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November 23, 2016

VIA FEDERAL EXPRESS:

Rusty Kestle, Project Manager
U.S. Environmental Protection Agency, Region IV
61 Forsyth Street, S.W.
(Mail Code: 9T25)
Atlanta, Georgia 30303-3415
Telephone: 404-562-8819

RE: 2016 First Semiannual Comprehensive Groundwater Monitoring Report
Cabot Carbon/ Koppers Superfund Site
Gainesville, Florida

Dear Mr. Kestle:

On behalf of Beazer East, Inc. (Beazer), enclosed is an electronic copy of the First Semiannual Comprehensive Groundwater Monitoring Report for the above-referenced site.

If you should have any questions regarding this correspondence, please do not hesitate to contact Mr. Michael Slenska, Beazer Environmental Manager, at (412) 208-8867 or Ms. Angie Gatchie of Field & Technical Services LLC (FTS) at 412-429-2694.

Sincerely,

Field & Technical Services LLC

Angie Gatchie
Project Scientist

Attachments: C.D.

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2016 FIRST SEMIANNUAL COMPREHENSIVE GROUNDWATER MONITORING REPORT

CABOT CARBON / KOPPERS SUPERFUND SITE GAINESVILLE, FLORIDA

Submitted to:

U.S. EPA Region 4

On behalf of:

Beazer East, Inc.

Prepared by:

Field & Technical Services, LLC
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NOVEMBER 23, 2016

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ABBREVIATIONS/ACRONYMS

Beazer	Beazer East, Inc.
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
CGMSAP	Comprehensive Groundwater Monitoring and Sample Analysis Plan
COC	Chain of Custody
DNAPL	Dense Non-Aqueous Phase Liquid
DO	Dissolved Oxygen
FTS	Field & Technical Services, LLC
GCTLs	Florida Groundwater Cleanup Target Levels
gpm	Gallons per Minute
HG	Hawthorn Group
IRM	Interim Remedial Measure
Koppers	Koppers Inc.
LNAPL	Light Non-Aqueous Phase Liquid
LTZ	Lower Transmissive Zone
MCL	Maximum Contaminant Level
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NAPL	Non-Aqueous Phase Liquid
ORP	Oxidation-Reduction Potential
PPE	Personal Protective Equipment
POTW	Publicly-Owned Treatment Works
QA	Quality Assurance
QC	Quality Control
Site	Cabot Carbon/Koppers Superfund Site, Gainesville, Florida
SOP	Standard Operating Procedure
SVOCs	Semi-volatile Organic Constituents
µg/l	Micrograms per Liter
U.S. EPA	United States Environmental Protection Agency
UTZ	Upper Transmissive Zone
VOCs	Volatile Organic Constituents
WWTP	Wastewater Treatment Plant

1.0 INTRODUCTION

On behalf of Beazer East, Inc. (Beazer), Field & Technical Services, LLC (FTS) is pleased to submit the 2016 First Semiannual Comprehensive Groundwater Monitoring Report for the Cabot Carbon/Koppers Superfund Site in Gainesville, Florida (Site) (Figure 1) to the United States Environmental Protection Agency (U.S. EPA). This report presents the Site-wide monitoring activities which occurred during the first semiannual period of 2016 (January 1, 2016 through June 30, 2016) conducted in accordance with the U.S. EPA-approved[1] *Comprehensive Groundwater Monitoring and Sample Analysis Plan*[2] (CGMSAP). The purpose of the CGMSAP is to combine the current groundwater monitoring efforts into a unified Site-wide program, thereby enhancing the efficiency of data collection and the quality of the data obtained for understanding Site-wide groundwater conditions. The CGMSAP has replaced the previous Surficial Aquifer, Hawthorn Group (HG), and Floridan Aquifer monitoring programs at the Site.

[1] U.S. EPA, June 19, 2010, *May 7, 2010 Response to Comments and Final CGMSAP Submittal*, Letter to Karen Fromme, FTS.

[2] FTS, June 30, 2014, *Comprehensive Groundwater Monitoring and Sample Analysis Plan Revision 05*, Cabot Carbon/Koppers Superfund Site, Gainesville, Florida, submitted to U.S. EPA.

2.0 MONITORING ACTIVITIES

Field activities associated with the first quarter 2016 were conducted February 8, 2016 through February 11, 2016. Field activities associated with the second quarter 2016 were conducted May 9, 2016 through May 12, 2016. Monitoring activities and methods used for the implementation of the CGMSAP are discussed in the following sections. Figure 2 depicts the locations of the monitoring wells sampled during the reporting period.

2.1 MONITORING PROCEDURES

The following summary describes the general methods employed to conduct water-level measurements, non-aqueous phase liquid (NAPL) measurements, and groundwater sampling during the first and second quarter 2016:

- Water levels were collected during the first quarter 2016 event to fulfill the semiannual gauging requirement as established in the CGMSAP. Water levels were measured with a water-level meter and interface probe before groundwater sampling commenced in accordance with FTS Standard Operation Procedure (SOP) #116 and the CGMSAP. The depths to the bottom of the monitoring wells were also measured to monitor the potential accumulation of silt or sand in the wells. All monitoring wells were allowed to equilibrate to atmospheric pressure prior to gauging. The thickness of accumulated NAPL (if present) was also measured prior to purging and sampling. Gauging order was generally based on available historical analytical data. Monitoring wells were gauged in order of increasing impact. This procedure was followed to minimize any potential for cross contamination between monitoring wells.

- Low-flow sampling procedures were implemented during the purging and sampling of the monitoring wells in accordance with FTS SOP #157 and the CGMSAP (except for the Floridan Aquifer multi-port monitoring wells and the Floridan Aquifer pumping wells, see below). Monitoring wells were purged using both a peristaltic pump and dedicated Teflon®-lined tubing or a QED bladder equipped with disposable Teflon® bladders and dedicated Teflon®-lined tubing. Flow rates were determined using a graduated cylinder.

- Groundwater sampling of the multi-port monitoring wells was conducted via the use of the Westbay sampling tool (Westbay MP Sampling System) and in accordance with the CGMSAP.

- Floridan Aquifer pumping wells (FW-6 and FW-21B) were purged by direct fill from spigot.

- Water-quality parameters were measured with a YSI-556 water-quality meter and either a LaMotte-2020e turbidity meter, which were field calibrated daily using manufacturer-supplied standard solutions. Field parameters were measured approximately every 5 minutes during low-flow sampling procedures and included: pH, specific conductivity, temperature, dissolved oxygen (DO), oxidation-reduction potential (ORP), and turbidity. Field parameters measured during direct fill sampling procedures included: pH, specific conductivity, temperature, and turbidity. The multi-port sampling equipment is not designed for flow-through cell application. Therefore, groundwater field parameters were not collected at the multi-port monitoring wells.

- Sampling was initiated after field parameters stabilized. Samples were collected either directly from the Teflon®-lined tubing after the YSI-556 and its flow-thru cell were removed or with a Teflon® bailer. The groundwater samples were collected according to volatility (volatile samples first, semi-volatile samples second, and inorganic samples last). Dissolved metals were filtered through a 0.45-micrometer filter immediately upon sample collection.

- Decontamination of sampling equipment was performed between monitoring well locations utilizing Alconox solution and DI water rinses as specified in FTS SOP # 104.

- Laboratory-supplied bottles were filled, labeled, placed in a cooler with ice, and transported under chain-of-custody procedures to ALS Environmental of Jacksonville, Florida for analysis.

- Purged groundwater was temporarily placed in 5-gallon buckets or the FTS 1,200-gallon water transport trailer and transferred to the on-Site waste-water treatment plant (WWTP) and subsequent discharge to the publicly-owned treatment works (POTW). Personal protective equipment (PPE) was collected in a 55-gallon drum for future disposal at an off-Site licensed facility.

Groundwater quality measurements, calculations, and field notes were recorded for each monitoring well with digital handheld computers and printouts are provided in Appendix A. Copies of the chain of custody (COC) forms are included with the laboratory analytical data reports in Appendix B.

2.2 SURFICIAL AQUIFER

Surficial Aquifer monitoring consists of sampling monitoring wells in the immediate vicinity of the eastern and northern Site property boundaries. Seventeen (17) Surficial Aquifer monitoring wells are used to monitor groundwater quality in the vicinity of these two property boundaries (Figure 2). The majority of the Surficial Aquifer monitoring wells are nested monitoring wells completed in the upper ("A" series monitoring wells) and lower ("B" series monitoring wells) portions of the Surficial Aquifer.

No Surficial Aquifer monitoring wells were sampled during the first or second quarter 2016 events. The monitoring locations and sampling frequency for the Surficial Aquifer is provided in Table 1.

2.3 HAWTHORN GROUP

HG monitoring focuses on wells located on-Site (near the former Drip Track and former North Lagoon areas), along the eastern and western property boundaries, and downgradient of these boundaries. A total of twenty-nine (29) HG monitoring wells are used to monitor groundwater quality (Figure 2).

No HG monitoring wells were sampled during the first or second quarter 2016 events. The monitoring locations and sampling frequency for the HG is provided in Table 2.

