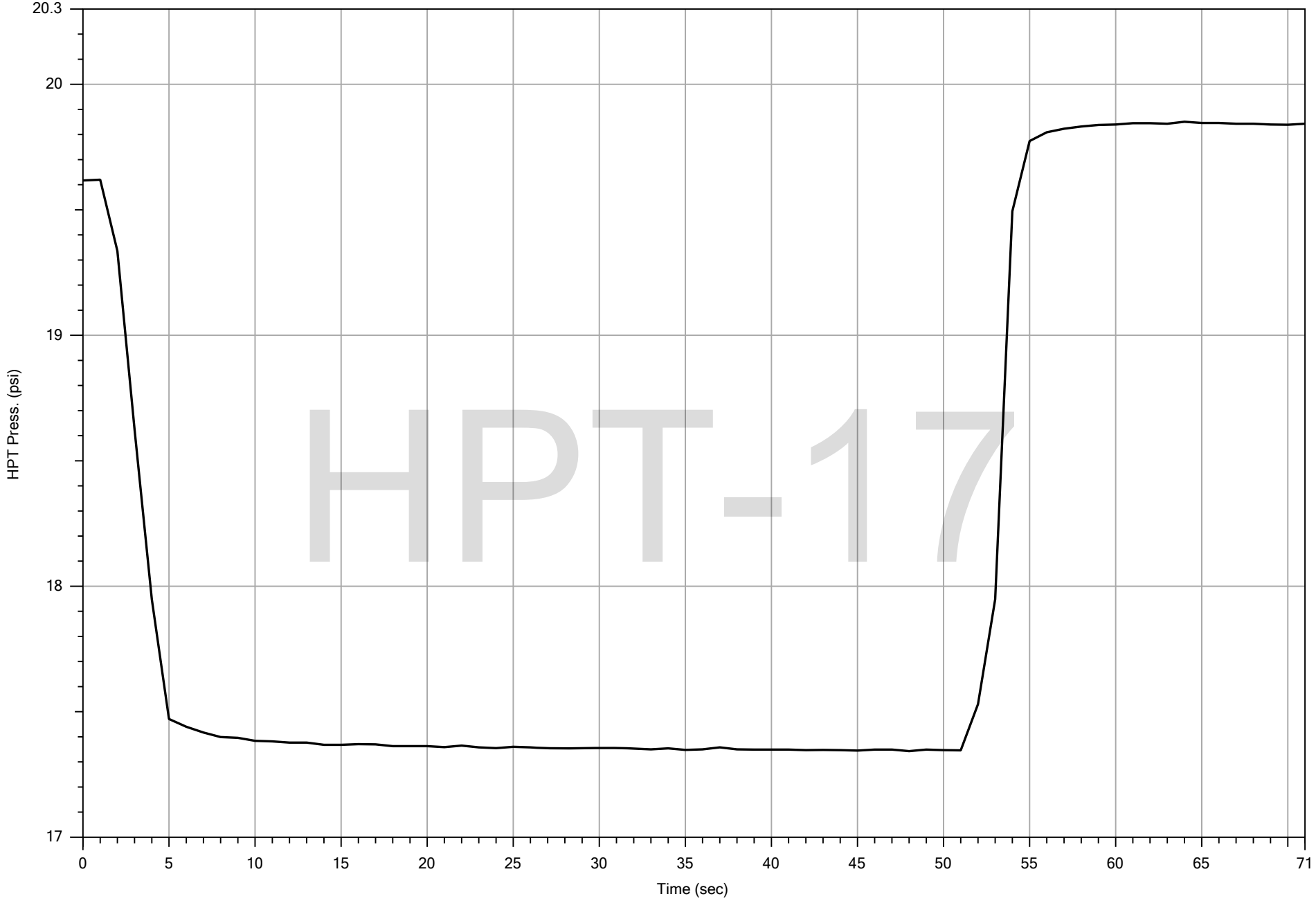
Company: Zebra	Operator: Mickey Ritter	File: HPT-16.TIM	Date: 10/30/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 25.65 ft	Test: 1



		File: HPT-17.HPT
Company: Zebra	Operator: Mickey Ritter	Date: 10/30/2015
Project ID: AVX	Client: Arcadis	Location:

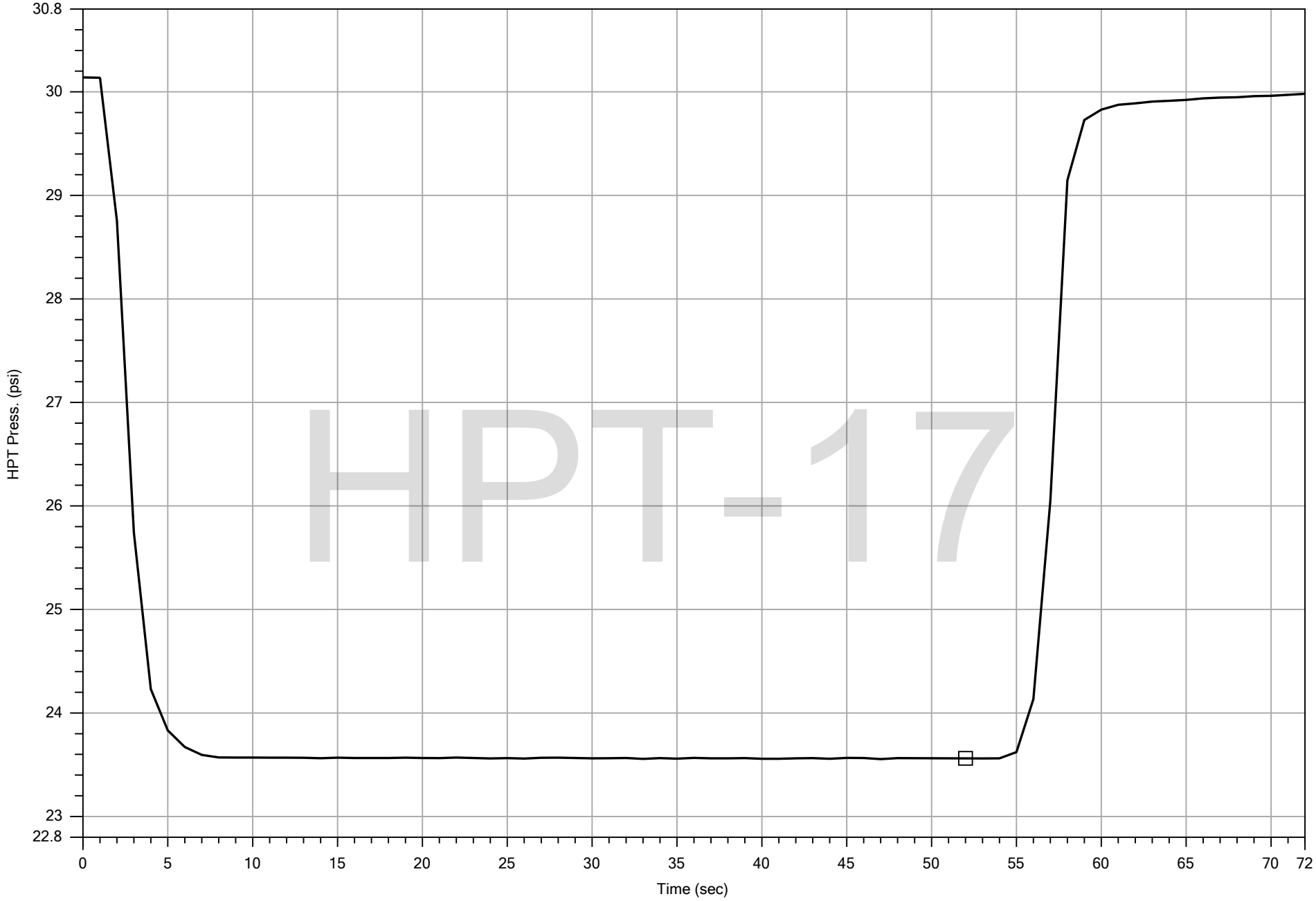


			File: HPT-17.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 10/30/2015
Project ID: AVX	Client: Arcadis		Location:



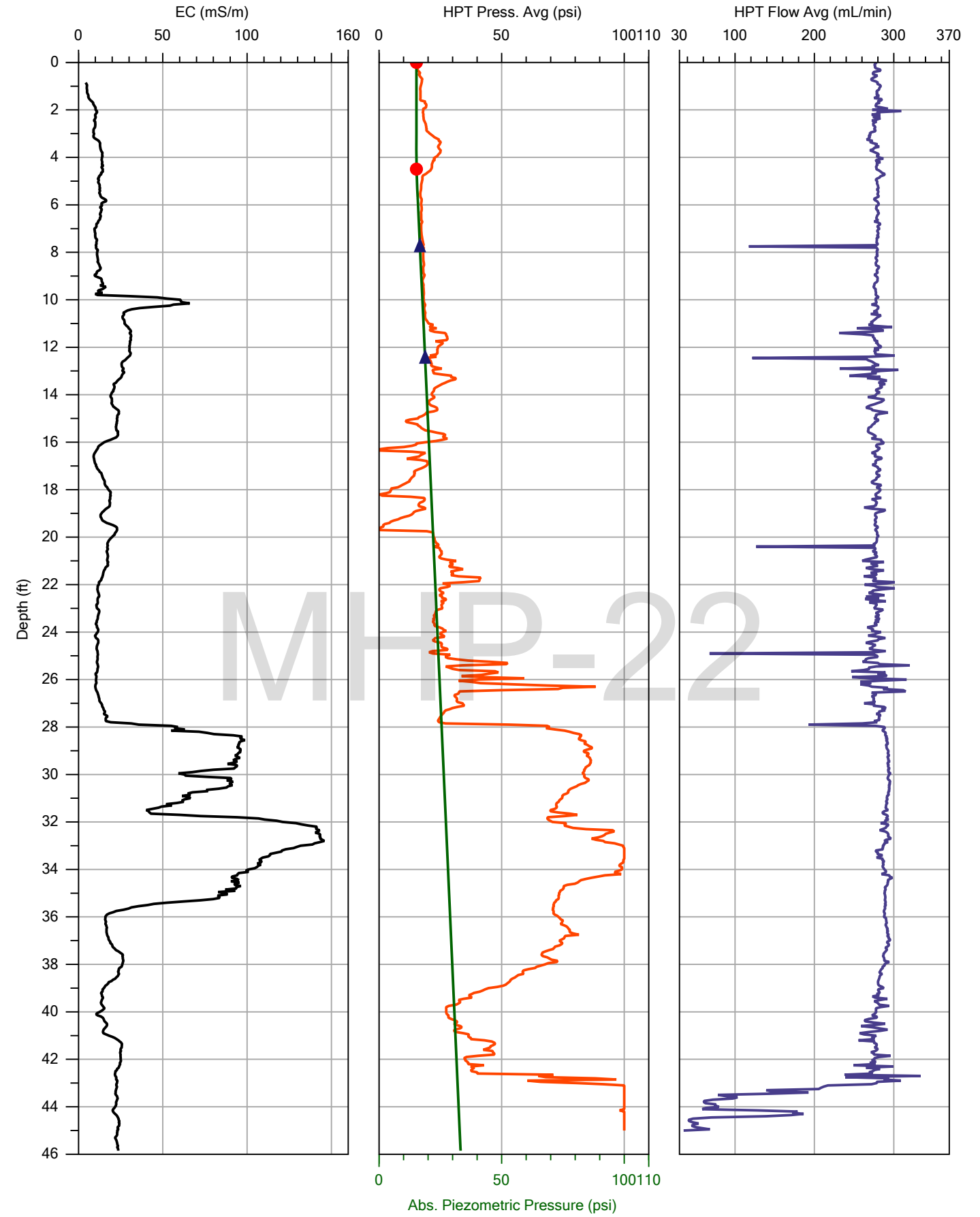
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-17.TIM	Date: 10/30/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 12.00 ft	Test: 1

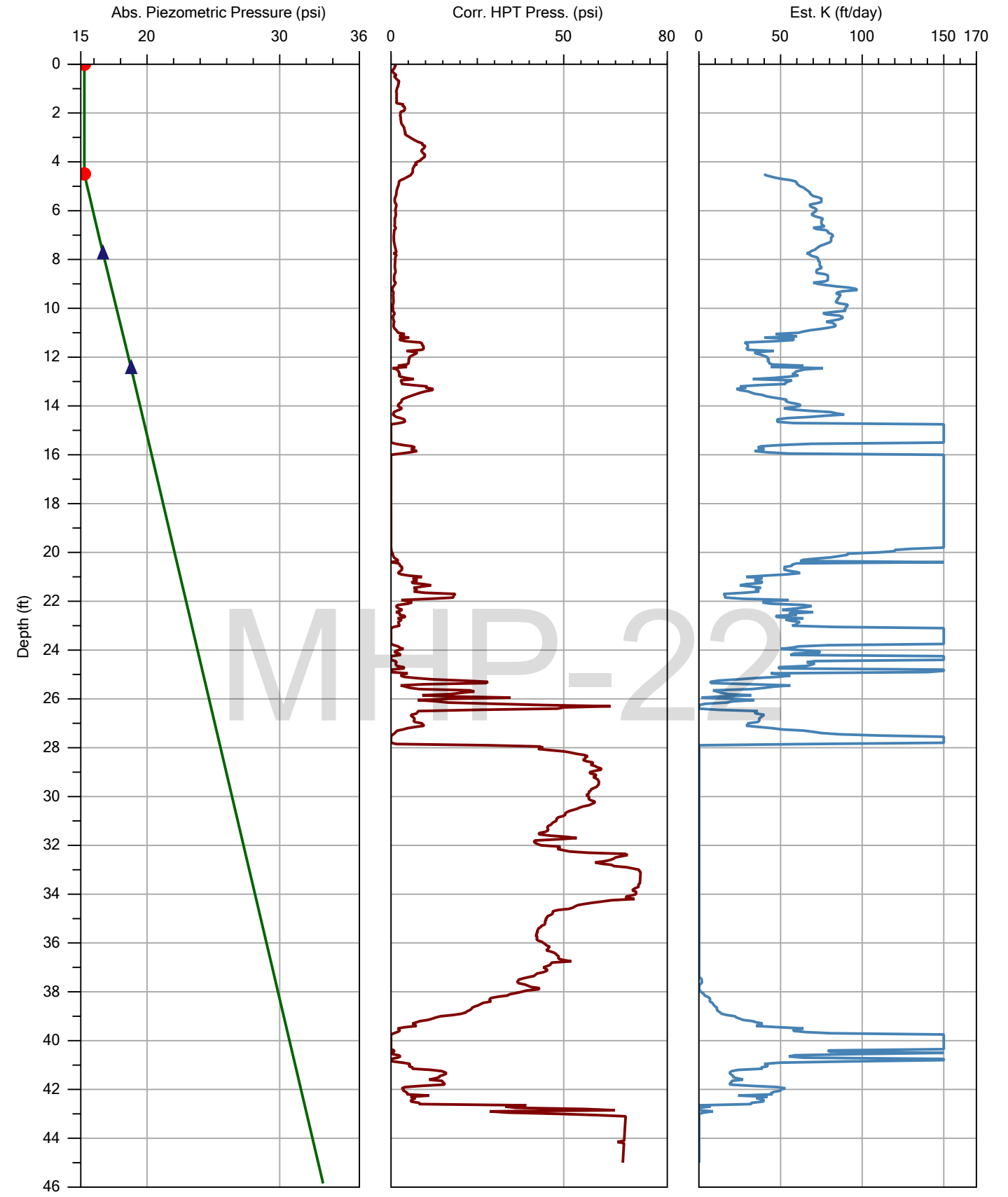


HPT DISSIPATION (SINGLE CASE)

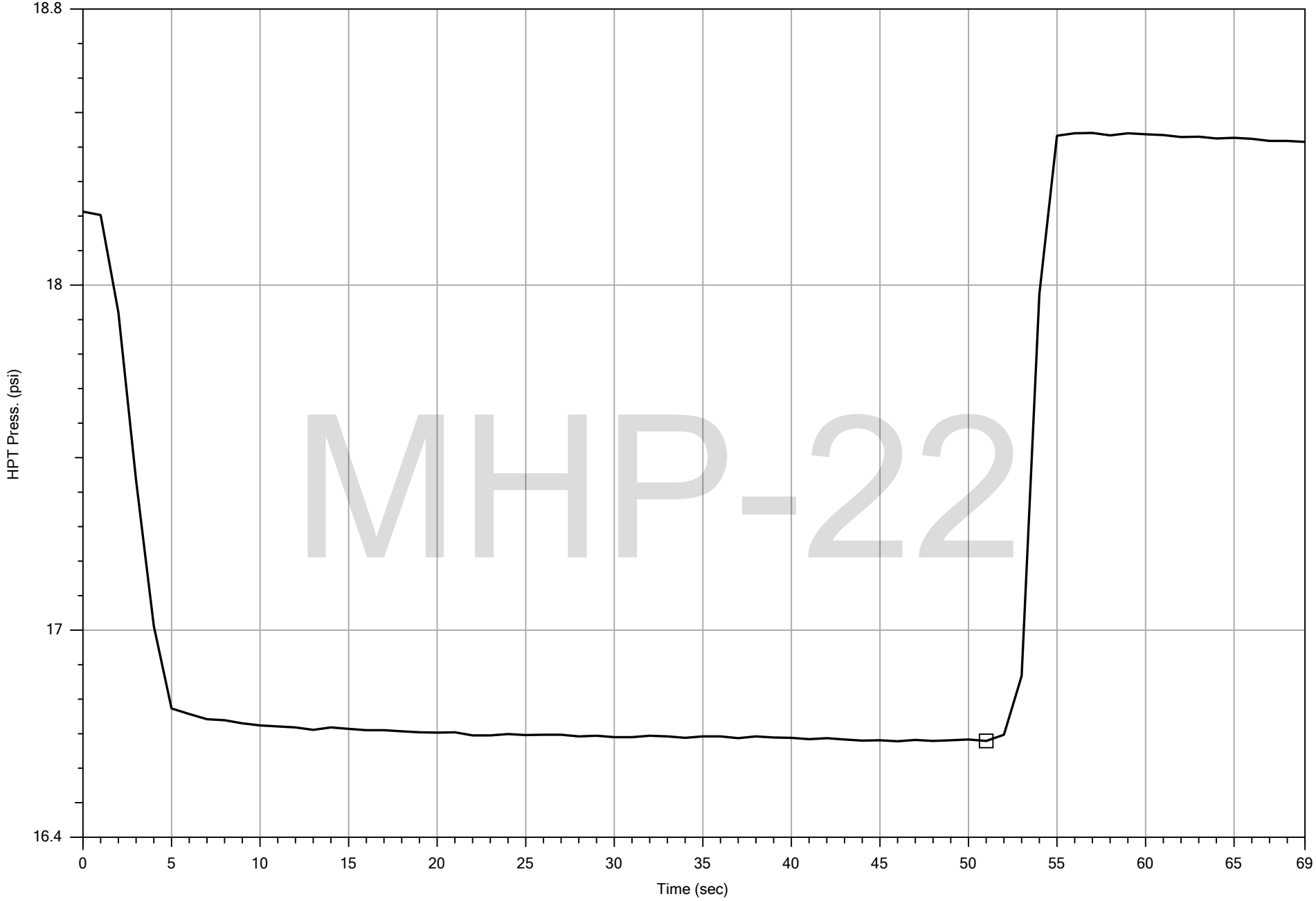
Company: Zebra	Operator: Mickey Ritter	File: HPT-17.TIM	Date: 10/30/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 28.50 ft	Test: 1



			File: HPT-18.HPT
Company: Zebra	Operator: Mickey ritter		Date: 10/31/2015
Project ID: AVX	Client: Arcadis		Location:

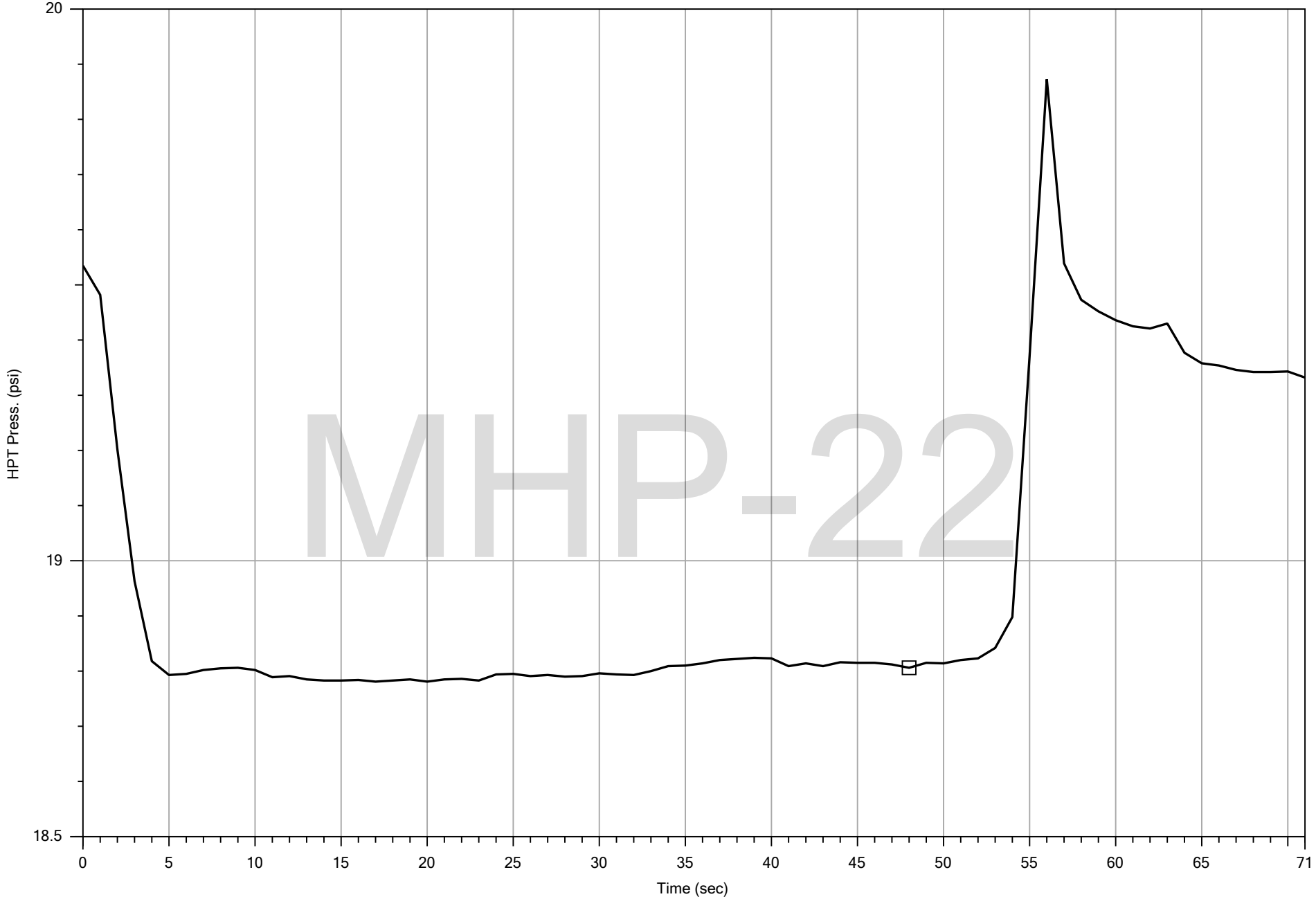


			File: HPT-18.HPT
Company: Zebra	Operator: Mickey ritter		Date: 10/31/2015
Project ID: AVX	Client: Arcadis		Location:



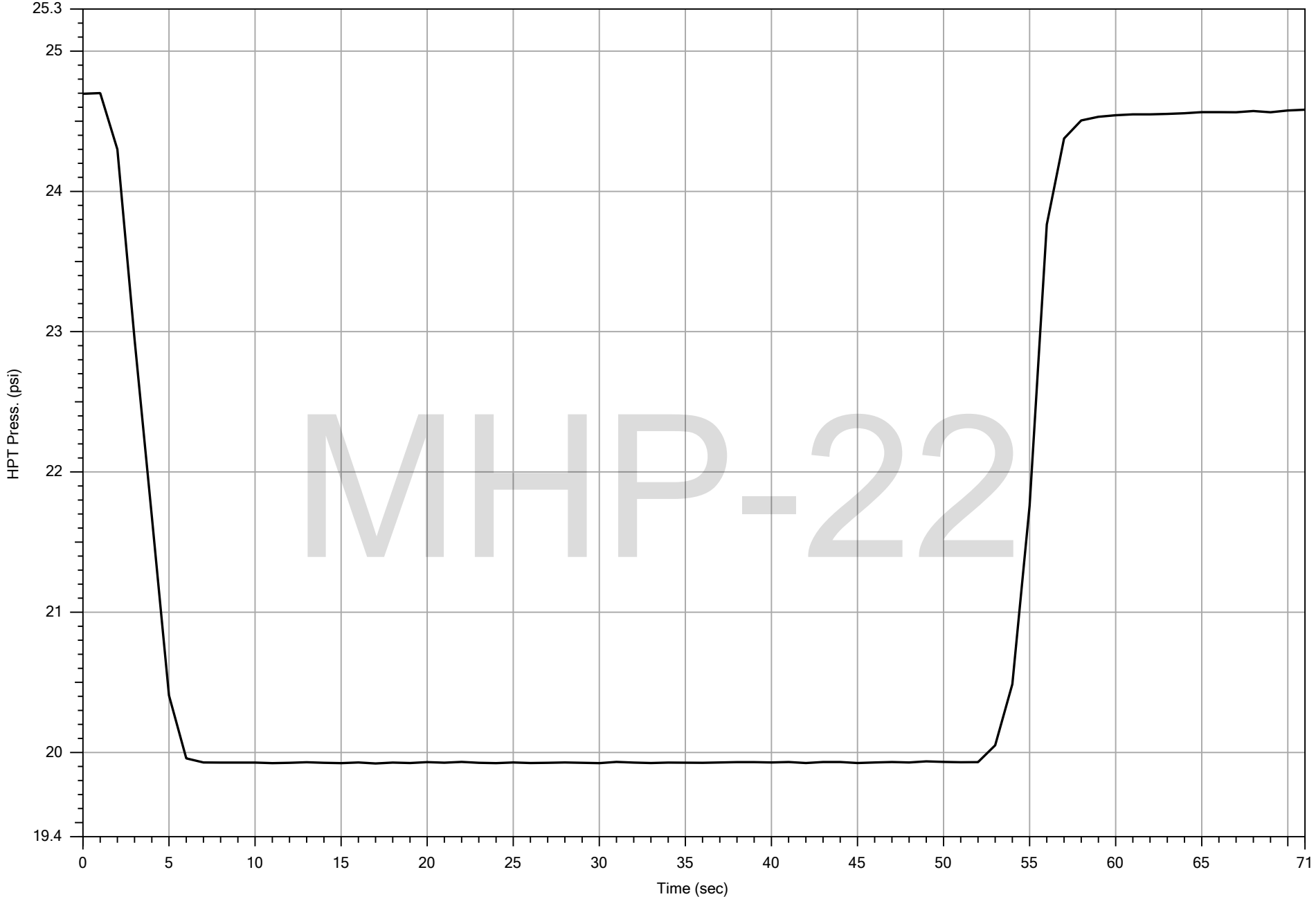
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey ritter	File: HPT-18.TIM	Date: 10/31/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 7.75 ft	Test: 1



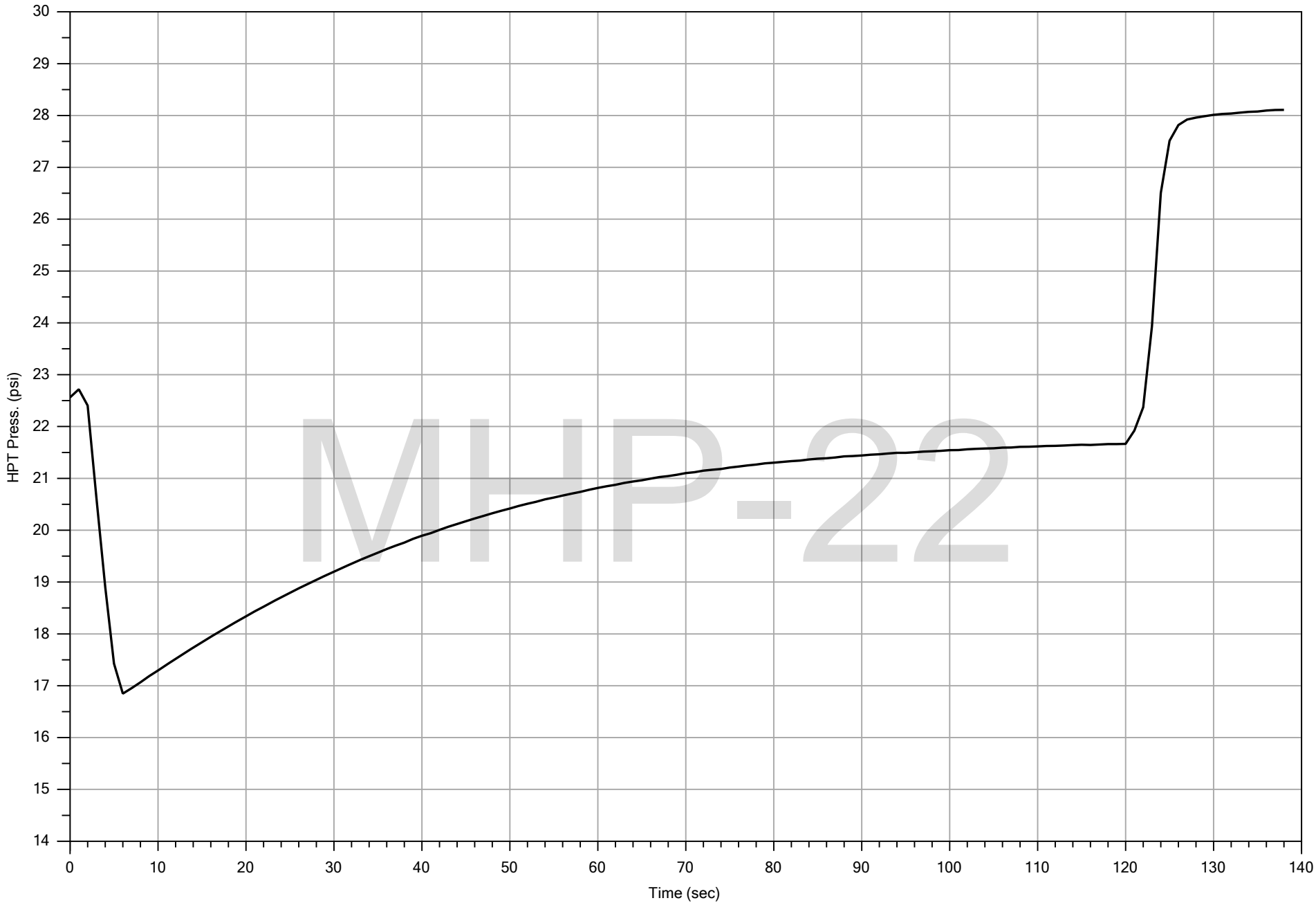
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey ritter	File: HPT-18.TIM	Date: 10/31/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 12.45 ft	Test: 1



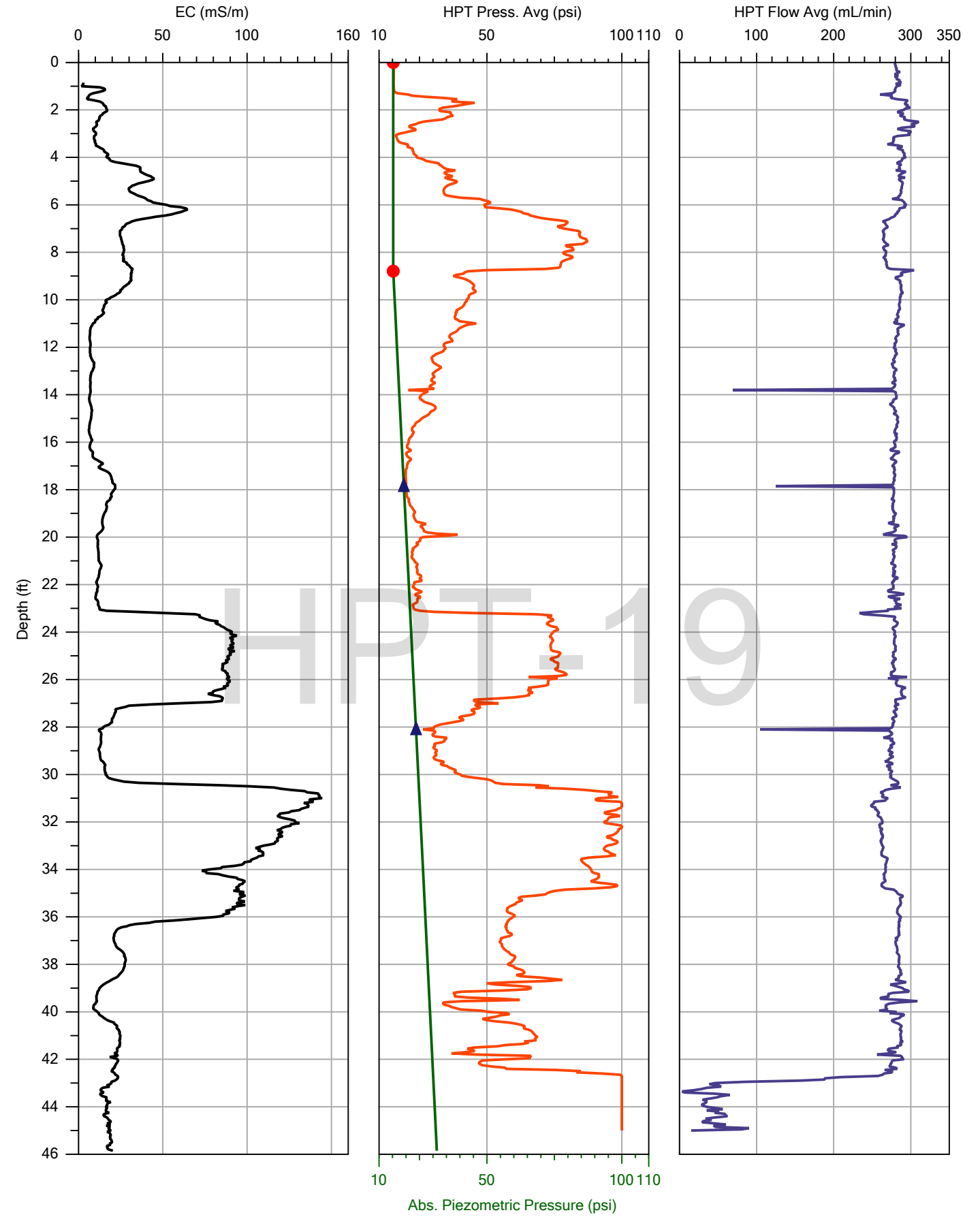
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey ritter	File: HPT-18.TIM	Date: 10/31/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 20.40 ft	Test: 1

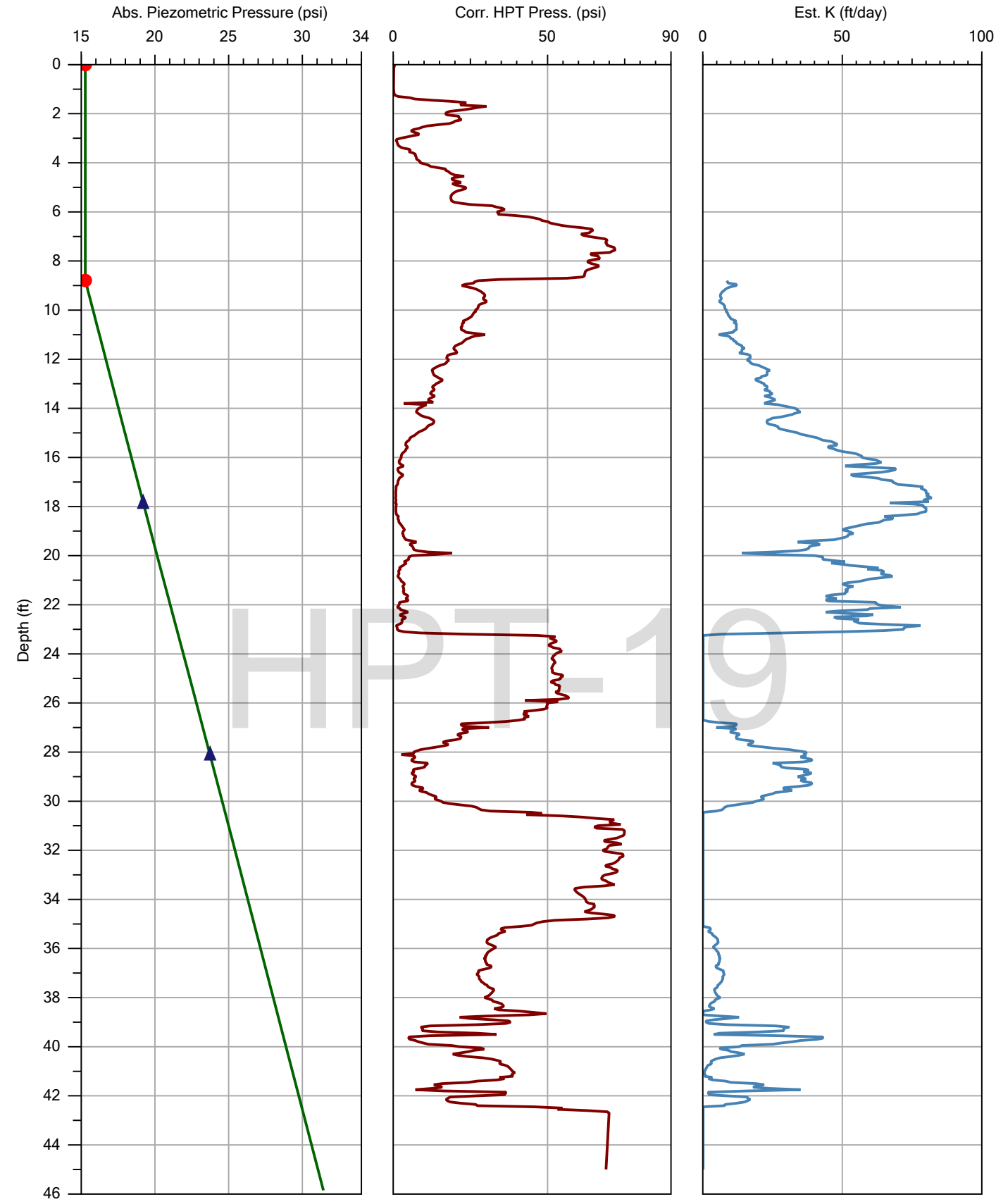


HPT DISSIPATION (SINGLE CASE)

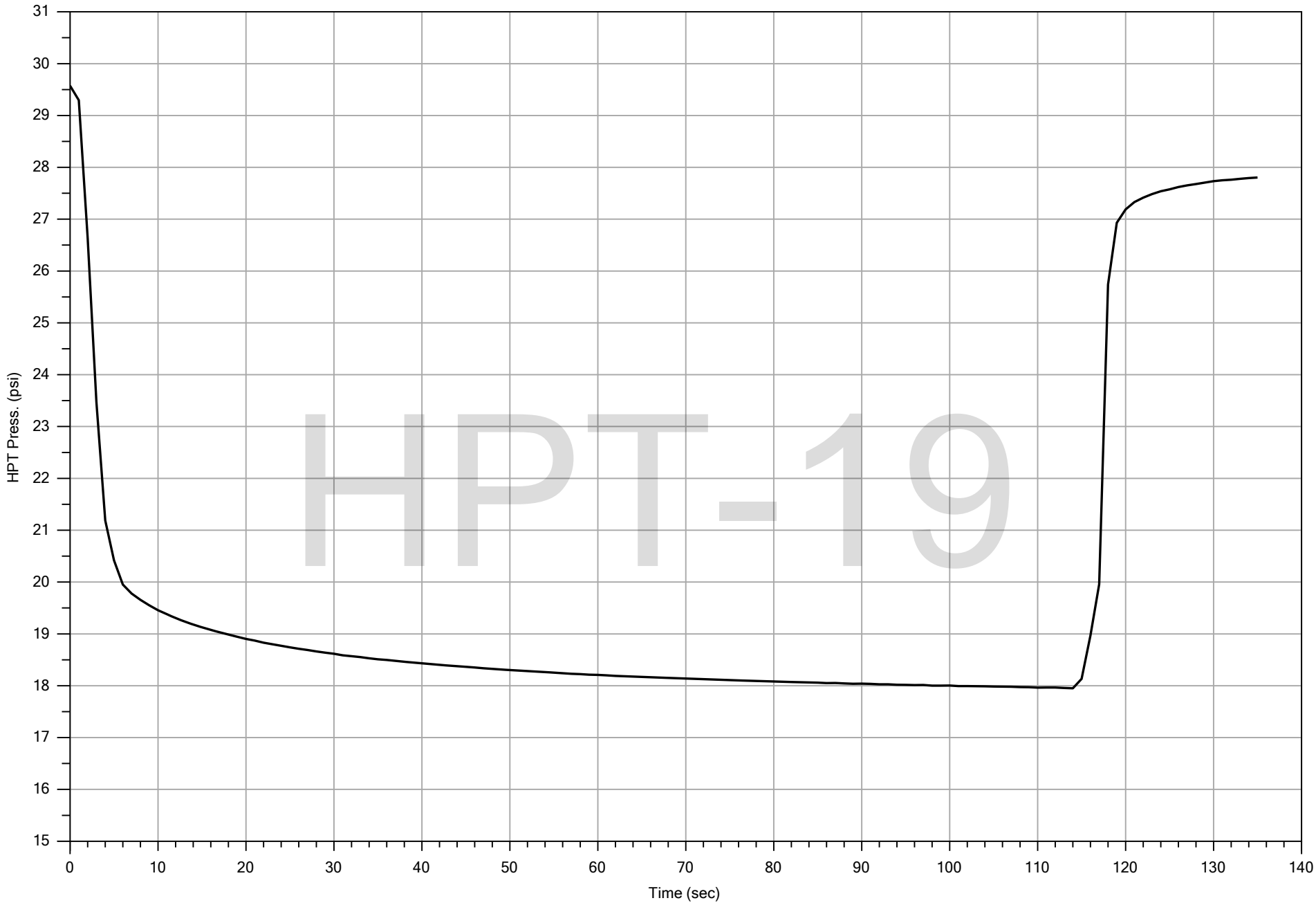
Company: Zebra	Operator: Mickey ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 24.90 ft	Test: 1
		File: HPT-18.TIM	Date: 10/31/2015



			File: HPT-19.HPT
Company: Zebra	Operator: Mickey ritter		Date: 10/31/2015
Project ID: AVX	Client: Arcadis		Location:

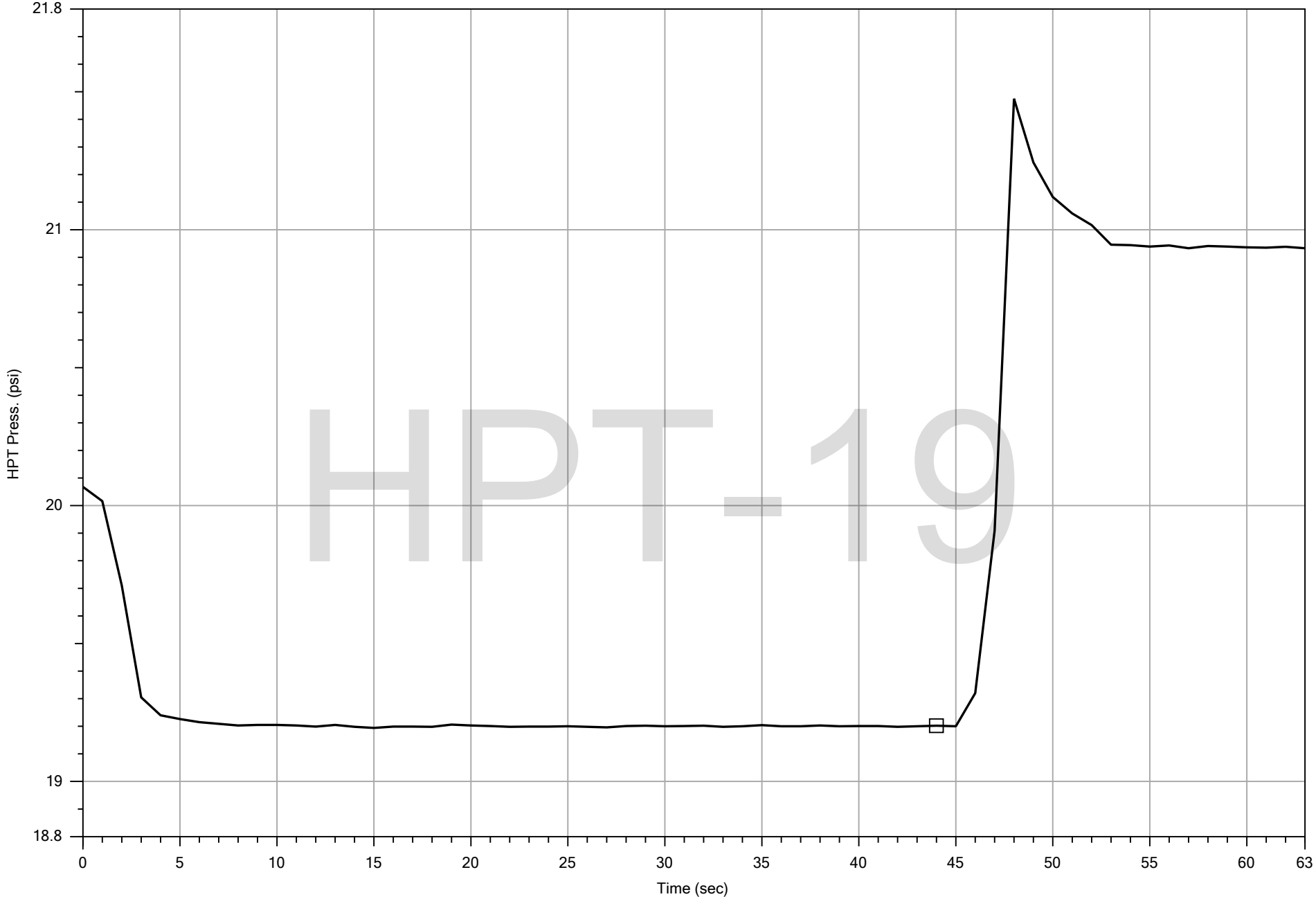


			File: HPT-19.HPT
Company: Zebra	Operator: Mickey ritter		Date: 10/31/2015
Project ID: AVX	Client: Arcadis		Location:



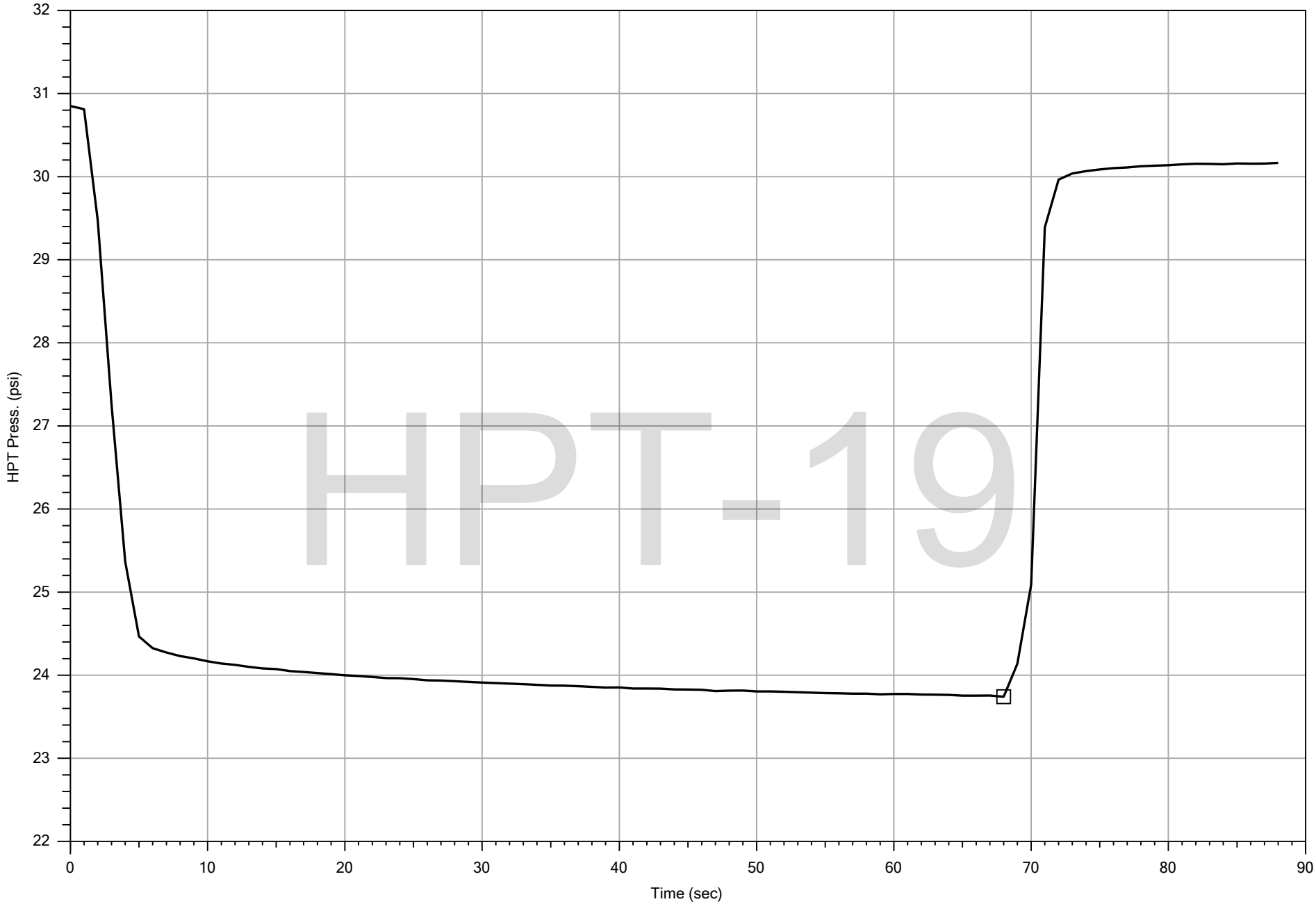
HPT DISSIPATION (SINGLE CASE)

File: HPT-19.TIM			Date: 10/31/2015
Company: Zebra	Operator: Mickey ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 13.80 ft	Test: 1



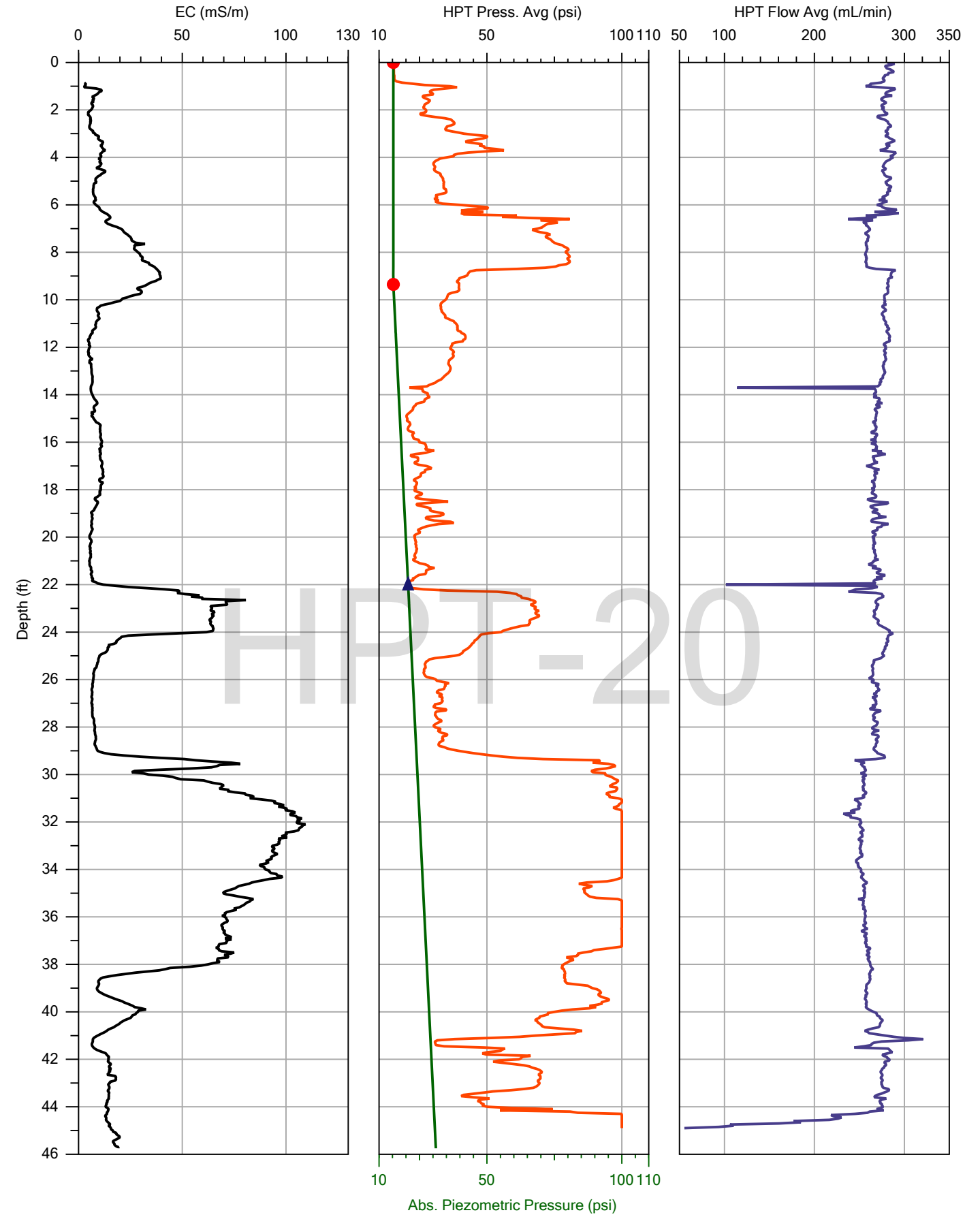
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey ritter	File: HPT-19.TIM	Date: 10/31/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 17.85 ft	Test: 1

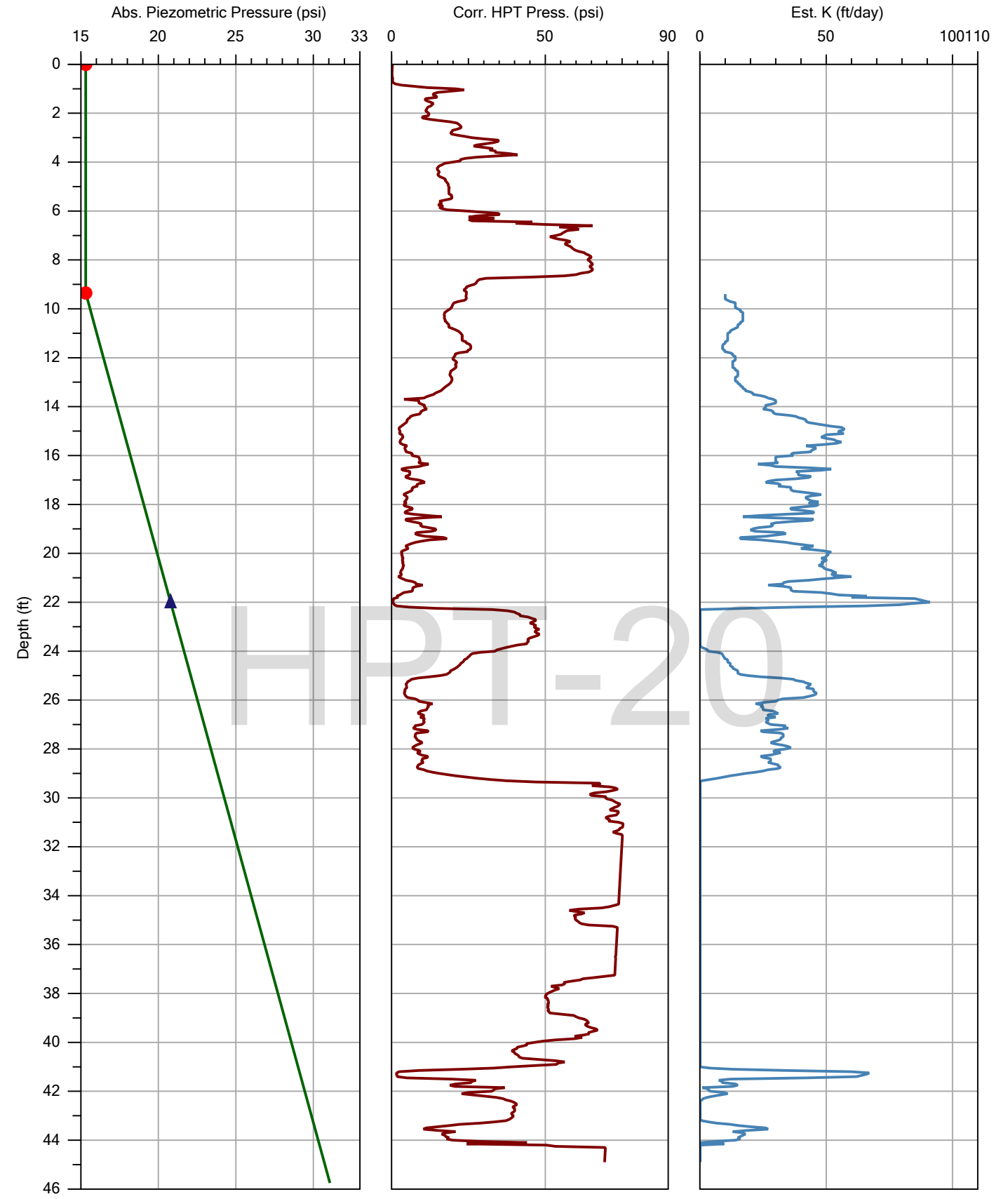


HPT DISSIPATION (SINGLE CASE)

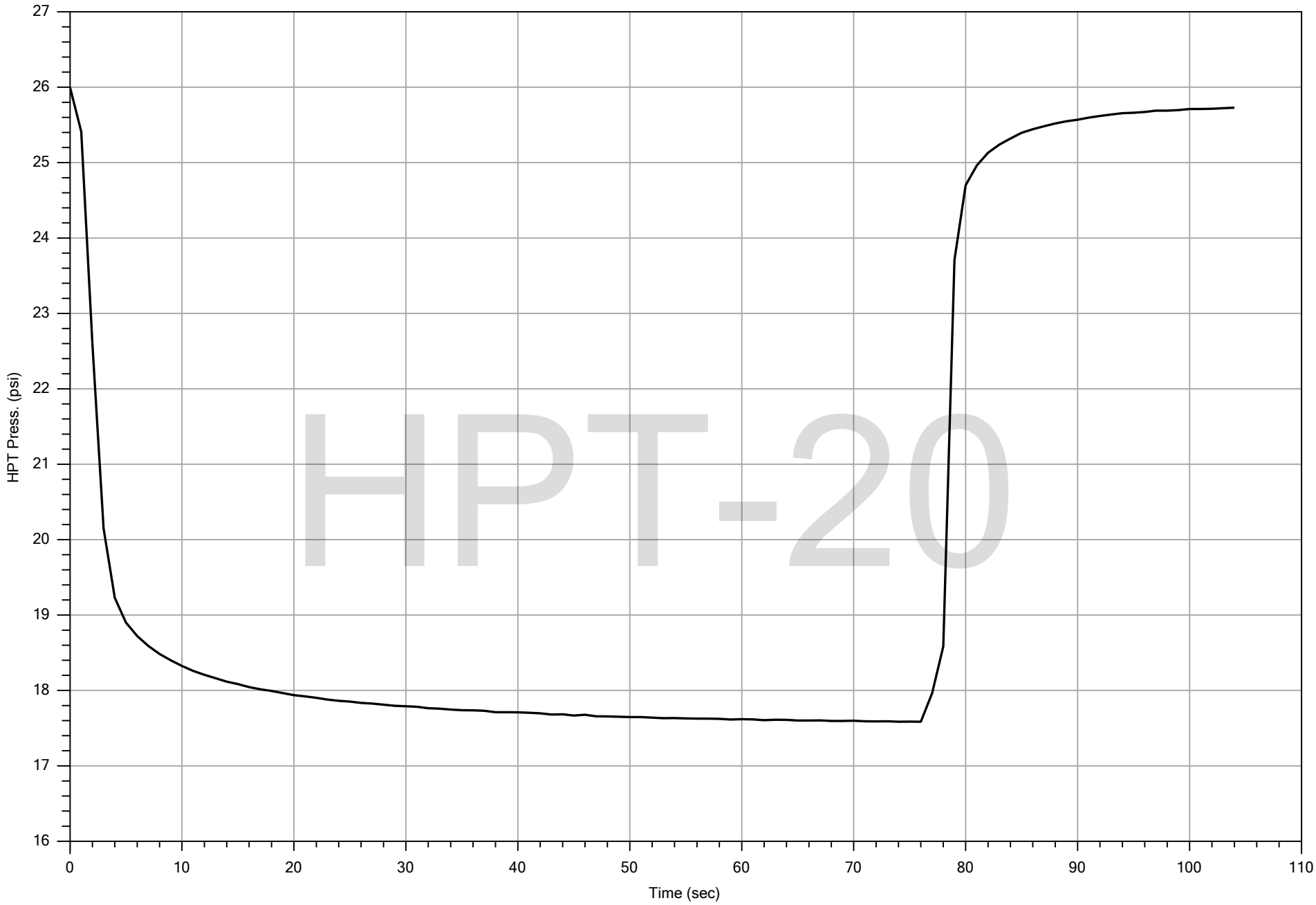
Company: Zebra	Operator: Mickey ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 28.10 ft	Test: 1
		File: HPT-19.TIM	Date: 10/31/2015



			File: HPT-20.HPT
Company: Zebra	Operator: Mickey ritter		Date: 10/31/2015
Project ID: AVX	Client: Arcadis		Location:

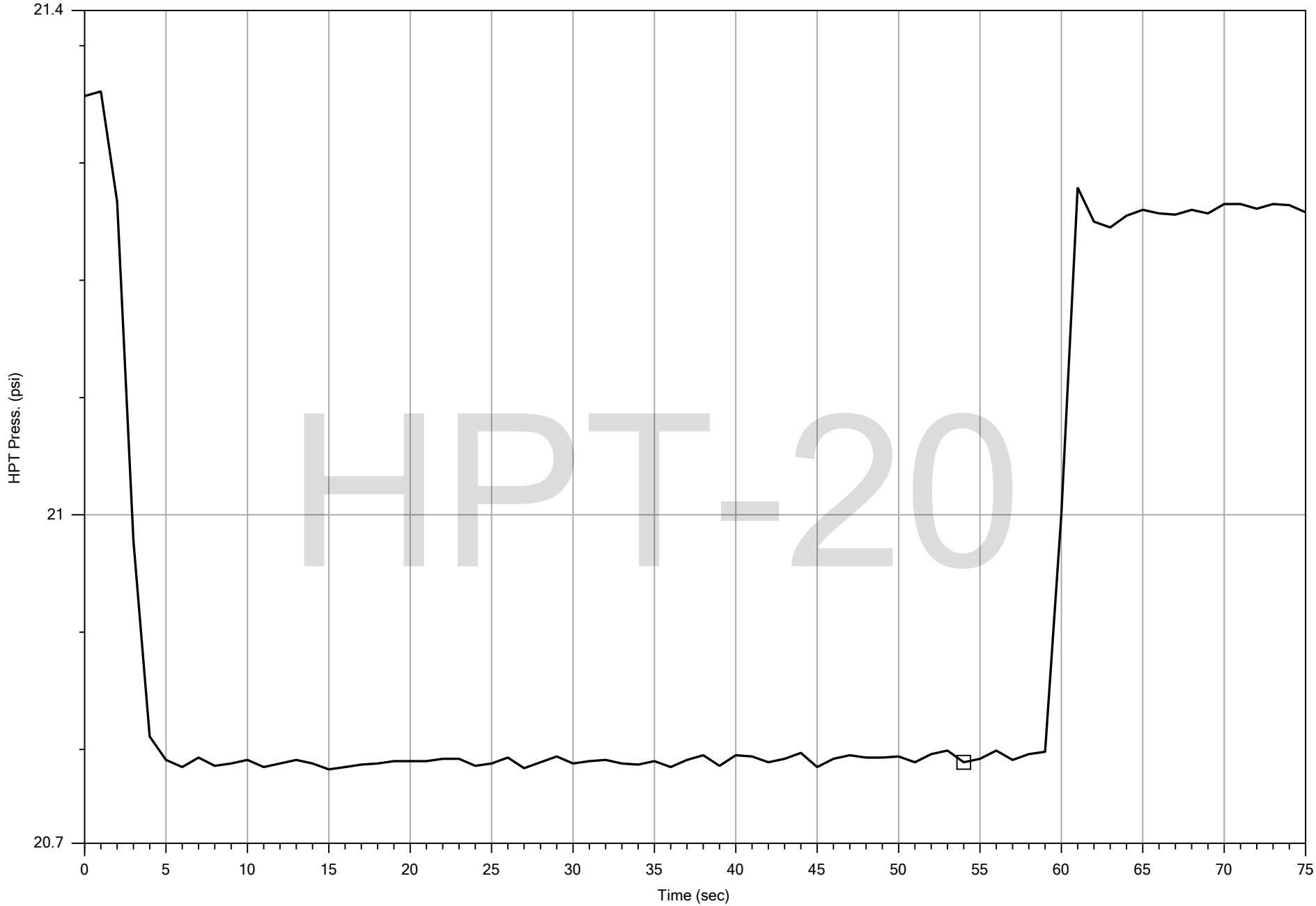


			File: HPT-20.HPT
Company: Zebra	Operator: Mickey ritter		Date: 10/31/2015
Project ID: AVX	Client: Arcadis		Location:



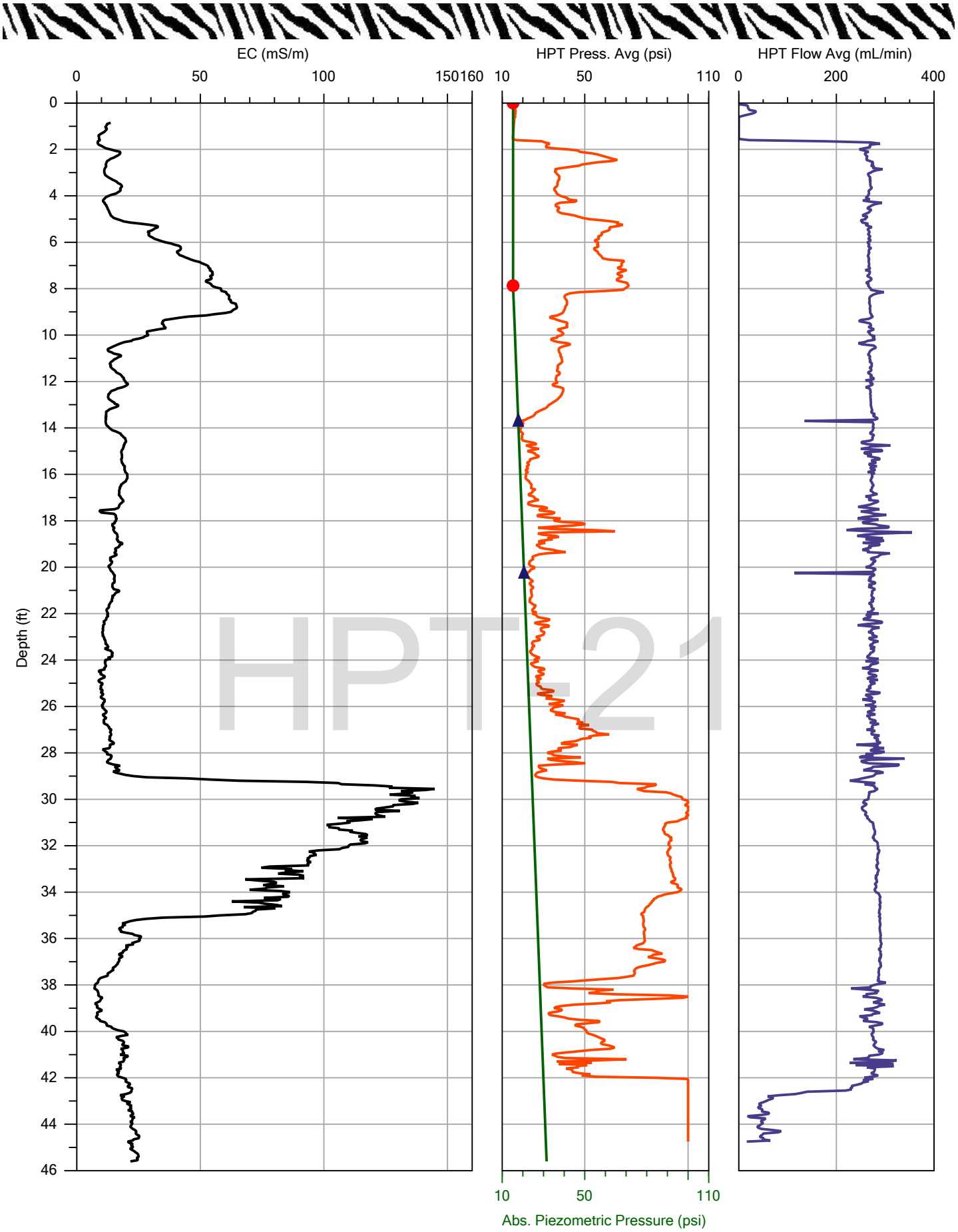
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 13.70 ft	Test: 1
File: HPT-20.TIM			Date: 10/31/2015

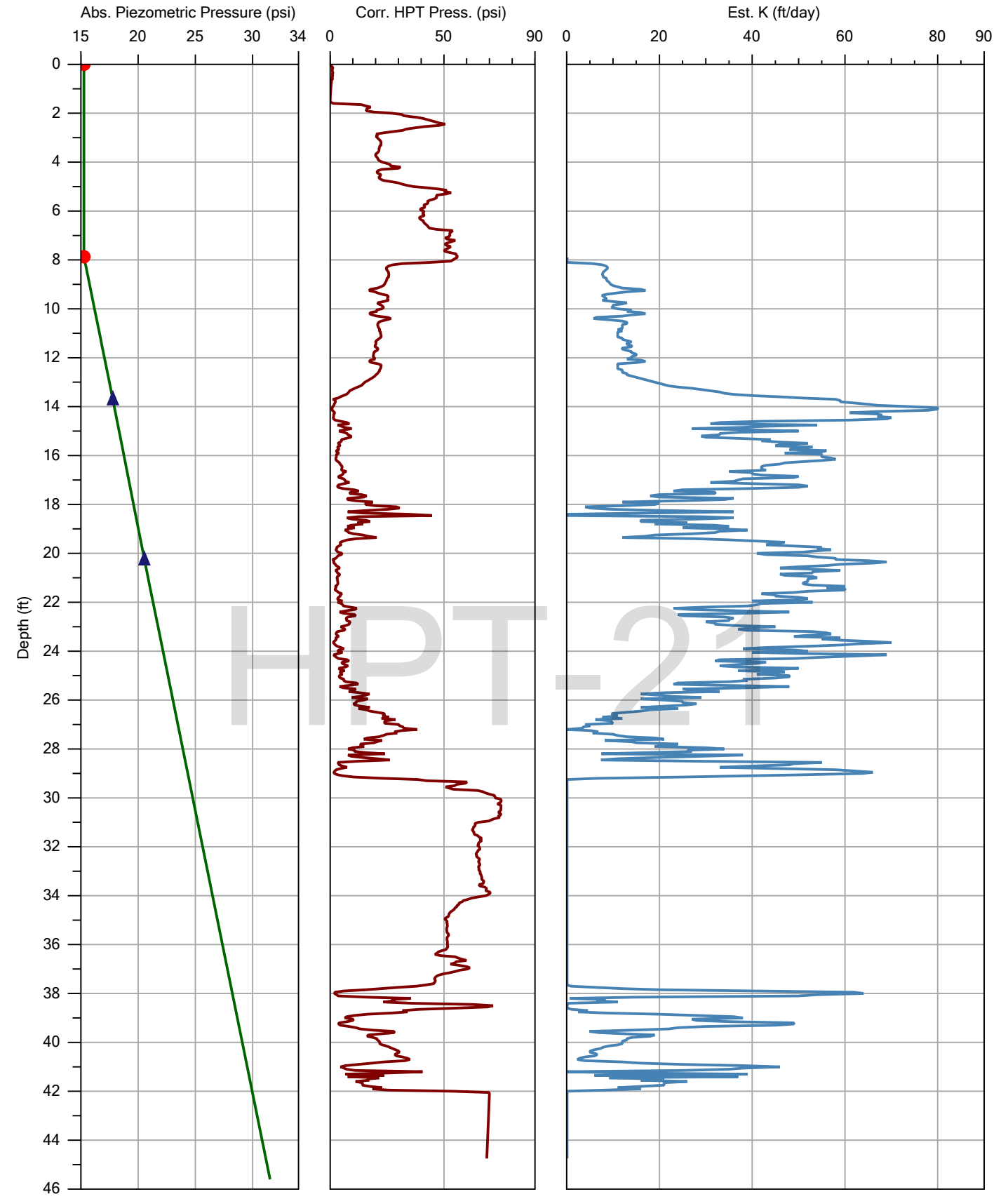


HPT DISSIPATION (SINGLE CASE)

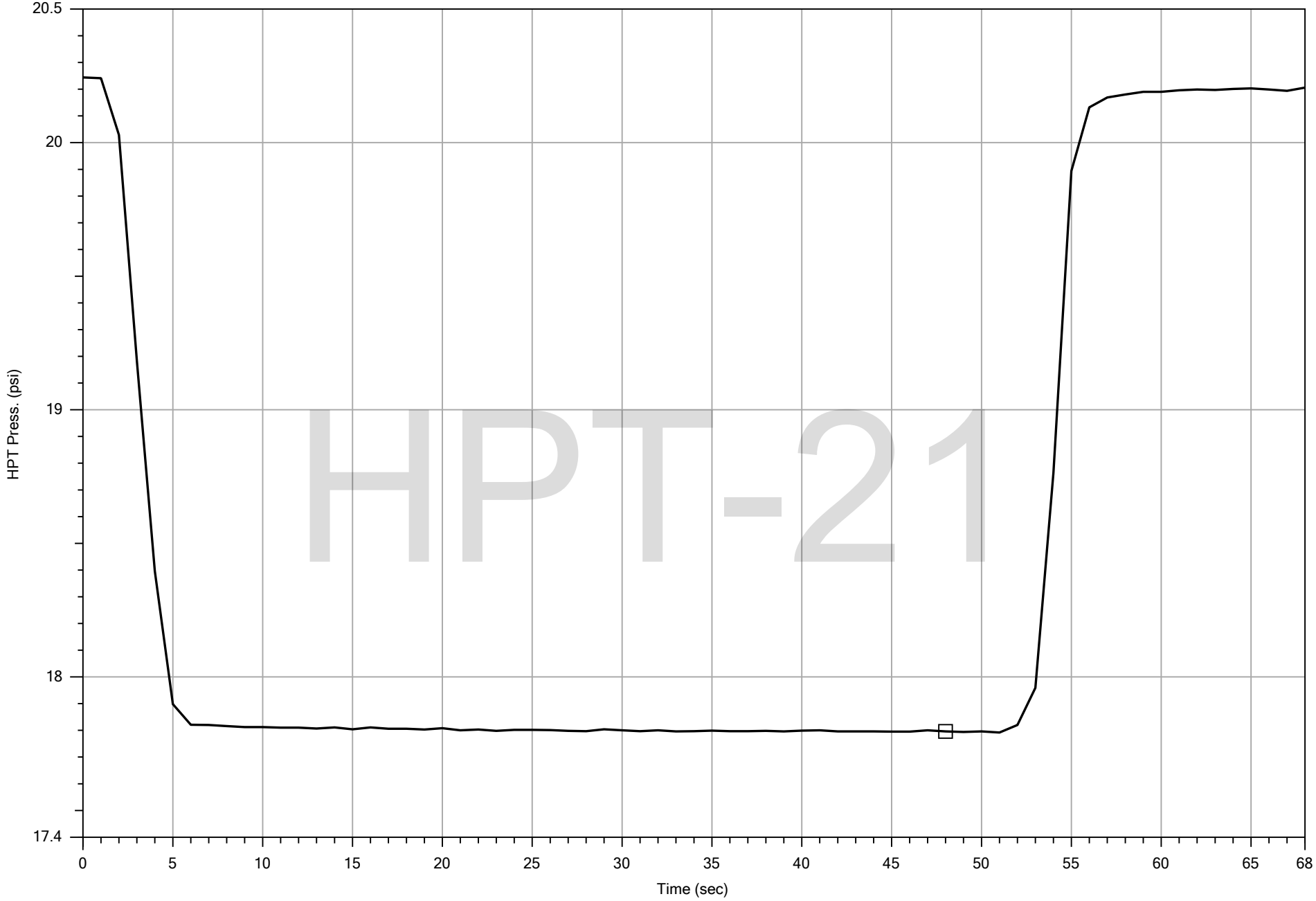
Company: Zebra	Operator: Mickey ritter	File: HPT-20.TIM	Date: 10/31/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 22.00 ft	Test: 1



			File: HPT-21.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/1/2015
Project ID: AVX	Client: Arcadis		Location:

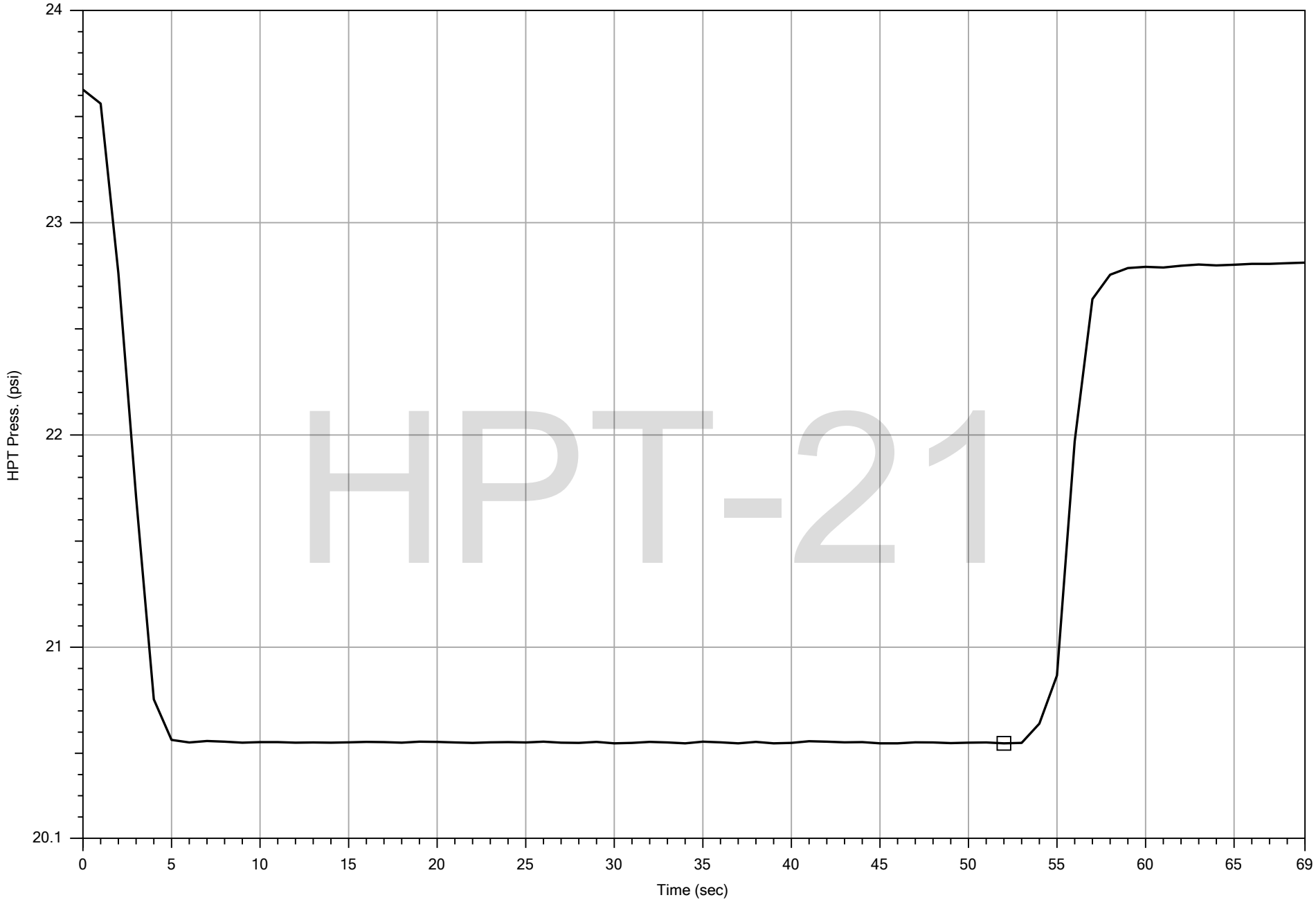


			File: HPT-21.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/1/2015
Project ID: AVX	Client: Arcadis		Location:



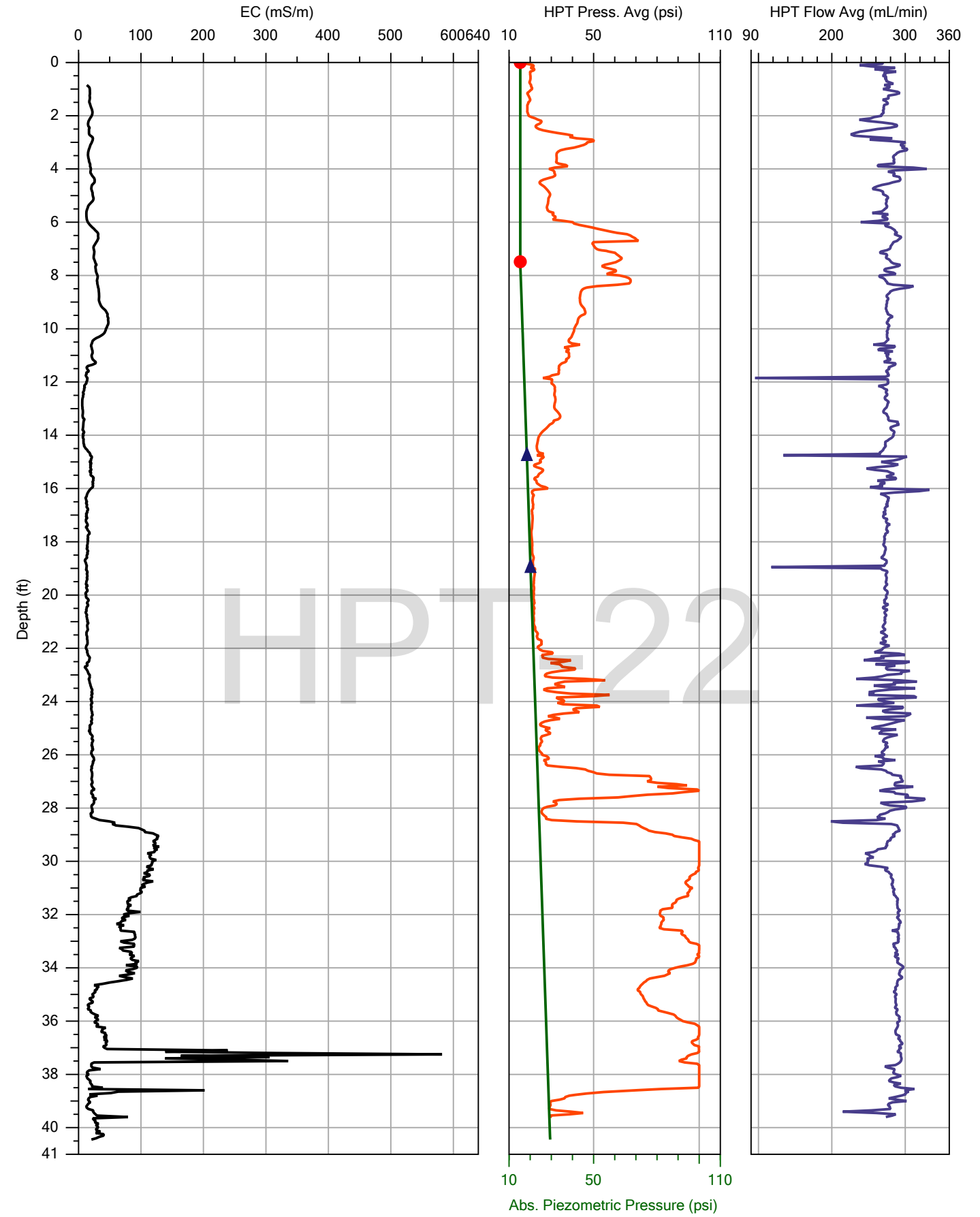
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 13.70 ft	Test: 1
File: HPT-21.TIM			Date: 11/1/2015

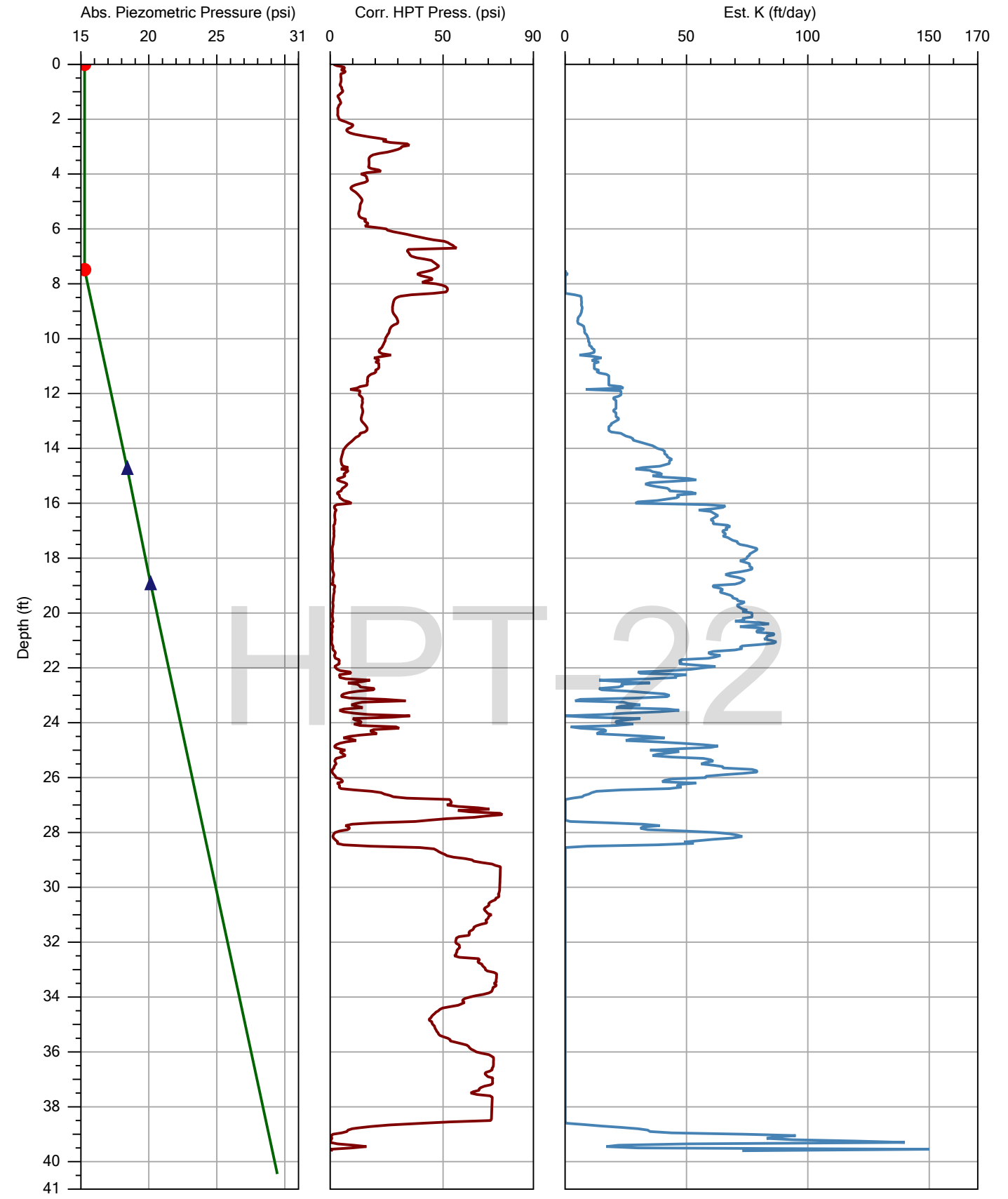


HPT DISSIPATION (SINGLE CASE)

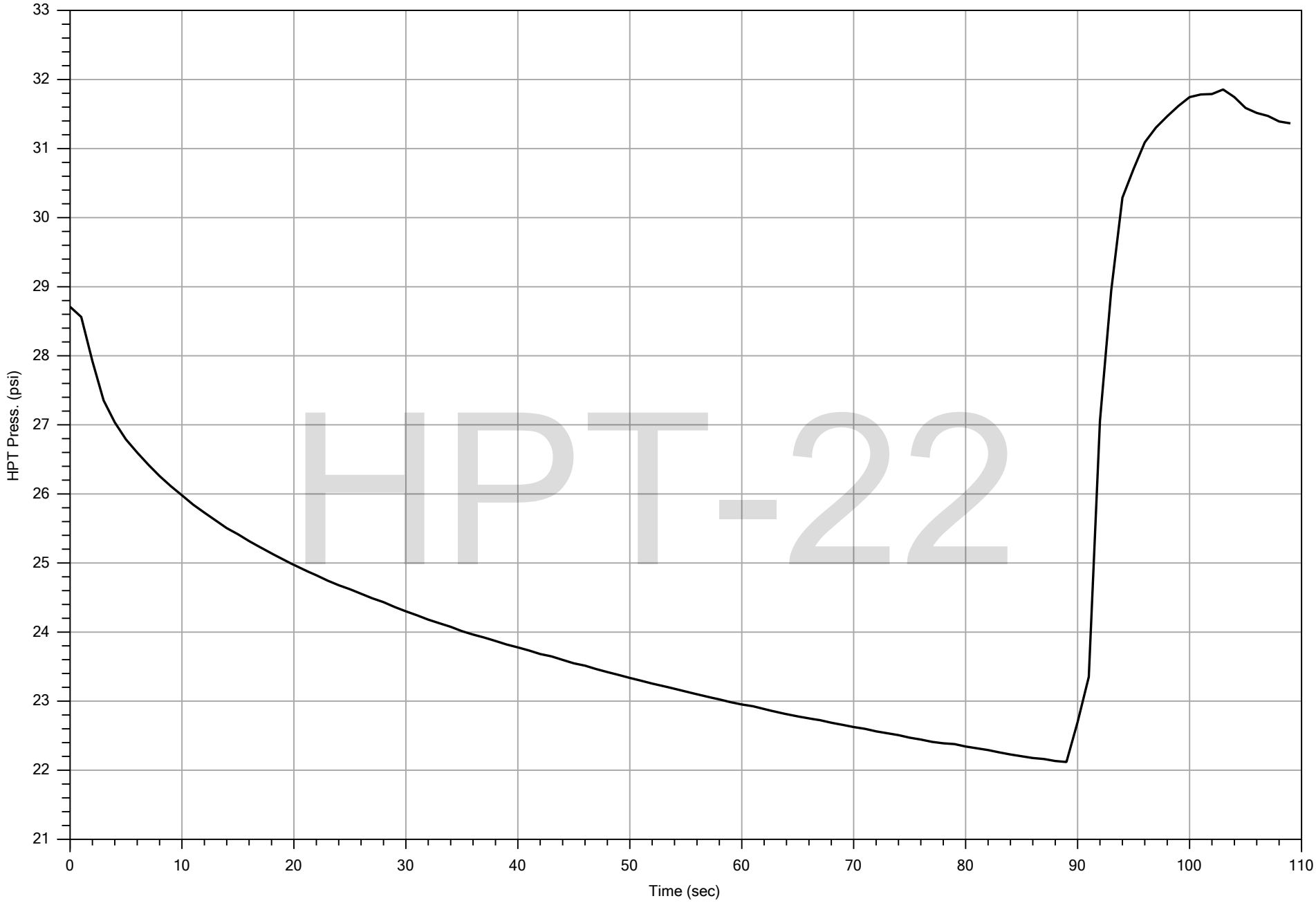
Company: Zebra	Operator: Mickey Ritter	File: HPT-21.TIM	Date: 11/1/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 20.25 ft	Test: 1