2.4 FLORIDAN AQUIFER

The Floridan Aquifer monitoring focuses on monitoring wells located downgradient and within suspected source area locations (Figure 2). The Floridan Aquifer monitoring wells are completed in the Upper Transmissive Zone (UTZ) and Lower Transmissive Zone (LTZ). The UTZ monitoring wells consist of both standard-construction monitoring wells and multiple-screen, multi-port sampling monitoring wells. The multi-port monitoring wells were installed to provide vertically discrete sampling within the Floridan Aquifer.

Thirteen Floridan Aquifer monitoring wells were sampled during the first quarter 2016 event and six Floridan Aquifer monitoring wells were sampled during the second quarter 2016 event (Table 3).

The list of analytes for the Floridan Aquifer monitoring wells is tailored to the known constituent distributions established from the quarterly sampling in these monitoring wells, which has been on-going since 2006. All Floridan Aquifer monitoring wells were sampled for select semi-volatile organic compounds (SVOCs) and benzene, toluene, ethylbenzene, and xylenes (BTEX) consistent with the CGMSAP. In addition, Floridan Aquifer monitoring well FW-24B was sampled for total and dissolved arsenic.

2.5 QUALITY ASSURANCE

Quality assurance/quality control (QA/QC) samples collected during the first and second quarter 2016 events included trip blanks, field blanks, equipment rinsate blanks, filter blanks, field duplicates, and Site-specific matrix-spike/matrix-spike duplicate (MS/MSD) samples in accordance with the CGMSAP. Trip blanks were included in each cooler submitted to the laboratory containing volatile organic constituents (VOCs). Field blanks and equipment rinsate blanks were collected at a rate of one blank per day per sampling event. The following table summarizes the field duplicate and MS/MSD samples collected during the first and second quarter sampling events.

Monitoring Zone	Well ID	QA/QC ID	QA/QC Type
First Quarter 2016			
Floridan Aquifer	FW-6	GAIN-FW-99B-020916	Duplicate
	FW-21B	GAIN-FW-99A-020916	Duplicate
	FW-24B Zone 3	GAIN-FW-99D-021016	Duplicate
	FW-4C Zone 3	--	MS/MSD
	FW-6	--	MS/MSD

Monitoring Zone	Well ID	QA/QC ID	QA/QC Type
Second Quarter 2016			
Floridan Aquifer	FW-22B Zone 3	GAIN-FW-99B-051016	Duplicate
	FW-24B Zone 4	GAIN-FW-99C-051116	Duplicate
	FW-24B Zone 2	--	MS/MSD

FTS completed a QA review of the field and technical data at two levels as described in the CGMSAP. For the first level, data were reviewed at the time of collection by following standard procedures and QC checks. For the second level, after data reduction to table format or arrays, the data were reviewed for anomalous values. Any inconsistencies or anomalies identified during this review were immediately resolved, if possible, by seeking clarification from the field personnel responsible for collecting the data.

Upon receipt of the analytical data from ALS Environmental, Environmental Standards validated the data, using the protocols of the U.S. EPA National Functional Guidelines

(U.S. EPA 2014[3], 2009[4], and 2014[5]) and U.S. EPA method specifications. Environmental Standards found the majority of the data acceptable with the summarized qualifications, listed in Appendix B. Appendix B also contains the data validations and analytical reports. Appendix C contains the electronic data submittal.

2.6 MONITORING WELL INSPECTION

A monitoring well inspection was completed on February 8, 2016. The FTS field crew documented observed defects or maintenance activities associated with the monitoring wells included in the first quarter 2016 event (Appendix A). The only defect observed during the first quarter 2016 monitoring well inspection was a cracked pad at monitoring well HG-24S; this minor defect has been repaired.

2.7 DEVIATIONS FROM THE CGMSAP

No deviations from the approved CGMSAP occurred during the reporting period.

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[3] U.S. EPA, August 2014. *U.S. EPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*.

[4] U.S. EPA, January 2009. *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use*.

[5] U.S. EPA, August 2014. *U.S. EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*.

3.0 MONITORING RESULTS

The NAPLs monitoring, groundwater flow, and water-quality results for the Surficial Aquifer, HG deposits, and Floridan Aquifer are discussed in the following sections.

3.1 NON-AQUEOUS PHASE LIQUIDS

Dense non-aqueous phase liquid (DNAPL) is being recovered two times per month in six Upper Hawthorn monitoring wells as an interim remedial measure (IRM). DNAPL is also being monitored and collected from TIPs and DNAPL recovery wells in the former Process Area as part of the ISGS performance monitoring activities; these data are not included with this report and will be provided as part of performance monitoring reporting. DNAPL recovery is reported in the monthly status reports for this Site. One of the six DNAPL recovery wells (HG-16S) is also sampled annually in accordance with the CGMSAP (Table 2). The annual gauging and sampling of this Upper Hawthorn monitoring HG-16S well will be conducted during the third quarter 2016, if no NAPL is present. Similar to historical gauging in monitoring well HG-16D, minor DNAPL staining was detected on the probe during measurement collection in this monitoring well (Table 4). Light non-aqueous phase liquid (LNAPL) was not detected in any of the HG monitoring wells measured during the first quarter 2016 monitoring event (Table 4).

3.2 GROUNDWATER FLOW

Groundwater potentiometric elevations were obtained in twenty-seven [27] HG monitoring wells locations during the first quarter 2016 (Table 4). The monitoring well groundwater elevations were used to construct the Upper and Lower HG potentiometric surface contour maps for the first quarter 2016 (Figures 3a and 3b). In addition to the semiannual gauging requirements of the CGMSAP, groundwater potentiometric elevations were also obtained from Upper Hawthorn monitoring wells HG-31S, HG-32S, HG-33S, HG-34S, and HG-35S and from Lower Hawthorn monitoring wells HG-12D and HG-16D during the first quarter 2016. The HG-31S, HG-32S, HG-33S, HG-34S, and HG-35S groundwater potentiometric elevations are presented on Table 4 and Figure 3a for greater refinement of the Upper Hawthorn potentiometric surface during the first quarter 2016. In addition, water-level data collected in late February 2016 from TIPs in the former Process Area and North Lagoon were used to help define potentiometric surface contours in these areas of the Site. In addition, results from the 2004 groundwater flow model developed for this area were used to extrapolate the effects of the Cabot groundwater collection system on Upper Hawthorn potentiometric surface to the east of the Site. Monitoring well HG-29S was not used to develop potentiometic surface contours, because the February 2016 water level is approximately 5 feet lower than projected water levels in this area. The HG-12D and HG-16D groundwater potentiometric elevations are presented on Table 4 and Figure 3b for refinement of the Lower Hawthorn potentiometric surface during the first quarter 2016. The following

subsections discuss the first quarter 2016 groundwater elevation data for the Surficial Aquifer, Upper Hawthorn, Lower Hawthorn, and Floridan Aquifer.

3.2.1 Surficial Aquifer

Surficial Aquifer groundwater flow at the Site is primarily controlled by the hydraulic-containment system designed to capture impacted groundwater at the Site. The hydraulic-containment system for the Surficial Aquifer was operational during the first and second quarters of 2016. Recovery wells along the eastern and northern property boundary continued to capture impacted groundwater along with the horizontal trench/drain recovery system in the immediate vicinity of the four former source areas. The average combined groundwater recovery rate from the Surficial Aquifer well/drain system during first quarter 2016 was approximately 56.3 gallons per minute (gpm) and second quarter 2016 was approximately 52.0 gpm. Surficial Aquifer horizontal groundwater collection drains were operating at or near the design flow rates of 10 gpm for the first half of 2016.

A Surficial Aquifer Potentiometric Surface Map was not developed for the first quarter 2016 gauging event as no Surficial Aquifer monitoring wells were gauged during this event in accordance with the CGMSAP.

3.2.2 Hawthorn Group Deposits

The HG deposits contain three primary low-permeability clay deposits termed the upper clay, middle clay and lower clay units. Sedimentary deposits between the upper and middle clay units are referred to as the Upper Hawthorn and sedimentary deposits between the middle and lower clay units are referred to as the Lower Hawthorn. Groundwater flow directions for the Upper Hawthorn are distinct from flow directions in the Lower Hawthorn and therefore, will be discussed separately in this section.

<u>Upper Hawthorn</u>

Groundwater flow in the Upper Hawthorn closely approximates the flow direction in the Surficial Aquifer, with a primarily northeastern flow direction across the Site (Figure 3a). The low-permeability upper clay unit restricts downward vertical flow resulting in approximately 2 to 3 feet hydraulic-head difference across this clay unit. However, the similar northeasterly groundwater flow direction in the Upper Hawthorn and Surficial Aquifer is an indication that hydraulic communication is occurring between these two hydrologic units such that the approximate groundwater flow directions are the same. Similar to the hydraulic gradient in the Surficial Aquifer, the hydraulic gradient for the Upper Hawthorn increases from south to north across the Site.

Lower Hawthorn

Groundwater flow in the Lower Hawthorn is influenced by the approximately 5- to 20-foot thick lower-permeability middle clay unit. The hydraulic-head difference across this clay unit is approximately 30 to 35 feet, indicating that the middle clay unit restricts vertical groundwater flow from the Upper Hawthorn to the Lower Hawthorn. The groundwater flow direction within the Lower Hawthorn is considerably different than the flow direction in the Upper Hawthorn. Monitoring well data from the Lower Hawthorn indicate the presence of a groundwater divide approximately extending from the southeastern corner of the Site to northwestern corner (Figure 3b). This groundwater divide results in northerly to northeasterly groundwater flow direction for the eastern half of the Site and a westerly to northwesterly flow direction for the western half of the Site. This groundwater divide approximately correlates with locations on the Site where the middle clay unit is thinnest (approximately 5 to 10 feet thick). These thin clay areas are also the same areas where the hydraulic-head differences between the Upper and Lower Hawthorn is the least (approximately 30 feet). Areas of the Site where the middle clay unit are the thickest (approximately 15 to 20 feet thick) correspond to areas where the hydraulic-head difference between these two units is also the greatest (more than 35 feet).

The hydraulic gradient is slightly less on the eastern portion of the Site versus the gradient on the western portion of the Site. This change in hydraulic gradient is likely due to a reduction in transmissivity for Lower Hawthorn deposits on the western half of the Site.

The potentiometric surface elevation for monitoring well HG-22D is approximately 6 feet higher than surrounding monitoring wells. The higher potentiometric surface elevation in this area may be due to the well completion in the upper portion of the Lower Hawthorn or increased hydraulic communication between the Upper Hawthorn and Lower Hawthorn in this area.

These data support the conceptual model of significantly restricted groundwater flow and hydraulic communication between the Upper and Lower Hawthorn across the entire Site. The approximately 30-foot of hydraulic-head difference in areas where the middle clay unit is projected to be the thinnest, supports this conceptual model.

3.2.3 Floridan Aquifer

Groundwater flow in the Floridan Aquifer is primarily controlled by groundwater withdrawals at the Murphree Wellfield. The Site is located within the large groundwater capture area that has developed from over 45 years of pumping at this wellfield. Additionally, groundwater recovery and treatment is occurring on Site in the Upper Floridan Aquifer at wells FW-6, FW-21B, FW-31BE, and FW-32BE at a combined average pumping rate of 36.9 gpm in the first quarter of 2016 and 35.4 gpm in the second

quarter of 2016. Because of groundwater withdrawals at the Murphree Wellfield, the average groundwater flow direction in the Floridan Aquifer at the Site is to the northeast.

A Floridan Aquifer Potentiometric Surface Map was not completed for the first quarter 2016 gauging event. No Floridan Aquifer monitoring wells were gauged during the first quarter 2016 event as part of the Site-wide groundwater monitoring program in accordance with the CGMSAP.

3.3 GROUNDWATER QUALITY

Groundwater samples were collected from thirteen Floridan Aquifer monitoring wells during the first quarter 2016 and from six Floridan Aquifer monitoring wells during the second quarter 2016 in accordance with the CGMSAP. Per the CGMSAP, Surficial Aquifer or HG monitoring wells were not sampled during the first or the second quarter 2016 events. The following subsections discuss groundwater quality observations for the Floridan Aquifer during the first and second quarter 2016.

3.3.1 Floridan Aquifer

Groundwater samples were collected from thirteen Floridan Aquifer monitoring wells during the first quarter 2016 and six Floridan Aquifer monitoring wells during the second quarter 2016. Table 5 presents a summary of the first quarter 2016 analytical results for the single-screened Floridan Aquifer monitoring wells. Summaries of the first and second quarter 2016 analytical results for the multi-screened, multi-port UTZ and LTZ Floridan Aquifer monitoring wells are presented in Tables 6a and 6b, respectively. A graphical summary of organic and inorganic constituents that exceed the U.S. EPA Maximum Contaminant Level (MCLs) and the Florida Groundwater Cleanup Target Levels (GCTLs) are provided for the source area monitoring wells (Figure 4) and transect monitoring wells (Figure 5), and boundary monitoring wells (Figures 6 and 7). Figures 8 and 9 show a summary of the Floridan Aquifer organic and the inorganic exceedances, respectively. The field forms, associated with the sampling of these monitoring wells, are included in Appendix A. The analytical laboratory results are included in Appendix B.

In the following paragraphs, groundwater quality results are discussed in more detail for the source, transect, and boundary monitoring wells.

3.3.1.1 Source Area Monitoring Wells

Samples from UTZ extraction well FW-6 and monitoring well FW-20B, located near the former North Lagoon, contained select organic constituents with concentrations above Florida GCTL standards; and benzene above its respective U.S. EPA MCL (Figure 4). Samples from UTZ extraction well FW-21B located downgradient of the former Drip

Track area also contained select organic constituents with concentrations above Florida GCTL standards.

The February 2016 sample collected from UTZ extraction well FW-6 contained four organic constituents that exceed Florida GCTL standards: benzene, acenaphthene, carbazole, and naphthalene; benzene was also was detected (5.7 micrograms per liter [µg/L]) above its respective U.S. EPA MCL. The February 2016 results for this well are consistent with previous sampling results.

The February and May 2016 samples collected from Zone 1 and Zone 2 for monitoring well FW-20B contain select organic constituents that exceed Florida GCTL standards. The February 2016 sample collected from Zone 1 contained four organic constituents (benzene, acenaphthene, carbazole, and naphthalene) that exceed their respective Florida GCTL standards. The May 2016 sample collected from Zone 1 contained six organic constituents (benzene, 2-methylnaphthalene, acenaphthene, carbazole, dibenzofuran, and naphthalene) that exceed their respective Florida GCTL standards. The February and May 2016 samples collected from Zone 2 contained four organic constituents (benzene, acenaphthene, carbazole, and naphthalene) that exceed their respective Florida GCTL standards. The samples collected from both Zone 1 and Zone 2 during the February and May 2016 sampling events also contained benzene that exceeds its respective U.S. EPA MCL. The February and May 2016 results for this well are consistent with previous sampling events.

The February 2016 sample collected from UTZ extraction well FW-21B contained five organic constituents that exceed Florida GCTL standards: benzene, 2-methylnaphthalene, acenaphthene, carbazole, and naphthalene. The February 2016 concentrations for this extraction well are higher than with previous sampling results.

3.3.1.2 Transect Monitoring Wells

There are a total of ten UTZ transect monitoring wells. Two of the UTZ transect monitoring wells were sampled during the reporting period (Figure 5). Samples collected from two monitoring wells FW-12B (Zones 1, 3 and 4), and FW-16B (Zone 1) contained select organic constituents that exceed the Florida GCTLs.

The highest constituent impacts in FW-12B continue to be in the two lowest monitoring zones. The uppermost monitoring zone contains constituent impacts, but at lower concentrations. The organic constituent concentrations observed in monitoring well FW-12B during the reporting period were consistent with previous sampling event results.

Monitoring well FW-16B Zone 1 contained three organic constituents (benzene, 2,4-dimethylphenol, and naphthalene) during the February and May 2016 events and in excess of Florida GCTL standards. The samples collected during both the February and

May 2016 sampling events also contained benzene that exceeds its respective U.S. EPA MCL. The February and May 2016 organic constituent concentrations in monitoring well FW-16B were similar to previous sampling events.

3.3.1.3 Boundary Monitoring Wells

As shown on Figure 6, all organic constituents were below the U.S. EPA MCLs and the Florida GCTLs for all monitoring wells sampled during the reporting period with the exception of FW-22B. During the February 2016 event, UTZ property boundary monitoring well FW-22B contained a phenol concentration (Zone 1 only) that exceeded the Florida GCTL standard; the results from Zones 2, 3, and 4, as well as the results from the May 2016 event, were non-detect for phenol in this well. Previously, phenol has been detected in boundary well FW-22B Zone 1 at concentrations below the Florida GCTL standard. All other monitoring wells sampled in February and/or May 2016 were below the U.S. EPA MCLs and the Florida GCTLs for all organic constituents. These wells include the single-screened UTZ property boundary monitoring well FW-4, the multi-screened, multi-port LTZ property boundary monitoring wells FW-4C, FW-22C, FW-23C, and FW-24C, and the multi-screened, multi-port UTZ property boundary monitoring wells FW-23B and FW-24B during the reporting period.

In addition, boundary monitoring well FW-24B was sampled for total and dissolved arsenic (Figure 7). Total and dissolved arsenic concentrations were elevated above Federal and State standards in Zone 1 in monitoring well FW-24B, which is consistent with previous sampling events. Total and dissolved arsenic were not detected above Federal and State standards in Zones 2, 3, and 4 in either the February or May 2016 sampling events for monitoring well FW-24B.