			File: HPT-22.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/1/2015
Project ID: AVX	Client: Arcadis		Location:

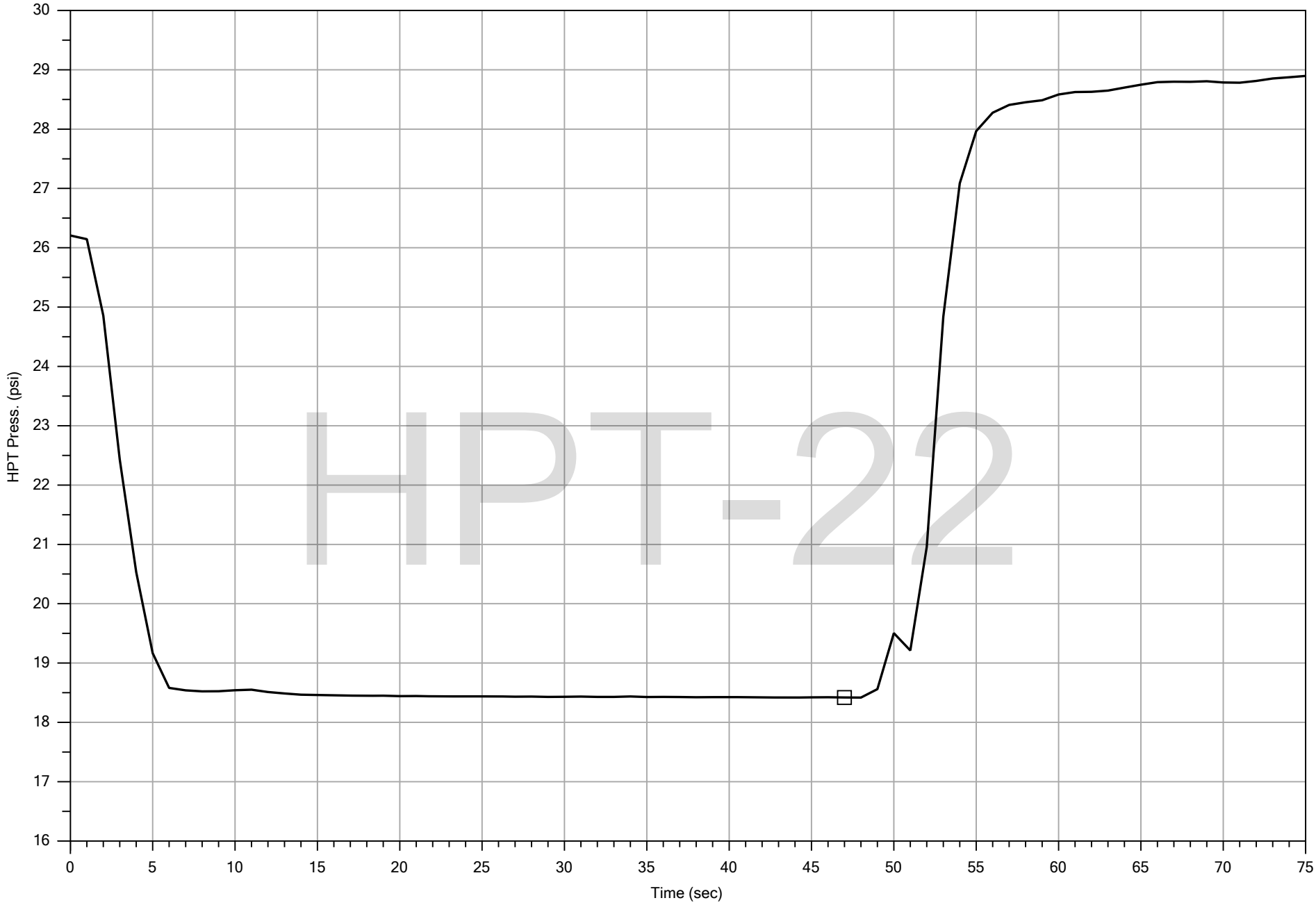


			File: HPT-22.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/1/2015
Project ID: AVX	Client: Arcadis		Location:



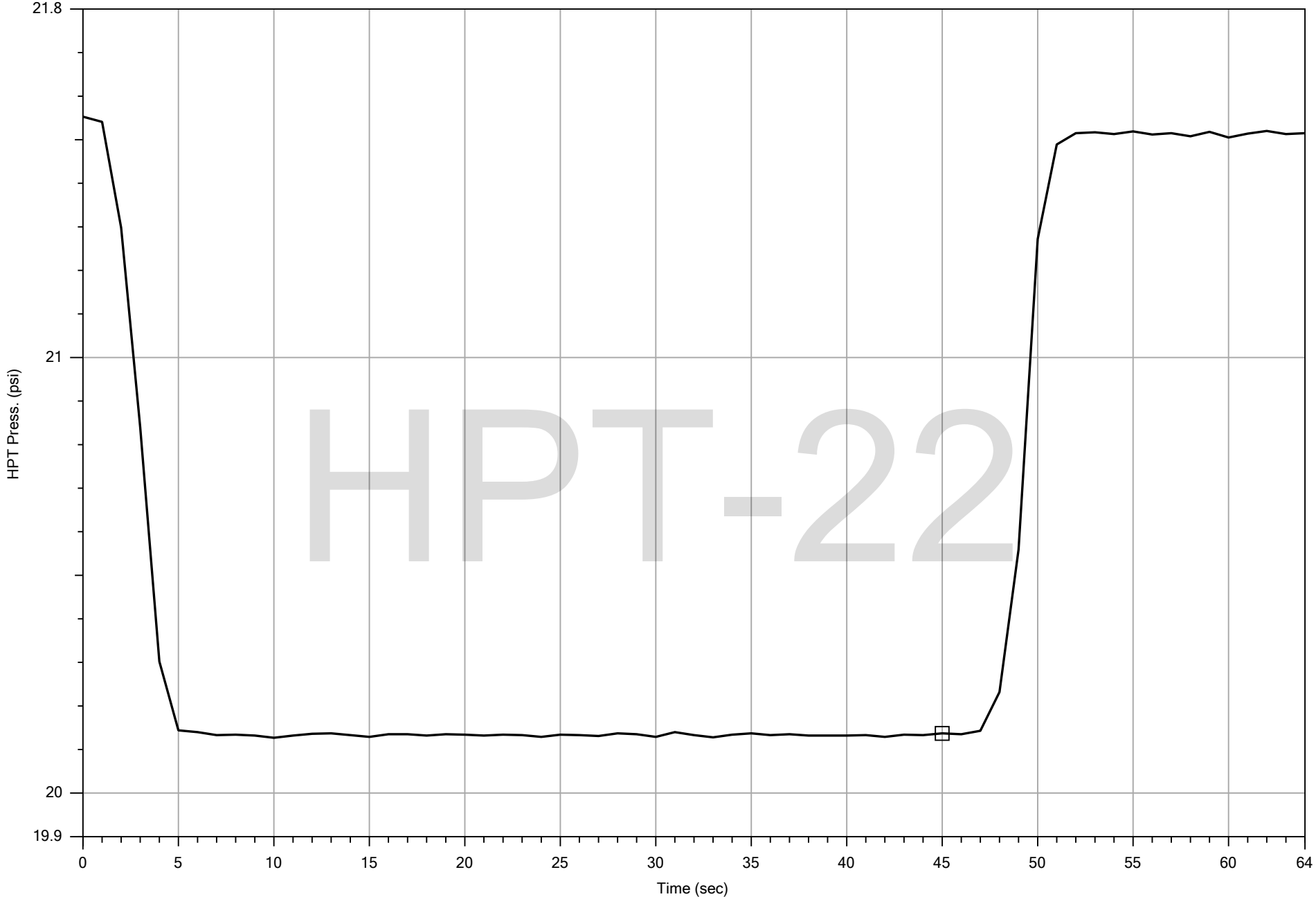
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-22.TIM	Date: 11/1/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 11.85 ft	Test: 1



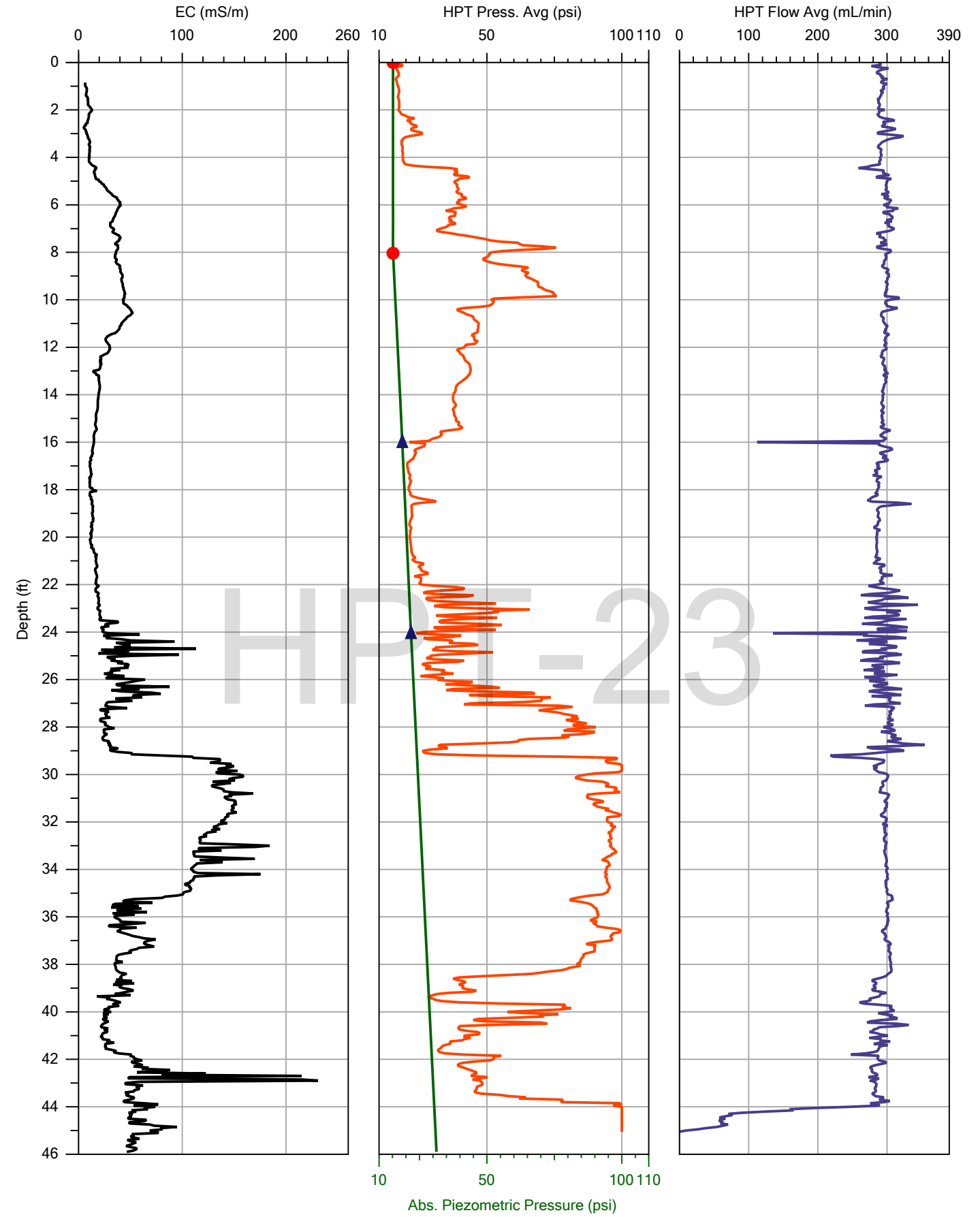
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-22.TIM	Date: 11/1/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 14.75 ft	Test: 1

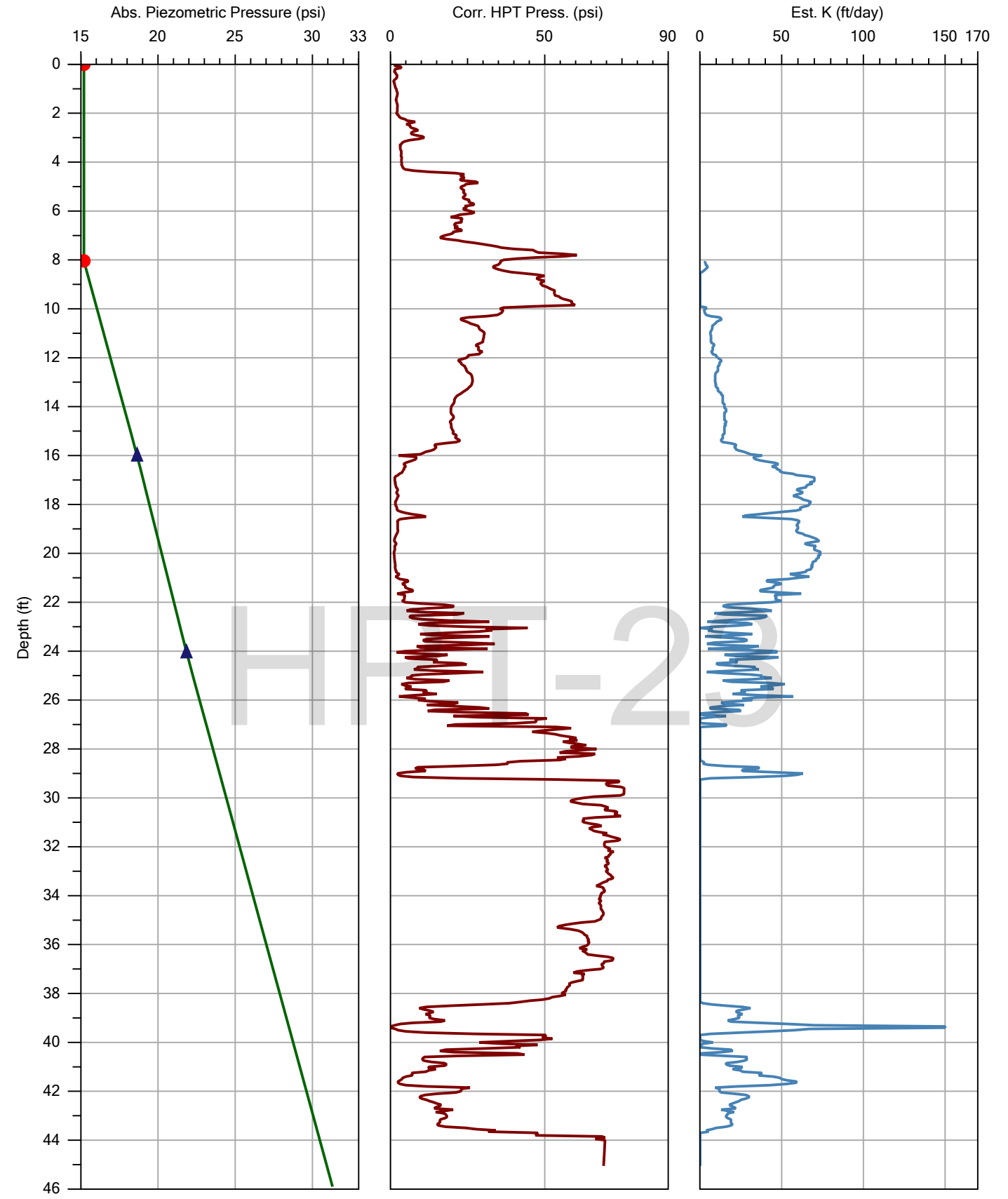


HPT DISSIPATION (SINGLE CASE)

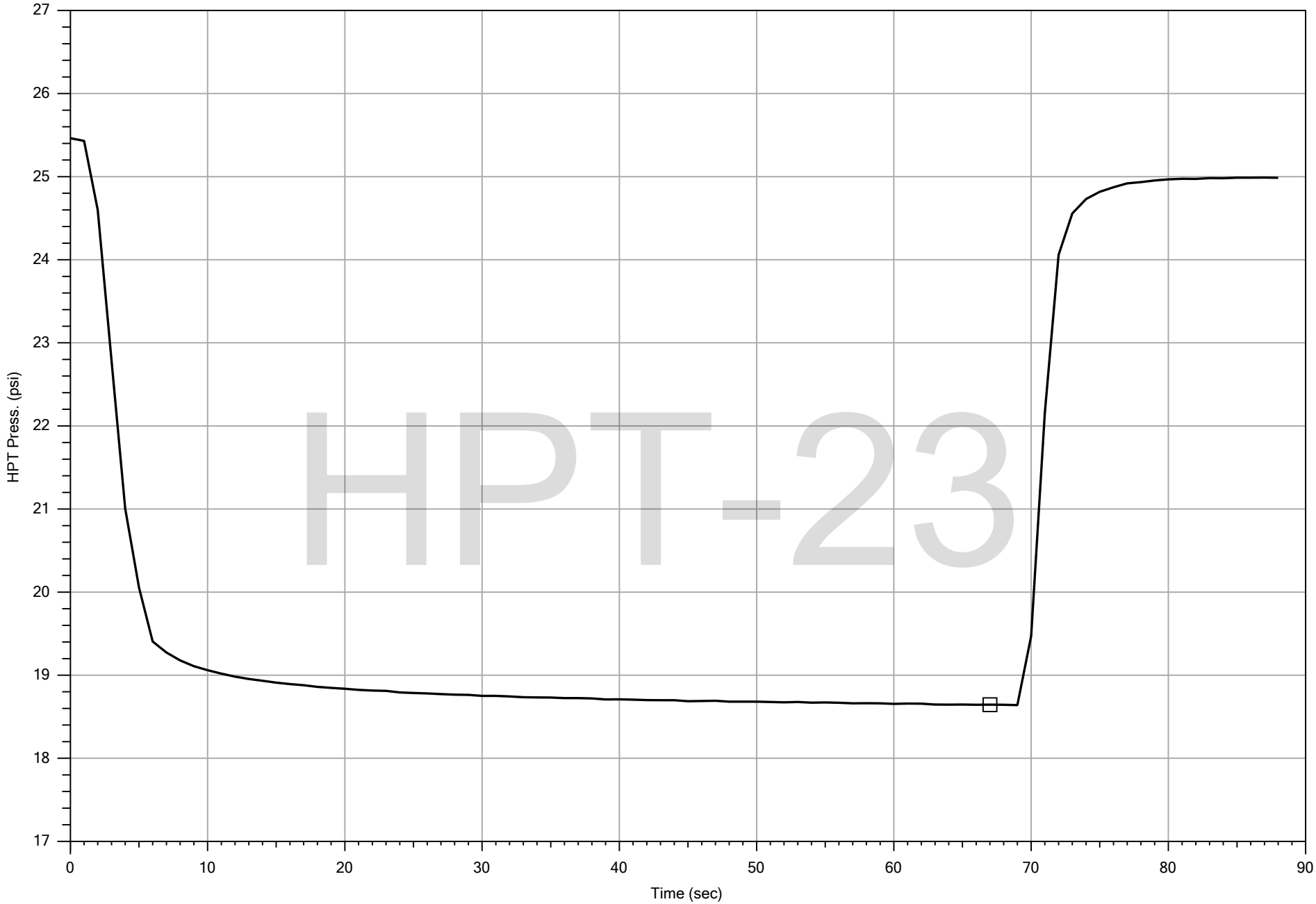
Company: Zebra	Operator: Mickey Ritter	File: HPT-22.TIM	Date: 11/1/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 18.95 ft	Test: 1



			File: HPT-23.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/1/2015
Project ID: AVX	Client: Arcadis		Location:

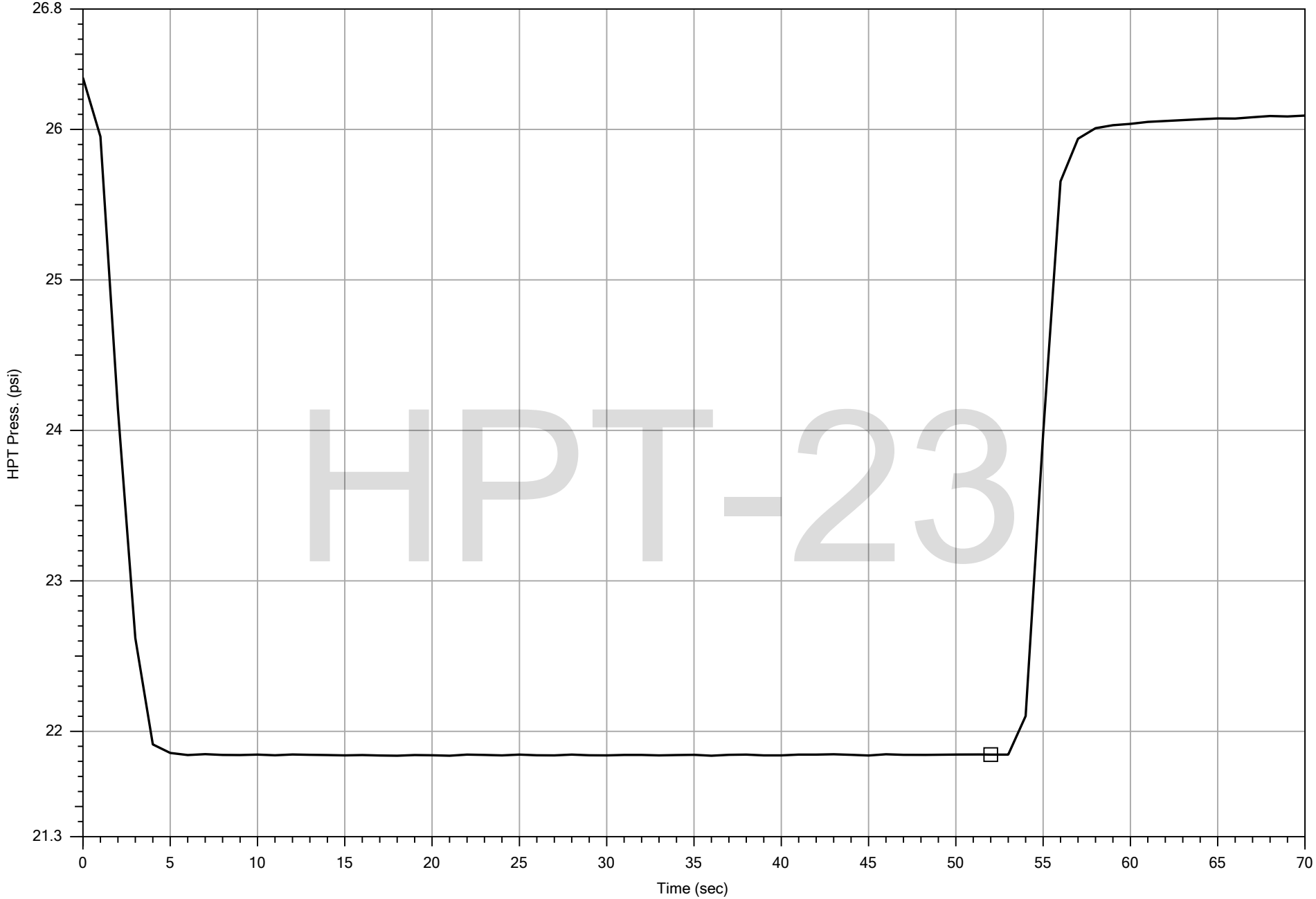


			File: HPT-23.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/1/2015
Project ID: AVX	Client: Arcadis		Location:



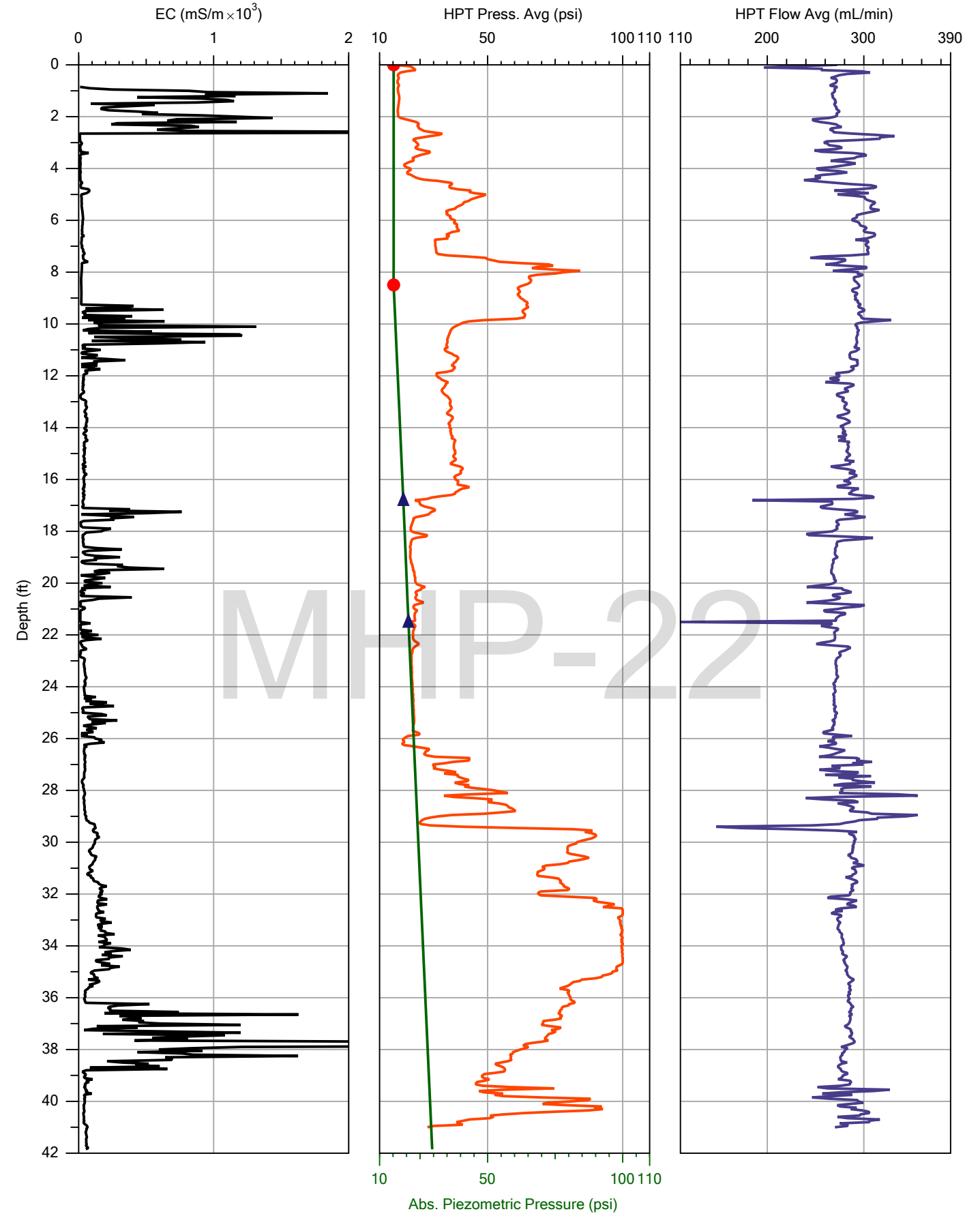
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-23.TIM	Date: 11/1/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 16.00 ft	Test: 1

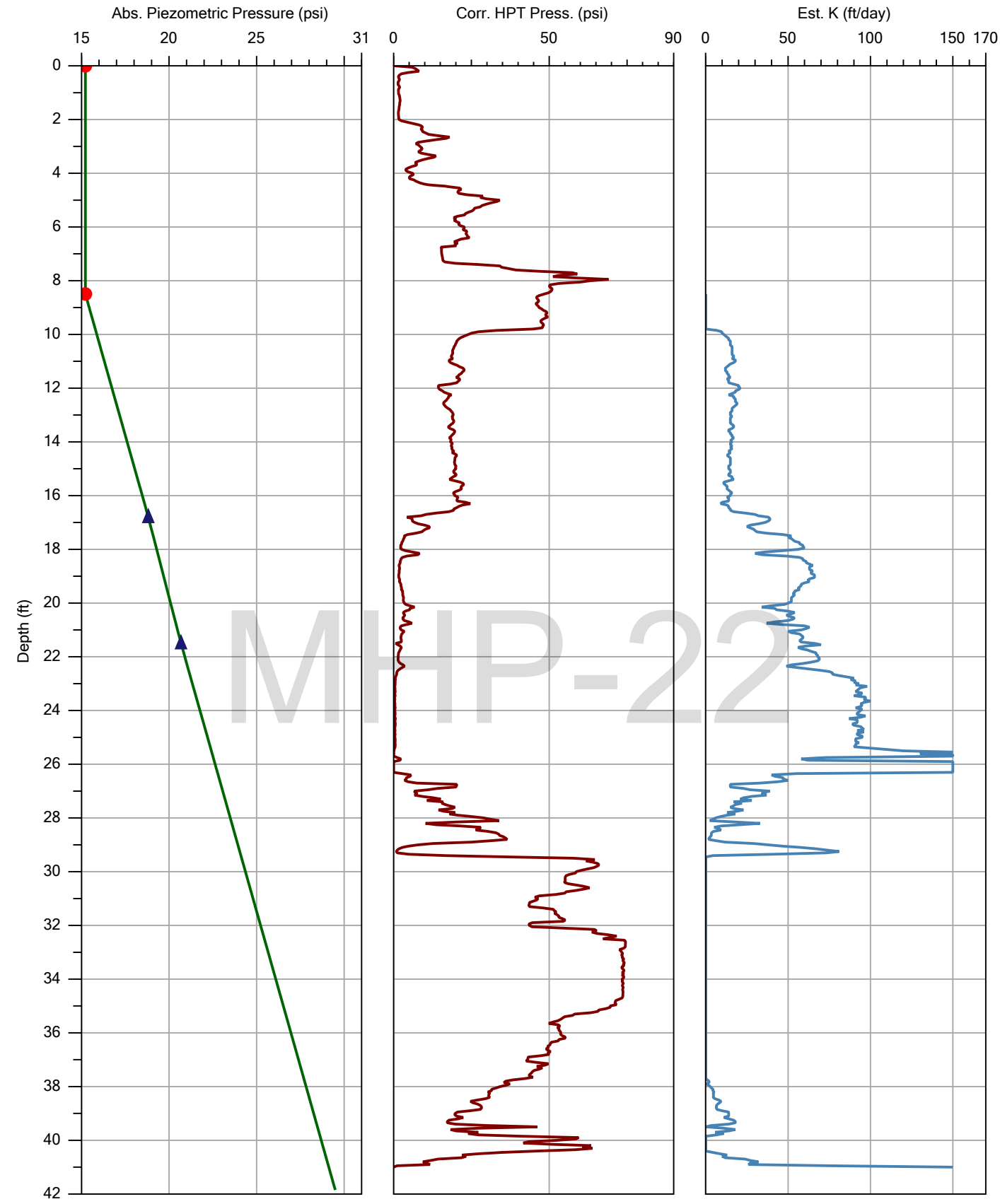


HPT DISSIPATION (SINGLE CASE)

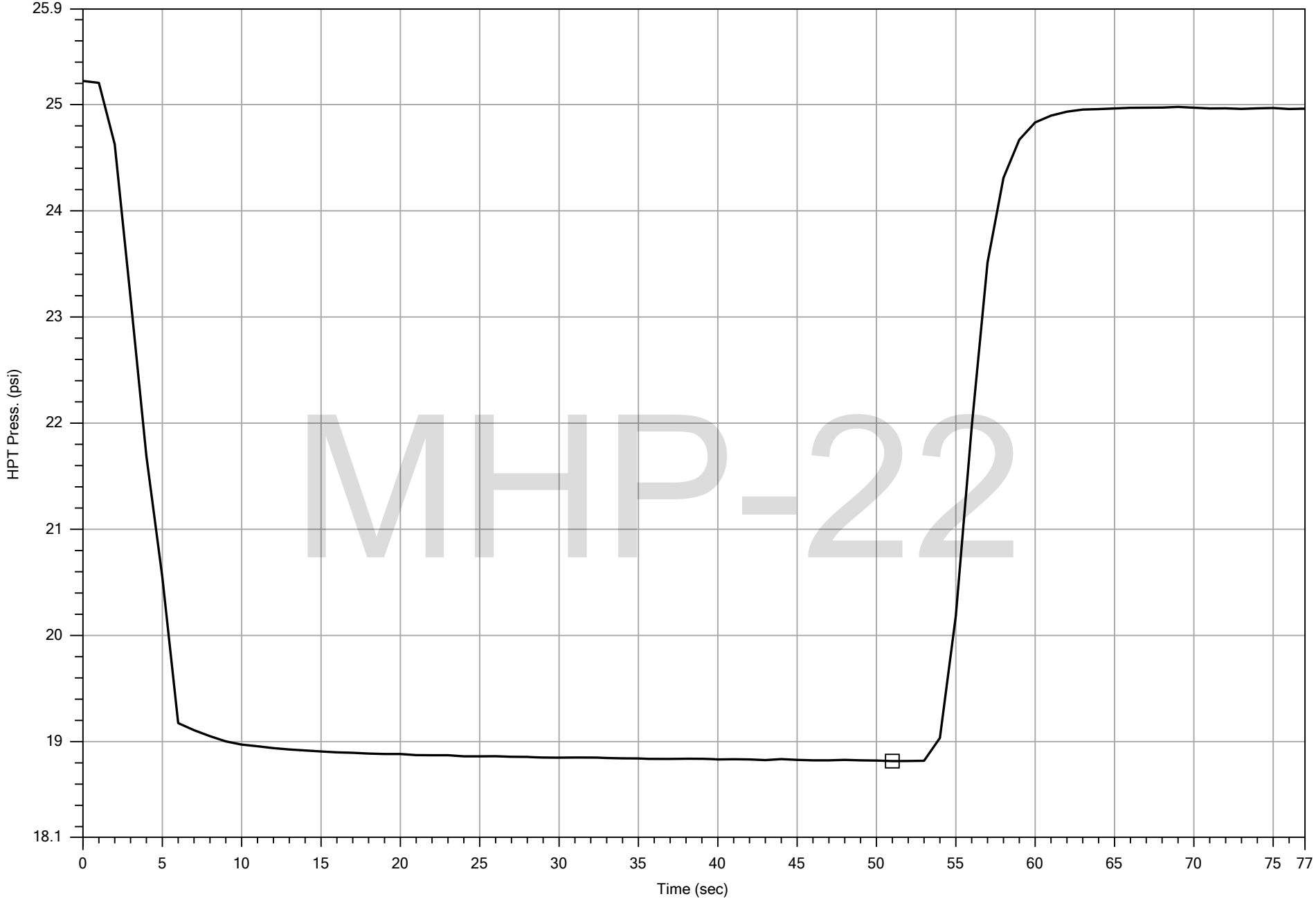
Company: Zebra	Operator: Mickey Ritter	File: HPT-23.TIM	Date: 11/1/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 24.05 ft	Test: 1



			File: HPT-24.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/1/2015
Project ID: AVX	Client: Arcadis		Location:

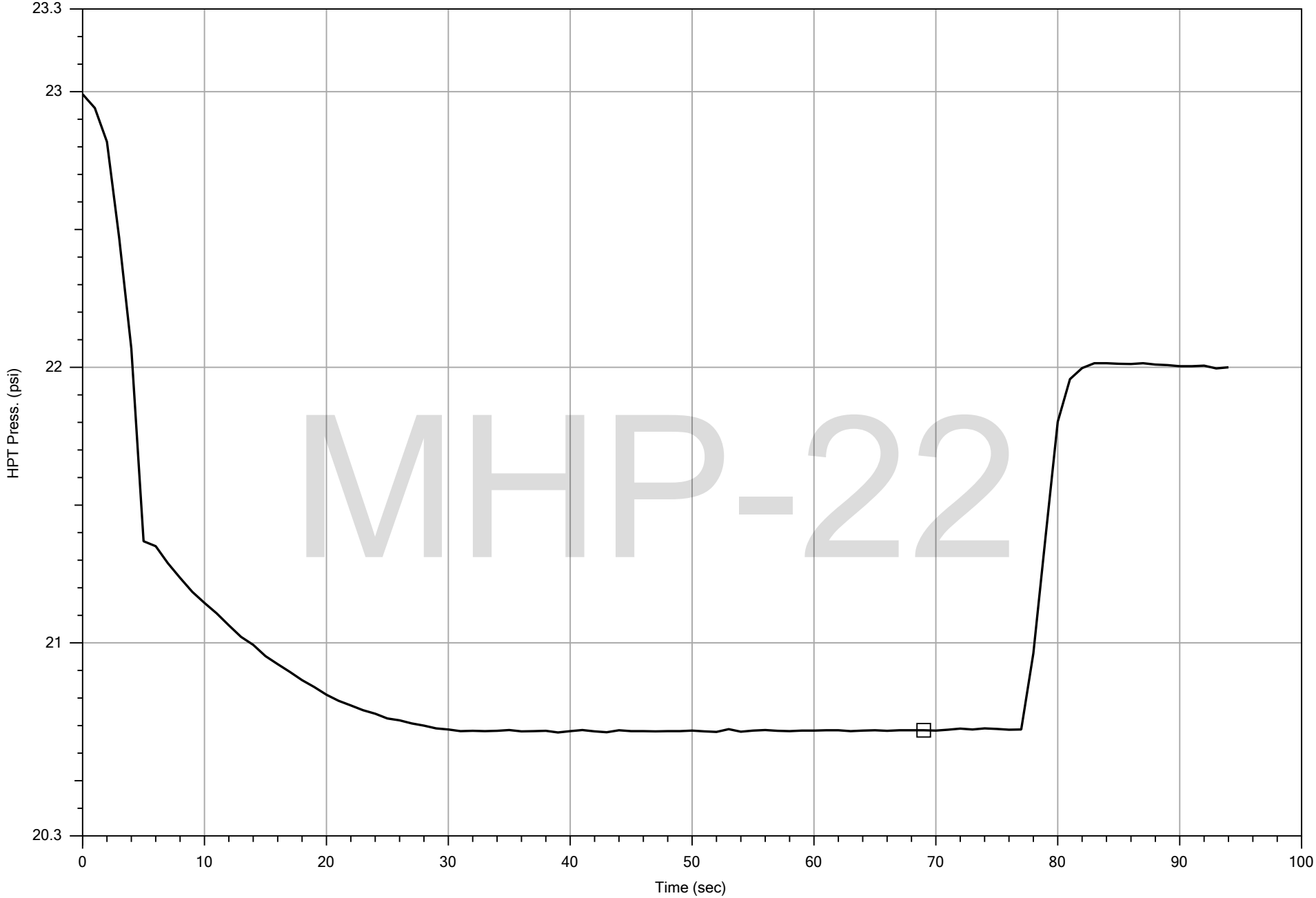


			File: HPT-24.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/1/2015
Project ID: AVX	Client: Arcadis		Location:



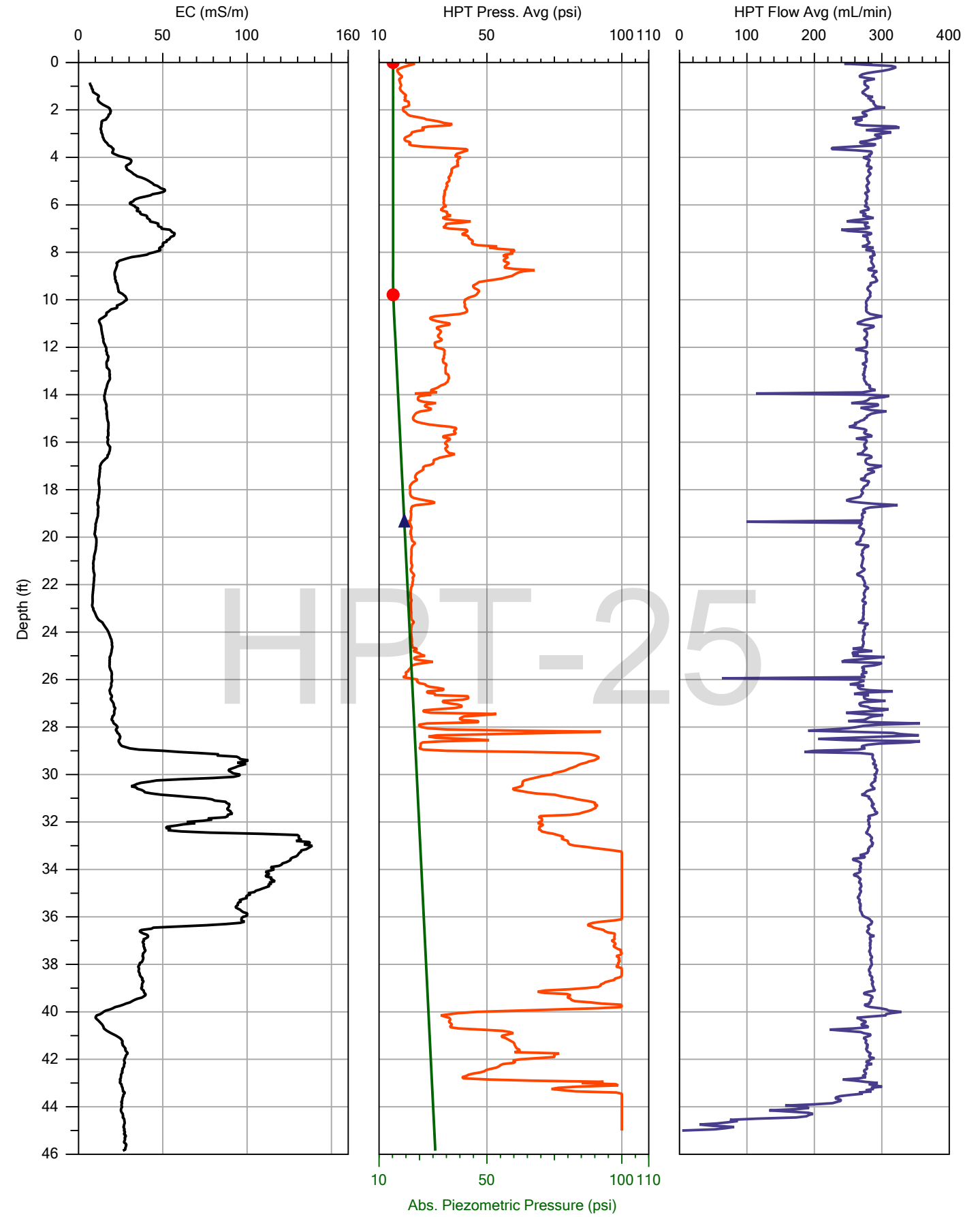
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 16.80 ft	Test: 1
File: HPT-24.TIM			Date: 11/1/2015

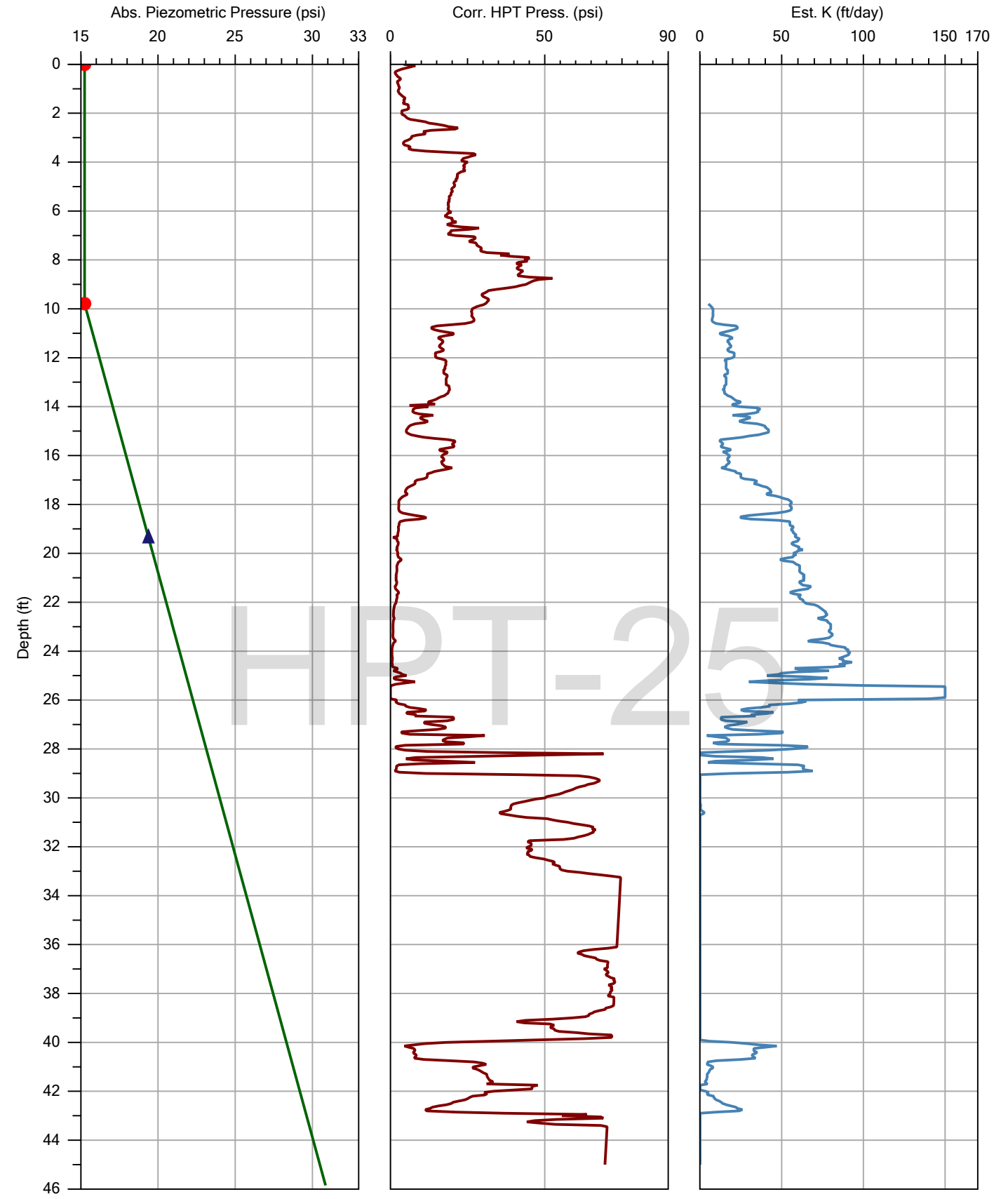


HPT DISSIPATION (SINGLE CASE)