4.0 SUMMARY AND CONCLUSIONS

4.1 HYDROGEOLOGY

Groundwater potentiometric elevations were obtained in 27 HG monitoring well locations during the first quarter 2016, in accordance with the semiannual gauging requirements of the CGMSAP. Water-level data from TIPs in the Former Process Area and North Lagoon were used to help better define potentiometric surface contours across the Site. In addition, results from the 2004 groundwater flow model developed for this area were used to extrapolate the effects of the Cabot groundwater collection system on the Upper Hawthorn potentiometric surface to the east of the Site. Potentiometric surface contour maps were developed for the Upper and Lower Hawthorn Group; however, potentiometric surface contour maps were not developed for the Surficial Aquifer or the Floridan Aquifer.

The groundwater flow direction in the Upper Hawthorn is primarily to the northeast across the Site. Monitoring well data from the Lower Hawthorn indicate the presence of a groundwater divide extending approximately from the southeastern corner of the Site to northwestern corner. This groundwater divide results in northerly to northeasterly groundwater flow direction for the eastern half of the Site and a westerly to northwesterly flow direction for the western half of the Site.

4.2 NAPL RECOVERY

DNAPL recovery is performed in six Upper Hawthorn monitoring wells at the Site. Only one of these six monitoring wells (HG-16S) is included in the annual sampling program. Upper Hawthorn monitoring well HG-16S, located near the former North Lagoon, was not gauged during the first quarter 2016. This well will be gauged during the annual event, in accordance with the CGMSAP. Similar to historical monitoring in monitoring well HG-16D, minor DNAPL staining was detected on the probe during the measurement collection in this monitoring well. LNAPL was not detected in any of the Upper or Lower HG monitoring wells gauged during the first quarter 2016 monitoring event. The NAPL thickness measurements are consistent with historical observations.

4.3 GROUNDWATER QUALITY

Groundwater quality observed during the first and second quarter 2016 sampling events in the Floridan Aquifer monitoring wells was generally consistent with previous sampling events.

Monitoring wells in the northwestern area of the Site demonstrate that dissolved-phase Site constituents are not wide-spread in the Floridan Aquifer. Organic constituents were not detected along the northern property boundary. No free-phase or residual DNAPL impacts were detected in continuous geologic core collected in the UF Aquifer at any of the monitoring well locations.

TABLES

Table 1
Surficial Aquifer Monitoring Wells and Program Parameters
2016 First Semiannual Comprehensive Groundwater Monitoring Report
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

Well ID	Monitoring Series	Parameters[2],[3]					Sampling Frequency[1]	Sampling Completed During the Reporting Period		Sampling to be Completed During the Next Reporting Period	
								First Quarter 2016	Second Quarter 2016	Third Quarter 2016	Fourth Quarter 2016
ITW-12	A	SVOCs	VOCs	--	--	--	Annual	--	--	X	--
ITW-22	A	SVOCs	VOCs	--	--	--	Annual	--	--	X	--
M-3BR	B	SVOCs	VOCs	Arsenic (total and dissolved)	Chromium (total and dissolved)	Pentachlorophenol	Annual	--	--	X	--
M-9AR	A	SVOCs	VOCs	Arsenic (total and dissolved)	--	--	Annual	--	--	X	--
M-9BR	B	SVOCs	VOCs	Arsenic (total and dissolved)	--	--	Annual	--	--	X	--
M-12	A	SVOCs	VOCs	Arsenic (total and dissolved)	Chromium (total and dissolved)	Pentachlorophenol	Annual	--	--	X	--
M-16A	A	SVOCs	VOCs	Arsenic (total and dissolved)	--	Pentachlorophenol	Annual	--	--	X	--
M-16B	B	SVOCs	VOCs	Arsenic (total and dissolved)	--	Pentachlorophenol	Annual	--	--	X	--
M-17	A	SVOCs	VOCs	Arsenic (total and dissolved)	--	Pentachlorophenol	Annual	--	--	X	--
M-20B	B	SVOCs	VOCs	Arsenic (total and dissolved)	--	Pentachlorophenol	Annual	--	--	X	--
M-23BR	B	SVOCs	VOCs	Arsenic (total and dissolved)	--	Pentachlorophenol	Annual	--	--	X	--
M-25B	B	SVOCs	VOCs	Arsenic (total and dissolved)	Chromium (total and dissolved)	Pentachlorophenol	Annual	--	--	X	--
M-33B	B	SVOCs	VOCs	--	--	--	Annual	--	--	X	--
M-34B	B	SVOCs	VOCs	Arsenic (total and dissolved)	Chromium (total and dissolved)	Pentachlorophenol	Annual	--	--	X	--
M-35B	B	SVOCs	VOCs	Arsenic (total and dissolved)	Chromium (total and dissolved)	Pentachlorophenol	Annual	--	--	X	--
M-36B	B	SVOCs	VOCs	Arsenic (total and dissolved)	Chromium (total and dissolved)	Pentachlorophenol	Annual	--	--	X	--
M-37B	B	SVOCs	VOCs	Arsenic (total and dissolved)	Chromium (total and dissolved)	Pentachlorophenol	Annual	--	--	X	--

Notes:

(1) "SA" indicates semiannual; "QTR" indicates quarterly.

(2) "SVOCs" indicates semivolatile organic compounds. The specific list of SVOCs included in the program is provided in Table 5-3.
Note that pentachlorophenol as listed on Table 5-3 will be analyzed for select samples.

(3) "VOCs" indicates volatile organic compounds. The specific list of VOCs included in the program is provided in Table 5-3.

"--" indicates well not sampled in accordance with the CGMSAP.

Table 2
Hawthorn Group Monitoring Wells and Program Parameters
2016 First Semiannual Comprehensive Groundwater Monitoring Report
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

Well ID	Parameters[2],[3]				Sampling Frequency[1]	Sampling Completed During the Reporting Period		Sampling to be Completed During the Next Reporting Period	
						First Quarter 2016	Second Quarter 2016	Third Quarter 2016	Fourth Quarter 2016
HG-2D	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-4S	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-4D	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-5D	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-6S	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-6D	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-10D	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-12D	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-16D	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-16S	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-20S	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-20D	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-21S	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-21D	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-22D	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-23D	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-24S	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-25D	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-26S	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-26D	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-27S	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-27D	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-29S	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-29D	SVOCs	VOCs	--	--	Annual	--	--	X	--
HG-31S	SVOCs	VOCs	Arsenic (total and dissolved)	Chromium (total and dissolved)	Annual	--	--	X	--
HG-32S	SVOCs	VOCs	Arsenic (total and dissolved)	Chromium (total and dissolved)	Annual	--	--	X	--
HG-33S	SVOCs	VOCs	Arsenic (total and dissolved)	Chromium (total and dissolved)	Annual	--	--	X	--
HG-34S	SVOCs	VOCs	Arsenic (total and dissolved)	Chromium (total and dissolved)	Annual	--	--	X	--
HG-35S	SVOCs	VOCs	Arsenic (total and dissolved)	Chromium (total and dissolved)	Annual	--	--	X	--

Notes:

[1] "QTR" indicates quarterly; "SA" indicates semiannual.

[2] "SVOCs" indicates semivolatile organic compounds. The specific list of SVOCs included in the program is provided in Table 5-4.

[3] "VOCs" indicates volatile organic compounds. The specific list of VOCs included in the program is provided in Table 5-4.

"NS" indicates not sampled due to the presence of dense non-aqueous phase liquid (DNAPL)

"--" indicates well not sampled in accordance with the CGMSAP.

Table 3
Floridan Aquifer Monitoring Wells and Program Parameters
2016 First Semiannual Comprehensive Groundwater Monitoring Report
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

Well ID	Parameters(2),(3)			Site Location	Westbay Zones	Sampling Frequency[1]	Sampling Completed During the Reporting Period		Sampling to be Completed During the Next Reporting Period	
							First Quarter 2016	Second Quarter 2016	Third Quarter 2016	Fourth Quarter 2016
FW-3	SVOCs	VOCs	--	Boundary	n/a	Annual	--	--	X	--
FW-4	SVOCs	VOCs	--	Boundary	n/a	Semiannual	X	--	X	--
FW-4C	SVOCs	VOCs	--	Boundary	all	Semiannual	X	--	X	--
FW-6	SVOCs	VOCs	--	Source area	n/a	Semiannual	X	--	X	--
FW-10B	SVOCs	VOCs	--	Transect area	all	Annual	--	--	X	--
FW-11B	SVOCs	VOCs	--	Transect area	all	Annual	--	--	X	--
FW-12B	SVOCs	VOCs	--	Transect area	all	Quarterly	X	X	X	X
FW-13B	SVOCs	VOCs	--	Transect area	all	Annual	--	--	X	--
FW-14B	SVOCs	VOCs	--	Transect area	all	Annual	--	--	X	--
FW-15B	SVOCs	VOCs	--	Transect area	all	Annual	--	--	X	--
FW-16B	SVOCs	VOCs	--	Transect area	1	Quarterly	X	X	X	X
			--		2, 3, 4	Annual	--	--	X	--
FW-17B	SVOCs	VOCs	--	Transect area	all	Annual	--	--	X	--
FW-18B	SVOCs	VOCs	--	Source area	all	Annual	--	--	X	--
FW-19B	SVOCs	VOCs	--	Source area	all	Annual	--	--	X	--
FW-20B	SVOCs	VOCs	--	Source area	1, 2	Quarterly	X	X	X	X
			--		3, 4	Annual	--	--	X	--
FW-21B	SVOCs	VOCs	--	Source area	n/a	Semiannual	X	--	X	--
FW-22B	SVOCs	VOCs	--	Boundary	all	Quarterly	X	X	X	X
FW-22C	SVOCs	VOCs	--	Boundary	all	Semiannual	X	--	X	--
FW-23B	SVOCs	VOCs	--	Boundary	all	Quarterly	X	X	X	X
FW-23C	SVOCs	VOCs	--	Boundary	all	Semiannual	X	--	X	--
FW-24B	SVOCs	VOCs	As (total and dissolved)	Boundary	all	Quarterly	X	X	X	X
FW-24C	SVOCs	VOCs	As (total and dissolved)	Boundary	all	Semiannual/Annual[4]	X	--	X	--
FW-25B	SVOCs	VOCs	--	Sentinel	n/a	Annual	--	--	X	--
FW-25C	SVOCs	VOCs	--	Sentinel	n/a	Annual	--	--	X	--
FW-26B	SVOCs	VOCs	--	Sentinel	n/a	Annual	--	--	X	--
FW-26C	SVOCs	VOCs	--	Sentinel	n/a	Annual	--	--	X	--
FW-27B	SVOCs	VOCs	As (total and dissolved)	Transect area	all	Annual	--	--	X	--
FW-28B	SVOCs	VOCs	As (total and dissolved)	Boundary	all	Annual	--	--	X	--
FW-29B	SVOCs	VOCs	--	Sentinel	n/a	Annual	--	--	X	--
FW-29C	SVOCs	VOCs	--	Sentinel	n/a	Annual	--	--	X	--
FW-30B	SVOCs	VOCs	As (total and dissolved)	Transect area	all	Annual	--	--	X	--

Notes:

[1] "QTR" indicates quarterly; "SA" indicates semiannual.

[2] "SVOCs" indicates semivolatile organic compounds. The specific list of SVOCs included in the program is provided in Table 5-6.

[3] "VOCs" indicates volatile organic compounds. The specific list of VOCs included in the program is provided in Table 5-6.

[4] Note that for FW-24C, arsenic analysis is required for Zone 1 on an annual basis only. Arsenic is not required for the other zones. Analysis for SVOCs and VOCs is required on a semiannual basis.

"NS" indicates not sampled due to the inability to access the wells.

"--" indicates well not sampled in accordance with the CGMSAP.

Table 4
Summary of Groundwater Elevations First Quarter 2016 Groundwater Monitoring Event
2016 First Semiannual Comprehensive Groundwater Monitoring Report
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

Well Number	Gauging Date	Top of Casing Elevation (ft msl)	Depth To Water (ft)	Measured Total Depth (ft TOC)	Apparent LNAPL Thickness (ft)	Apparent DNAPL Thickness (ft)	Groundwater Elevation (ft msl)
HG-2D	2/8/16	188.88	50.11	112.85	NP	NP	138.77
HG-4D	2/8/16	180.91	39.48	107.84	NP	NP	141.43
HG-4S	2/8/16	180.41	7.89	52.58	NP	NP	172.52
HG-5D	2/8/16	187.73	51.70	112.68	NP	NP	136.03
HG-6D	2/8/16	185.02	37.89	108.50	NP	NP	147.13
HG-6S	2/8/16	184.86	11.46	52.57	NP	NP	173.40
HG-12D	2/8/16	184.64	42.14	118.16	NP	NP	142.50
HG-16D	2/8/16	185.07	42.39	117.49	NP	Trace	142.68
HG-20D	2/8/16	174.33	34.43	84.30	NP	NP	139.90
HG-20S	2/8/16	174.37	4.02	39.80	NP	NP	170.35
HG-21D	2/8/16	167.90	33.37	94.96	NP	NP	134.53
HG-21S	2/8/16	167.72	7.93	41.10	NP	NP	159.79
HG-22D	2/8/16	186.15	41.20	82.64	NP	NP	144.95
HG-23D	2/8/16	186.70	48.26	89.36	NP	NP	138.44
HG-24S	2/8/16	184.28	8.66	71.23	NP	NP	175.62
HG-25D	2/8/16	181.30	47.52	85.94	NP	NP	133.78
HG-26D	2/8/16	182.92	36.82	94.24	NP	NP	146.10
HG-26S	2/8/16	183.21	10.45	44.31	NP	NP	172.76
HG-27D	2/8/16	162.42	29.37	96.40	NP	NP	133.05
HG-27S	2/8/16	162.48	7.29	59.84	NP	NP	155.19
HG-29D	2/8/16	179.17	38.30	96.74	NP	NP	140.87
HG-29S	2/8/16	179.17	12.78	54.80	NP	NP	166.39
HG-31S	2/8/16	185.53	11.25	58.26	NP	NP	174.28
HG-32S	2/8/16	186.04	12.35	58.20	NP	NP	173.69
HG-33S	2/8/16	184.91	11.66	58.18	NP	NP	173.25
HG-34S	2/8/16	185.45	11.93	58.44	NP	NP	173.52
HG-35S	2/8/16	186.47	12.95	71.11	NP	NP	173.52

Notes:

ft msl - feet above mean sea level
ft toc - feet below top of casing

NP = no product measured or observed
NM = not measured; pumping well
LNAPL = Light Non-Aqueous Phase Liquid
DNAPL = Dense Non-Aqueous Phase Liquid

Table 5
Summary of Analytical Data for Floridan Aquifer Monitoring Wells
2016 First Semiannual Comprehensive Groundwater Monitoring Report
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

Analyte	Federal MCL [1] (ug/l)	Florida GCTL [2] (ug/l)	Well ID: FW-4 Sample Date: 2/10/2016 Sample Type: SMP	FW-6 2/9/2016 SMP	FW-6 2/9/2016 DUP	FW-21B 2/9/2016 SMP	FW-21B 2/9/2016 DUP
Temperature (°C)	NA	NA	11.74	23.29	-	19.95	-
pH (S.U.)	NA	NA	7.58	7.49	-	7.42	-
Conductivity (mS/cm)	NA	NA	0.299	0.400	-	0.481	-
VOCs							
BENZENE	5	1	1 U	5.7	5.6	3.2	3.4
ETHYLBENZENE	700	30	1 U	1 U	1 U	1.7	1.9
TOLUENE	10000	40	1 U	1 U	1 U	1 U	1 U
XYLENE (total)	1000	20	3 U	2.8	3	3.3	2.3
SVOCs							
2,4-DIMETHYLPHENOL	-	140	5.26 U	5.21 U	5.15 U	5.15 U	5.43 U
2-METHYLNAPHTHALENE	-	28	5.26 U	9.6 J	8.22 J	46.2	54.8
2-METHYLPHENOL	-	35	5.26 U	5.21 U	5.15 U	5.15 U	5.43 U
3&4-METHYLPHENOL	-	3.5[3]	3.68 U	3.65 U	3.61 U	3.61 U	3.8 U
ACENAPHTHENE	-	20	5.26 U	36.1 J	29.6 J	38.7	45.7
ACENAPHTHYLENE	-	210	5.26 U	5.21 U	5.15 U	5.15 U	5.43 U
ANTHRACENE	-	2100	5.26 U	5.21 U	5.15 U	5.15 U	5.43 U
CARBAZOLE	-	1.8	1.9 U	9.9	6.02	19.5	23.3
DIBENZOFURAN	-	28	5.26 U	11.5 J	8.93 J	19.7	23.1
FLUORANTHENE	-	280	5.26 U	5.21 U	5.15 U	5.15 U	5.43 U
FLUORENE	-	280	5.26 U	17.5	13.5	20.6	23.9
NAPHTHALENE	-	14	5.26 U	217	237	684 J	917 J
PHENANTHRENE	-	210	5.26 U	9.93	6.96	12	14.2
PHENOL	-	10	5.26 U	5.21 UJ	5.15 UJ	5.15 U	5.43 U
PYRENE	-	210	5.26 U	5.21 U	5.15 U	5.15 U	5.43 U

Notes:

B - Indicates analyte was detected in the field blank.

U - Indicates analyte was not detected above the method detection limit (MDL)

J - Indicates result is estimated

Concentration exceeds Florida GCTL

Concentration exceeds Florida MCL

[1] - Federal Maximum Contaminant Levels (MCLs) represent the National Primary Drinking Water Standards.

[2] - Florida Groundwater Cleanup Target Levels (GCTL) are guidelines set forth in 62-777 Florida Administrative Code (F.A.C.).

[3] - 3-Methylphenol and 4-Methylphenol cannot be quantified separately using SW846.