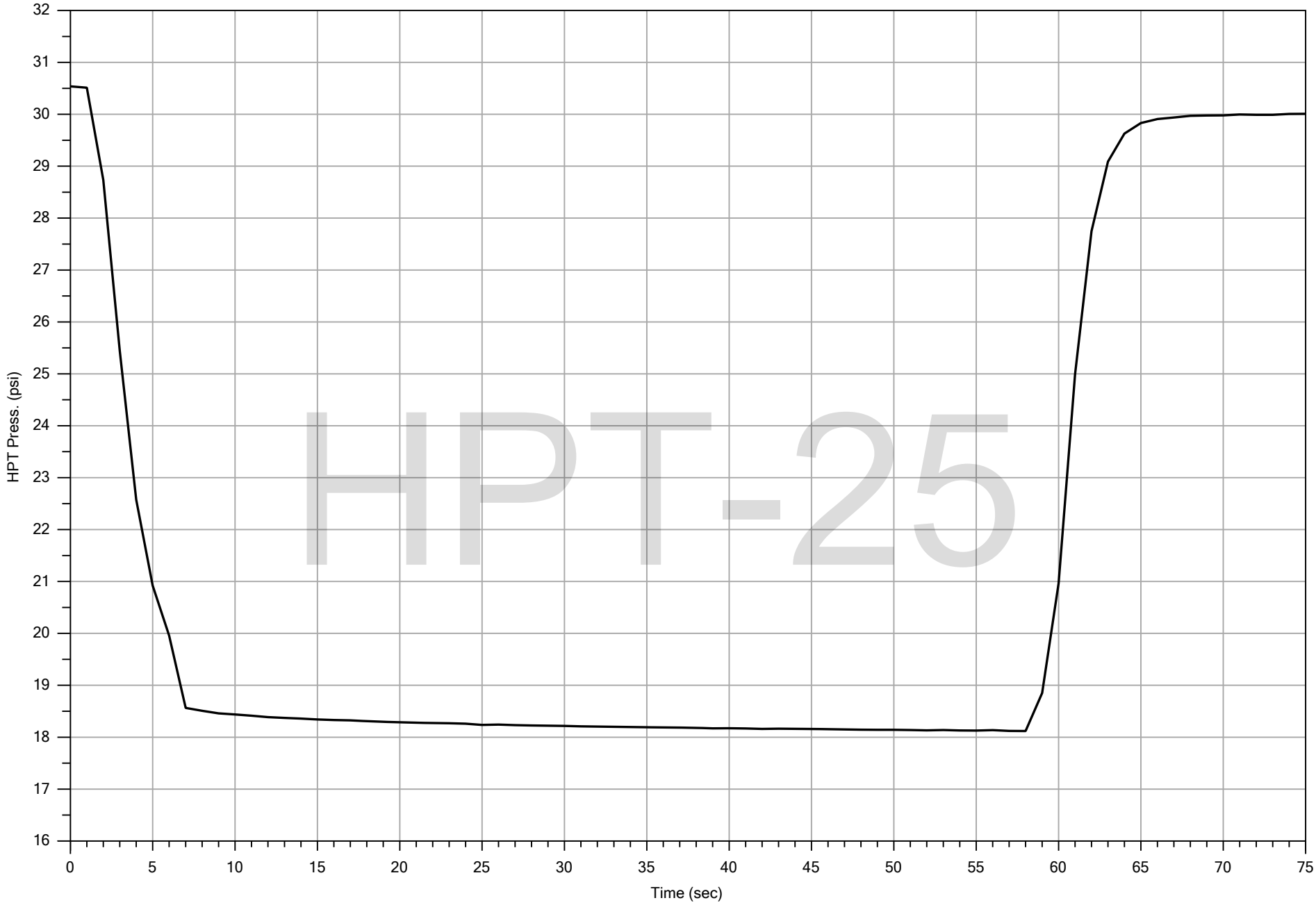
Company: Zebra	Operator: Mickey Ritter	File: HPT-24.TIM	Date: 11/1/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 21.50 ft	Test: 1



			File: HPT-25.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/1/2015
Project ID: AVX	Client: Arcadis		Location:

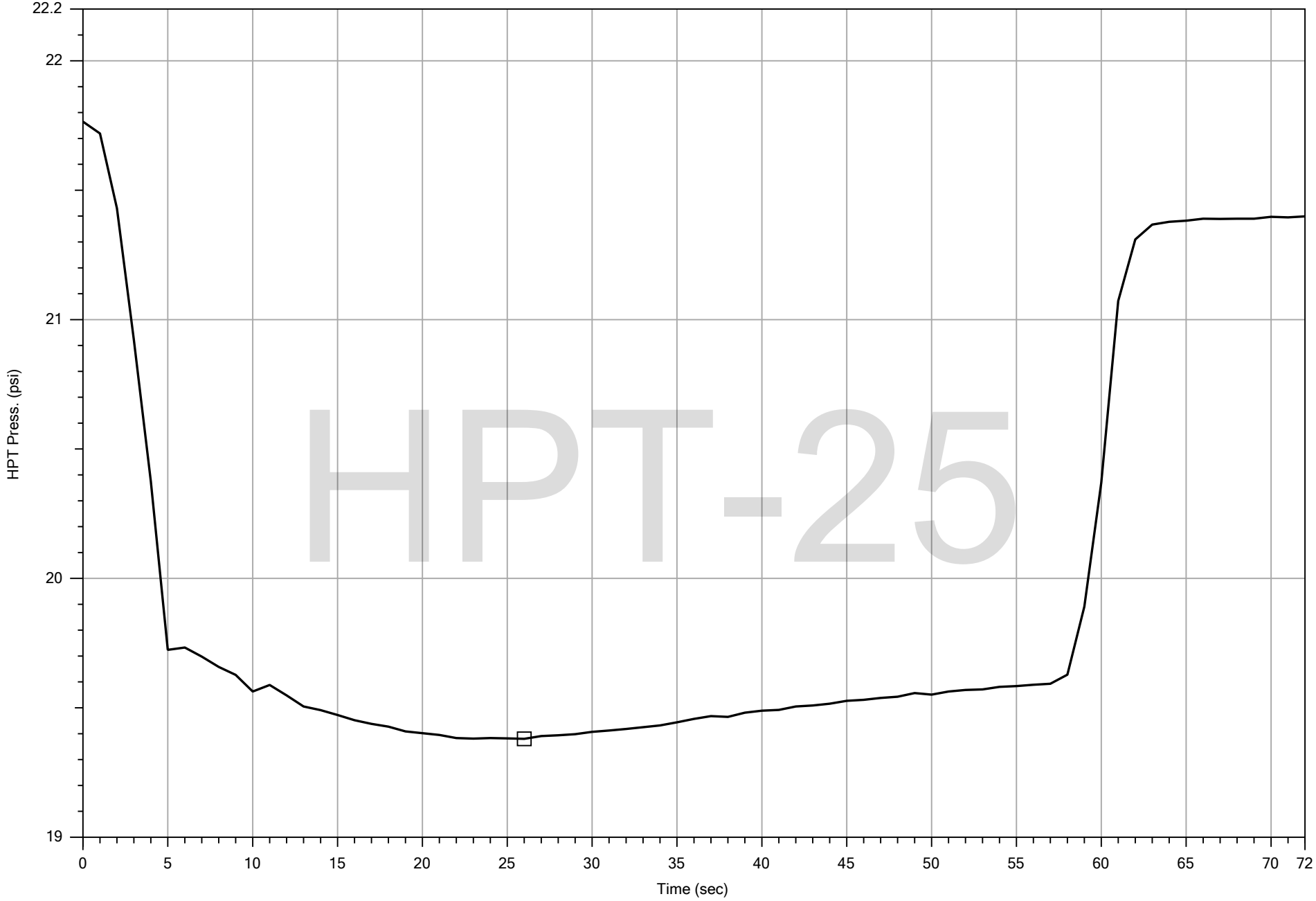


			File: HPT-25.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/1/2015
Project ID: AVX	Client: Arcadis		Location:



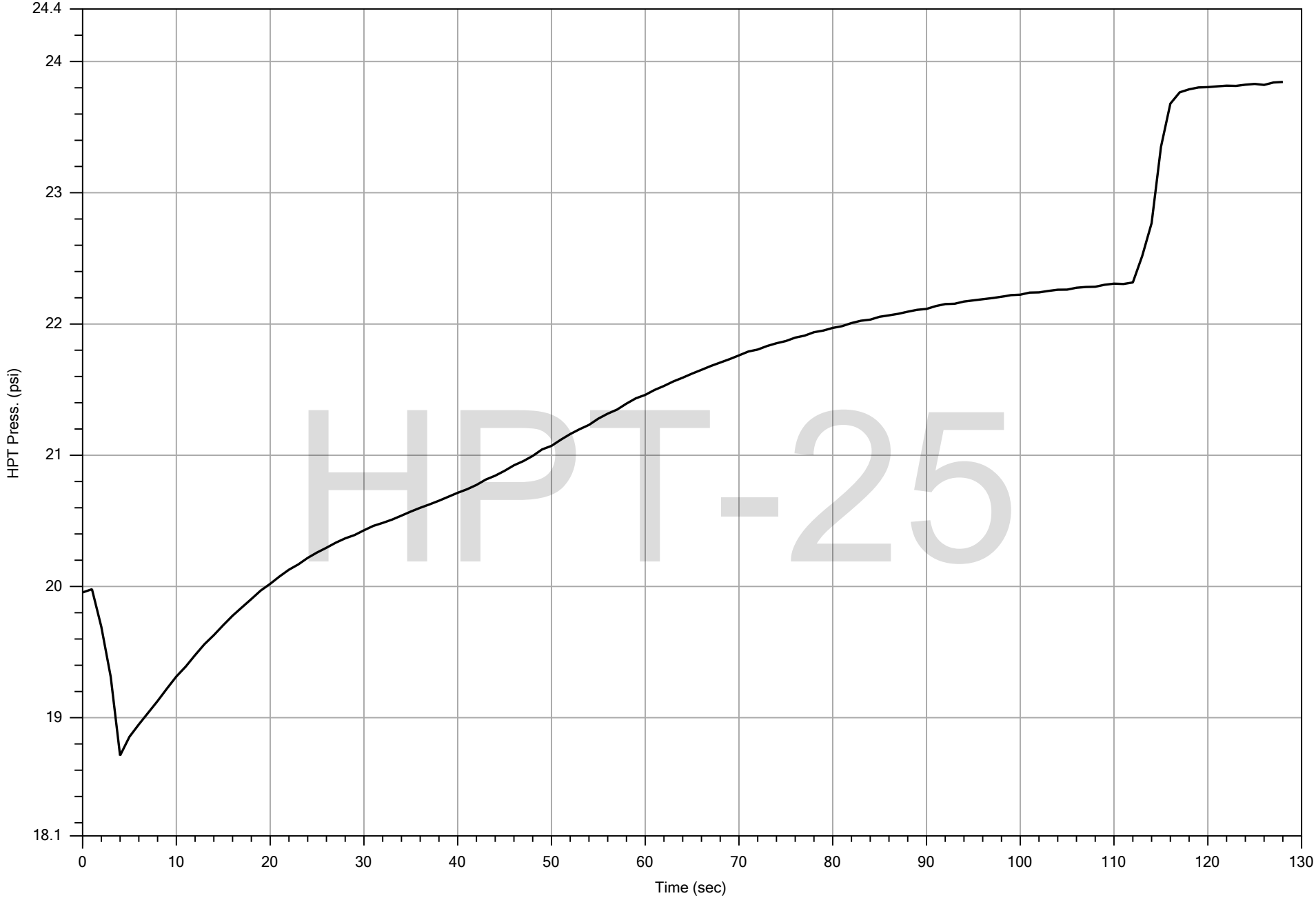
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-25.TIM	Date: 11/1/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 13.95 ft	Test: 1



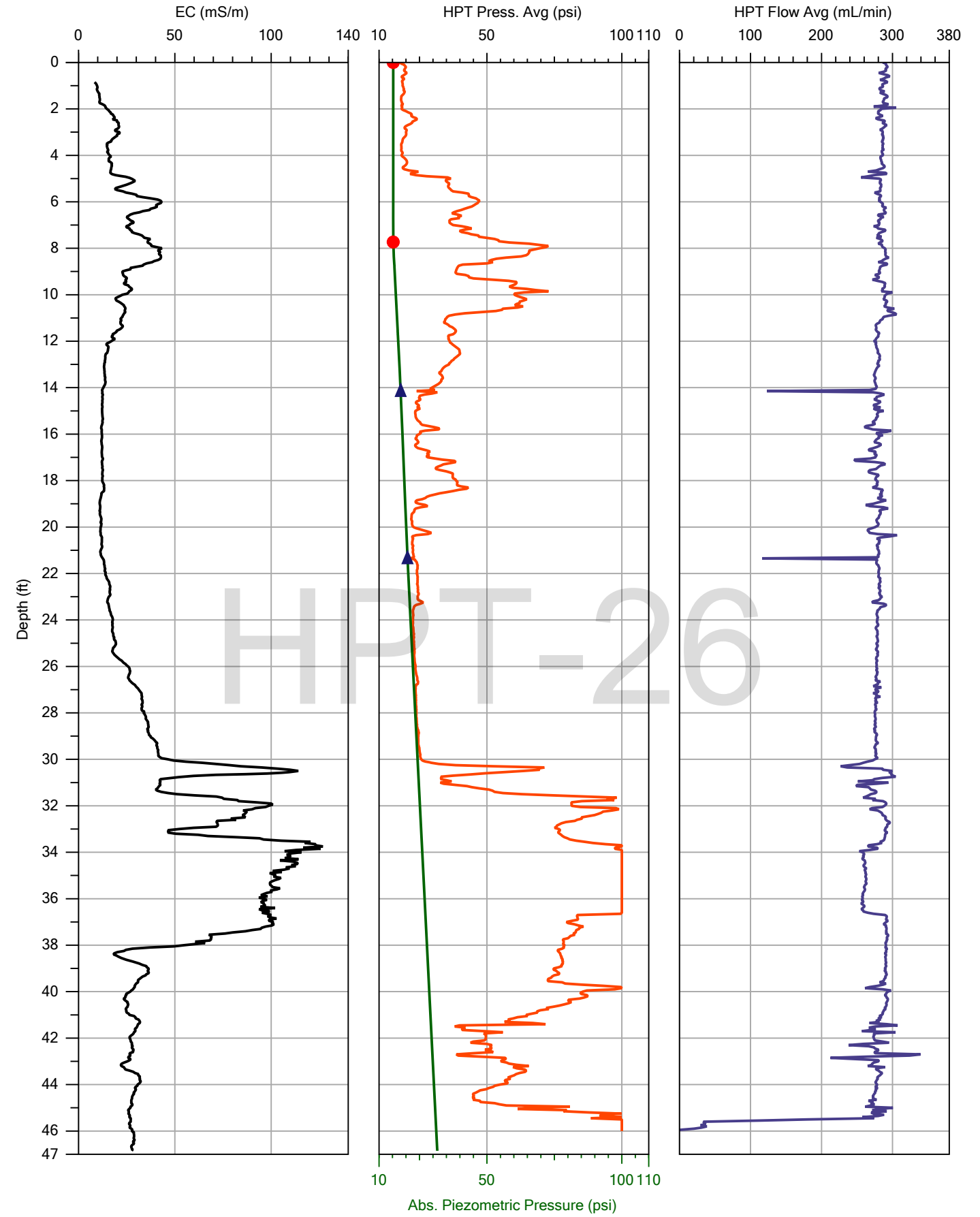
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-25.TIM	Date: 11/1/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 19.35 ft	Test: 1

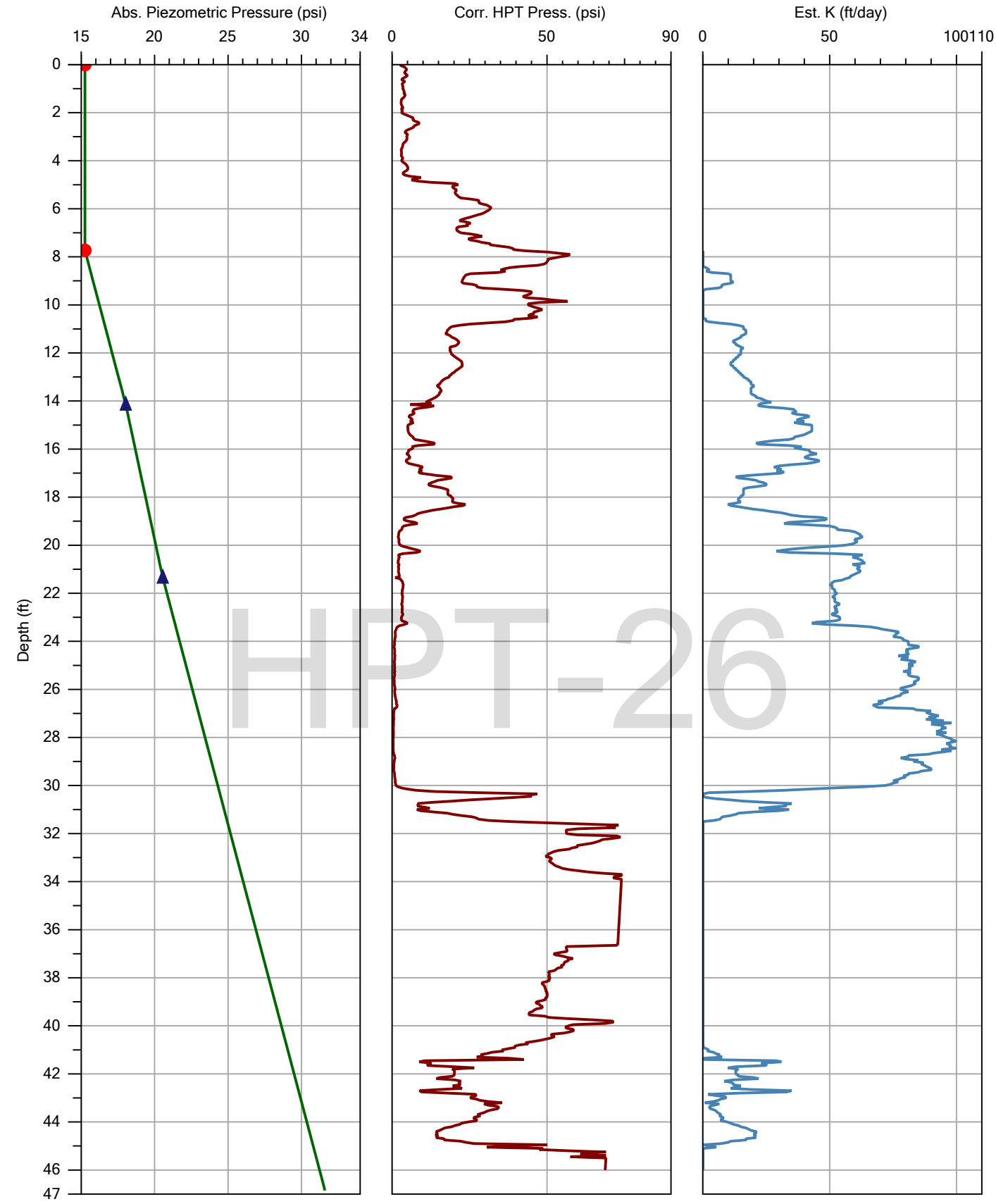


HPT DISSIPATION (SINGLE CASE)

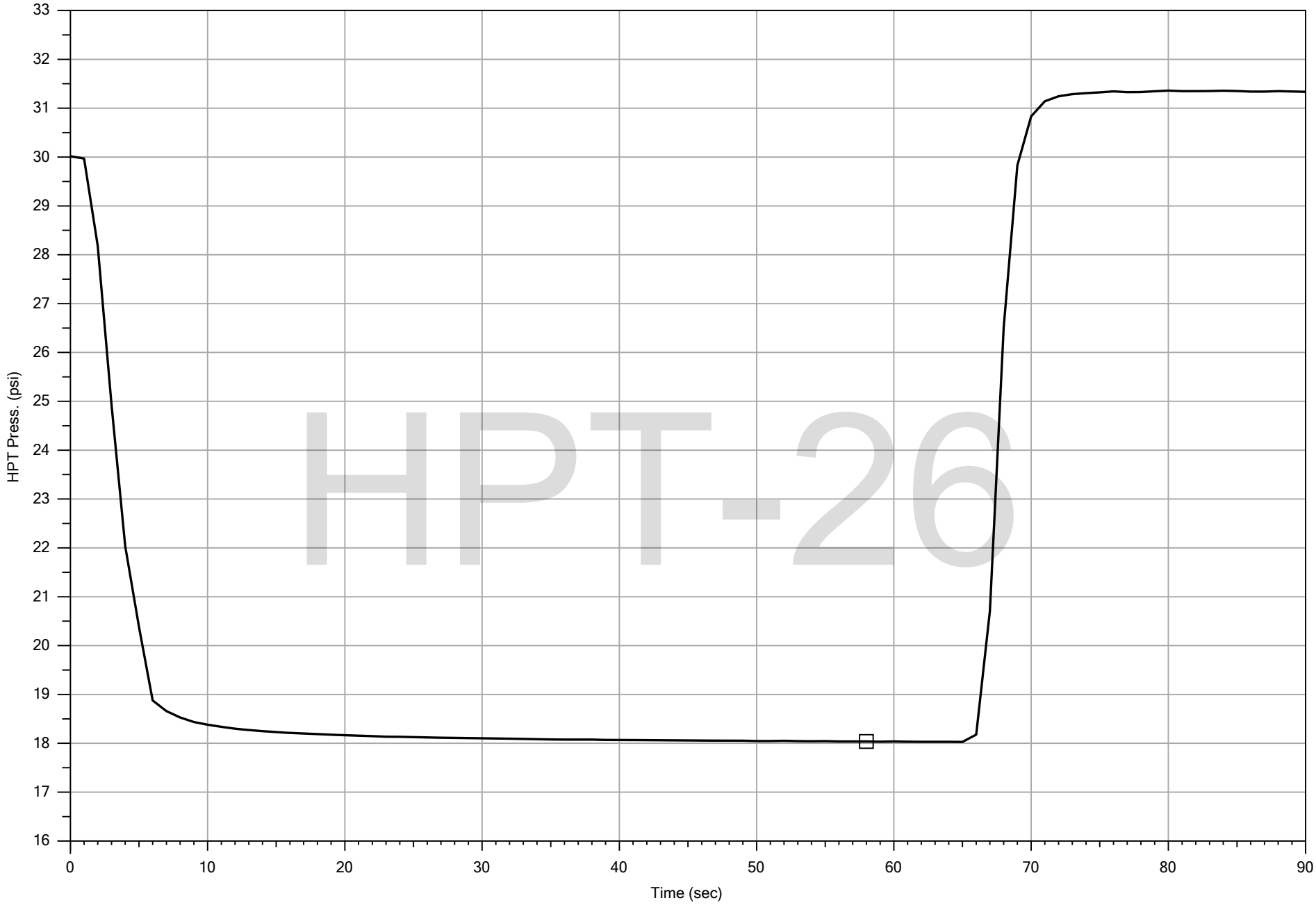
Company: Zebra	Operator: Mickey Ritter	File: HPT-25.TIM	Date: 11/1/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 25.95 ft	Test: 1



			File: HPT-26.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/1/2015
Project ID: AVX	Client: Arcadis		Location:

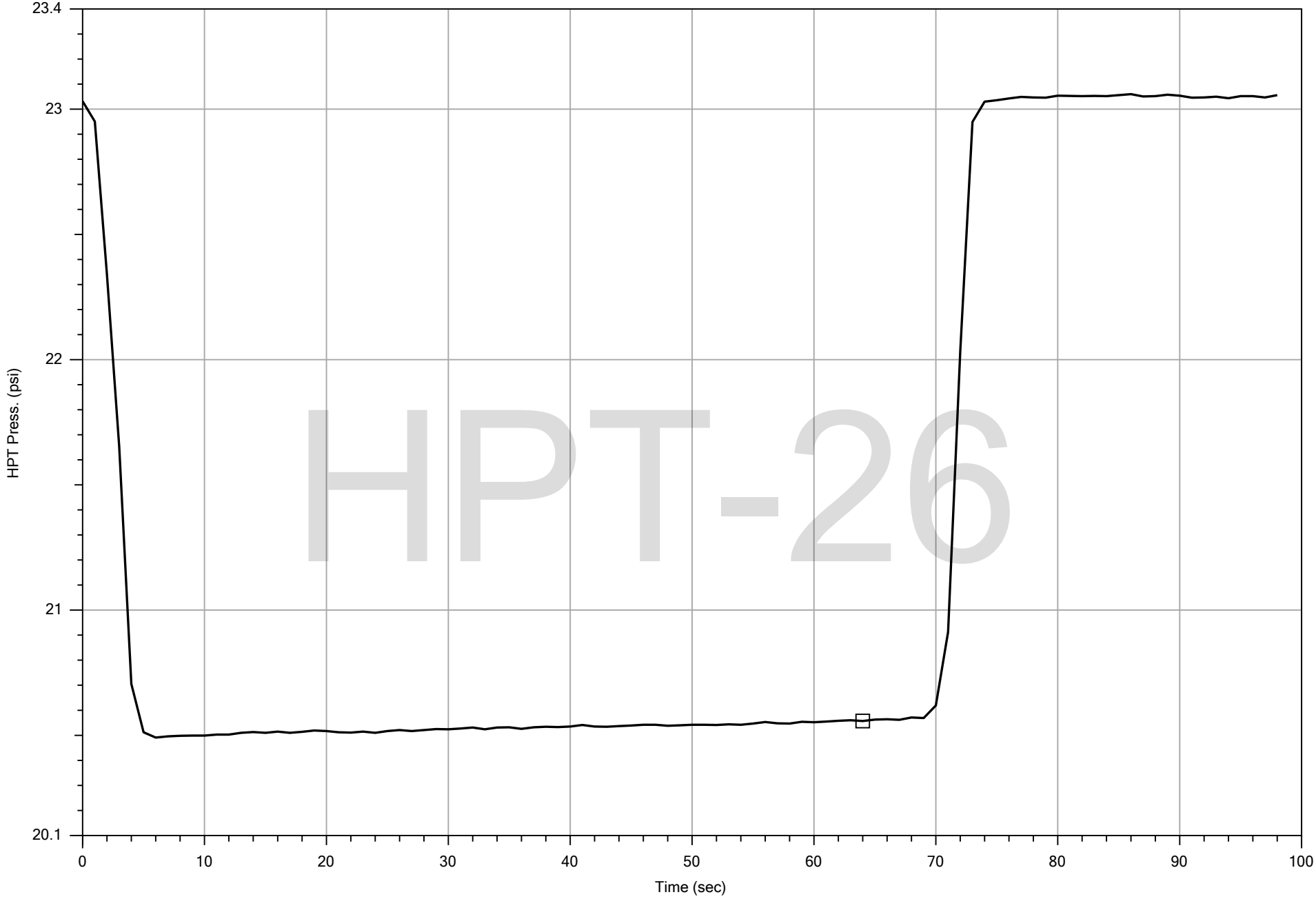


			File: HPT-26.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/1/2015
Project ID: AVX	Client: Arcadis		Location:



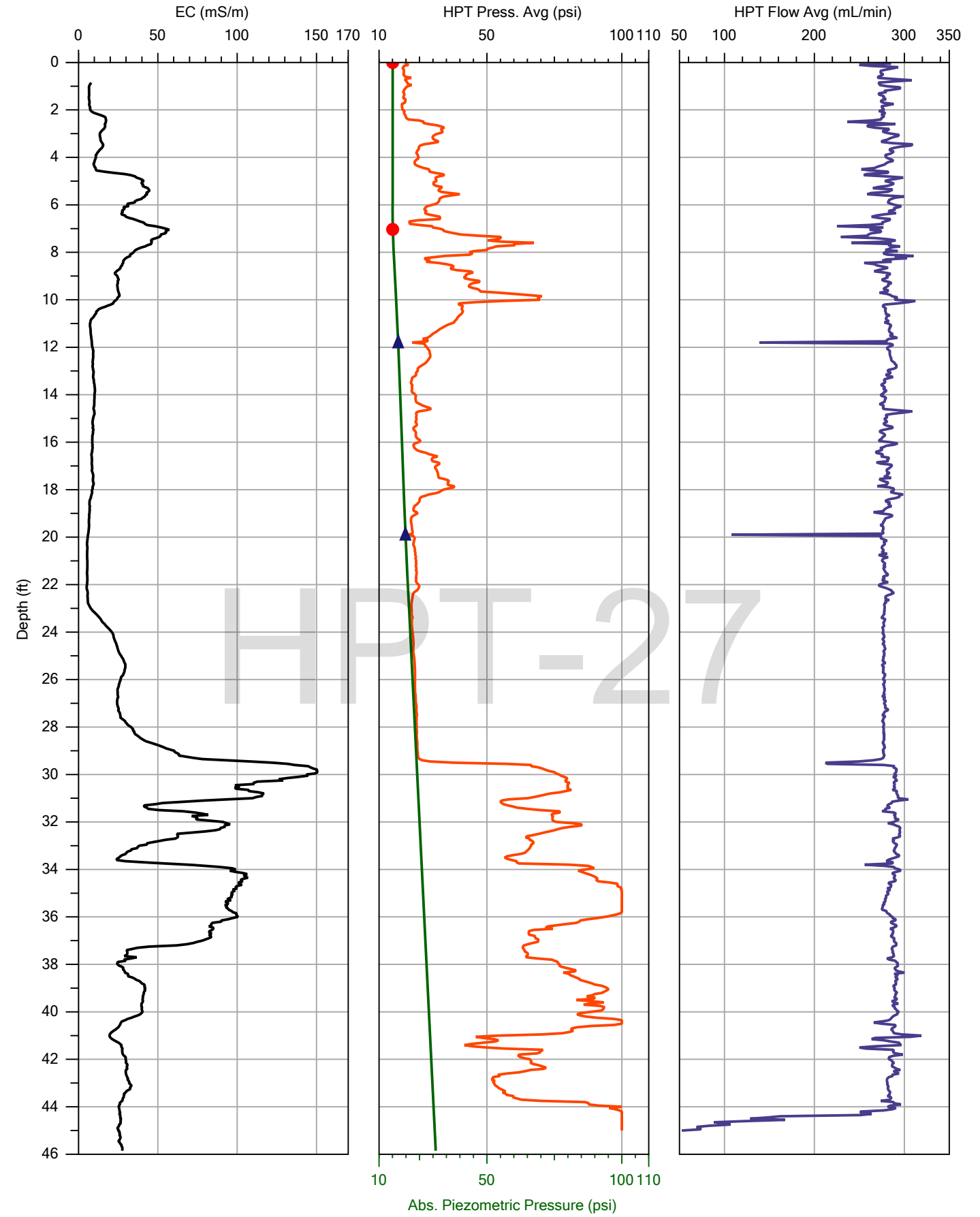
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-26.TIM	Date: 11/1/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 14.15 ft	Test: 1

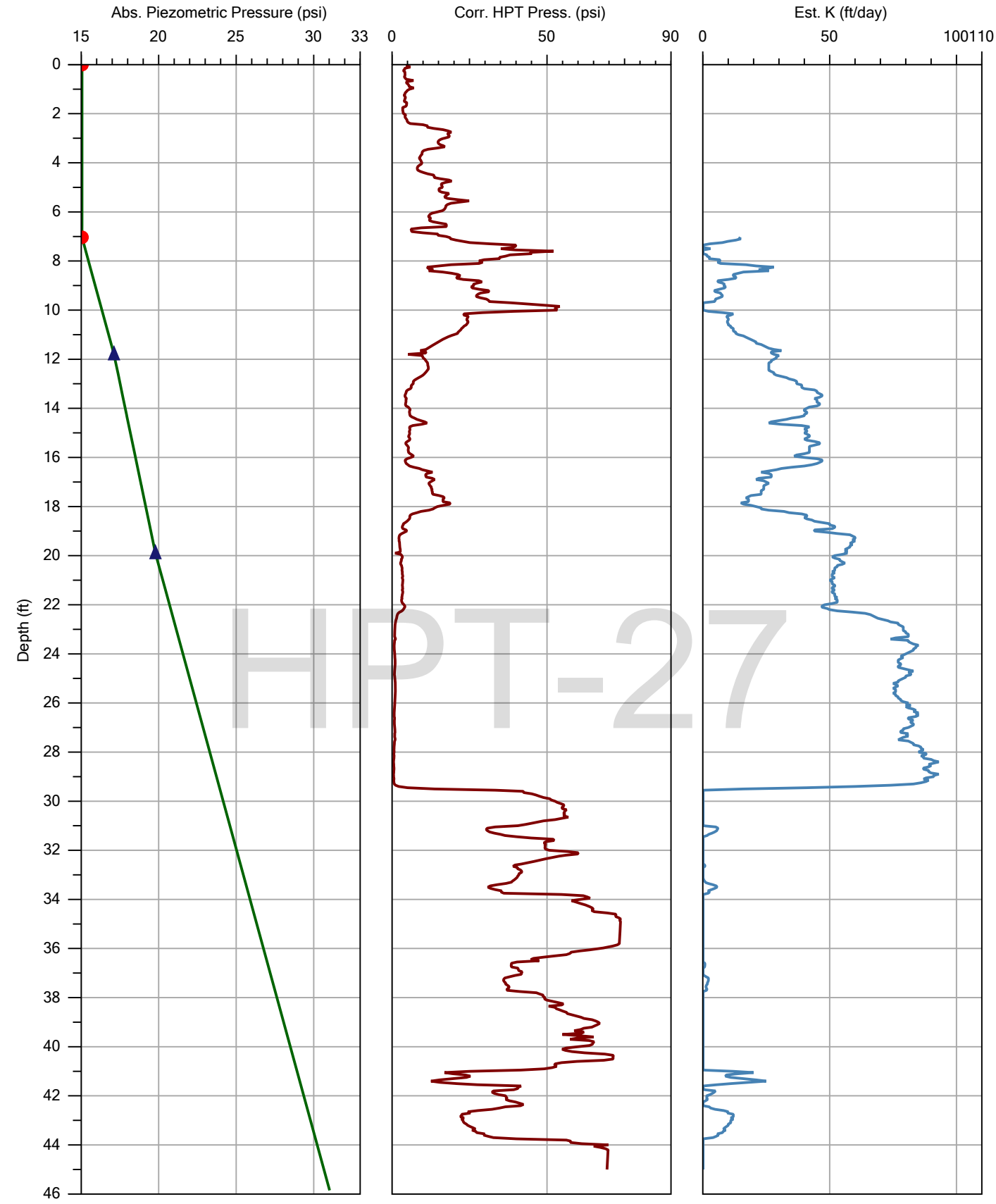


HPT DISSIPATION (SINGLE CASE)

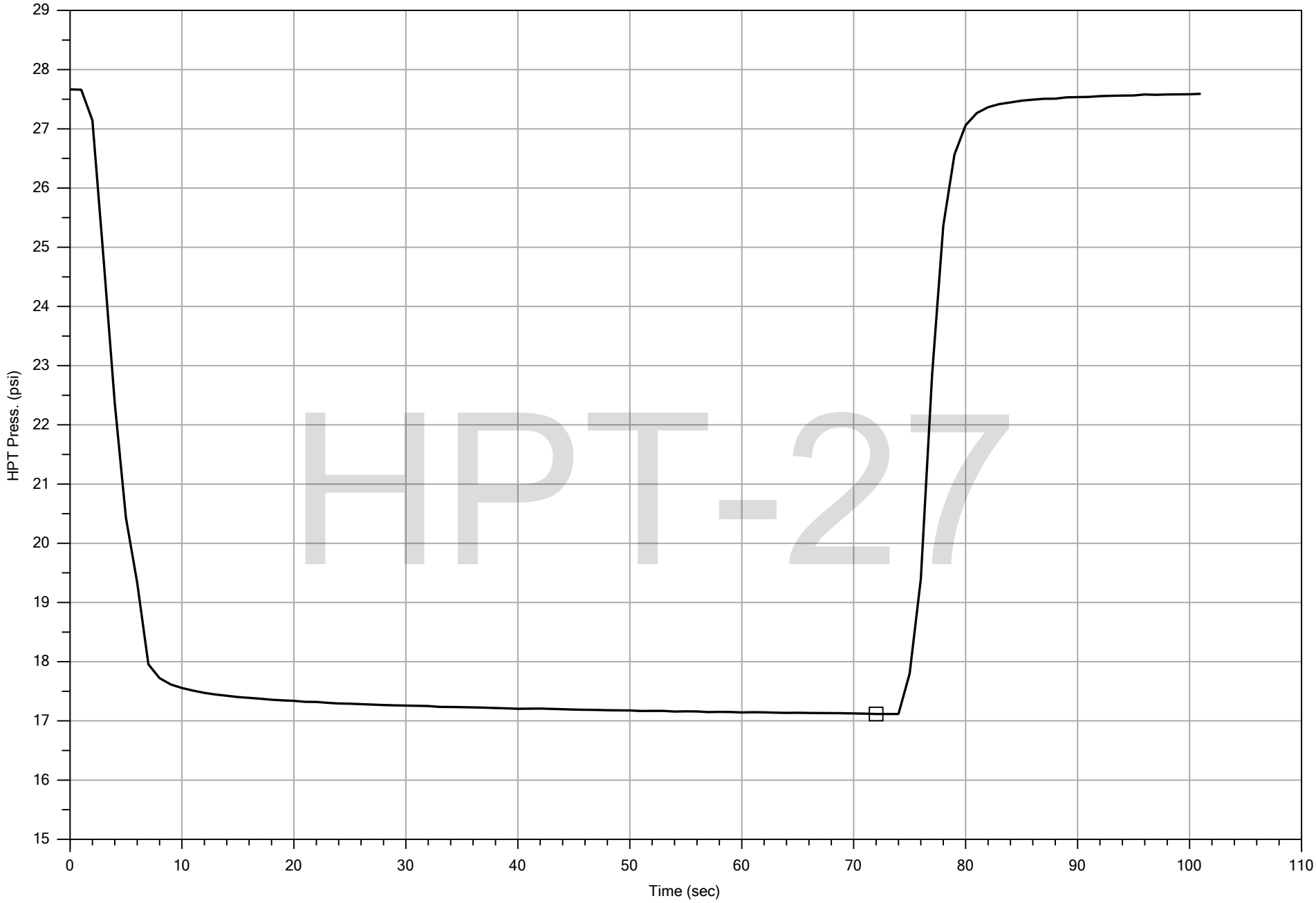
Company: Zebra	Operator: Mickey Ritter	File: HPT-26.TIM	Date: 11/1/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 21.35 ft	Test: 1



			File: HPT-27.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/2/2015
Project ID: AVX	Client: Arcadis		Location:

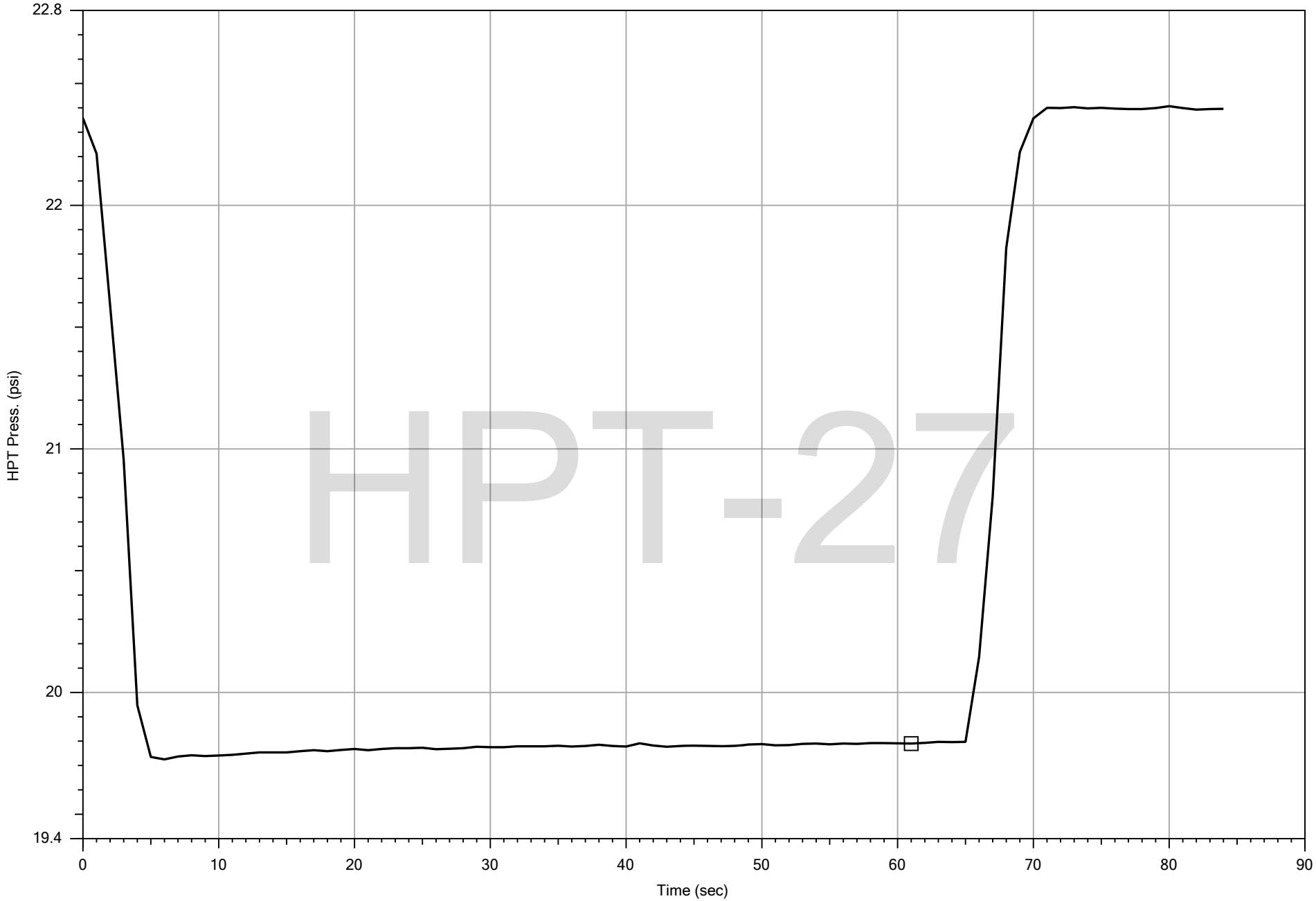


			File: HPT-27.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/2/2015
Project ID: AVX	Client: Arcadis		Location:



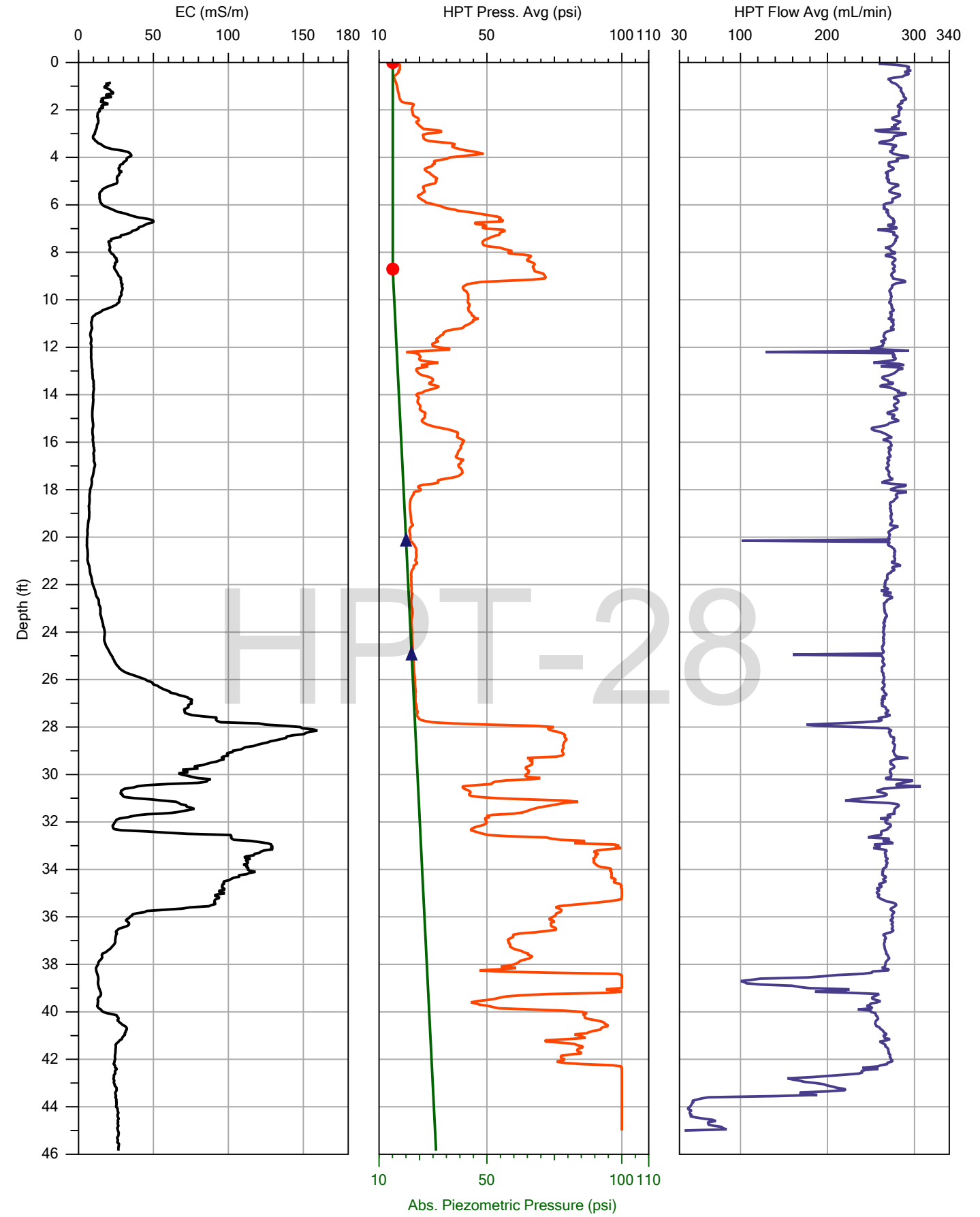
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-27.TIM	Date: 11/2/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 11.80 ft	Test: 1