Table 6a
Summary of Analytical Data for Westbay Upper Transmissive Zone Monitoring Wells
2016 First Semiannual Comprehensive Groundwater Monitoring Report
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

Constituent	Federal MCL[1] (ug/L)	Florida GCTL[2] (ug/L)	WELL ID FW-12B								WELL ID FW-16B	
			Zone 1	Zone 1	Zone 2	Zone 2	Zone 3	Zone 3	Zone 4	Zone 4	Zone 1	Zone 1
		Sample Date:	2/11/2016	5/11/2016	2/11/2016	5/11/2016	2/11/2016	5/12/2016	2/11/2016	5/12/2016	2/11/2016	5/11/2016
METALS												
ARSENIC (dissolved)	10	10	--	--	--	--	--	--	--	--	--	--
ARSENIC (total)	10	10	--	--	--	--	--	--	--	--	--	--
VOCs												
BENZENE	5	1	3.9	4.1	1 U	1 U	7	6.7	4.3	4.1 J	8	8.7
ETHYLBENZENE	700	30	2.7	3.1	1 U	1 U	1 U	1 U	1 U	1 UJ	4.7	5
TOLUENE	10000	40	6.3	6.8	1 U	1 U	1 U	1 U	1 U	1 UJ	6.8	7.3
XYLENE (total)	1000	20	5.4	7.2	3 U	3 U	4.8	5.8	5	5.7 J	9.3	9.6
SVOCs												
2,4-DIMETHYLPHENOL	-	140	28.6 J	37.9	5.75 U	5.11 U	5.49 U	5.16 U	5.32 U	5.06 U	260 J	215 J
2-METHYLNAPHTHALENE	-	28	5.43 UJ	5.16 U	5.75 UJ	5.11 U	42.8 J	88.1	15.6 J	30.5	5.43 UJ	5 UJ
2-METHYLPHENOL	-	35	26.3 J	26	5.75 U	5.11 U	5.49 U	5.16 U	5.32 U	5.06 U	5.43 U	5.69
3&4-METHYLPHENOL	-	3.5[3]	3.8 U	5.16 U	4.02 U	5.11 U	3.85 U	5.16 U	3.72 U	5.06 U	3.8 U	5 U
ACENAPHTHENE	-	20	5.43 UJ	5.16 U	5.75 UJ	5.11 U	44.7 J	66.6	24.4 J	38.8	5.43 UJ	5 UJ
ACENAPHTHYLENE	-	210	5.43 UJ	5.16 U	5.75 UJ	5.11 U	5.49 UJ	5.16 U	5.32 UJ	5.06 U	5.43 UJ	5 UJ
ANTHRACENE	-	2100	5.43 UJ	5.16 U	5.75 UJ	5.11 U	5.49 UJ	5.16 U	5.32 UJ	5.06 U	5.43 UJ	5 U
CARBAZOLE	-	1.8	1.96 U	1.86 U	2.07 U	1.84 U	3.07 J	6.02	1.92 U	1.82 U	1.96 U	1.8 U
DIBENZOFURAN	-	28	5.43 UJ	5.16 U	5.75 UJ	5.11 U	23.5 J	31.1	14.2 J	23	5.43 UJ	5 UJ
FLUORANTHENE	-	280	5.43 U	5.16 U	5.75 U	5.11 U	5.49 U	5.16 U	5.32 U	5.06 U	5.43 U	5 U
FLUORENE	-	280	5.43 UJ	5.16 U	5.75 UJ	5.11 U	29.2 J	36.7	15.2 J	24.9	5.43 UJ	5 U
NAPHTHALENE	-	14	98.5 J	249	5.75 UJ	5.11 U	404 J	1300	310 J	673	67 J	101 J
PHENANTHRENE	-	210	5.43 UJ	5.16 U	5.75 UJ	5.11 U	21.6 J	23.3	5.32 UJ	6.58	5.43 UJ	5 U
PHENOL	-	10	5.43 UJ	5.16 U	5.75 UJ	5.11 U	5.49 UJ	5.16 U	5.32 UJ	5.06 U	5.43 UJ	5 UJ
PYRENE	-	210	5.43 UJ	5.16 U	5.75 UJ	5.11 U	5.49 UJ	5.16 U	5.32 UJ	5.06 U	5.43 UJ	5 U

Table 6a
Summary of Analytical Data for Westbay Upper Transmissive Zone Monitoring Wells
2016 First Semiannual Comprehensive Groundwater Monitoring Report
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

Constituent	Federal MCL[1] (ug/L)	Florida GCTL[2] (ug/L)	WELL ID FW-20B				WELL ID FW-22B								
			Zone 1	Zone 1	Zone 2	Zone 2	Zone 1	Zone 1	Zone 2	Zone 2	Zone 3	Zone 3	Duplicate	Zone 4	Zone 4
Sample Date:			2/11/2016	5/12/2016	2/11/2016	5/12/2016	2/9/2016	5/9/2016	2/9/2016	5/9/2016	2/9/2016	5/10/2016	5/10/2016	2/9/2016	5/10/2016
METALS															
ARSENIC (dissolved)	10	10	--	--	--	--	--	--	--	--	--	--	--	--	--
ARSENIC (total)	10	10	--	--	--	--	--	--	--	--	--	--	--	--	--
VOCs															
BENZENE	5	1	9.5	8.2	7.9	6.9	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
ETHYLBENZENE	700	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
TOLUENE	10000	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
XYLENE (total)	1000	20	3.7	5	3.4	4.7	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U
SVOCs															
2,4-DIMETHYLPHENOL	-	140	5.26 UJ	5.21 U	5.32 U	5.16 UJ	5.32 U	5 UJ	5.26 U	5 U	5.21 U	5 U	5 U	5.26 U	5 U
2-METHYLNAPHTHALENE	-	28	20.7 J	51.6	25.5 J	23.2 J	5.32 U	5 UJ	5.26 U	5 UJ	5.21 U	5 UJ	5 UJ	5.26 U	5 UJ
2-METHYLPHENOL	-	35	5.26 UJ	5.21 U	5.32 U	5.16 UJ	5.32 U	5 UJ	5.26 U	5 U	5.21 U	5 U	5 U	5.26 U	5 U
3&4-METHYLPHENOL	-	3.5[3]	3.68 UJ	5.21 U	3.72 U	5.16 UJ	3.72 U	5 UJ	3.68 U	5 U	3.65 U	5 U	5 U	3.68 U	5 U
ACENAPHTHENE	-	20	33.2 J	59.5	39.9 J	40 J	5.32 U	5 UJ	6.12	5 UJ	5.21 U	5 UJ	5 UJ	5.26 U	5 UJ
ACENAPHTHYLENE	-	210	5.26 UJ	5.21 U	5.32 UJ	5.16 UJ	5.32 U	5 UJ	5.26 U	5 UJ	5.21 U	5 UJ	5 UJ	5.26 U	5 UJ
ANTHRACENE	-	2100	5.26 UJ	5.21 U	5.32 UJ	5.16 UJ	5.32 U	5 UJ	5.26 U	5 U	5.21 U	5 U	5 U	5.26 U	5 U
CARBAZOLE	-	1.8	20.8 J	17.5	14.1	13.6 J	1.92 U	1.8 UJ	1.9 U	1.8 U	1.88 U	1.8 U	1.8 U	1.9 U	1.8 U
DIBENZOFURAN	-	28	12.5 J	29.4	19.3 J	20.5 J	5.32 U	5 UJ	5.26 U	5 UJ	5.21 U	5 UJ	5 UJ	5.26 U	5 UJ
FLUORANTHENE	-	280	5.26 UJ	5.21 U	5.32 U	5.16 UJ	5.32 U	5 UJ	5.26 U	5 U	5.21 U	5 U	5 U	5.26 U	5 U
FLUORENE	-	280	31.3 J	39.9	25.8 J	30.2 J	5.32 U	5 UJ	5.26 U	5 U	5.21 U	5 U	5 U	5.26 U	5 U
NAPHTHALENE	-	14	290 J	853	329 J	891 J	5.32 U	5 UJ	5.26 U	5 UJ	5.21 U	5 UJ	5 UJ	5.26 U	5 UJ
PHENANTHRENE	-	210	18.5 J	32.2	19.3 J	20.9 J	5.32 U	5 UJ	5.26 U	5 U	5.21 U	5 U	5 U	5.26 U	5 U
PHENOL	-	10	5.26 UJ	5.21 U	5.32 UJ	5.16 UJ	21.6	5 UJ	5.26 U	5 UJ	5.21 U	5 UJ	5 UJ	5.26 U	5 UJ
PYRENE	-	210	5.26 UJ	5.21 U	5.32 UJ	5.16 UJ	5.32 U	5 UJ	5.26 U	5 U	5.21 U	5 U	5 U	5.26 U	5 U

Table 6a
Summary of Analytical Data for Westbay Upper Transmissive Zone Monitoring Wells
2016 First Semiannual Comprehensive Groundwater Monitoring Report
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

Constituent	Federal MCL[1] (ug/L)	Florida GCTL[2] (ug/L)	WELL ID FW-23B							
			WELL ID	Zone 1	Zone 2	Zone 2	Zone 3	Zone 3	Zone 4	Zone 4
		Sample Date:	2/8/2016	5/9/2016	2/8/2016	5/9/2016	2/8/2016	5/9/2016	2/8/2016	5/9/2016
METALS										
ARSENIC (dissolved)	10	10	--	--	--	--	--	--	--	--
ARSENIC (total)	10	10	--	--	--	--	--	--	--	--
VOCs										
BENZENE	5	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
ETHYLBENZENE	700	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
TOLUENE	10000	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
XYLENE (total)	1000	20	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ
SVOCs										
2,4-DIMETHYLPHENOL	-	140	5.56 U	5 U	5.68 U	5 U	5.21 U	5 UJ	5.56 U	5 UJ
2-METHYLNAPHTHALENE	-	28	5.56 U	5 UJ	5.68 U	5 UJ	5.21 U	5 UJ	5.56 U	5 UJ
2-METHYLPHENOL	-	35	5.56 U	5 U	5.68 U	5 U	5.21 U	5 UJ	5.56 U	5 UJ
3&4-METHYLPHENOL	-	3.5[3]	3.89 U	5 U	3.98 U	5 U	3.65 U	5 UJ	3.89 U	5 UJ
ACENAPHTHENE	-	20	5.56 U	5 UJ	5.68 U	5 UJ	5.21 U	5 UJ	5.56 U	5 UJ
ACENAPHTHYLENE	-	210	5.56 U	5 UJ	5.68 U	5 UJ	5.21 U	5 UJ	5.56 U	5 UJ
ANTHRACENE	-	2100	5.56 U	5 U	5.68 U	5 U	5.21 U	5 UJ	5.56 U	5 UJ
CARBAZOLE	-	1.8	2 U	1.8 U	2.05 U	1.8 U	1.88 U	1.8 UJ	2 U	1.8 UJ
DIBENZOFURAN	-	28	5.56 U	5 UJ	5.68 U	5 UJ	5.21 U	5 UJ	5.56 U	5 UJ
FLUORANTHENE	-	280	5.56 U	5 U	5.68 U	5 U	5.21 U	5 UJ	5.56 U	5 UJ
FLUORENE	-	280	5.56 U	5 U	5.68 U	5 U	5.21 U	5 UJ	5.56 U	5 UJ
NAPHTHALENE	-	14	5.56 U	5 UJ	5.68 U	5 UJ	5.21 U	5 UJ	5.56 U	5 UJ
PHENANTHRENE	-	210	5.56 U	5 U	5.68 U	5 U	5.21 U	5 UJ	5.56 U	5 UJ
PHENOL	-	10	14 U	5 UJ	5.68 U	5 UJ	5.24 U	5 UJ	5.56 U	5 UJ
PYRENE	-	210	5.56 U	5 U	5.68 U	5 U	5.21 U	5 UJ	5.56 U	5 UJ

Table 6a
Summary of Analytical Data for Westbay Upper Transmissive Zone Monitoring Wells
2016 First Semiannual Comprehensive Groundwater Monitoring Report
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

Constituent	Federal MCL[1] (ug/L)	Florida GCTL[2] (ug/L)	WELL ID FW-24B									
			Zone 1	Zone 1	Zone 2	Zone 2	Zone 3	Duplicate	Zone 3	Zone 4	Zone 4	Duplicate
		Sample Date:	2/10/2016	5/11/2016	2/10/2016	5/11/2016	2/10/2016	2/10/2016	5/11/2016	2/10/2016	5/11/2016	5/11/2016
METALS												
ARSENIC (dissolved)	10	10	38	28	0.6 J	1.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.79 J
ARSENIC (total)	10	10	43	34	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56 J	0.5 U
VOCs												
BENZENE	5	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ETHYLBENZENE	700	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TOLUENE	10000	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
XYLENE (total)	1000	20	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
SVOCs												
2,4-DIMETHYLPHENOL	-	140	5.49 U	5 U	5.49 U	5.21 U	5.62 U	5.26 U	5.21 UJ	5.62 U	5 U	5 U
2-METHYLNAPHTHALENE	-	28	5.49 UJ	5 UJ	5.49 UJ	5.21 UJ	5.62 UJ	5.26 UJ	5.21 UJ	5.62 UJ	5 UJ	5 U
2-METHYLPHENOL	-	35	5.49 U	5 U	5.49 U	5.21 U	5.62 U	5.26 U	5.21 UJ	5.62 U	5 U	5 U
3&4-METHYLPHENOL	-	3.5[3]	3.85 U	5 U	3.85 U	5.21 U	3.93 U	3.68 U	5.21 UJ	3.93 U	5 U	5 U
ACENAPHTHENE	-	20	5.49 U	5 UJ	5.49 U	5.21 UJ	5.62 U	5.26 U	5.21 UJ	5.62 U	5 UJ	5 U
ACENAPHTHYLENE	-	210	5.49 U	5 UJ	5.49 U	5.21 UJ	5.62 U	5.26 U	5.21 UJ	5.62 U	5 UJ	5 U
ANTHRACENE	-	2100	5.49 U	5 U	5.49 U	5.21 U	5.62 U	5.26 U	5.21 UJ	5.62 U	5 U	5 U
CARBAZOLE	-	1.8	1.98 U	1.8 U	1.98 U	1.88 U	2.03 U	1.9 U	1.88 UJ	2.03 U	1.8 U	1.8 U
DIBENZOFURAN	-	28	5.49 U	5 UJ	5.49 U	5.21 UJ	5.62 U	5.26 U	5.21 UJ	5.62 U	5 UJ	5 U
FLUORANTHENE	-	280	5.49 U	5 U	5.49 U	5.21 U	5.62 U	5.26 U	5.21 UJ	5.62 U	5 U	5 U
FLUORENE	-	280	5.49 U	5 U	5.49 U	5.21 U	5.62 U	5.26 U	5.21 UJ	5.62 U	5 U	5 U
NAPHTHALENE	-	14	5.49 UJ	5 UJ	5.49 UJ	5.21 UJ	5.62 UJ	5.26 UJ	5.21 UJ	5.62 UJ	5 UJ	5 U
PHENANTHRENE	-	210	5.49 U	5 U	5.49 U	5.21 U	5.62 U	5.26 U	5.21 UJ	5.62 U	5 U	5 U
PHENOL	-	10	5.49 U	5 UJ	5.49 U	5.21 UJ	5.62 U	5.26 U	5.21 UJ	5.62 U	5 UJ	5 U
PYRENE	-	210	5.49 U	5 U	5.49 U	5.21 U	5.62 U	5.26 U	5.21 UJ	5.62 U	5 U	5 U

Notes:

B - Indicates analyte was detected in the field blank.

U - Indicates analyte was not detected above the method detection limit (MDL)

J - Indicates result is estimated

R - Indicates result is rejected

Concentration exceeds Florida GCTL

Concentration exceeds Federal MCL

(1) - Federal Maximum Contaminant Levels (MCLs) represent the National Primary Drinking Water Standards.

(2) - Florida Groundwater Cleanup Target Levels (GCTL) are guidelines set forth in 62-777 Florida Administrative Code (F.A.C.).

(3) - 3-Methylphenol and 4-Methylphenol cannot be quantified separately using SW846.

Table 6b
Summary of Analytical Data for Westbay Lower Transmissive Zone Monitoring Wells
2016 First Semiannual Comprehensive Groundwater Monitoring Report
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

Constituent	Federal MCL[1] (ug/L)	Florida GCTL[2] (ug/L)	WELL ID FW-4C			WELL ID FW-22C		
			Zone 1	Zone 2	Zone 3	Zone 1	Zone 2	Zone 3
		Sample Date:	2/8/2016	2/8/2016	2/9/2016	2/10/2016	2/10/2016	2/10/2016
Metals								
BENZENE	5	1	1 U	1 U	1 U	1 U	1 U	1 U
ETHYLBENZENE	700	30	1 U	1 U	1 U	1 U	1 U	1 U
TOLUENE	10000	40	1 U	1 U	1 U	1 U	1 U	1 U
XYLENE (total)	1000	20	3 U	3 U	3 U	3 U	3 U	3 U
SVOCs								
2,4-DIMETHYLPHENOL	-	140	5.21 U	5.21 U	5.21 U	5.43 UJ	5.38 U	5.21 U
2-METHYLNAPHTHALENE	-	28	5.21 U	5.21 U	5.21 U	5.43 UJ	5.38 UJ	5.21 UJ
2-METHYLPHENOL	-	35	5.21 U	5.21 U	5.21 U	5.43 UJ	5.38 U	5.21 U
3&4-METHYLPHENOL	-	3.5[3]	3.65 U	3.65 U	3.65 U	3.8 UJ	3.76 U	3.65 U
ACENAPHTHENE	-	20	5.21 U	5.21 U	5.21 U	5.43 U	5.38 U	5.21 U
ACENAPHTHYLENE	-	210	5.21 U	5.21 U	5.21 U	5.43 U	5.38 U	5.21 U
ANTHRACENE	-	2100	5.21 U	5.21 U	5.21 U	5.43 U	5.38 U	5.21 U
CARBAZOLE	-	1.8	1.88 U	1.88 U	1.88 U	1.96 U	1.94 U	1.88 U
DIBENZOFURAN	-	28	5.21 U	5.21 U	5.21 U	5.43 U	5.38 U	5.21 U
FLUORANTHENE	-	280	5.21 U	5.21 U	5.21 U	5.43 U	5.38 U	5.21 U
FLUORENE	-	280	5.21 U	5.21 U	5.21 U	5.43 U	5.38 U	5.21 U
NAPHTHALENE	-	14	5.21 U	5.21 U	5.21 U	5.43 UJ	5.38 UJ	5.21 UJ
PHENANTHRENE	-	210	5.21 U	5.21 U	5.21 U	5.43 U	5.38 U	5.21 U
PHENOL	-	10	22.4 U	13.1 U	5.21 U	5.43 UJ	5.38 U	5.21 U
PYRENE	-	210	5.21 U	5.21 U	5.21 U	5.43 U	5.38 U	5.21 U