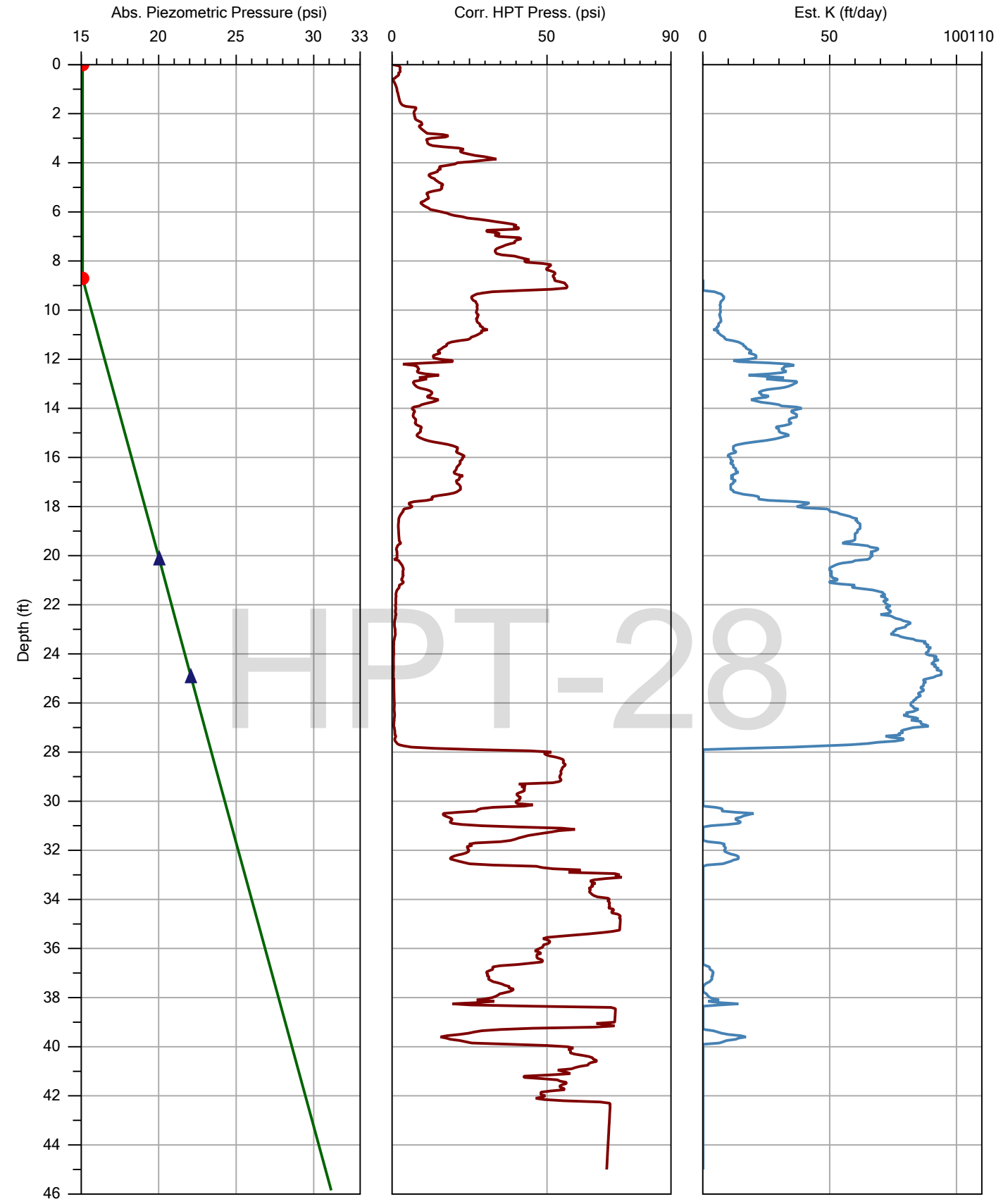


HPT DISSIPATION (SINGLE CASE)

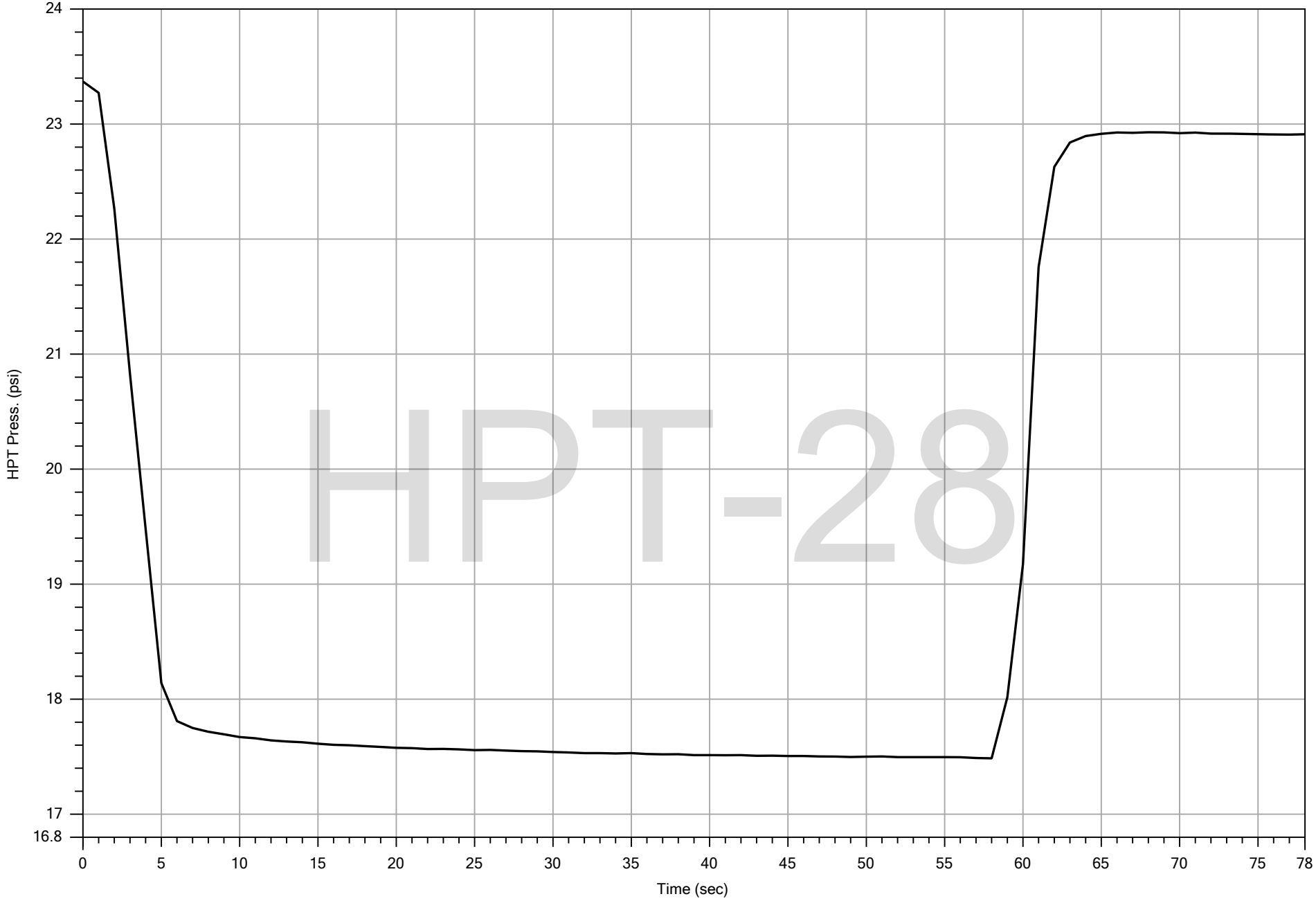
Company: Zebra	Operator: Mickey Ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 19.90 ft	Test: 1
		File: HPT-27.TIM	Date: 11/2/2015



		File: HPT-28.HPT
Company: Zebra	Operator: Mickey Ritter	Date: 11/2/2015
Project ID: AVX	Client: Arcadis	Location:

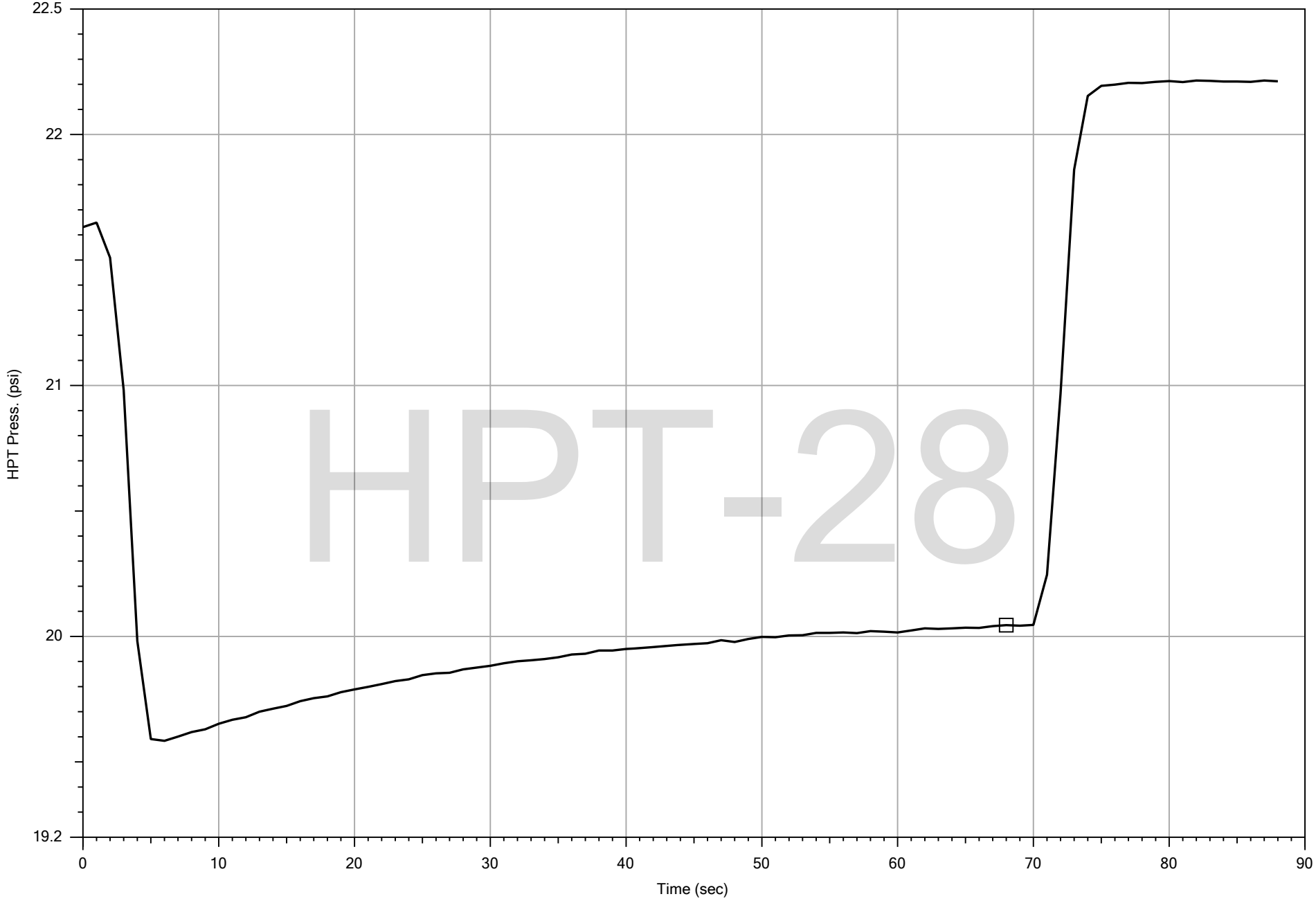


			File: HPT-28.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/2/2015
Project ID: AVX	Client: Arcadis		Location:



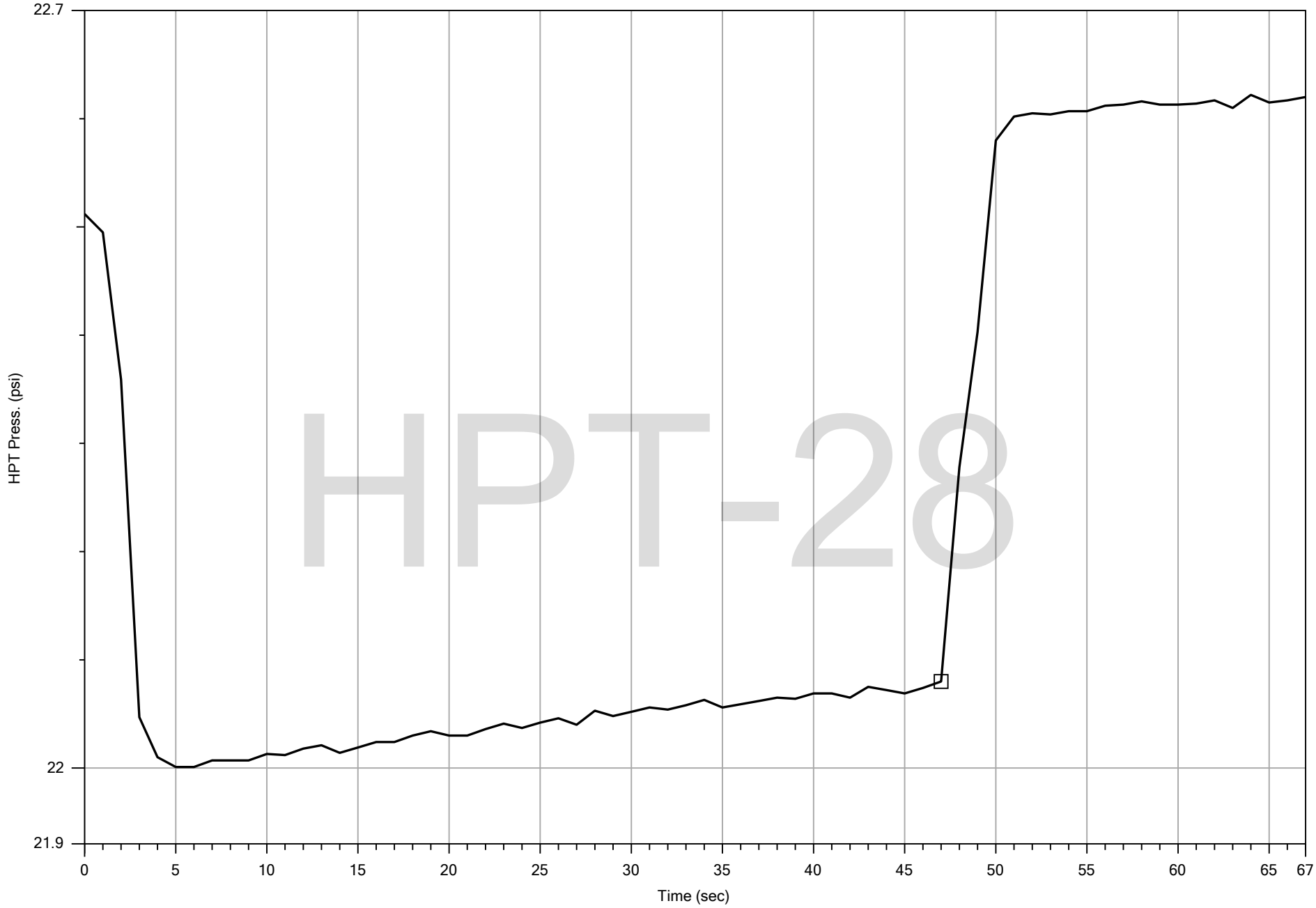
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 12.20 ft	Test: 1
File: HPT-28.TIM			Date: 11/2/2015



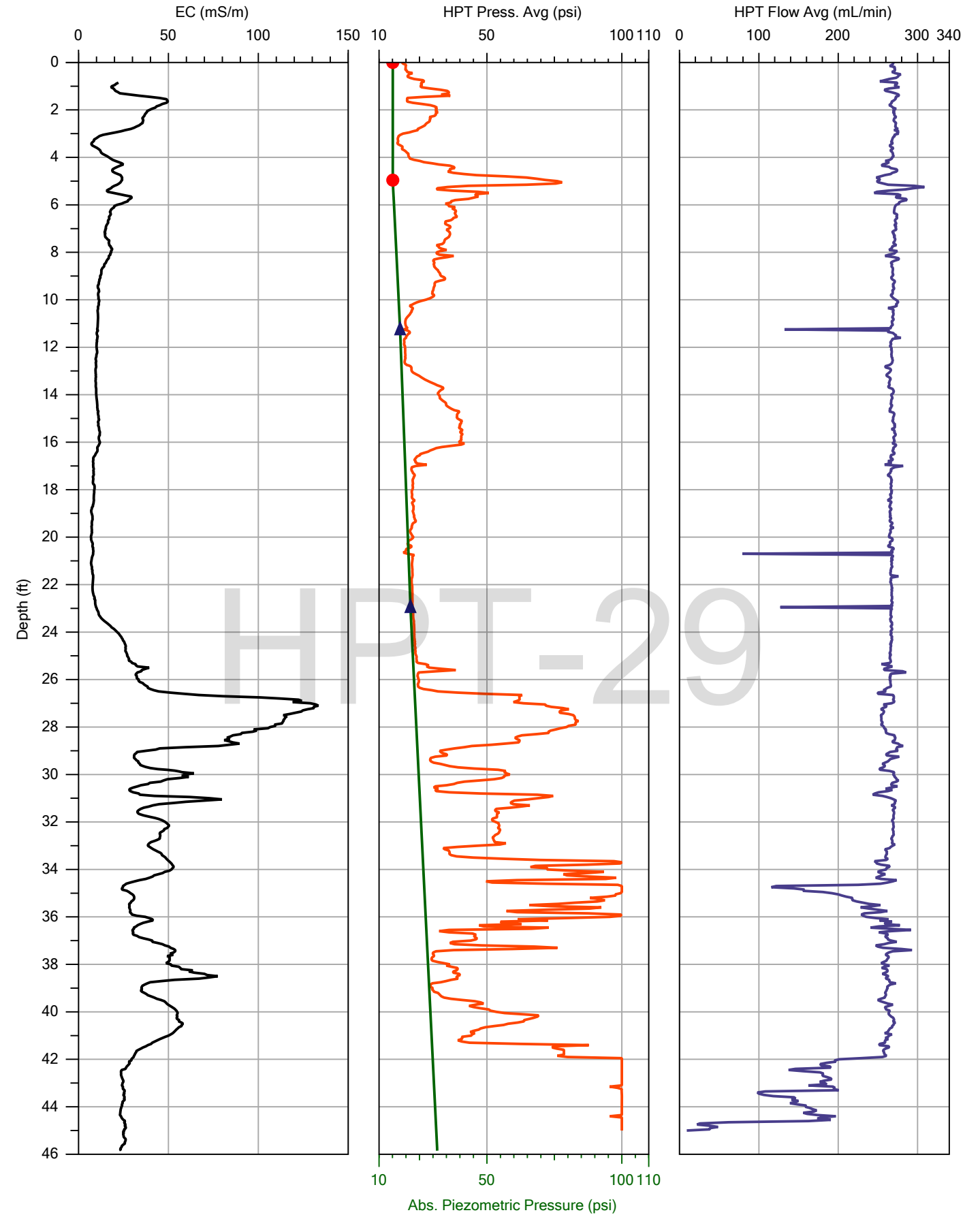
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 20.15 ft	Test: 1
		File: HPT-28.TIM	Date: 11/2/2015

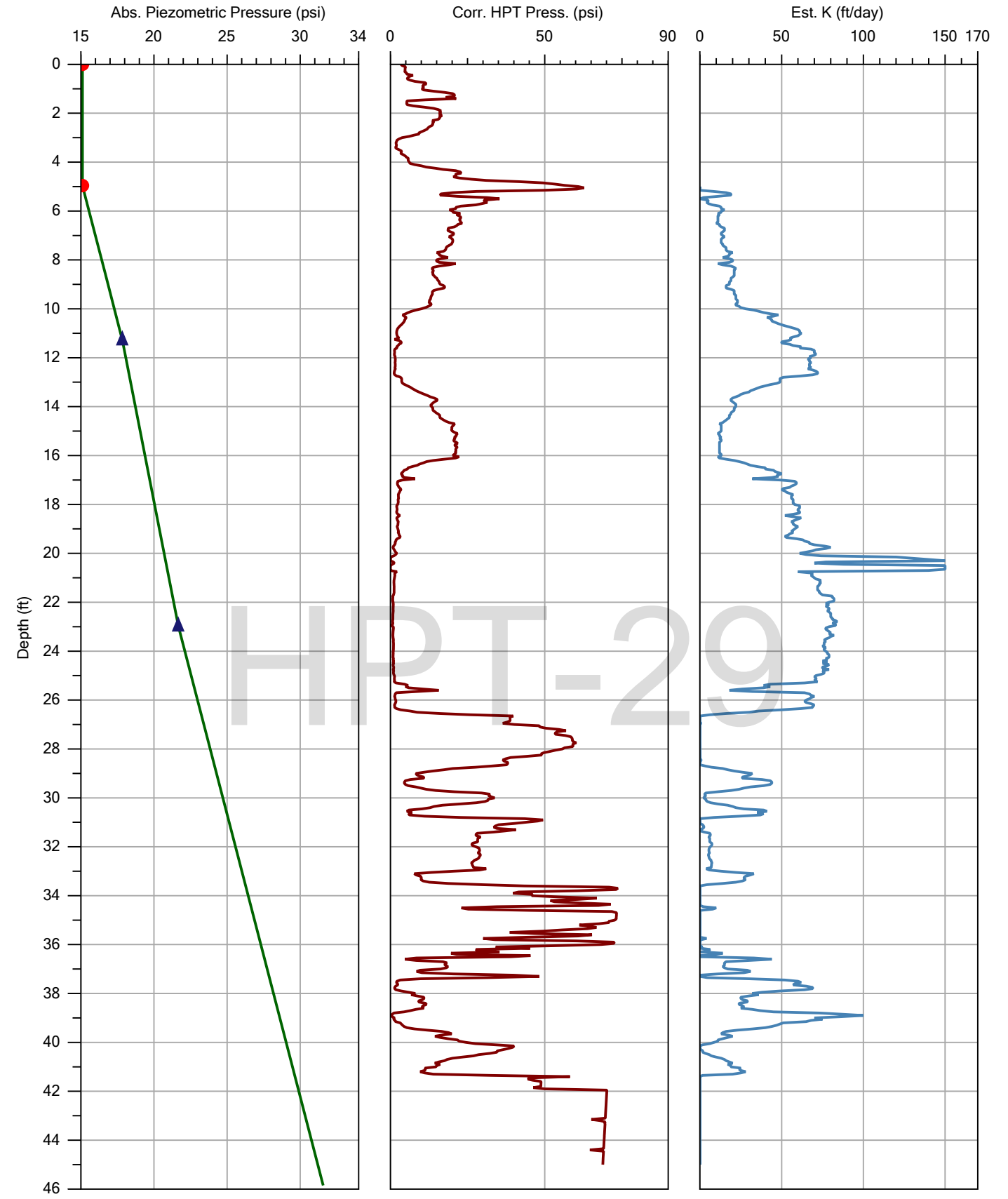


HPT DISSIPATION (SINGLE CASE)

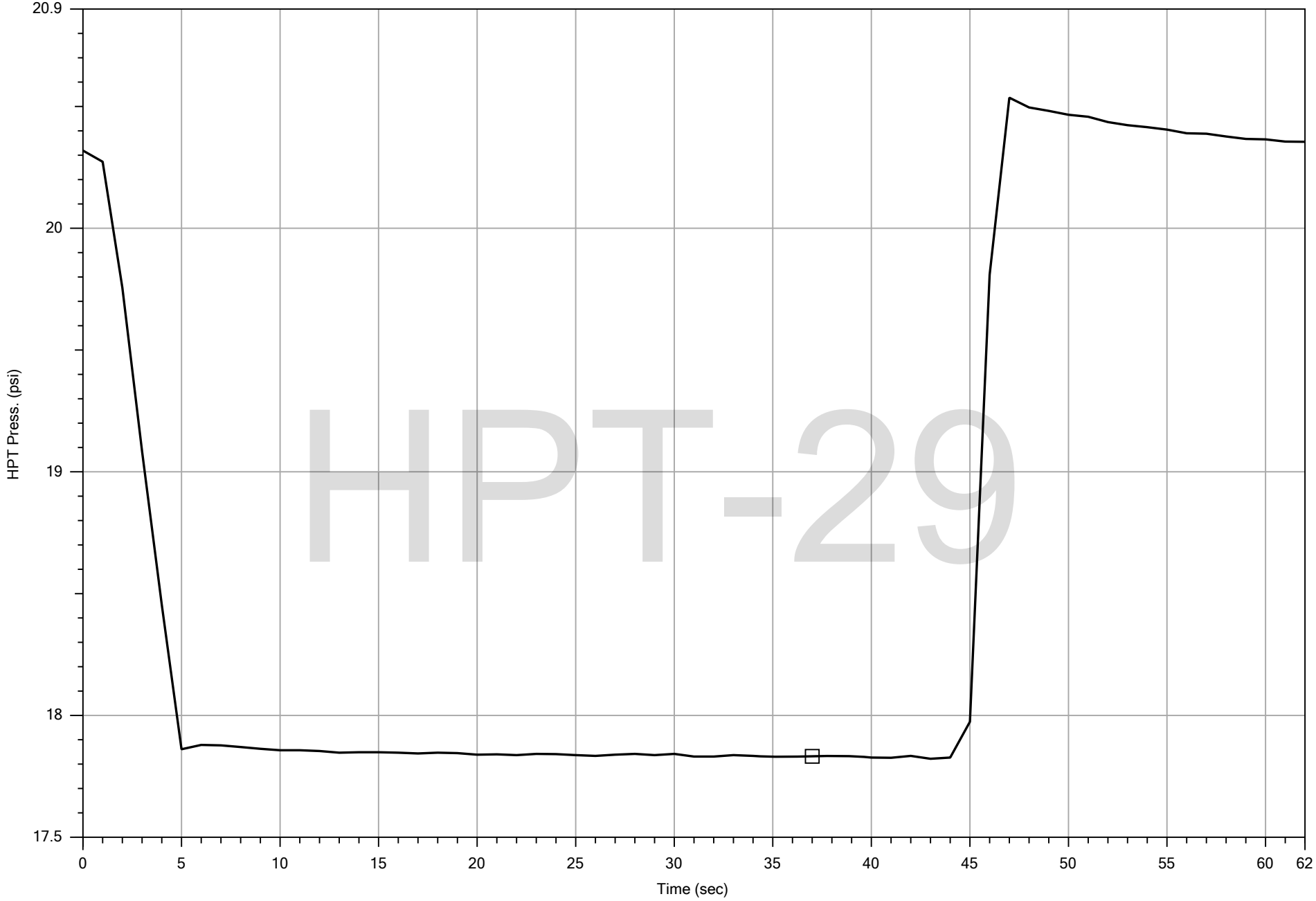
Company: Zebra	Operator: Mickey Ritter	File: HPT-28.TIM	Date: 11/2/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 24.95 ft	Test: 1



			File: HPT-29.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/2/2015
Project ID: AVX	Client: Arcadis		Location:

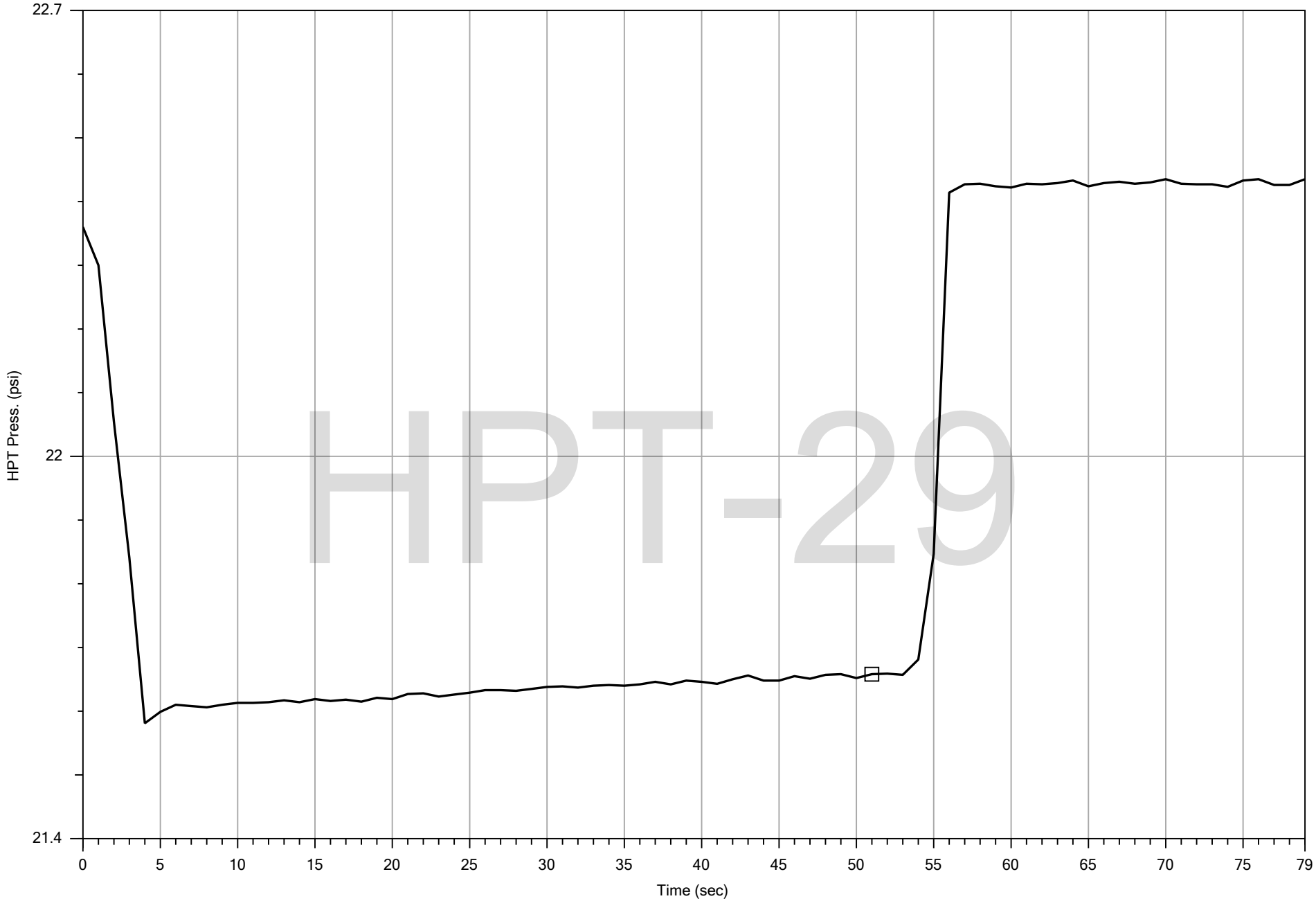


			File: HPT-29.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/2/2015
Project ID: AVX	Client: Arcadis		Location:



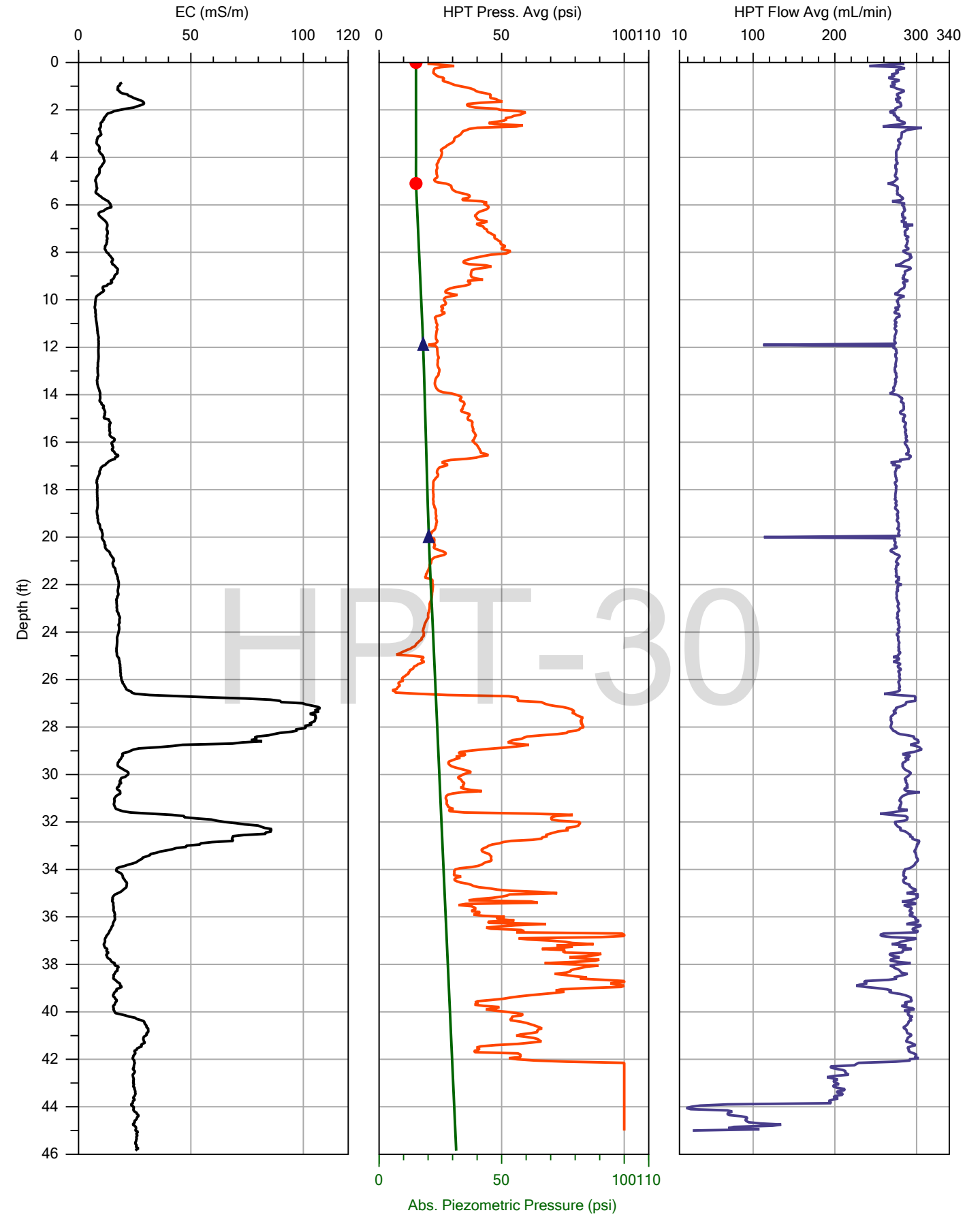
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-29.TIM	Date: 11/2/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 11.25 ft	Test: 1

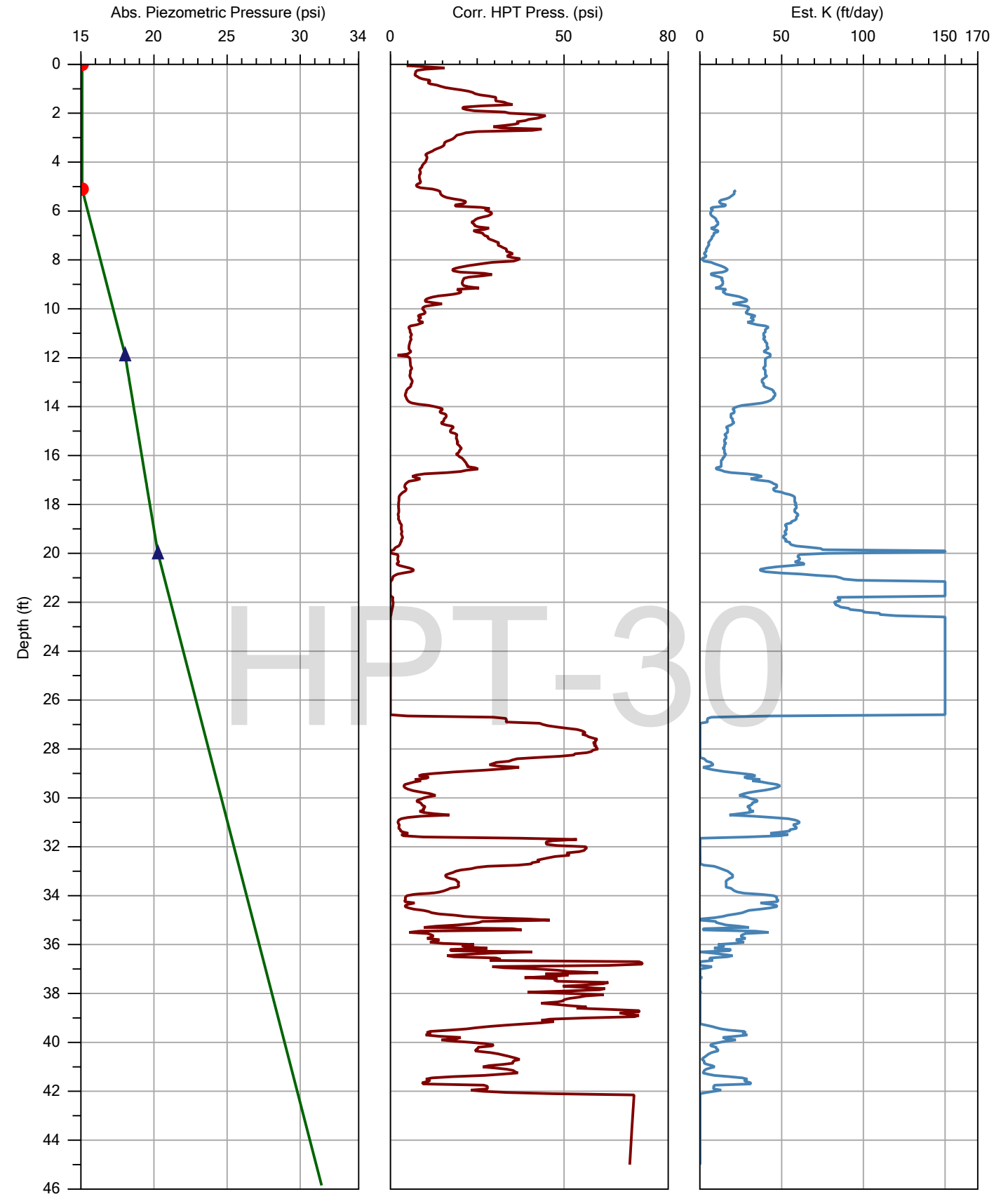


HPT DISSIPATION (SINGLE CASE)

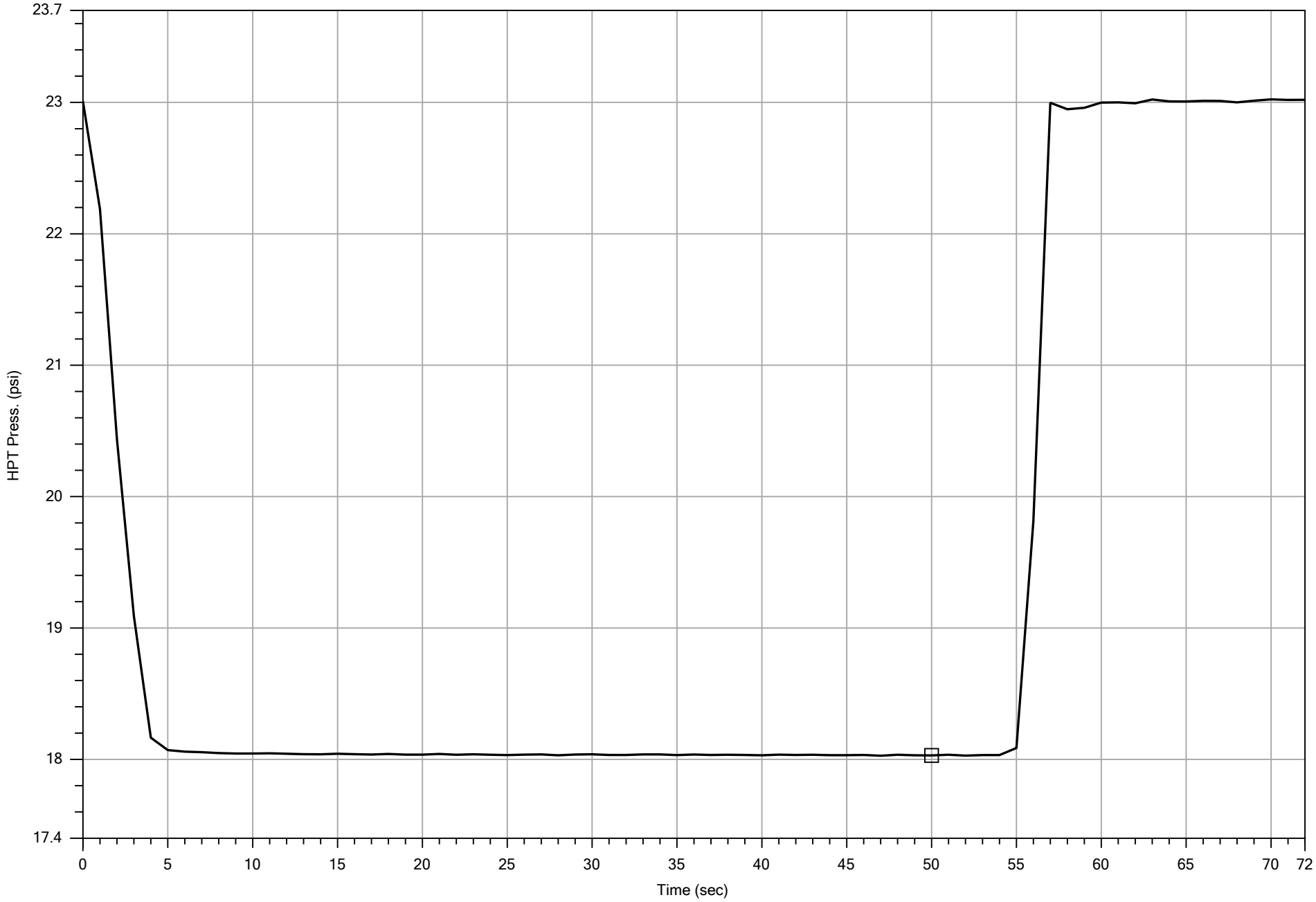
Company: Zebra	Operator: Mickey Ritter	File: HPT-29.TIM	Date: 11/2/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 22.95 ft	Test: 1



			File: HPT-30.HPT
Company: Zebra		Operator: Mickey Ritter	Date: 11/2/2015
Project ID: AVX		Client: Arcadis	Location:

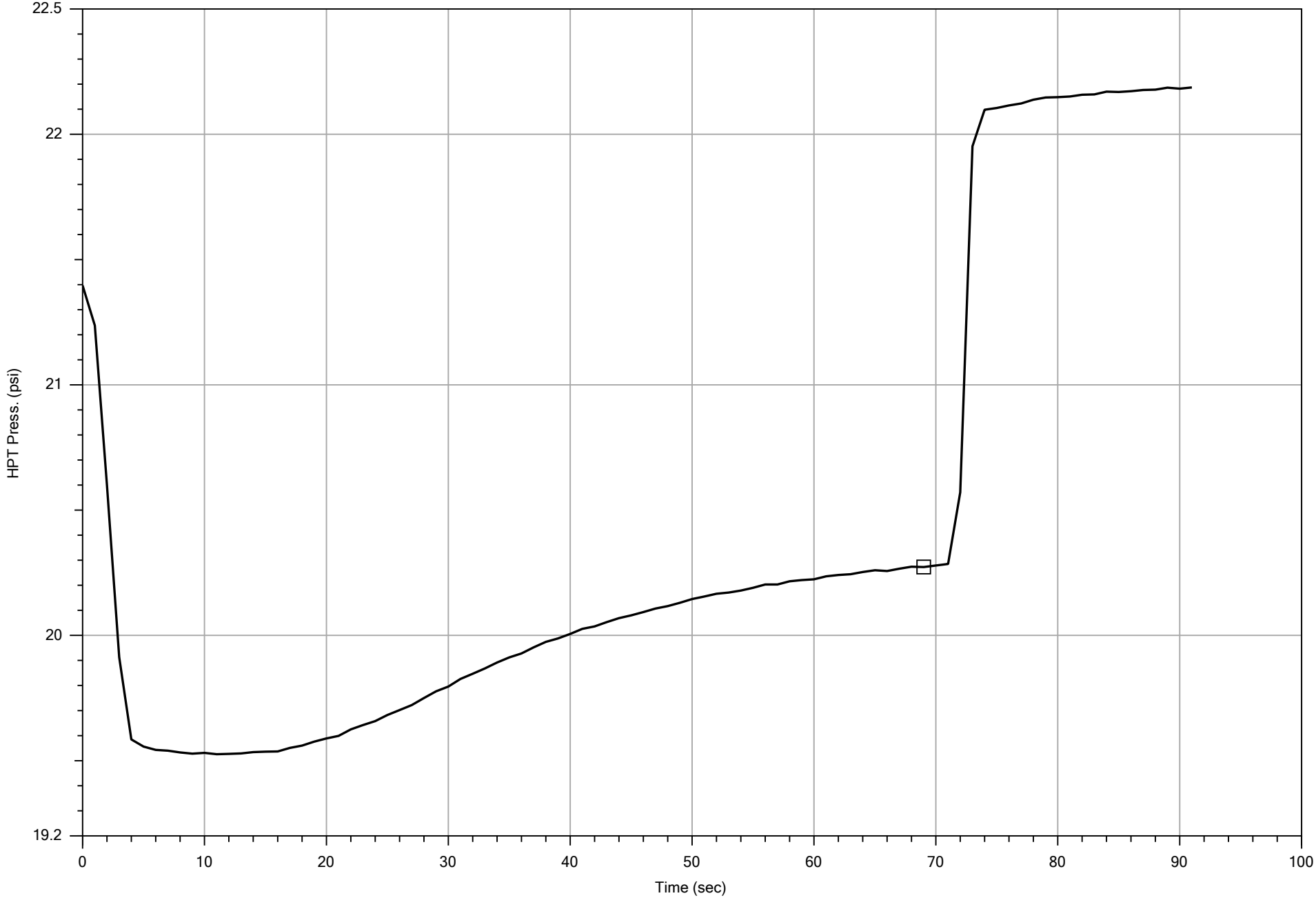


			File: HPT-30.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/2/2015
Project ID: AVX	Client: Arcadis		Location:



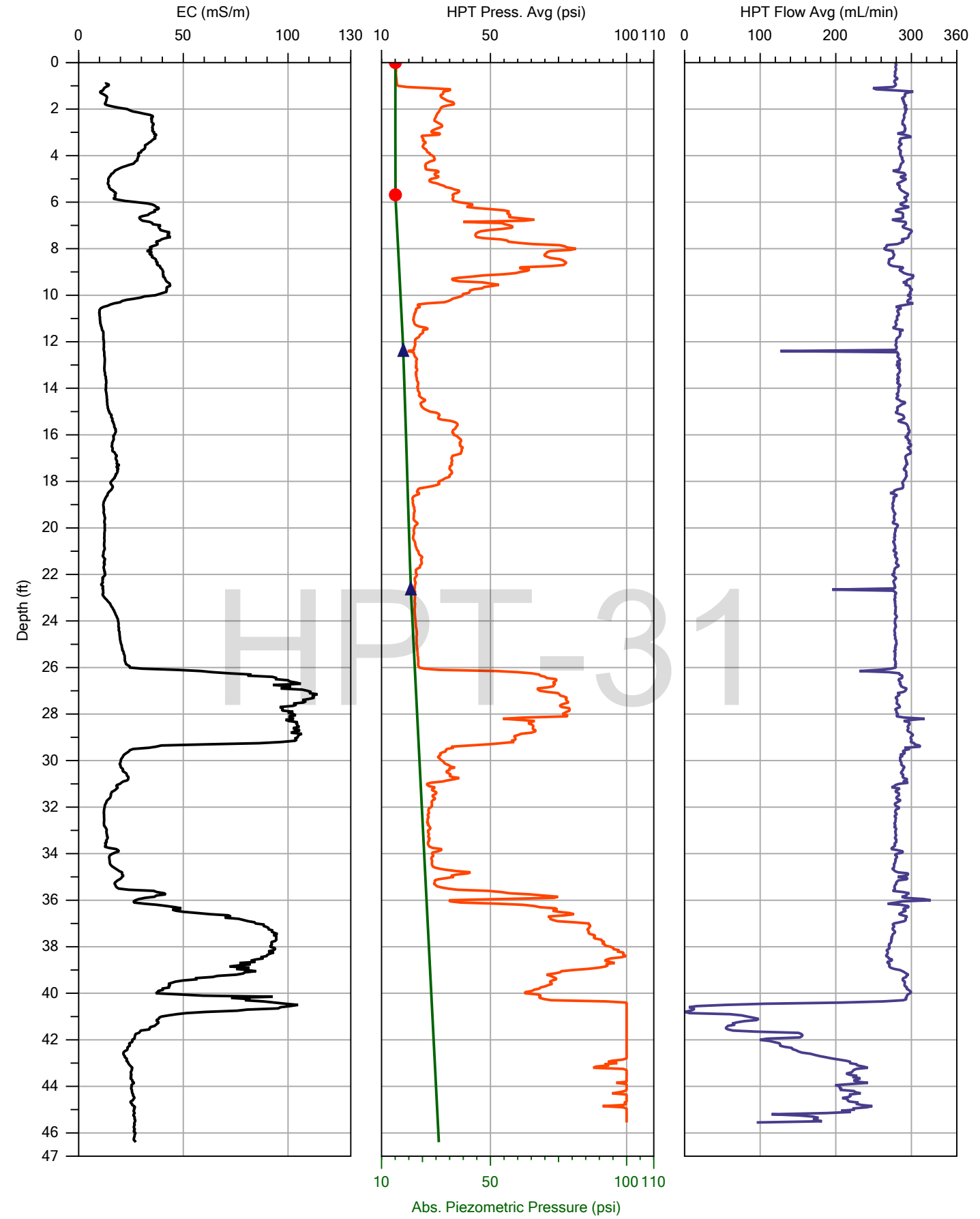
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-30.TIM	Date: 11/2/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 11.90 ft	Test: 1

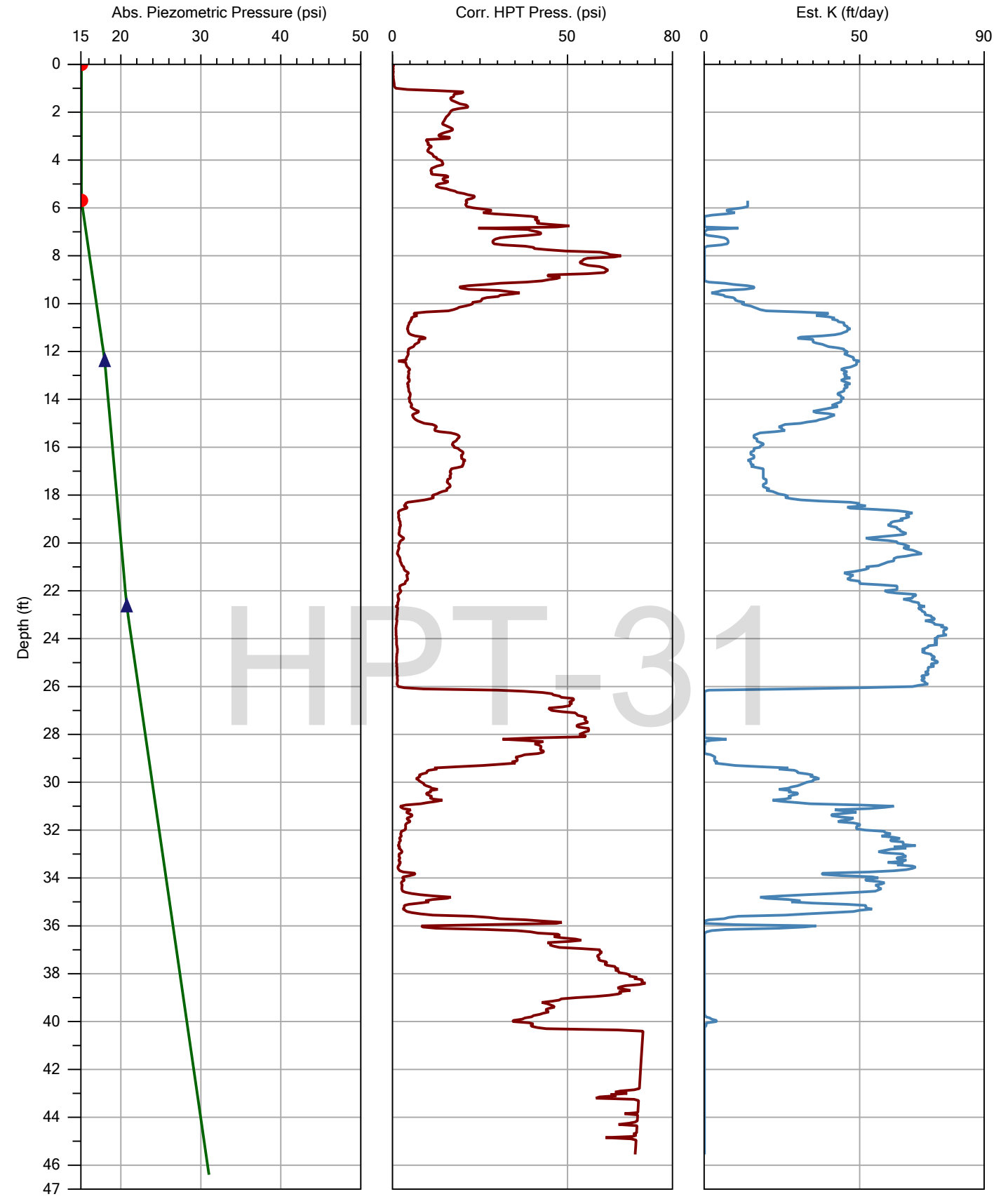


HPT DISSIPATION (SINGLE CASE)

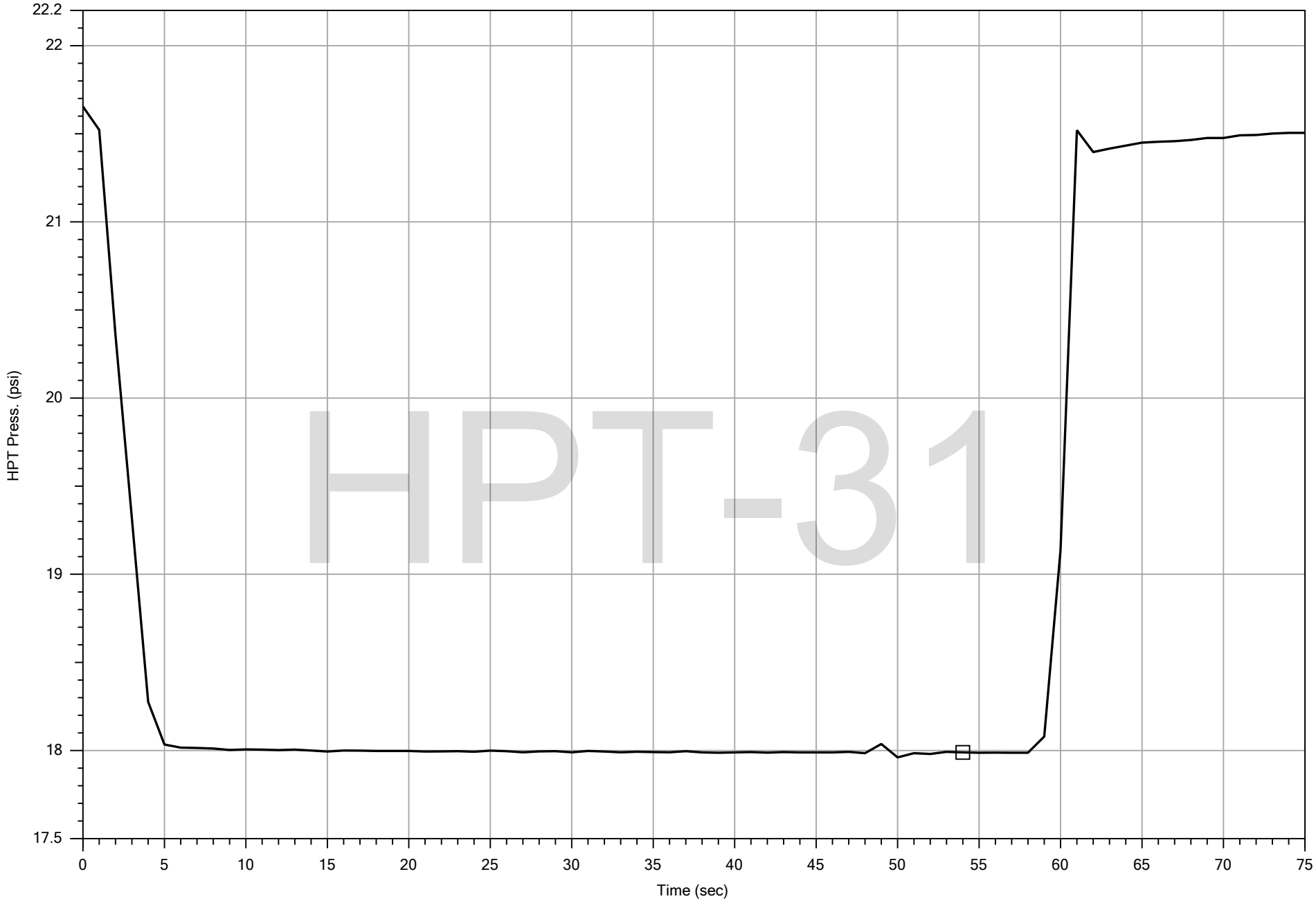
Company: Zebra	Operator: Mickey Ritter	File: HPT-30.TIM	Date: 11/2/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 20.00 ft	Test: 1



			File: HPT-31.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/2/2015
Project ID: AVX	Client: Arcadis		Location:

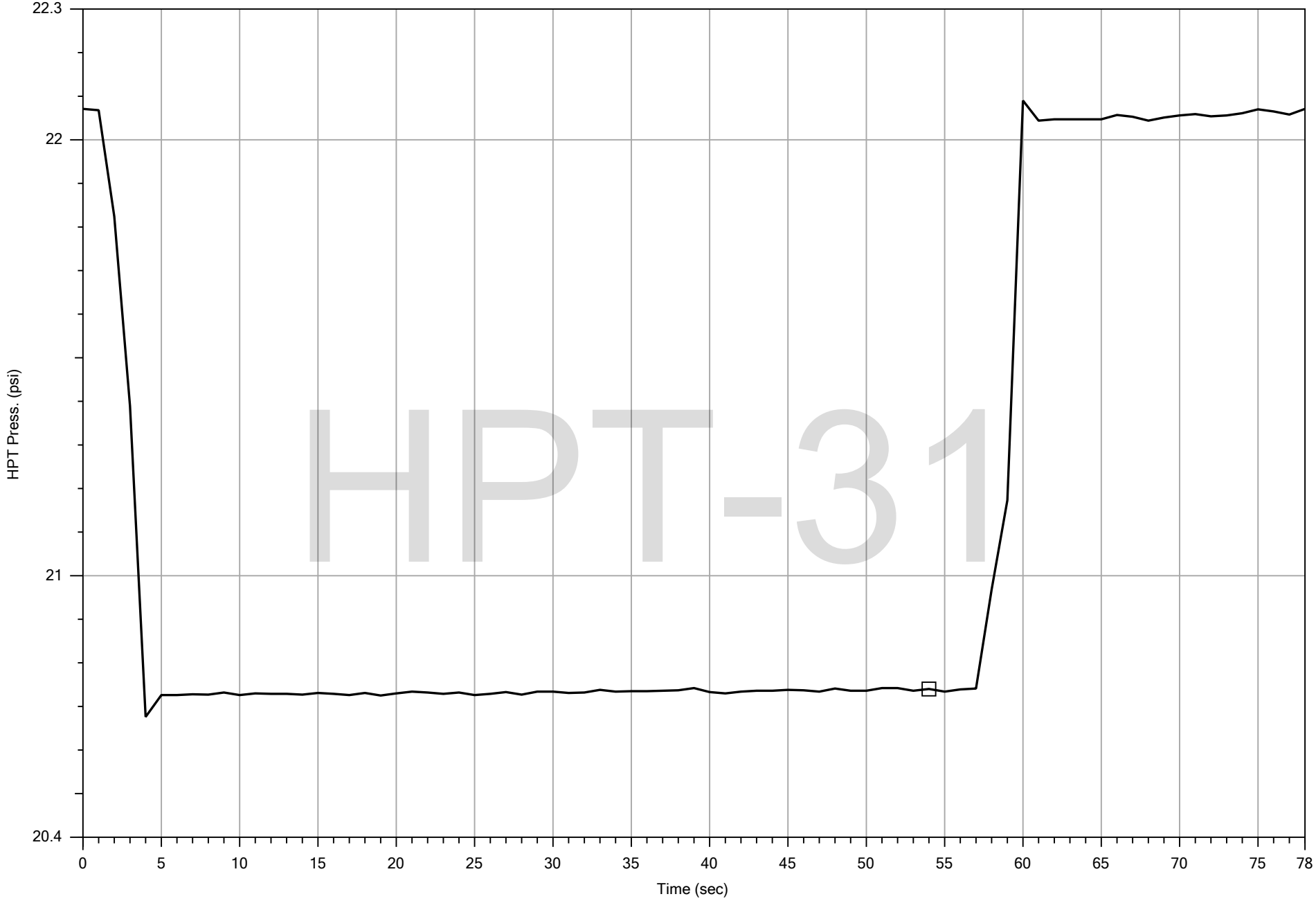


			File: HPT-31.HPT
Company: Zebra		Operator: Mickey Ritter	Date: 11/2/2015
Project ID: AVX		Client: Arcadis	Location:



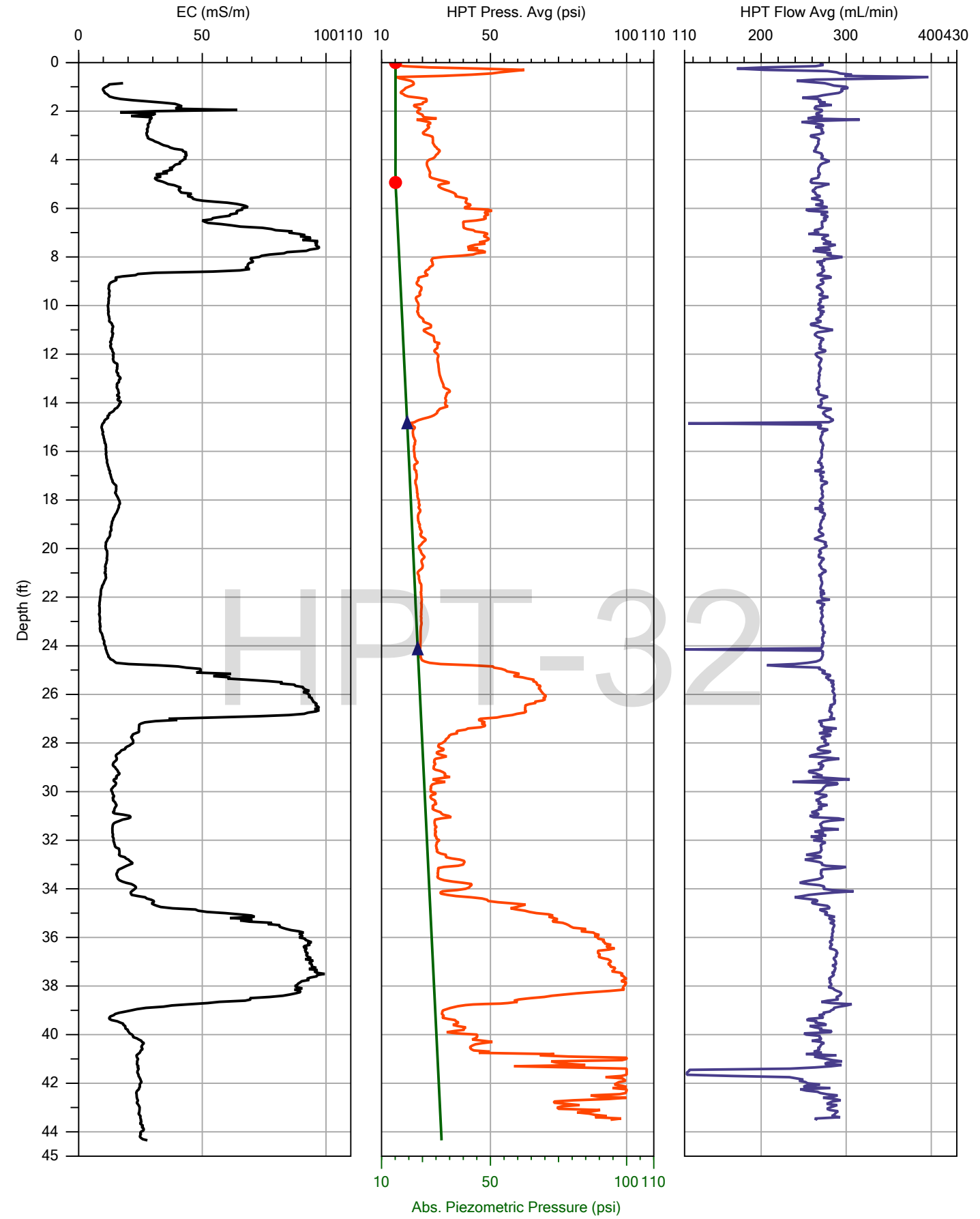
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-31.TIM	Date: 11/2/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 12.40 ft	Test: 1

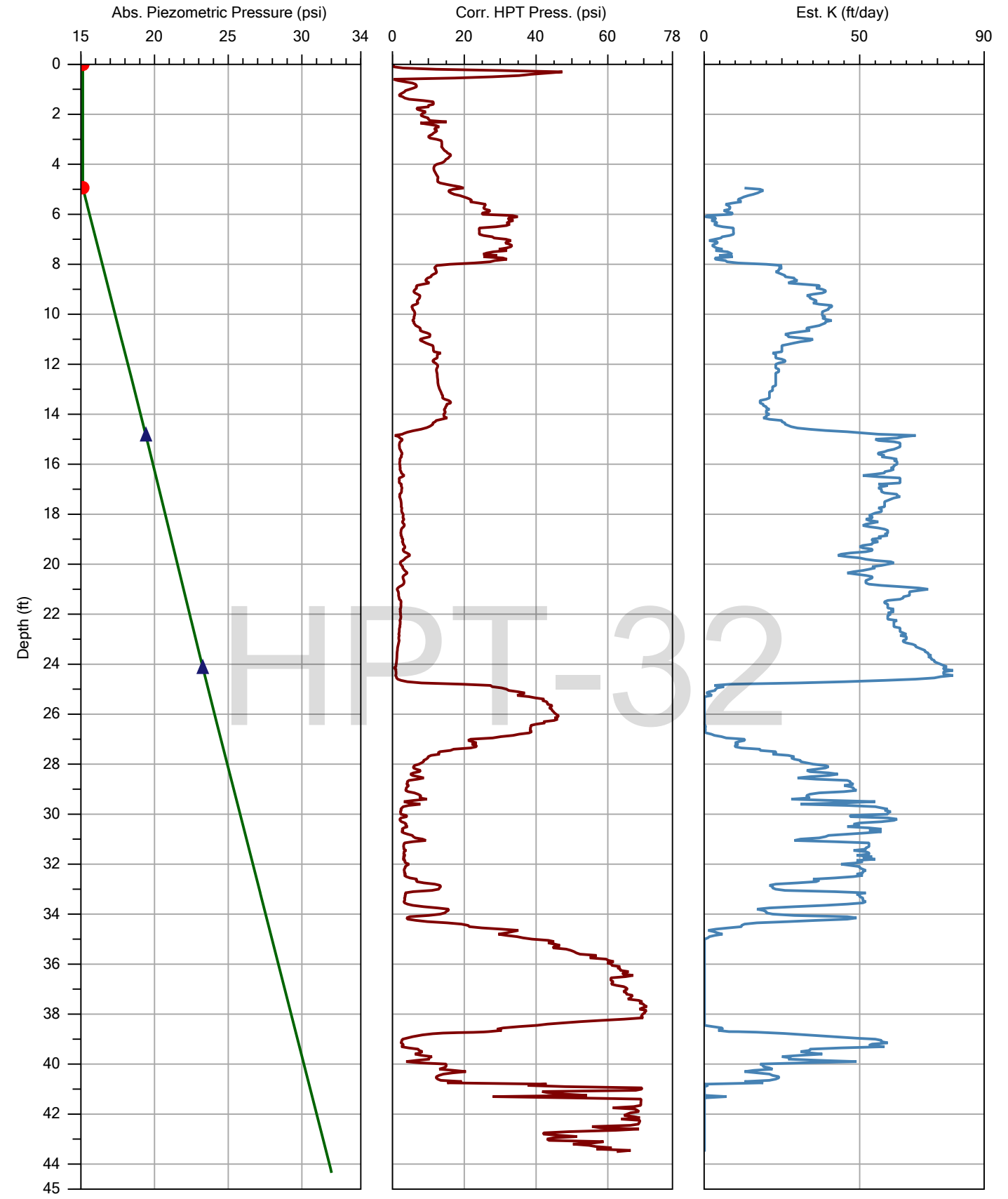


HPT DISSIPATION (SINGLE CASE)

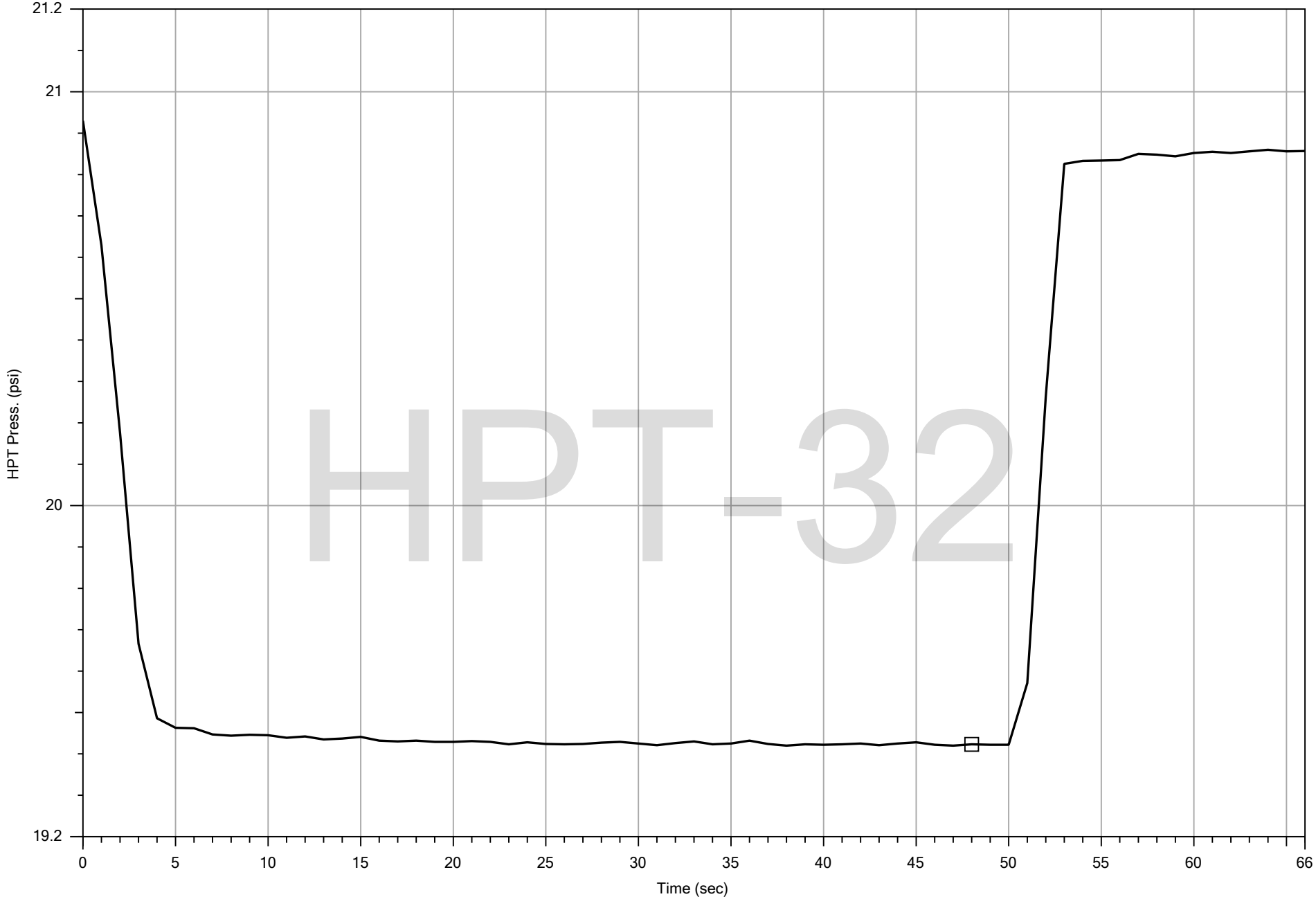
Company: Zebra	Operator: Mickey Ritter	File: HPT-31.TIM	Date: 11/2/2015
		Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 22.65 ft	Test: 1



			File: HPT-32.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/3/2015
Project ID: AVX	Client: Arcadis		Location:

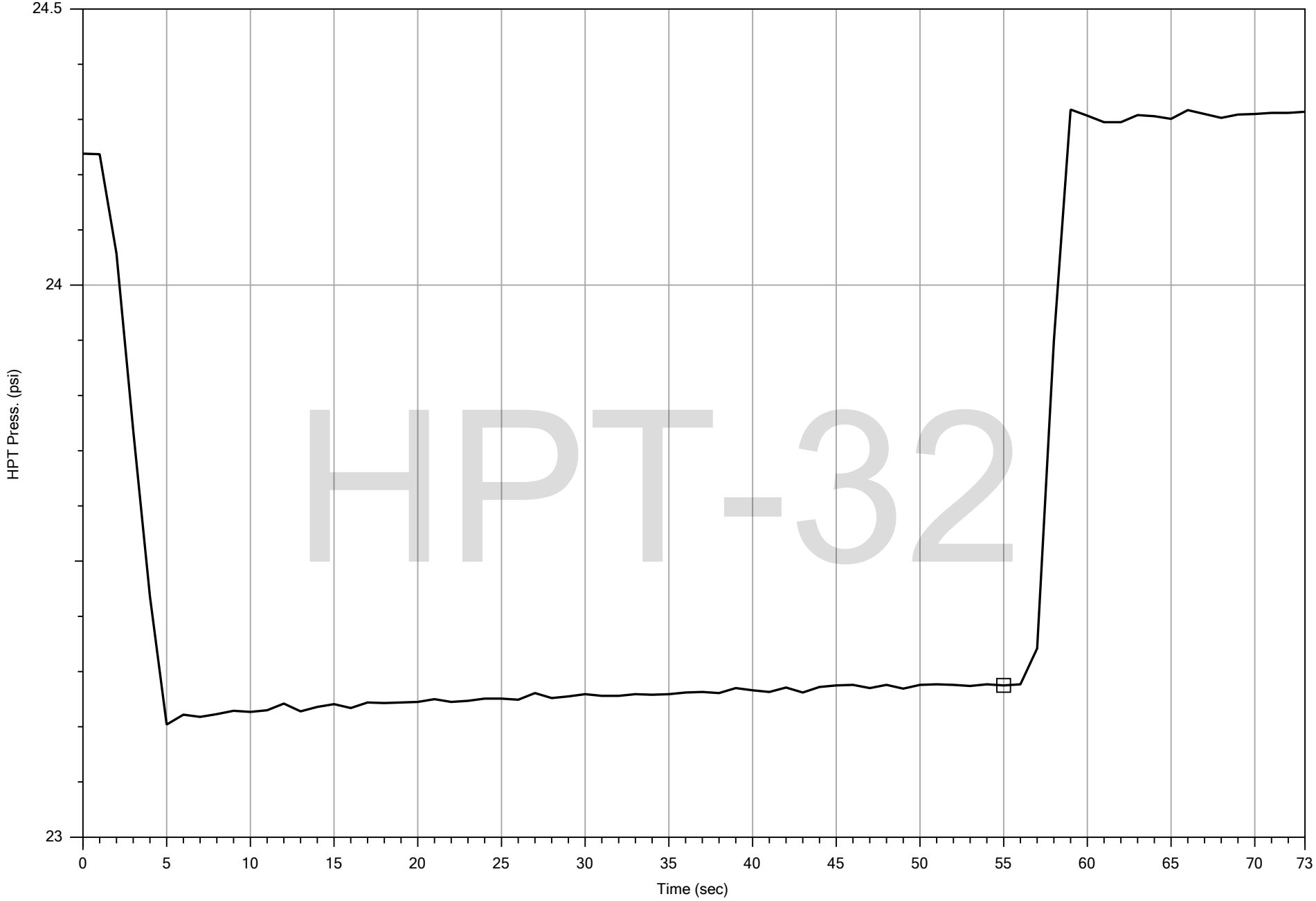


			File: HPT-32.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/3/2015
Project ID: AVX	Client: Arcadis		Location:



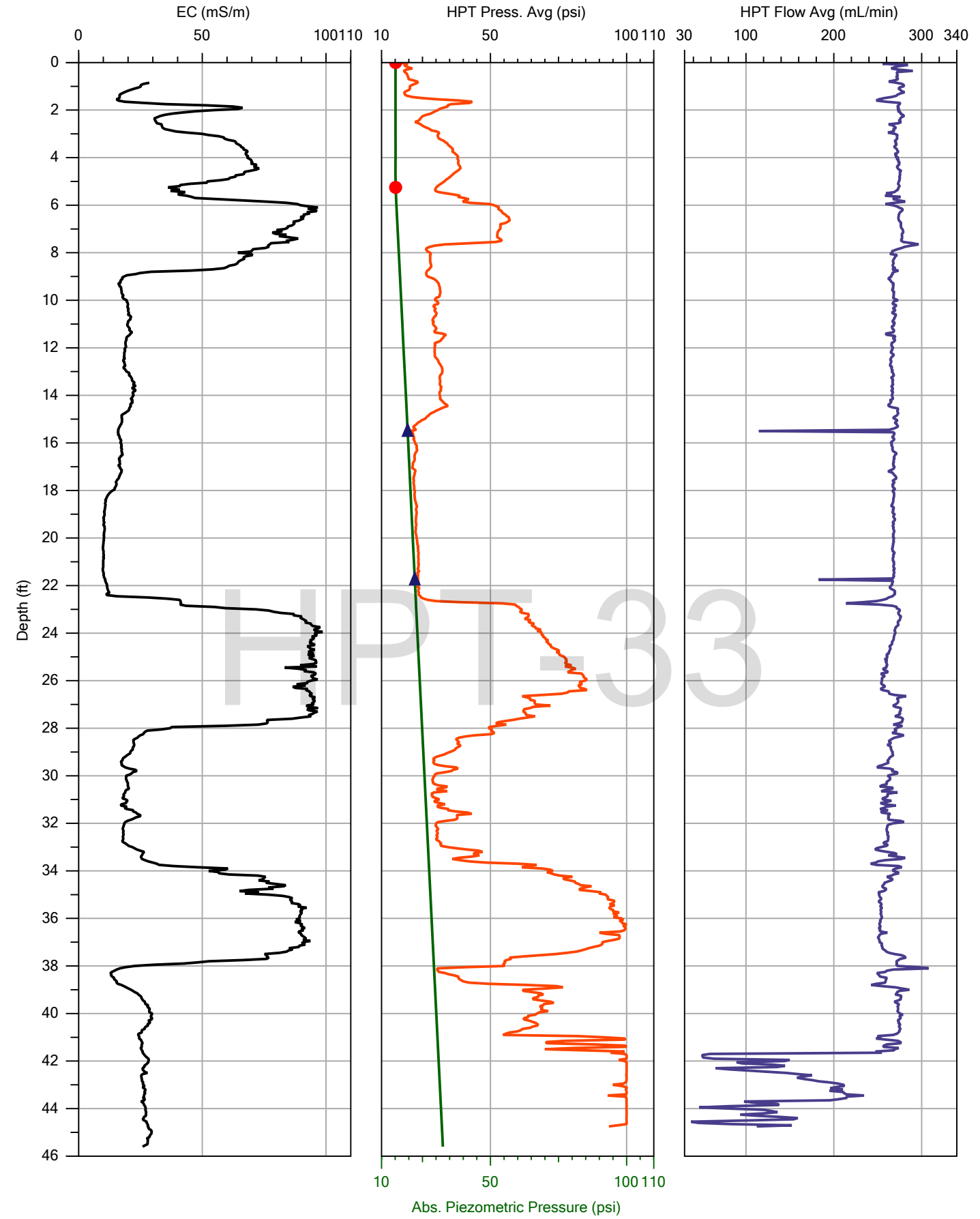
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 14.85 ft	Test: 1
File: HPT-32.TIM			Date: 11/3/2015



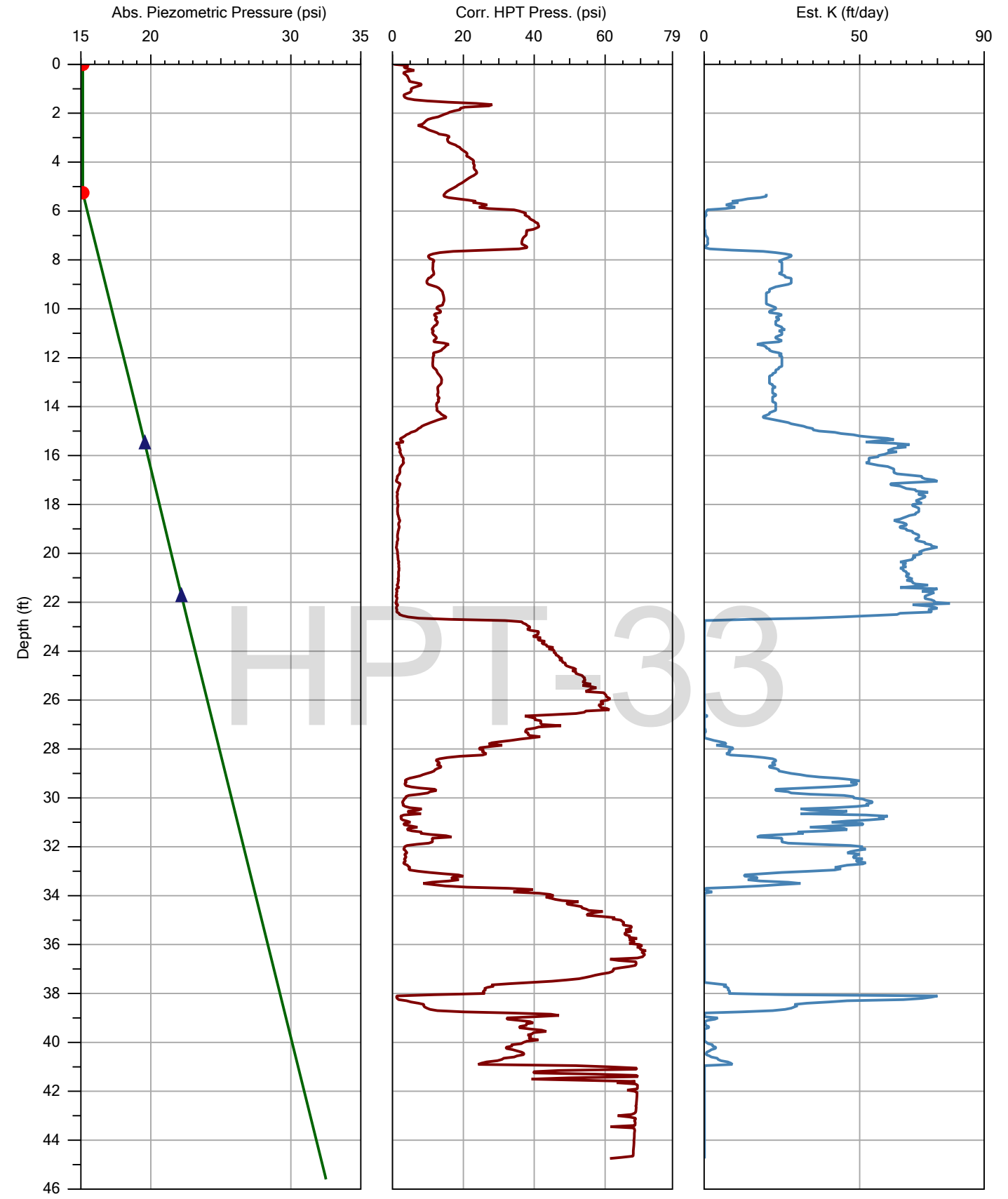
HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-32.TIM	Date: 11/3/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 24.15 ft	Test: 1

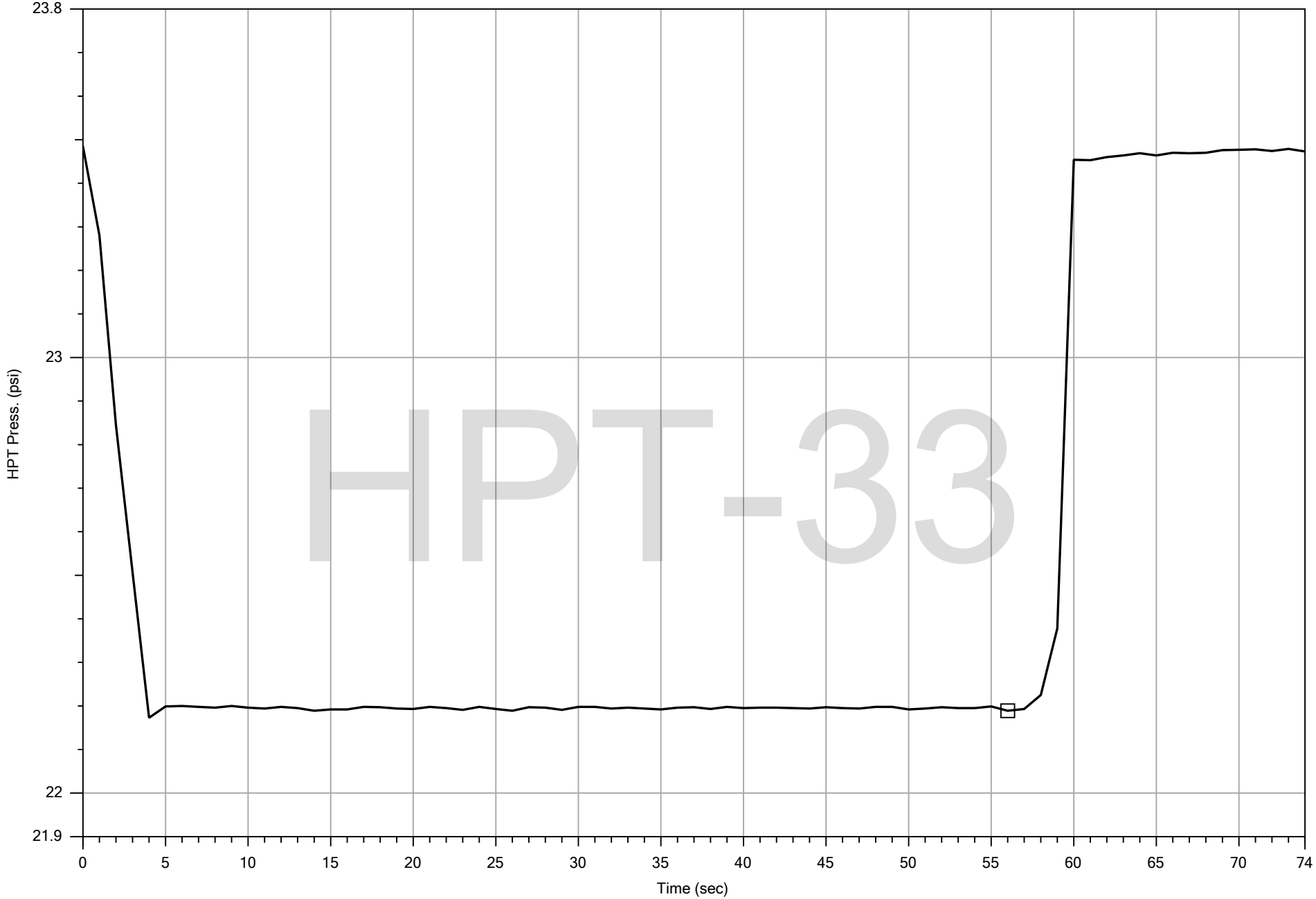


ZEBRA

		File: HPT-33.HPT
Company: Zebra	Operator: Mickey Ritter	Date: 11/3/2015
Project ID: AVX	Client: Arcadis	Location:

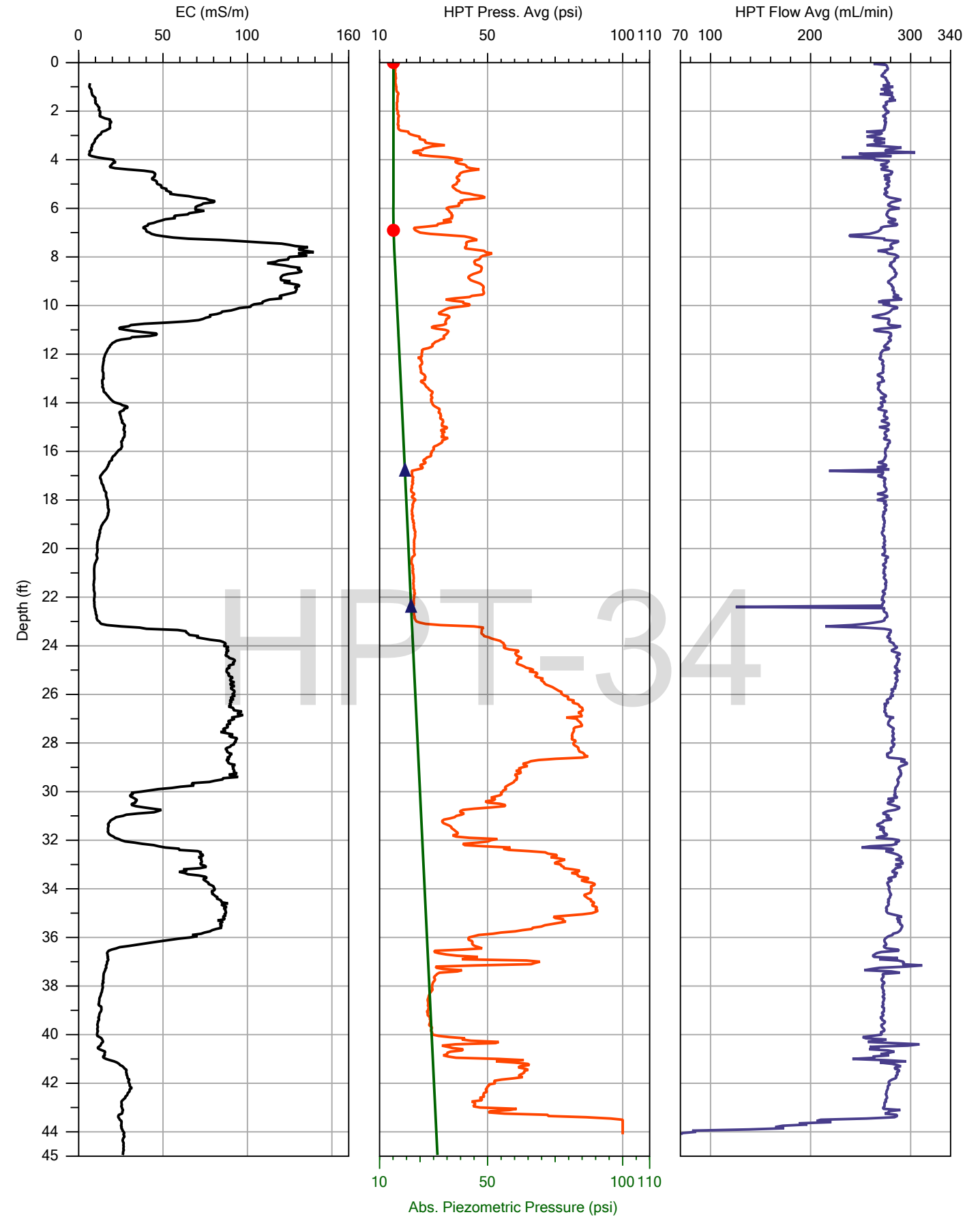


			File: HPT-33.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/3/2015
Project ID: AVX	Client: Arcadis		Location:

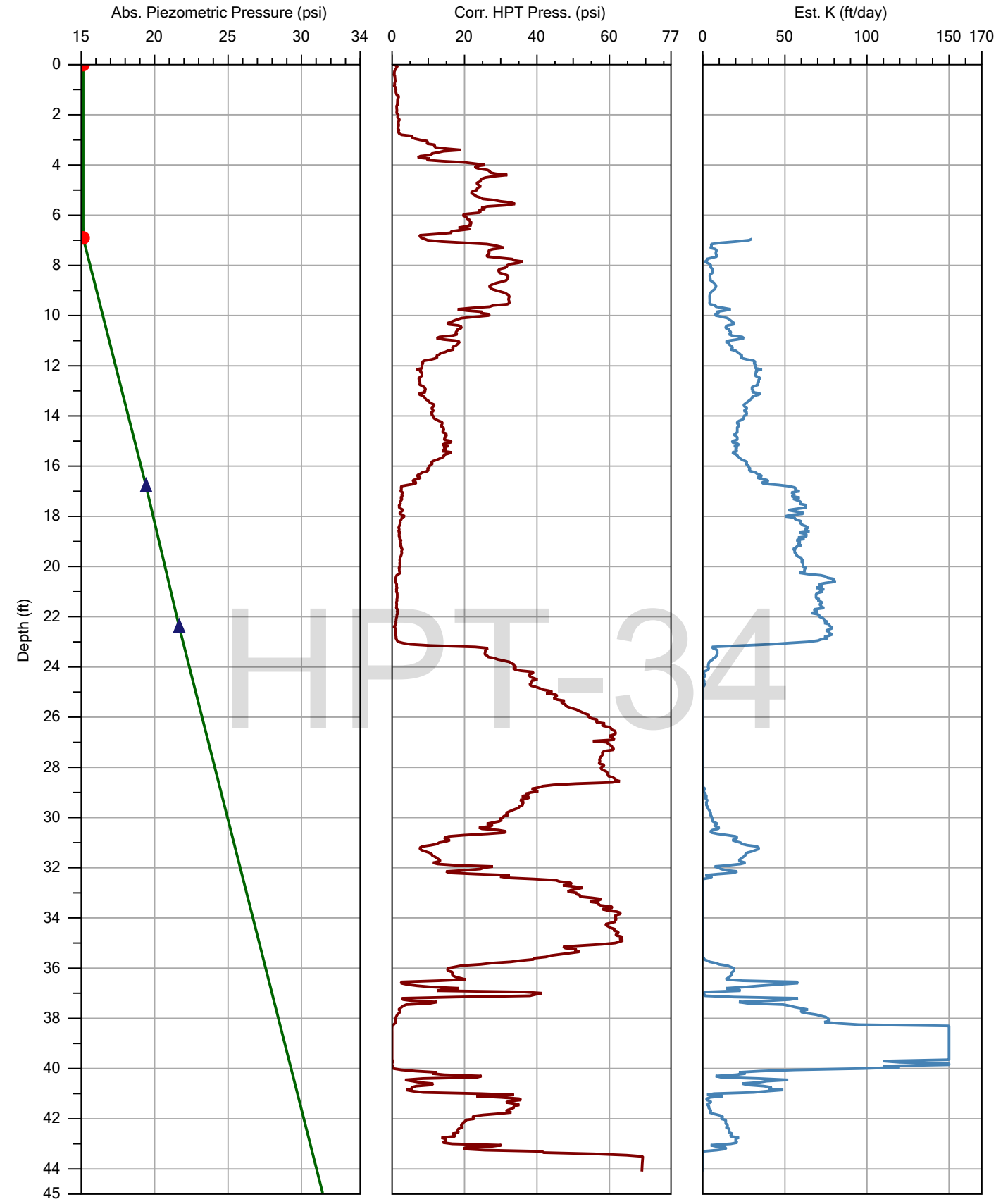


HPT DISSIPATION (SINGLE CASE)

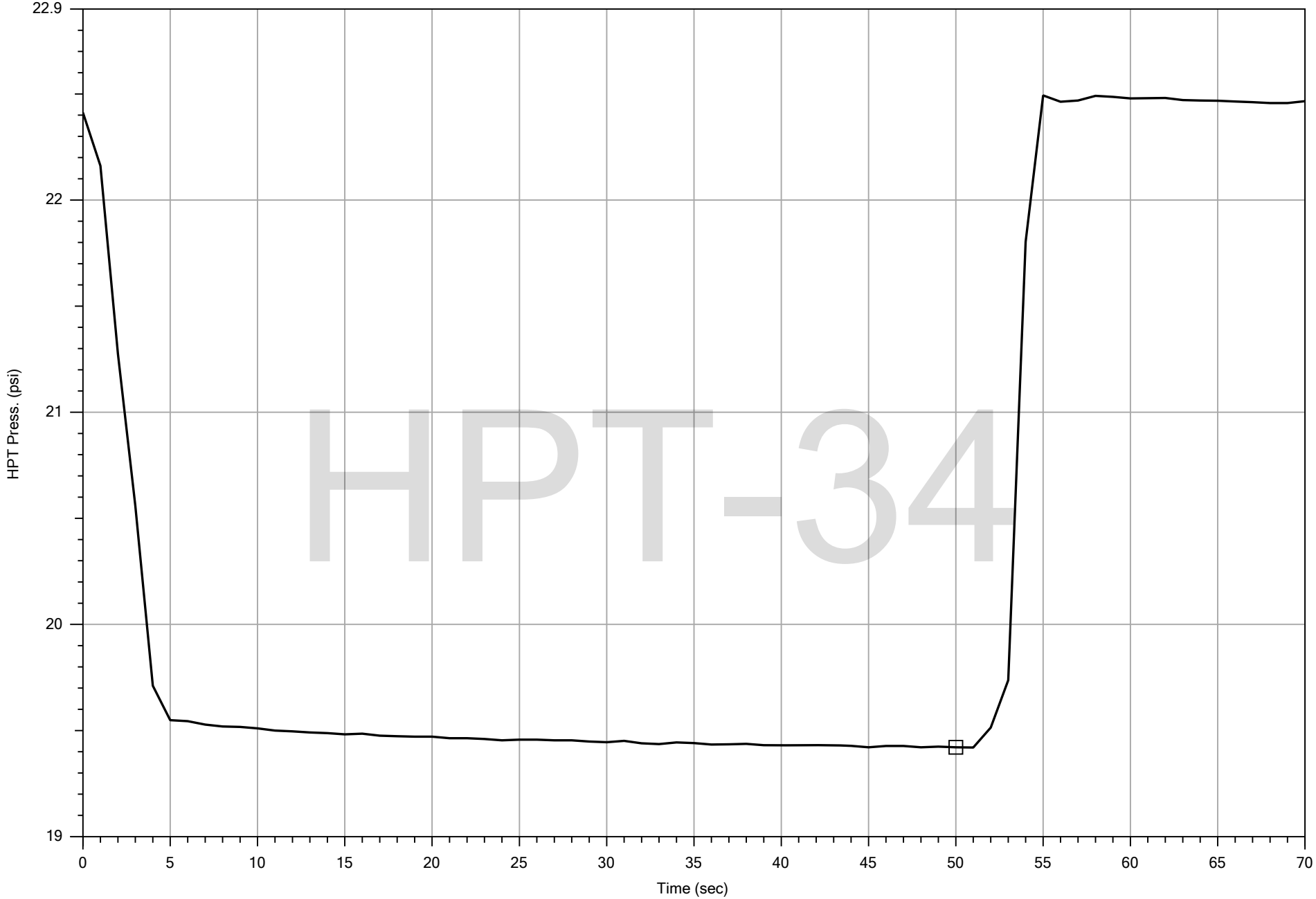
Company: Zebra	Operator: Mickey Ritter	File: HPT-33.TIM	Date: 11/3/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 21.75 ft	Test: 1



		File: HPT-34.HPT
Company: Zebra	Operator: Mickey Ritter	Date: 11/3/2015
Project ID: AVX	Client: Arcadis	Location:

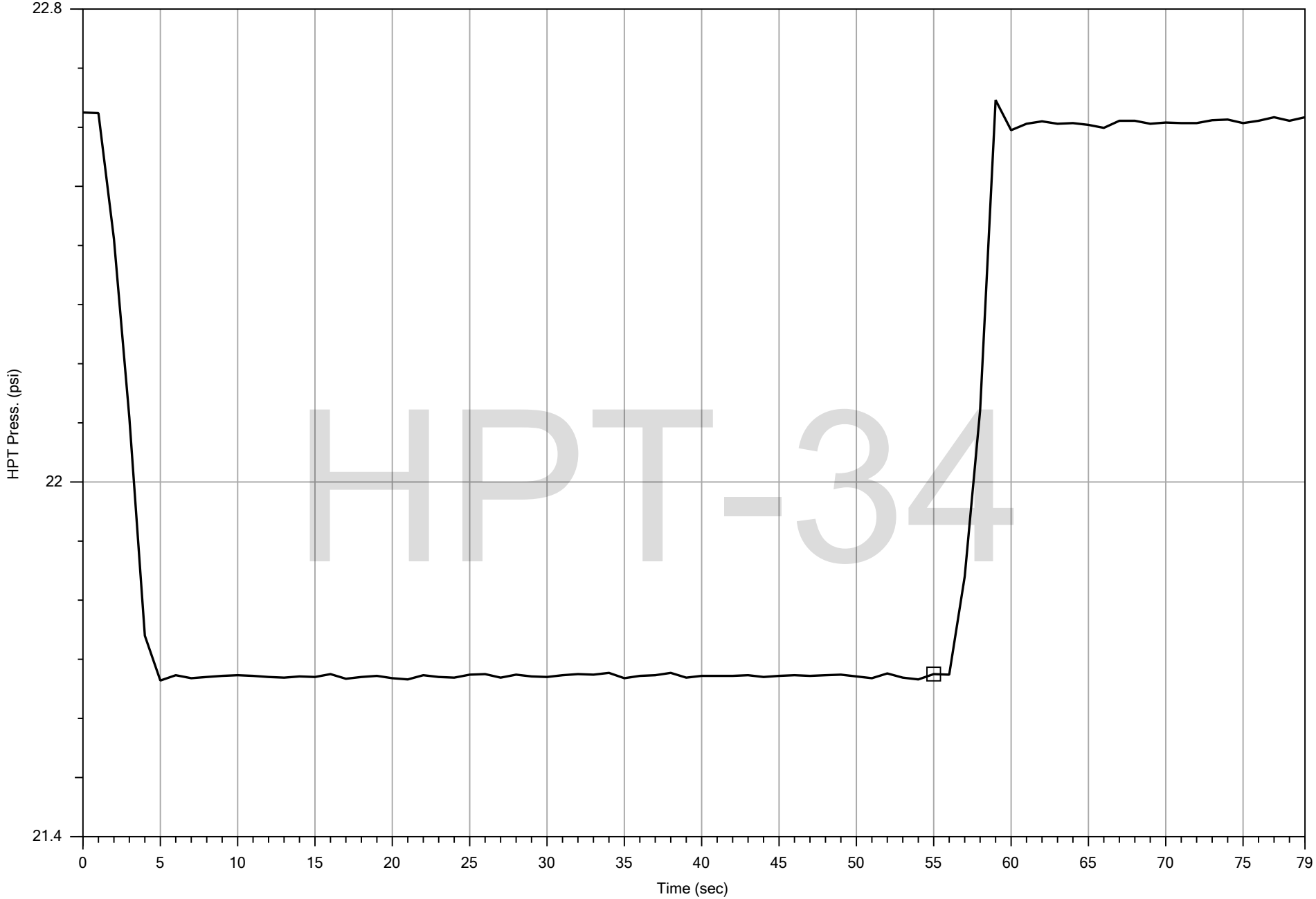


			File: HPT-34.HPT
Company: Zebra	Operator: Mickey Ritter		Date: 11/3/2015
Project ID: AVX	Client: Arcadis		Location:



HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	File: HPT-34.TIM	Date: 11/3/2015
Project ID: AVX	Client: Arcadis	Location:	Sensor: HPT Press.
		Depth: 16.80 ft	Test: 1



ZEBRA

HPT DISSIPATION (SINGLE CASE)

Company: Zebra	Operator: Mickey Ritter	Location:	Sensor: HPT Press.
Project ID: AVX	Client: Arcadis	Depth: 22.40 ft	Test: 1
		File: HPT-34.TIM	Date: 11/3/2015

APPENDIX D

Environmental Visualization System Model

APPENDIX E

Tracer Injection Well and Piezometer Boring Logs

Date Start/Finish: March 14-15th, 2016 **Drilling Company:** Parratt Wolff, Inc. **Driller's Name:** Lewis LeFever **Drilling Method:** Hollow Stem Auger **Auger/Tube Size:** 5' x 6.25" I.D. **Rig Type:** Truck Mount CME 55 **Sampling Method:** 2"x5' MacroCore	**Northing:** TBD **Easting:** TBD **Riser Elevation:** TBD **Borehole Depth:** 29 feet bgs **Surface Elevation:** TBD **Descriptions By:** Daniel Rhodes	**Well/Boring ID: IW-152S** **Client:** AVX Corporation **Location:** Myrtle Beach, South Carolina			

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0	1		N/A	1.6 1.8 1.5		0 - 3.0': Fine to medium SAND, little Silt, loose, grey to brown grey, moist.	Flush Mount Protective Casing
					1.1 0.9		3.0 - 5.0': CLAY, little fine Sand, moderately stiff to stiff, low to moderate plasticity, grey to dark grey, moist. Concrete cobbles at 3' bgs.	4" PVC Riser (0 - 14.0' BGS)
5	5	2		4.0/5.0	N/A 0.3 0.4 0.6 0.8		5.0 - 6.0': No Recovery. 6.0 - 9.0': CLAY, trace fine Sand, soft, low plasticity, grey to dark grey, moist. 9.0 - 10.0': CLAY, little Sand, soft to moderately stiff, low plasticity, grey to dark grey, moist.	Neat Cement Grout (0 - 11.0' BGS)
10	10	3		5.0/5.0	0.3 0.3 0.2 0.3 0.3		10.0 - 13.25': CLAY, little fine Sand, stiff, low plasticity, moist, grey to dark grey, wet at 12' bgs. 13.25 - 15.0': Fine SAND, some Silt and Clay, loose, grey to dark grey, wet.	#00N Fine Choker Sand (11.0 - 12.0' BGS) GP #2 Sand Pack (12.0 - 29.0' BGS) 4" 0.020" Slot Wire Wrapped Stainless Steel Screen (14.0 - 29.0' BGS)
15	15							

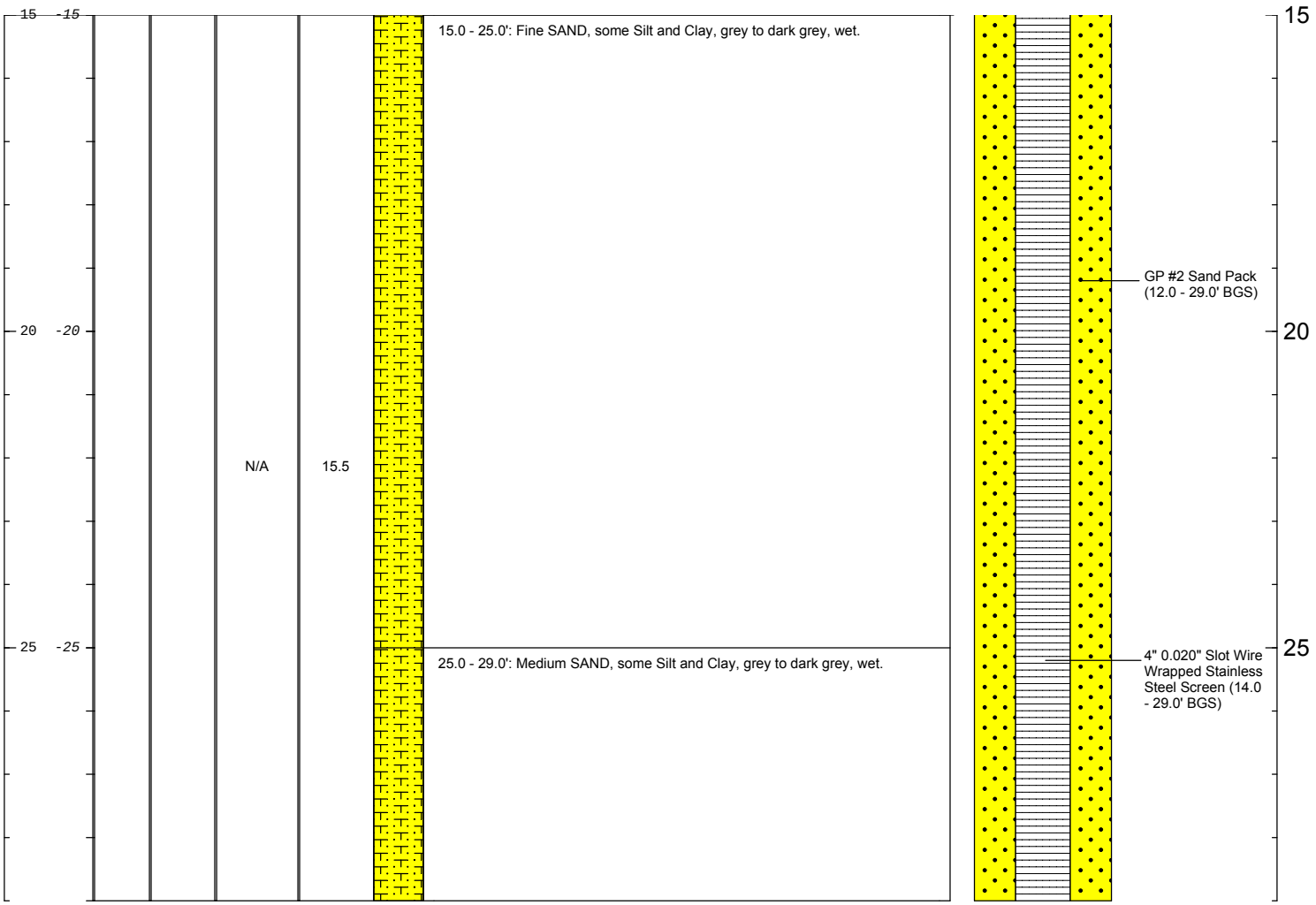
ARCADIS Design & Consultancy for natural and built assets

Remarks:

bgs - below ground surface
amsl - above mean sea level
N/A - not available or not applicable
I.D. - Inside Diameter
Boring was hand cleared to 5' bgs.
TBD - To Be Determined
IW-152S was developed by high pressure jetting, surging and purging. Approximately 175 gallons were removed before the turbidity stabilized at 8.3 ntu.
Locations will be surveyed by South Carolina licensed surveyor.

Date Start/Finish:	March 14-15th, 2016	**Northing:**	TBD	**Well/Boring ID:** **IW-152S**	
Drilling Company:	Parratt Wolff, Inc.	**Easting:**	TBD	**Client:** AVX Corporation	
Driller's Name:	Lewis LeFever	**Riser Elevation:**	TBD		
Drilling Method:	Hollow Stem Auger	**Borehole Depth:**	29 feet bgs	**Location:** Myrtle Beach, South Carolina	
Auger/Tube Size:	5' x 6.25" I.D.	**Surface Elevation:**	TBD		
Rig Type:	Truck Mount CME 55				
Sampling Method:	2"x5' MacroCore	**Descriptions By:**	Daniel Rhodes		

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
15	-15			N/A	15.5		15.0 - 25.0': Fine SAND, some Silt and Clay, grey to dark grey, wet.	GP #2 Sand Pack (12.0 - 29.0' BGS)
20	-20							
25	-25						25.0 - 29.0': Medium SAND, some Silt and Clay, grey to dark grey, wet.	4" 0.020" Slot Wire Wrapped Stainless Steel Screen (14.0 - 29.0' BGS)



ARCADIS Design & Consultancy for natural and built assets

Remarks:

bgs - below ground surface
amsl - above mean sea level
N/A - not available or not applicable
I.D. - Inside Diameter
Boring was hand cleared to 5' bgs.
TBD - To Be Determined
IW-152S was developed by high pressure jetting, surging and purging. Approximately 175 gallons were removed before the turbidity stabilized at 8.3 ntu.
Locations will be surveyed by South Carolina licensed surveyor.

Date Start/Finish:	March 15th, 2016	**Northing:**	TBD	**Well/Boring ID:**	**IW-153D**
Drilling Company:	Parratt Wolff, Inc.	**Easting:**	TBD	**Client:**	AVX Corporation
Driller's Name:	Lewis LeFever	**Riser Elevation:**	TBD		
Drilling Method:	Hollow Stem Auger	**Borehole Depth:**	45 feet bgs	**Location:**	Myrtle Beach, South Carolina
Auger/Tube Size:	5' x 6.25" I.D.	**Surface Elevation:**	TBD		
Rig Type:	Truck Mount CME 55	**Descriptions By:**	Daniel Rhodes		
Sampling Method:	2"x5' MacroCore				

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0				0		0 -2.0': Fine to medium SAND, little Silt, loose, light to dark brown, moist.	Flush Mount Protective Casing
					0.2			
		1		N/A	0.2		2.0 - 3.5': Fine to medium SAND, loose, light to dark grey, moist.	
					0.1		3.5 - 5.0': CLAY, some fine Sand, low to medium plasticity, soft, light to dark grey, moist.	
5	5				0			
					0.1		5.0 - 6.0': CLAY, some fine Sand, low to medium plasticity, soft, light to dark grey, moist.	
		2			0.2		6.0 - 8.25': CLAY, high plasticity, moderately stiff, olive grey, moist.	4" PVC Riser (0 - 33.0' BGS)
				4.0/5.0	0.3			
					0.1		8.25 - 10.0': CLAY and fine to medium Sand, low plasticity, soft, light to green grey, moist.	
10	10				0.3			
					N/A		10.0 - 12.5': No Recovery.	
					N/A			
				2.5/5.0	0.1		12.5 - 14.0': Fine to medium SAND, trace Silt, loose, brownish grey, moist. Wet at 13.5' bgs.	
					0.1			
					0.1		14.0 - 15.0': Medium SAND, little Silt and Clay, loose, dark grey, wet.	
15	15				N/A		15.0 - 17.5': No Recovery.	Neat Cement Grout (0 - 29.0' BGS)
					N/A			
				2.5/5.0	0.3		17.5 - 18.75': Fine to medium SAND, some Clay, loose, dark brownish grey, wet.	
					0.1			
					0.3		18.75 - 20.0': Coarse SAND, little Silt, few quartz clasts (2-3mm), loose, dark grey, wet.	
20	20				N/A		20.0 - 24.9': Coarse SAND, little Silt and Shell Fragments (2-5mm), few quartz clasts (2-3mm), loose, dark grey, wet.	
				3.0/5.0	N/A			

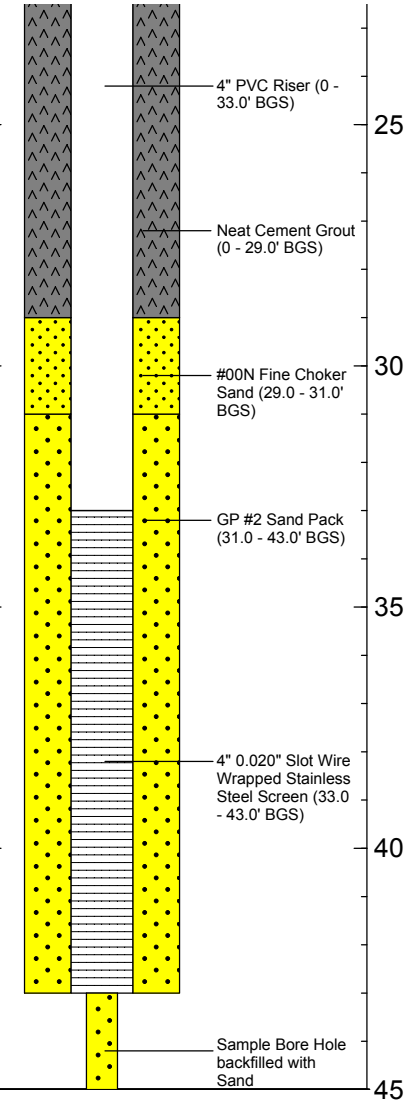
ARCADIS Design & Consultancy for natural and built assets

Remarks:

bgs - below ground surface
amsl - above mean sea level
N/A - not available or not applicable
I.D. - Inside Diameter
Boring was hand cleared to 5' bgs.
TBD - To Be Determined
IW-153D was developed by high pressure jetting, surging and purging. Approximately 165 gallons were removed before the turbidity stabilized at 37.6 ntu.
Locations will be surveyed by South Carolina licensed surveyor.

Date Start/Finish:	March 15th, 2016	**Northing:**	TBD	**Well/Boring ID:**	**IW-153D**
Drilling Company:	Parratt Wolff, Inc.	**Easting:**	TBD	**Client:**	AVX Corporation
Driller's Name:	Lewis LeFever	**Riser Elevation:**	TBD		
Drilling Method:	Hollow Stem Auger	**Borehole Depth:**	45 feet bgs	**Location:**	Myrtle Beach, South Carolina
Auger/Tube Size:	5' x 6.25" I.D.	**Surface Elevation:**	TBD		
Rig Type:	Truck Mount CME 55				
Sampling Method:	2"x5' MacroCore	**Descriptions By:**	Daniel Rhodes		

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
				3.0/5.0	0.9		20.0 - 24.9': Coarse SAND, little Silt and Shell Fragments (2-5mm), few quartz clasts (2-3mm), loose, dark grey, wet.	
					7.1			
					7.3		24.9 - 25.0': Medium SAND, loose, light grey, wet.	
25	25			3.0/5.0	N/A		25.0 - 27.6': Medium SAND, loose, light grey, wet.	
					N/A			
					103.6		27.6 - 30.0': Medium to coarse SAND, some shell fragments and quartz clasts (2-3mm), little Silt, loose, grey, wet.	
					121.3			
30	30				113.4			
				4.0/5.0	78.3		30.0 - 31.5': Fine to medium SAND, some Silt, loose, grey, wet.	
					73.4		31.5 - 33.7': CLAY, trace Silt, soft, low plasticity, olive grey, wet.	
					50.2			
					31.3		33.7 - 35.0': Medium to coarse SAND, some Silt and Clay, little shell fragments (2-3mm), loose, dark grey, wet.	
35	35				30.9			
				3.0/5.0	N/A		35.0 - 37.0': No Recovery.	
					N/A			
					120.3		37.0 - 38.6': Fine to medium SAND, loose, grey, wet.	
					129.7		38.6 - 40.0': Medium to coarse SAND, trace fine Sand and Silt, loose, light grey, wet.	
40	40				289.4			
				4.5/5.0	194.8		40.0 - 43.0': Medium to coarse SAND, trace fine Sand and Silt and quartz clasts (3-5mm), loose, grey, wet.	
					276.3			
					281.3			
					82.7		43.0 - 45.0': Fine to medium SAND and Silt and Clay, in layers, alternating, loose, soft, low plasticity, dark grey, wet.	
45	45				31.4			

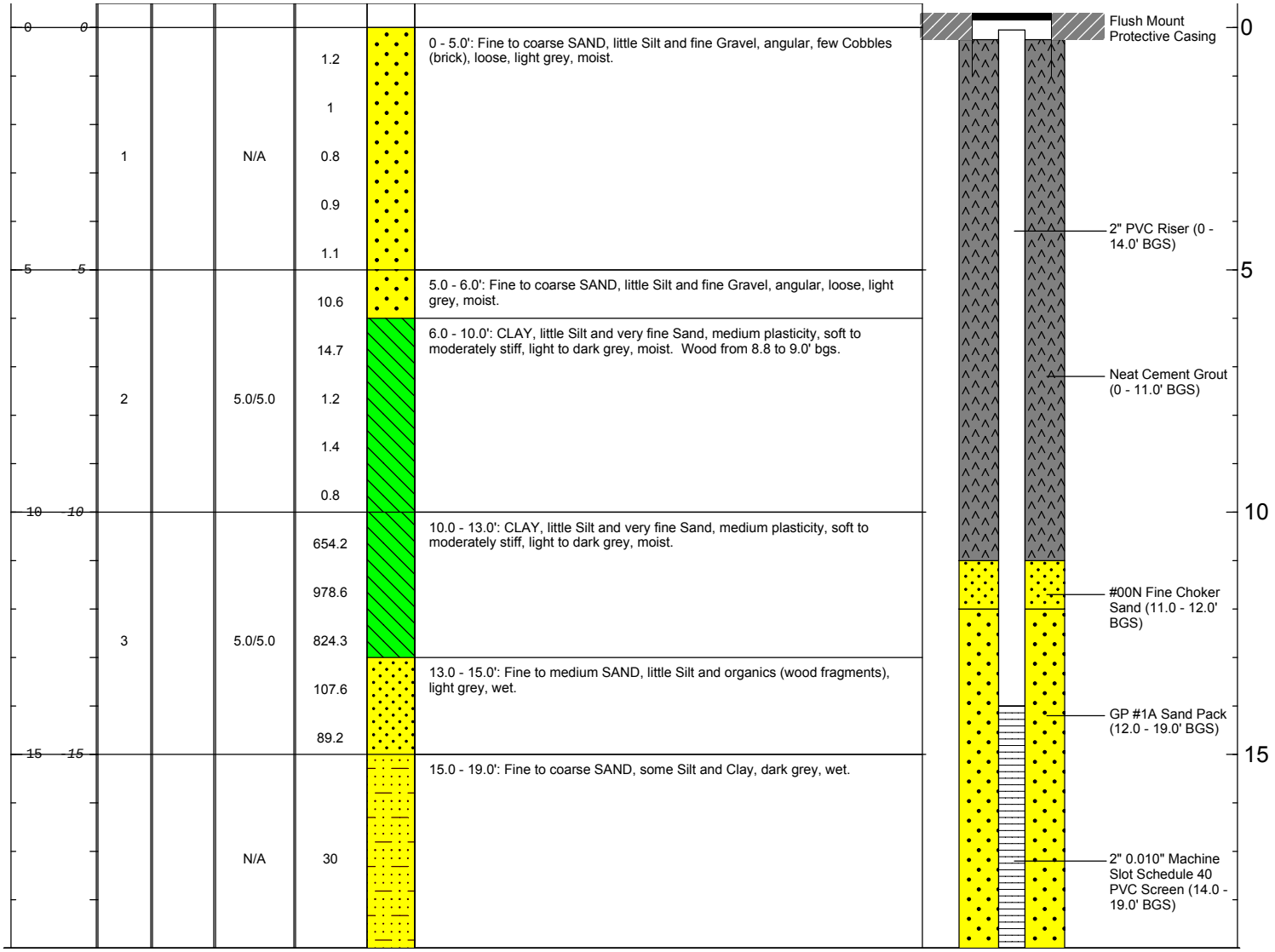


ARCADIS Design & Consultancy for natural and built assets

Remarks:

bgs - below ground surface
amsl - above mean sea level
N/A - not available or not applicable
I.D. - Inside Diameter
Boring was hand cleared to 5' bgs.
TBD - To Be Determined
IW-153D was developed by high pressure jetting, surging and purging. Approximately 165 gallons were removed before the turbidity stabilized at 37.6 ntu.
Locations will be surveyed by South Carolina licensed surveyor.

Date Start/Finish: March 16th, 2016	**Northing:** TBD	**Well/Boring ID:** **P-6 S1**
Drilling Company: Parratt Wolff, Inc.	**Easting:** TBD	**Client:** AVX Corporation
Driller's Name: Kevin White	**Riser Elevation:** TBD	
Drilling Method: Hollow Stem Auger	**Borehole Depth:** 19 feet bgs	**Location:** Myrtle Beach, South Carolina
Auger/Tube Size: 5' x 4.25" I.D.	**Surface Elevation:** TBD	
Rig Type: Track Mounted CME 55	**Descriptions By:** Chris Bonessi	
Sampling Method: 2"x5' MacroCore		

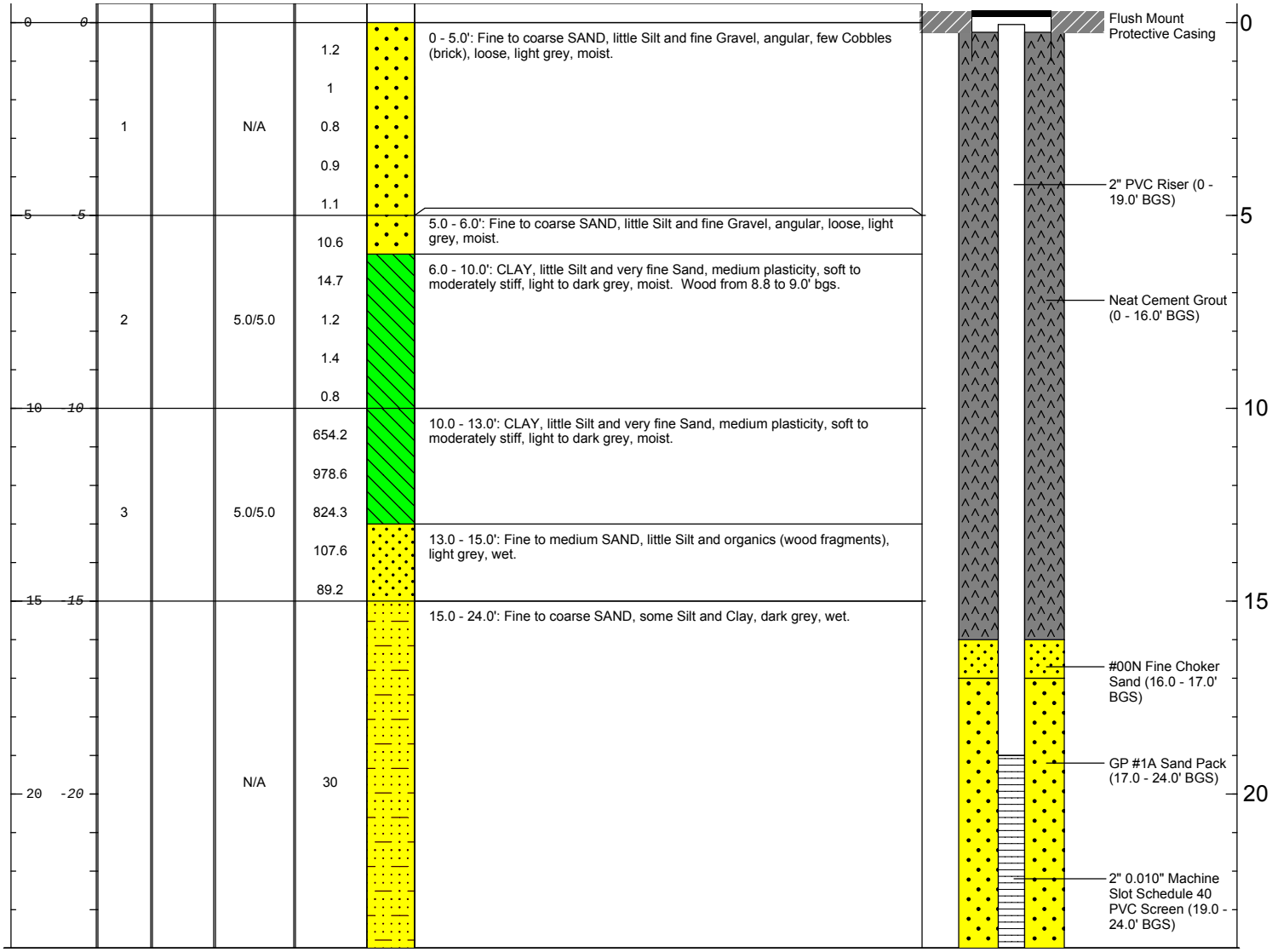


ARCADIS Design & Consultancy for natural and built assets

Remarks:

bgs - below ground surface
amsl - above mean sea level
N/A - not available or not applicable
I.D. - Inside Diameter
Boring was hand cleared to 5' bgs.
TBD - To Be Determined
Sampled boring from 5-15' bgs. Remaining depth was advanced with Hollow Stem Augers
P-6 S1 was developed by surging and purging. Approximately 100 gallons were removed before the turbidity stabilized at 120 ntu.
Locations will be surveyed by South Carolina licensed surveyor.

Date Start/Finish:	March 16th, 2016	**Northing:**	TBD	**Well/Boring ID:** **P-6 S2**	
Drilling Company:	Parratt Wolff, Inc.	**Easting:**	TBD	**Client:** AVX Corporation	
Driller's Name:	Kevin White	**Riser Elevation:**	TBD		
Drilling Method:	Hollow Stem Auger	**Borehole Depth:**	24 feet bgs	**Location:** Myrtle Beach, South Carolina	
Auger/Tube Size:	5' x 4.25" I.D.	**Surface Elevation:**	TBD		
Rig Type:	Track Mounted CME 55	**Descriptions By:**	Chris Bonessi		
Sampling Method:	2"x5' MacroCore				

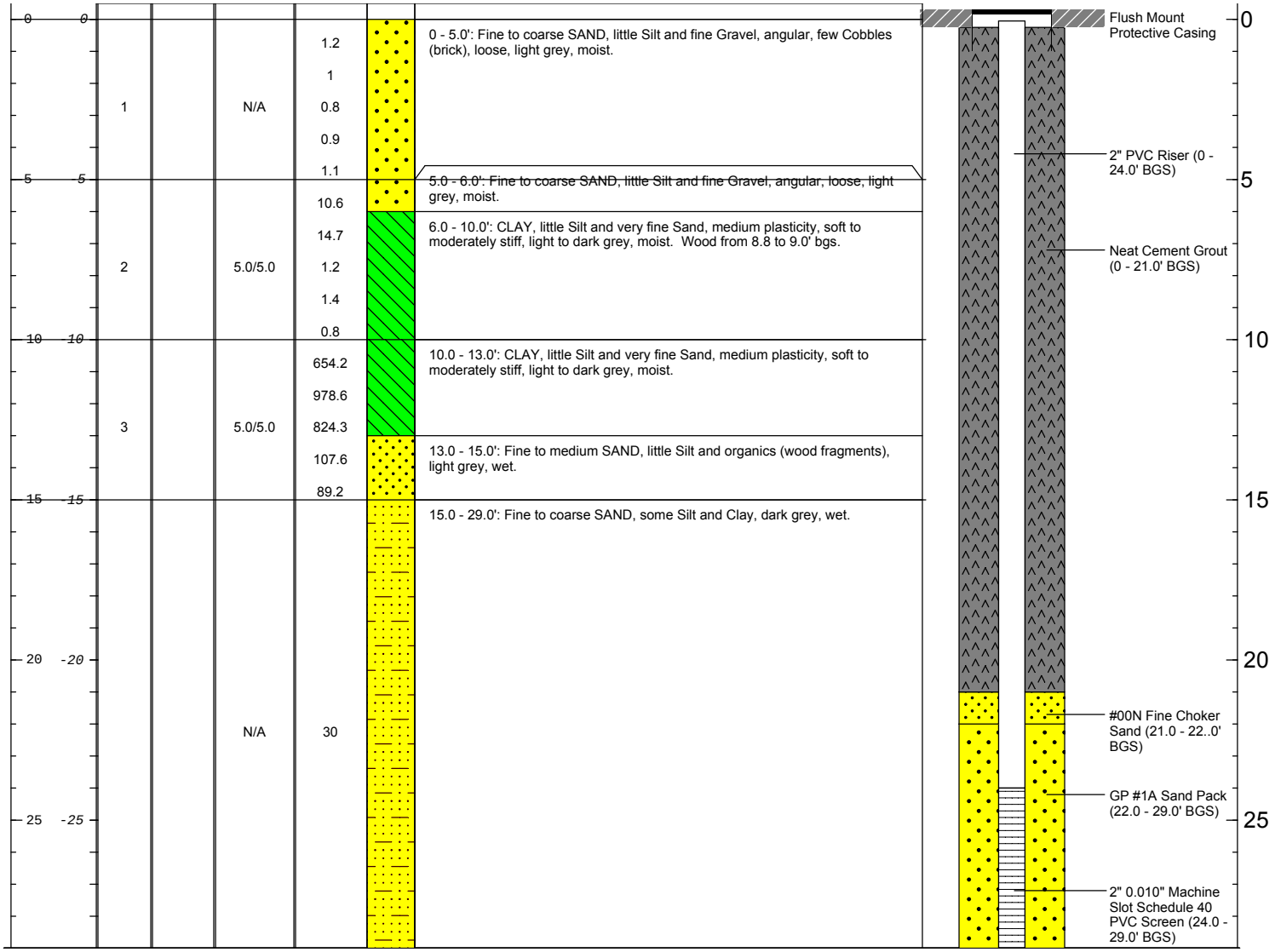


ARCADIS Design & Consultancy for natural and built assets

Remarks:

bgs - below ground surface
amsl - above mean sea level
N/A - not available or not applicable
I.D. - Inside Diameter
Boring was hand cleared to 5' bgs.
TBD - To Be Determined
Sampled boring from 5-15' bgs. Remaining depth was advanced with Hollow Stem Augers
P-6 S2 was developed by surging and purging. Approximately 150 gallons were removed before the turbidity stabilized at 105 ntu.
Locations will be surveyed by South Carolina licensed surveyor.

Date Start/Finish:	March 16th, 2016	**Northing:**	TBD	**Well/Boring ID:** **P-6 S3**	
Drilling Company:	Parratt Wolff, Inc.	**Easting:**	TBD	**Client:** AVX Corporation	
Driller's Name:	Kevin White	**Riser Elevation:**	TBD		
Drilling Method:	Hollow Stem Auger	**Borehole Depth:**	29 feet bgs	**Location:** Myrtle Beach, South Carolina	
Auger/Tube Size:	5' x 4.25" I.D.	**Surface Elevation:**	TBD		
Rig Type:	Track Mounted CME 55				
Sampling Method:	2"x5' MacroCore	**Descriptions By:**	Chris Bonessi		



ARCADIS Design & Consultancy for natural and built assets

Remarks:

bgs - below ground surface
amsl - above mean sea level
N/A - not available or not applicable
I.D. - Inside Diameter
Boring was hand cleared to 5' bgs.
TBD - To Be Determined
Sampled boring from 5-15' bgs. Remaining depth was advanced with Hollow Stem Augers
P-6 S3 was developed by surging and purging. Approximately 120 gallons were removed before the turbidity stabilized at 76 ntu.
Locations will be surveyed by South Carolina licensed surveyor.

Date Start/Finish:	March 15th, 2016	**Northing:**	TBD	**Well/Boring ID:** **P-7 S1**	
Drilling Company:	Parratt Wolff, Inc.	**Easting:**	TBD	**Client:** AVX Corporation	
Driller's Name:	Kevin White	**Riser Elevation:**	TBD		
Drilling Method:	Hollow Stem Auger	**Borehole Depth:**	17 feet bgs	**Location:** Myrtle Beach, South Carolina	
Auger/Tube Size:	5' x 4.25" I.D.	**Surface Elevation:**	TBD		
Rig Type:	Track Mounted CME 55	**Descriptions By:**	Chris Bonessi		
Sampling Method:	2"x5' MacroCore				

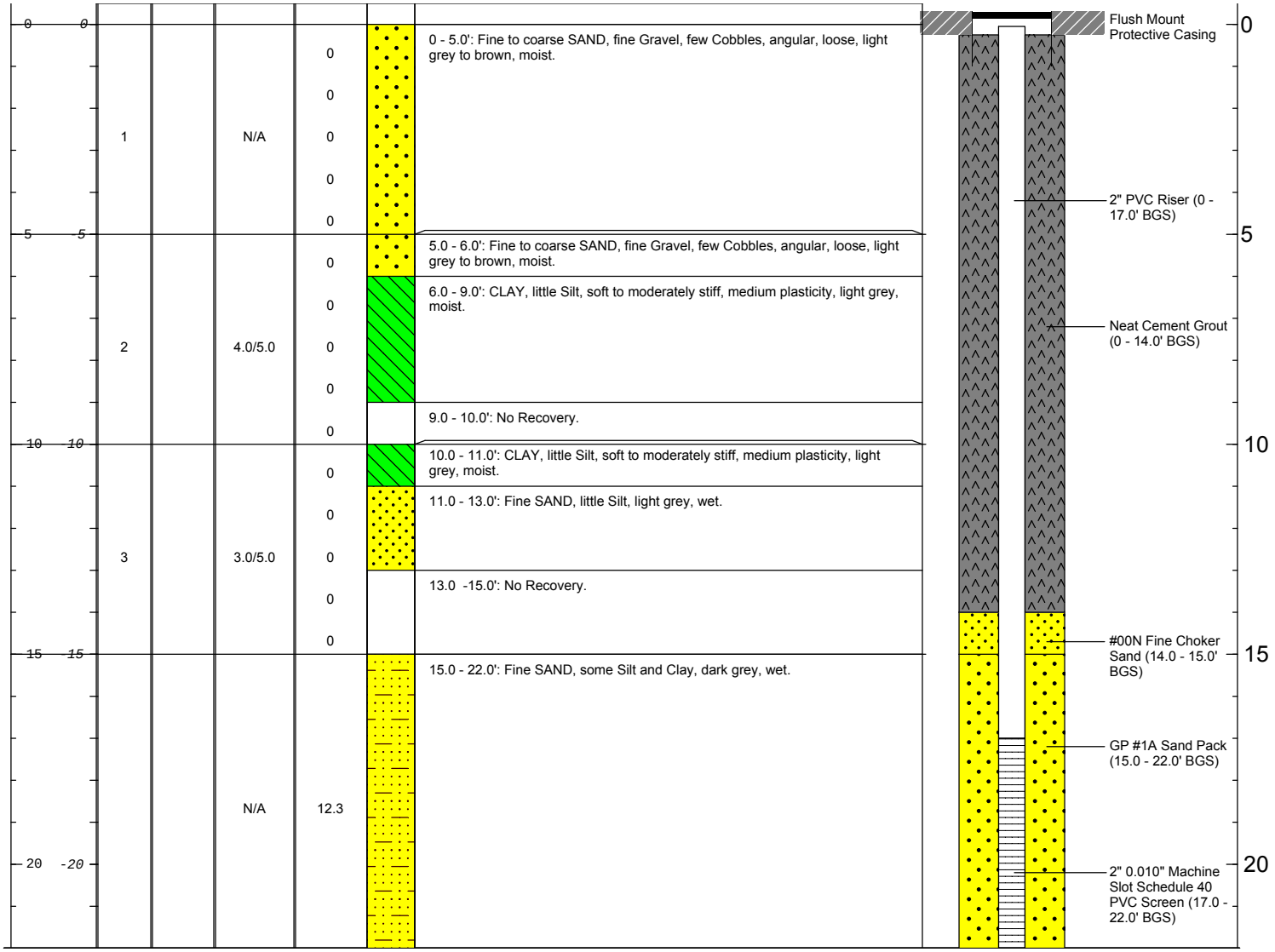
DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0	1		N/A	0 0 0 0 0		0 - 5.0': Fine to coarse SAND, fine Gravel, few Cobbles, angular, loose, light grey to brown, moist.	Flush Mount Protective Casing 2" PVC Riser (0 - 12.0' BGS)
5	5	2		4.0/5.0	0 0 0 0 0		5.0 - 6.0': Fine to coarse SAND, fine Gravel, few Cobbles, angular, loose, light grey to brown, moist. 6.0 - 9.0': CLAY, little Silt, soft to moderately stiff, medium plasticity, light grey, moist. 9.0 - 10.0': No Recovery.	Neat Cement Grout (0 - 9.0' BGS)
10	10	3		3.0/5.0	0 0 0 0 0		10.0 - 11.0': CLAY, little Silt, soft to moderately stiff, medium plasticity, light grey, moist. 11.0 - 13.0': Fine SAND, little Silt, light grey, wet. 13.0 -15.0': No Recovery.	#00N Fine Choker Sand (9.0 - 10.0' BGS) GP #1A Sand Pack (10.0 - 17.0' BGS)
15	15			N/A	12.3		15.0 - 17.0': Fine SAND, some Silt and Clay, dark grey, wet.	2" 0.010" Machine Slot Schedule 40 PVC Screen (12.0 - 17.0' BGS)

ARCADIS Design & Consultancy for natural and built assets

Remarks:

bgs - below ground surface
amsl - above mean sea level
N/A - not available or not applicable
I.D. - Inside Diameter
Boring was hand cleared to 5' bgs.
TBD - To Be Determined
Sampled boring from 5-15' bgs. Remaining depth was advanced with Hollow Stem Augers
P-7 S1 was developed by surging and purging. Approximately 100 gallons were removed before the turbidity stabilized at 31.2 ntu.
Locations will be surveyed by South Carolina licensed surveyor.

Date Start/Finish:	March 15th, 2016	**Northing:**	TBD	**Well/Boring ID:** **P-7 S2**	
Drilling Company:	Parratt Wolff, Inc.	**Easting:**	TBD	**Client:** AVX Corporation	
Driller's Name:	Kevin White	**Riser Elevation:**	TBD		
Drilling Method:	Hollow Stem Auger	**Borehole Depth:**	22 feet bgs	**Location:** Myrtle Beach, South Carolina	
Auger/Tube Size:	5' x 4.25" I.D.	**Surface Elevation:**	TBD		
Rig Type:	Track Mounted CME 55				
Sampling Method:	2"x5' MacroCore	**Descriptions By:**	Chris Bonessi		

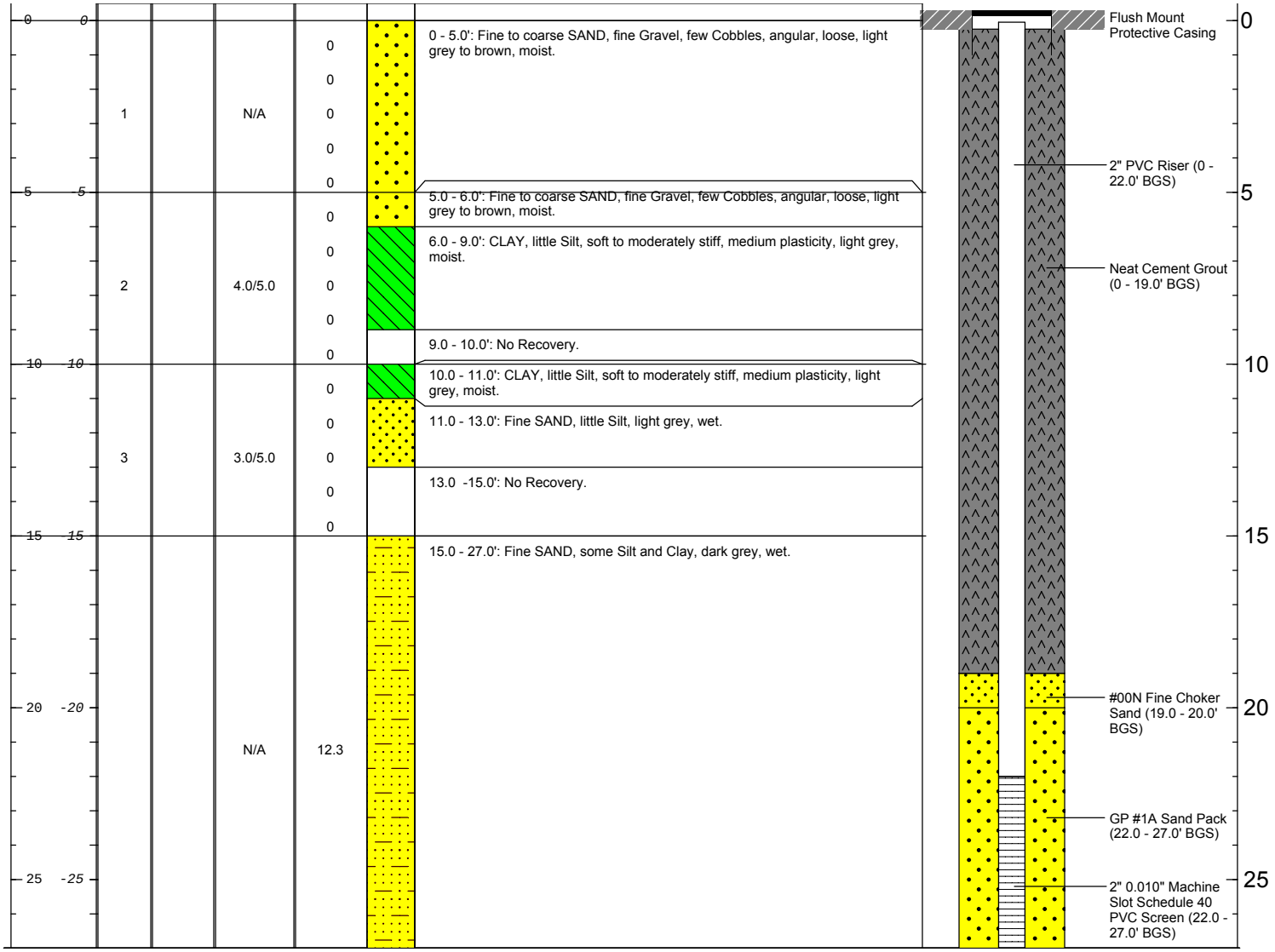


ARCADIS Design & Consultancy for natural and built assets

Remarks:

bgs - below ground surface
amsl - above mean sea level
N/A - not available or not applicable
I.D. - Inside Diameter
Boring was hand cleared to 5' bgs.
TBD - To Be Determined
Sampled boring from 5-15' bgs. Remaining depth was advanced with Hollow Stem Augers
P-7 S2 was developed by surging and purging. Approximately 80 gallons were removed before the turbidity stabilized at 101 ntu.
Locations will be surveyed by South Carolina licensed surveyor.

Date Start/Finish:	March 15th, 2016	**Northing:**	TBD	**Well/Boring ID:** **P-7 S3**	
Drilling Company:	Parratt Wolff, Inc.	**Easting:**	TBD		
Driller's Name:	Kevin White	**Riser Elevation:**	TBD	**Client:** AVX Corporation	
Drilling Method:	Hollow Stem Auger				
Auger/Tube Size:	5' x 4.25" I.D.	**Borehole Depth:**	27 feet bgs	**Location:** Myrtle Beach, South Carolina	
Rig Type:	Track Mounted CME 55	**Surface Elevation:**	TBD		
Sampling Method:	2"x5' MacroCore				
		Descriptions By:	Chris Bonessi		



ARCADIS Design & Consultancy for natural and built assets

Remarks:

bgs - below ground surface
amsl - above mean sea level
N/A - not available or not applicable
I.D. - Inside Diameter
Boring was hand cleared to 5' bgs.
TBD - To Be Determined
Sampled boring from 5-15' bgs. Remaining depth was advanced with Hollow Stem Augers
P-7 S3 was developed by surging and purging. Approximately 50 gallons were removed before the turbidity stabilized at 60 ntu.
Locations will be surveyed by South Carolina licensed surveyor.

Date Start/Finish:	March 16th, 2016	**Northing:**	TBD	**Well/Boring ID:** **P-8 S1**	
Drilling Company:	Parratt Wolff, Inc.	**Easting:**	TBD		
Driller's Name:	Lewis LeFever	**Riser Elevation:**	TBD	**Client:** AVX Corporation	
Drilling Method:	Hollow Stem Auger				
Auger/Tube Size:	5' x 4.25" I.D.	**Borehole Depth:**	17 feet bgs	**Location:** Myrtle Beach, South Carolina	
Rig Type:	Truck Mount CME 55	**Surface Elevation:**	TBD		
Sampling Method:	2"x5' MacroCore				
		Descriptions By:	Daniel Rhodes		

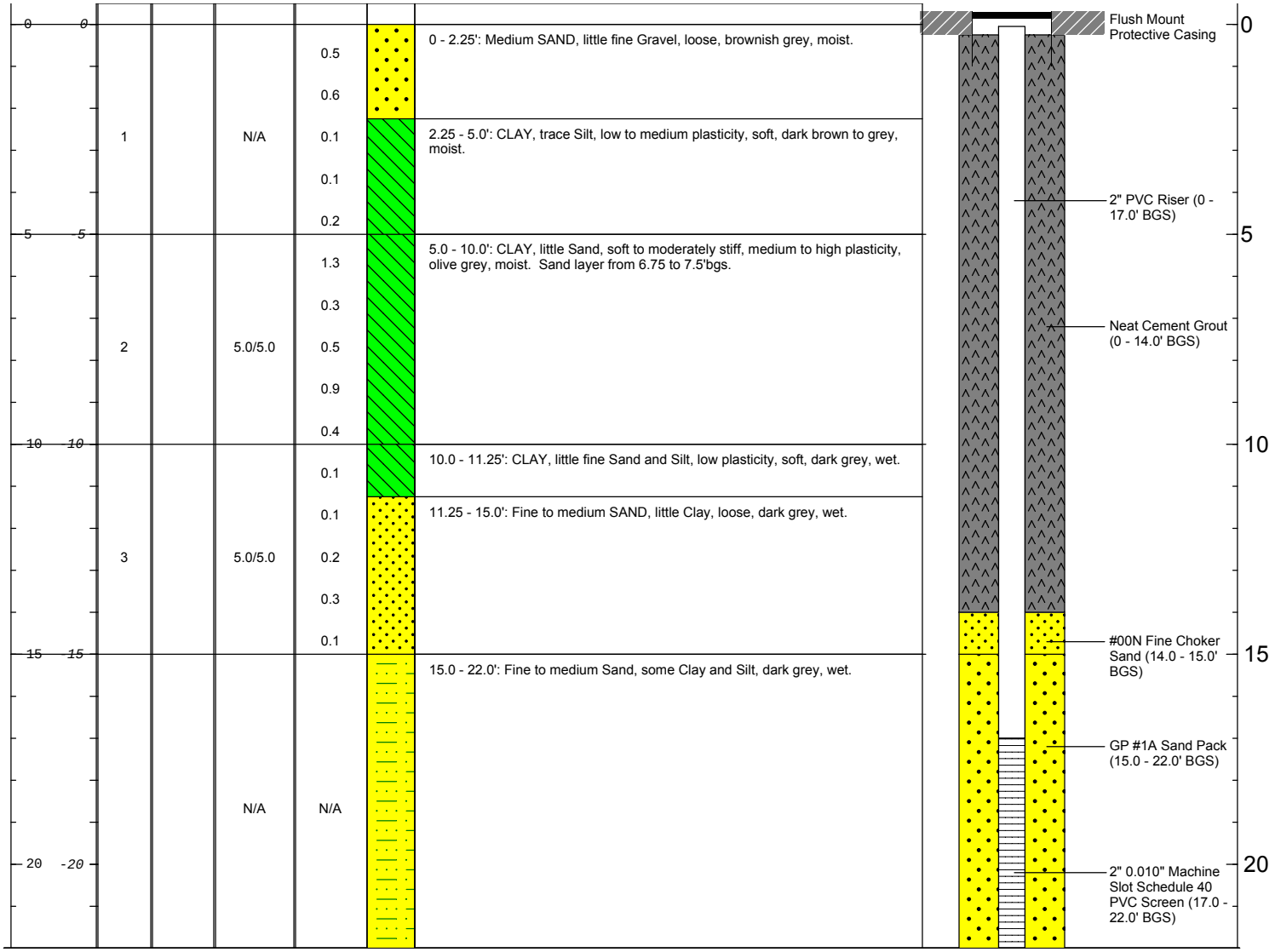
DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0				0.5		0 - 2.25': Medium SAND, little fine Gravel, loose, brownish grey, moist.	Flush Mount Protective Casing
					0.6			
		1		N/A	0.1		2.25 - 5.0': CLAY, trace Silt, low to medium plasticity, soft, dark brown to grey, moist.	
					0.1			2" PVC Riser (0 - 12.0' BGS)
					0.2			
5	5				1.3		5.0 - 10.0': CLAY, little Sand, soft to moderately stiff, medium to high plasticity, olive grey, moist. Sand layer from 6.75 to 7.5'bgs.	
					0.3			
		2		5.0/5.0	0.5			Neat Cement Grout (0 - 9.0' BGS)
					0.9			
					0.4			
10	10				0.1		10.0 - 11.25': CLAY, little fine Sand and Silt, low plasticity, soft, dark grey, wet.	#00N Fine Choker Sand (9.0 - 10.0' BGS)
					0.1		11.25 - 15.0': Fine to medium SAND, little Clay, loose, dark grey, wet.	
		3		5.0/5.0	0.2			GP #1A Sand Pack (10.0 - 17.0' BGS)
					0.3			
					0.1			
15	15						15.0 - 17.0': Fine to medium Sand, some Clay and Silt, dark grey, wet.	2" 0.010" Machine Slot Schedule 40 PVC Screen (12.0 - 17.0' BGS)
				N/A	N/A			

ARCADIS Design & Consultancy for natural and built assets

Remarks:

bgs - below ground surface
N/A - not available or not applicable
Boring was hand cleared to 5' bgs.
Sampled boring from 5-15' bgs. Remaining depth was advanced with Hollow Stem Augers
P-8 S1 was developed by surging and purging. Approximately 130 gallons were removed before the turbidity stabilized at 44 ntu.
Locations will be surveyed by South Carolina licensed surveyor.
amsl - above mean sea level
I.D. - Inside Diameter
TBD - To Be Determined

Date Start/Finish:	March 16th, 2016	**Northing:**	TBD	**Well/Boring ID:** **P-8 S2**	
Drilling Company:	Parratt Wolff, Inc.	**Easting:**	TBD	**Client:** AVX Corporation	
Driller's Name:	Lewis LeFever	**Riser Elevation:**	TBD		
Drilling Method:	Hollow Stem Auger	**Borehole Depth:**	22 feet bgs	**Location:** Myrtle Beach, South Carolina	
Auger/Tube Size:	5' x 4.25" I.D.	**Surface Elevation:**	TBD		
Rig Type:	Truck Mount CME 55				
Sampling Method:	2"x5' MacroCore	**Descriptions By:**	Daniel Rhodes		



ARCADIS Design & Consultancy for natural and built assets

Remarks:

bgs - below ground surface
amsl - above mean sea level
N/A - not available or not applicable
I.D. - Inside Diameter
Boring was hand cleared to 5' bgs.
TBD - To Be Determined
Sampled boring from 5-15' bgs. Remaining depth was advanced with Hollow Stem Augers
P-8 S2 was developed by surging and purging. Approximately 100 gallons were removed before the turbidity stabilized at 100 ntu.
Locations will be surveyed by South Carolina licensed surveyor.

Date Start/Finish: March 17th, 2016	**Northing:** TBD	**Well/Boring ID:** **P-8 S3**
Drilling Company: Parratt Wolff, Inc.	**Easting:** TBD	
Driller's Name: Lewis LeFever	**Riser Elevation:** TBD	**Client:** AVX Corporation
Drilling Method: Hollow Stem Auger		
Auger/Tube Size: 5' x 4.25" I.D.	**Borehole Depth:** 27 feet bgs	**Location:** Myrtle Beach, South Carolina
Rig Type: Truck Mount CME 55	**Surface Elevation:** TBD	
Sampling Method: 2"x5' MacroCore		
	Descriptions By: Daniel Rhodes	

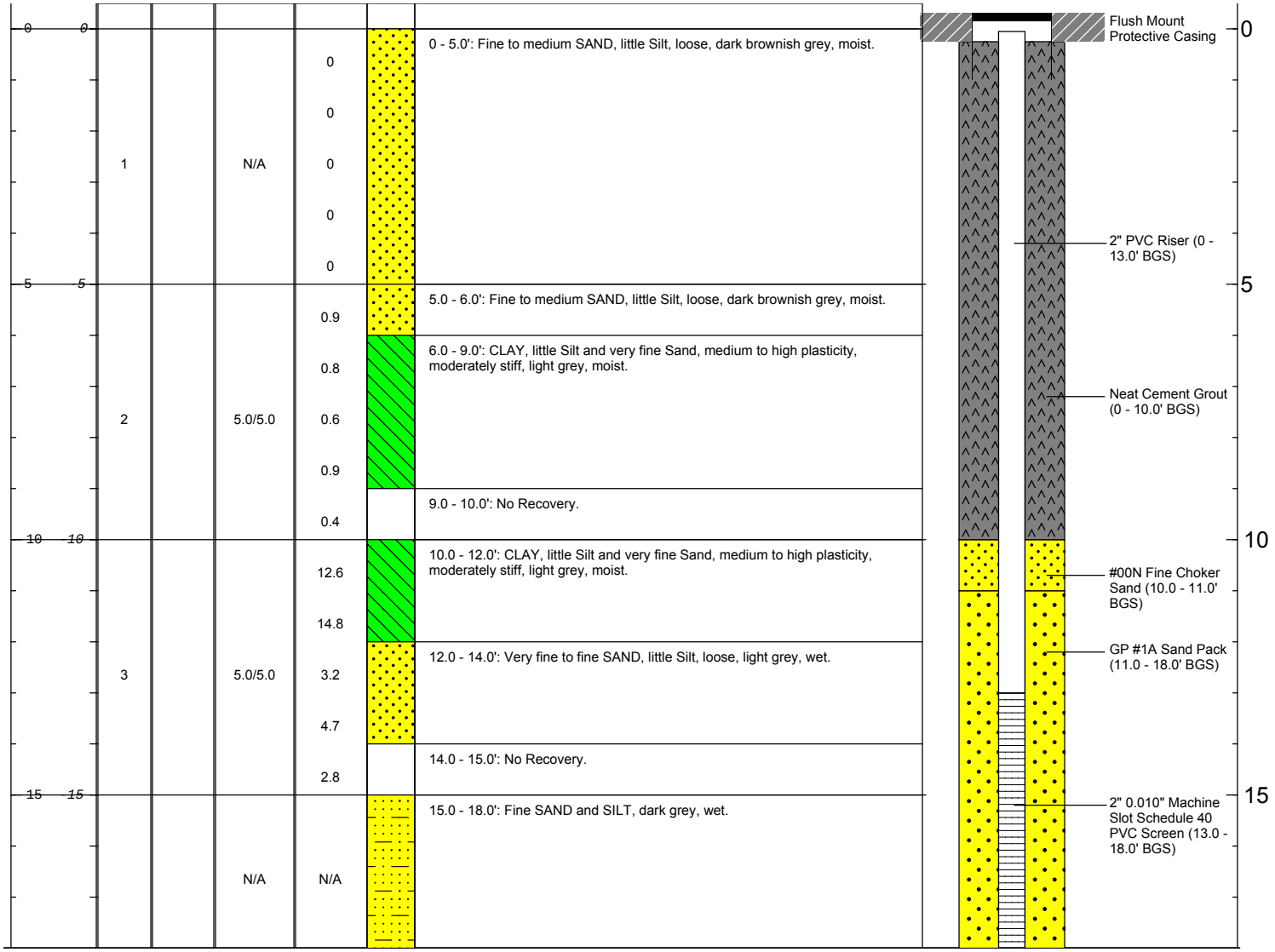
DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0				0.5		0 - 2.25': Medium SAND, little fine Gravel, loose, brownish grey, moist.	Flush Mount Protective Casing
					0.6			
		1		N/A	0.1		2.25 - 5.0': CLAY, trace Silt, low to medium plasticity, soft, dark brown to grey, moist.	
					0.1			2" PVC Riser (0 - 22.0' BGS)
5	5				0.2			
					1.3		5.0 - 10.0': CLAY, little Sand, soft to moderately stiff, medium to high plasticity, olive grey, moist. Sand layer from 6.75 to 7.5'bgs.	
		2		5.0/5.0	0.3			Neat Cement Grout (0 - 19.0' BGS)
					0.5			
					0.9			
					0.4			
10	10				0.1		10.0 - 11.25': CLAY, little fine Sand and Silt, low plasticity, soft, dark grey, wet.	
					0.1		11.25 - 15.0': Fine to medium SAND, little Clay, loose, dark grey, wet.	
		3		5.0/5.0	0.2			
					0.3			
15	15				0.1			
							15.0 - 27.0': Fine to medium Sand, some Clay and Silt, dark grey, wet.	
20	-20			N/A	N/A			#00N Fine Choker Sand (19.0 - 20.0' BGS)
								GP #1A Sand Pack (20.0 - 27.0' BGS)
25	-25							2" 0.010" Machine Slot Schedule 40 PVC Screen (22.0 - 27.0' BGS)

ARCADIS Design & Consultancy for natural and built assets

Remarks:

bgs - below ground surface
amsl - above mean sea level
N/A - not available or not applicable
I.D. - Inside Diameter
Boring was hand cleared to 5' bgs.
TBD - To Be Determined
Sampled boring from 5-15' bgs. Remaining depth was advanced with Hollow Stem Augers
P-8 S3 was developed by surging and purging. Approximately 70 gallons were removed before the turbidity stabilized at 15.7 ntu.
Locations will be surveyed by South Carolina licensed surveyor.

Date Start/Finish:	March 17th, 2016	**Northing:**	TBD	**Well/Boring ID:** **P-9 S1**	
Drilling Company:	Parratt Wolff, Inc.	**Easting:**	TBD		
Driller's Name:	Kevin White	**Riser Elevation:**	TBD	**Client:** AVX Corporation	
Drilling Method:	Hollow Stem Auger				
Auger/Tube Size:	5' x 4.25" I.D.	**Borehole Depth:**	18 feet bgs	**Location:** Myrtle Beach, South Carolina	
Rig Type:	Track Mounted CME 55	**Surface Elevation:**	TBD		
Sampling Method:	2"x5' MacroCore				
		Descriptions By:	Chris Bonessi		

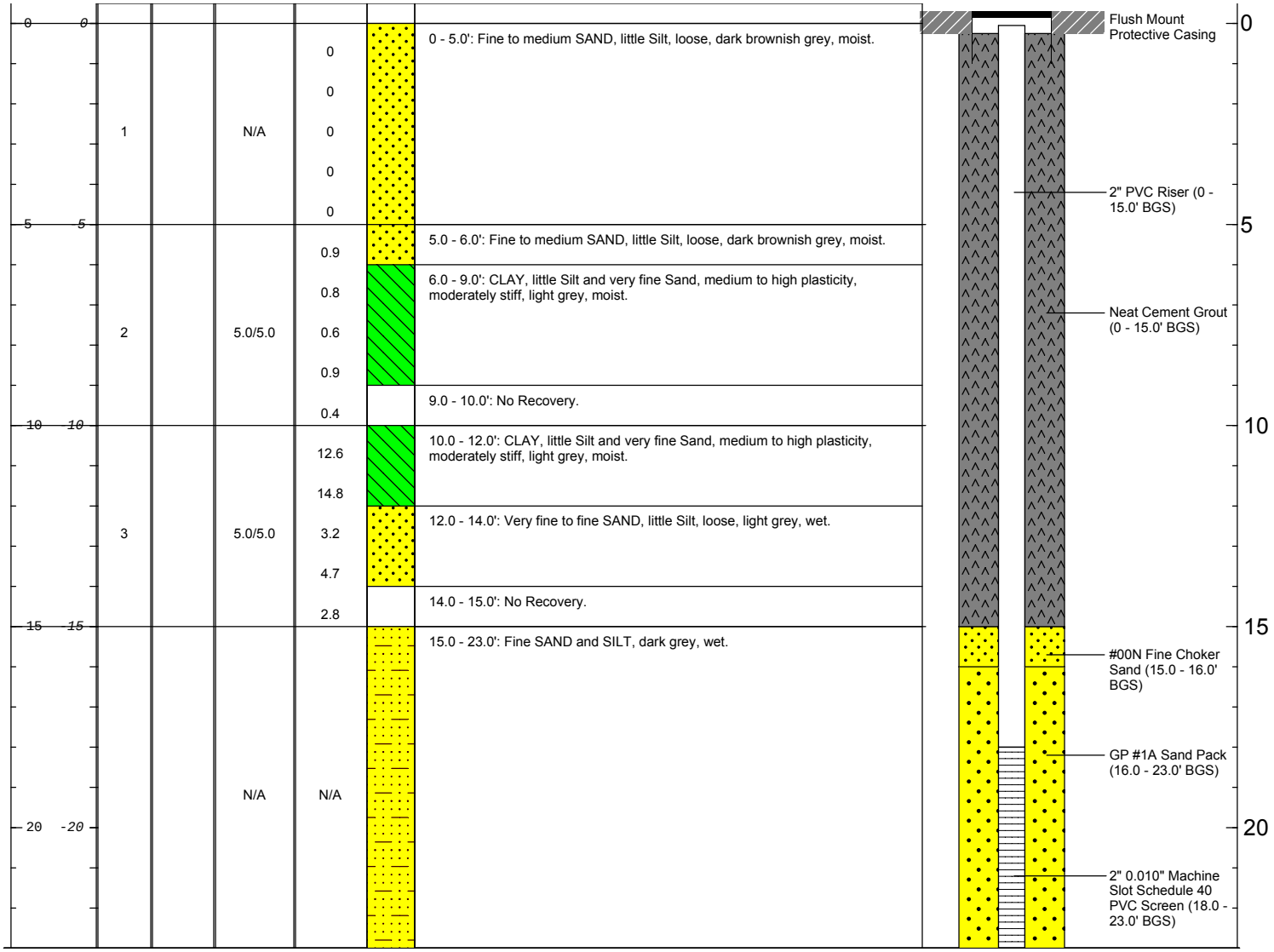


ARCADIS Design & Consultancy for natural and built assets

Remarks:

bgs - below ground surface
N/A - not available or not applicable
Boring was hand cleared to 5' bgs.
amsl - above mean sea level
I.D. - Inside Diameter
TBD - To Be Determined
Sampled boring from 5-15' bgs. Remaining depth was advanced with Hollow Stem Augers
P-9 S1 was developed by surging and purging. Approximately 100 gallons were removed before the turbidity stabilized at 120 ntu.
Locations will be surveyed by South Carolina licensed surveyor.

Date Start/Finish:	March 16th, 2016	**Northing:**	TBD	**Well/Boring ID:** **P-9 S2**	
Drilling Company:	Parratt Wolff, Inc.	**Easting:**	TBD	**Client:** AVX Corporation	
Driller's Name:	Kevin White	**Riser Elevation:**	TBD		
Drilling Method:	Hollow Stem Auger	**Borehole Depth:**	23 feet bgs	**Location:** Myrtle Beach, South Carolina	
Auger/Tube Size:	5' x 4.25" I.D.	**Surface Elevation:**	TBD		
Rig Type:	Track Mounted CME 55				
Sampling Method:	2"x5' MacroCore	**Descriptions By:**	Chris Bonessi		



ARCADIS Design & Consultancy for natural and built assets

Remarks:

bgs - below ground surface
N/A - not available or not applicable
Boring was hand cleared to 5' bgs.
amsl - above mean sea level
I.D. - Inside Diameter
TBD - To Be Determined
Sampled boring from 5-15' bgs. Remaining depth was advanced with Hollow Stem Augers
P-9 S2 was developed by surging and purging. Approximately 110 gallons were removed before the turbidity stabilized at 20.6 ntu.
Locations will be surveyed by South Carolina licensed surveyor.

Date Start/Finish:	March 16th, 2016	**Northing:**	TBD	**Well/Boring ID:** **P-9 S3**	
Drilling Company:	Parratt Wolff, Inc.	**Easting:**	TBD		
Driller's Name:	Kevin White	**Riser Elevation:**	TBD	**Client:** AVX Corporation	
Drilling Method:	Hollow Stem Auger				
Auger/Tube Size:	5' x 4.25" I.D.	**Borehole Depth:**	28 feet bgs	**Location:** Myrtle Beach, South Carolina	
Rig Type:	Track Mounted CME 55	**Surface Elevation:**	TBD		
Sampling Method:	2"x5' MacroCore				
		Descriptions By:	Chris Bonessi		

DEPTH	ELEVATION	Sample Run Number	Sample/Int/Type	Recovery (feet)	PID Headspace (ppm)	Geologic Column	Stratigraphic Description	Well/Boring Construction
0	0	1		N/A	0 0 0 0 0		0 - 5.0': Fine to medium SAND, little Silt, loose, dark brownish grey, moist.	Flush Mount Protective Casing 2" PVC Riser (0 - 23.0' BGS)
5	-5	2		5.0/5.0	0.9 0.8 0.6 0.9 0.4		5.0 - 6.0': Fine to medium SAND, little Silt, loose, dark brownish grey, moist. 6.0 - 9.0': CLAY, little Silt and very fine Sand, medium to high plasticity, moderately stiff, light grey, moist. 9.0 - 10.0': No Recovery.	Neat Cement Grout (0 - 20.0' BGS)
10	-10	3		5.0/5.0	12.6 14.8 3.2 4.7 2.8		10.0 - 12.0': CLAY, little Silt and very fine Sand, medium to high plasticity, moderately stiff, light grey, moist. 12.0 - 14.0': Very fine to fine SAND, little Silt, loose, light grey, wet. 14.0 - 15.0': No Recovery.	
15	-15			N/A	N/A		15.0 - 28.0': Fine SAND and SILT, dark grey, wet.	#00N Fine Choker Sand (20.0 - 21.0' BGS) GP #1A Sand Pack (21.0 - 28.0' BGS) 2" 0.010" Machine Slot Schedule 40 PVC Screen (23.0 - 28.0' BGS)
20	-20							
25	-25							

ARCADIS Design & Consultancy for natural and built assets

Remarks:

bgs - below ground surface
amsl - above mean sea level
N/A - not available or not applicable
I.D. - Inside Diameter
Boring was hand cleared to 5' bgs.
TBD - To Be Determined
Sampled boring from 5-15' bgs. Remaining depth was advanced with Hollow Stem Augers
P-9 S3 was developed by surging and purging. Approximately 120 gallons were removed before the turbidity stabilized at 76 ntu.
Locations will be surveyed by South Carolina licensed surveyor.

APPENDIX F

Photo Log

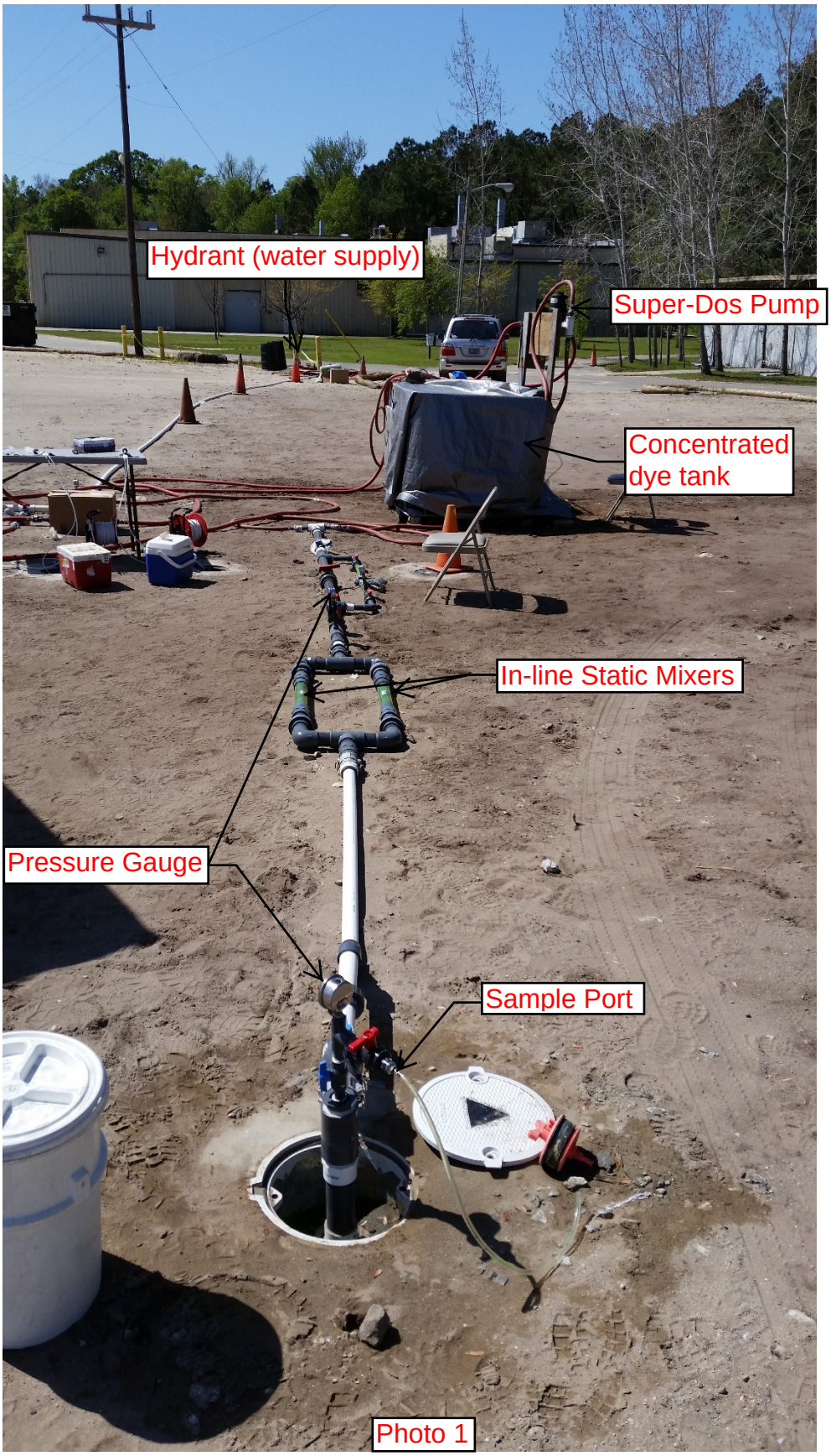

Hydrant (water supply)
Super-Dos Pump
Concentrated dye tank
In-line Static Mixers
Pressure Gauge
Sample Port

Photo 1

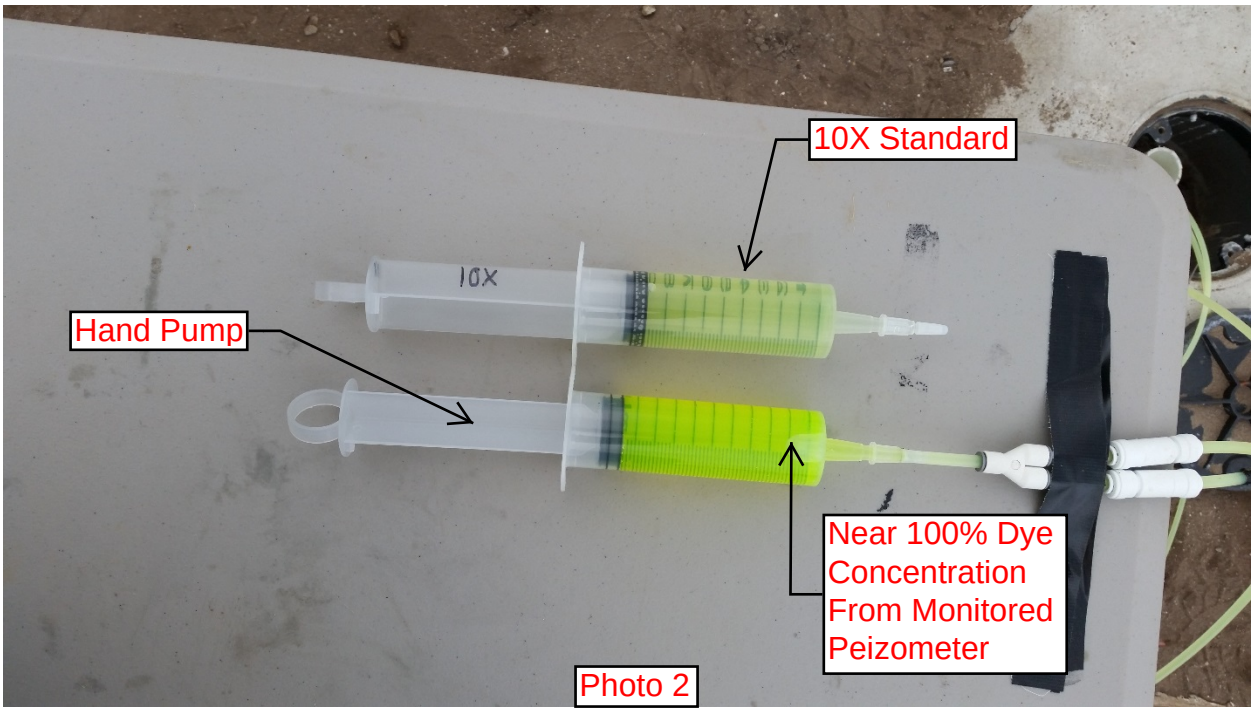


Photo 2

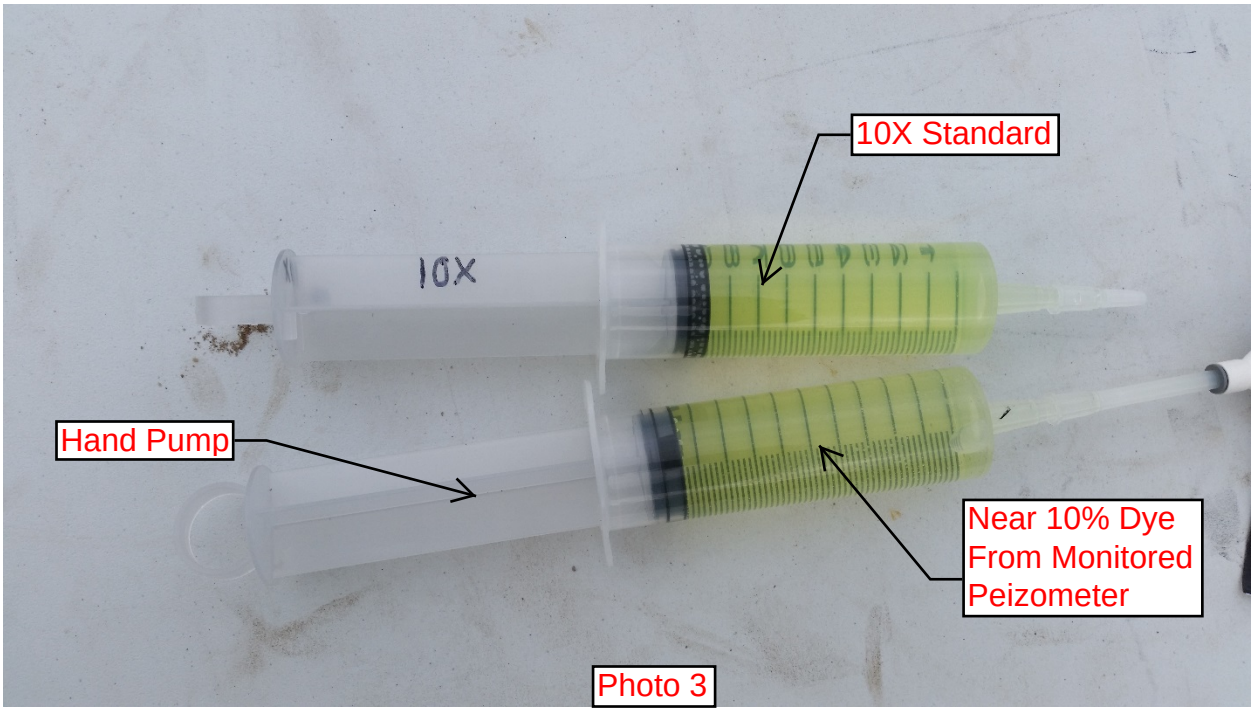


Photo 3

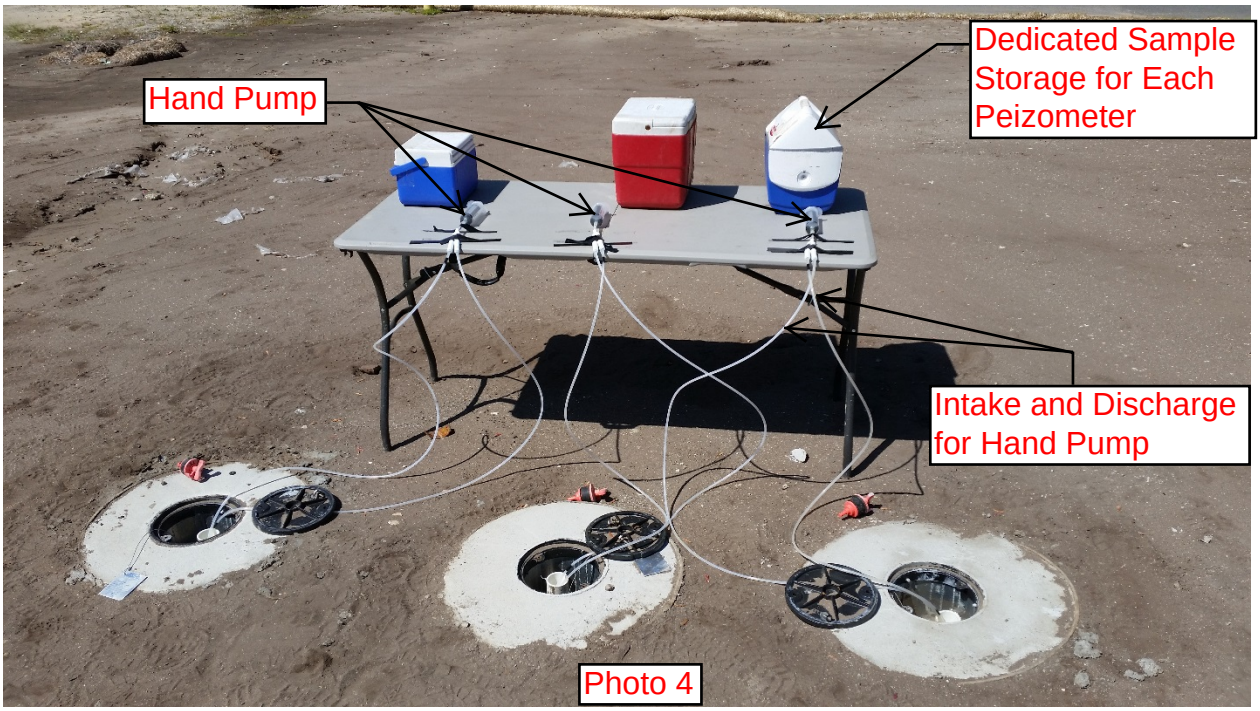

Hand Pump
Dedicated Sample Storage for Each Peizometer
Intake and Discharge for Hand Pump

Photo 4

Arcadis U.S., Inc.

6041 Wallace Road Extension

Suite 300

Wexford, Pennsylvania 15090

Tel 724 742 9180

Fax 724 742 9189

www.arcadis.com