Table 6b
Summary of Analytical Data for Westbay Lower Transmissive Zone Monitoring Wells
2016 First Semiannual Comprehensive Groundwater Monitoring Report
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

Constituent	Federal MCL[1] (ug/L)	Florida GCTL[2] (ug/L)	WELL ID FW-23C			WELL ID FW-24C			
			Zone 1	Zone 2	Zone 3	Zone 1	Zone 2	Zone 3	Zone 4
		Sample Date:	2/9/2016	2/9/2016	2/9/2016	2/10/2016	2/10/2016	2/10/2016	2/10/2016
Metals									
BENZENE	5	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ETHYLBENZENE	700	30	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TOLUENE	10000	40	1 U	1 U	1 U	1 U	1 U	1 U	1 U
XYLENE (total)	1000	20	3 U	3 U	3 U	3 U	3 U	3 U	3 U
SVOCs									
2,4-DIMETHYLPHENOL	-	140	5.1 U	5.49 U	5.1 U	5.1 U	5.56 U	5.32 U	5.43 U
2-METHYLNAPHTHALENE	-	28	5.1 U	5.49 U	5.1 U	5.1 UJ	5.56 UJ	5.32 UJ	5.43 UJ
2-METHYLPHENOL	-	35	5.1 U	5.49 U	5.1 U	5.1 U	5.56 U	5.32 U	5.43 U
3&4-METHYLPHENOL	-	3.5[3]	3.57 U	3.85 U	3.57 U	3.57 U	3.89 U	3.72 U	3.8 U
ACENAPHTHENE	-	20	5.1 U	5.49 U	5.1 U	5.1 U	5.56 U	5.32 U	5.43 U
ACENAPHTHYLENE	-	210	5.1 U	5.49 U	5.1 U	5.1 U	5.56 U	5.32 U	5.43 U
ANTHRACENE	-	2100	5.1 U	5.49 U	5.1 U	5.1 U	5.56 U	5.32 U	5.43 U
CARBAZOLE	-	1.8	1.84 U	1.98 U	1.84 U	1.84 U	2 U	1.92 U	1.96 U
DIBENZOFURAN	-	28	5.1 U	5.49 U	5.1 U	5.1 U	5.56 U	5.32 U	5.43 U
FLUORANTHENE	-	280	5.1 U	5.49 U	5.1 U	5.1 U	5.56 U	5.32 U	5.43 U
FLUORENE	-	280	5.1 U	5.49 U	5.1 U	5.1 U	5.56 U	5.32 U	5.43 U
NAPHTHALENE	-	14	5.1 U	5.49 U	5.1 U	5.1 UJ	5.56 UJ	5.32 UJ	5.43 UJ
PHENANTHRENE	-	210	5.1 U	5.49 U	5.1 U	5.1 U	5.56 U	5.32 U	5.43 U
PHENOL	-	10	5.1 U	5.49 U	5.1 U	5.1 U	5.56 U	5.32 U	5.43 U
PYRENE	-	210	5.1 U	5.49 U	5.1 U	5.1 U	5.56 U	5.32 U	5.43 U

Notes:

B - Indicates analyte was detected in the field blank.

U - Indicates analyte was not detected above the method detection limit (MDL)

J - Indicates result is estimated

Concentration exceeds Florida GCTL.

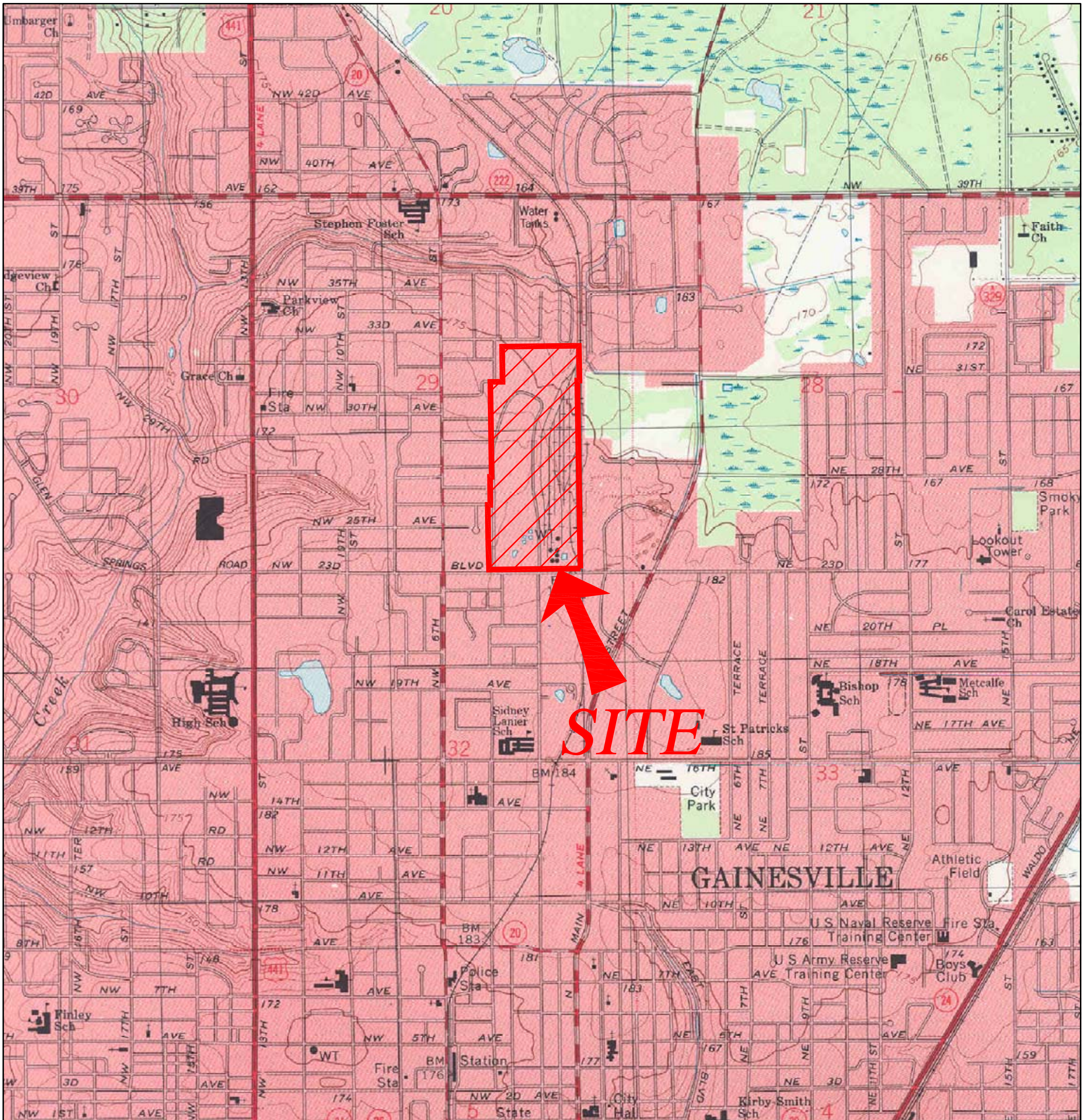
Concentration exceeds Federal MCL.

(1) Federal Mazimum Contaminant Levels (MCLs) represent the National Primary Drinking Water Standards.

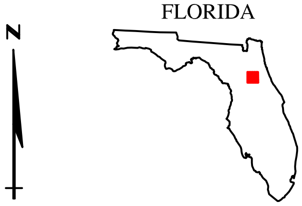
(2) Florida Groundwater Cleanup Target Levels (GCTLs) are guidelines set forth in 62-777 Florida Administrative Code (F.A.C.).

(3) 3-Methylphenol and 4-Methylphenol cannot be quantified separately using USEPA SW-846 Method 8270C.

FIGURES



FLORIDA



QUADRANGLE LOCATION

REFERENCE: USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLES
GAINESVILLE EAST, FLORIDA – 1994

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN:	KC	DATE:	08/04/16
CHKD:	AMG	DATE:	08/04/16
APPD:	AMG	DATE:	10/04/16
SCALE:	1" = 1000'		
ISSUE DATE:			

FTS

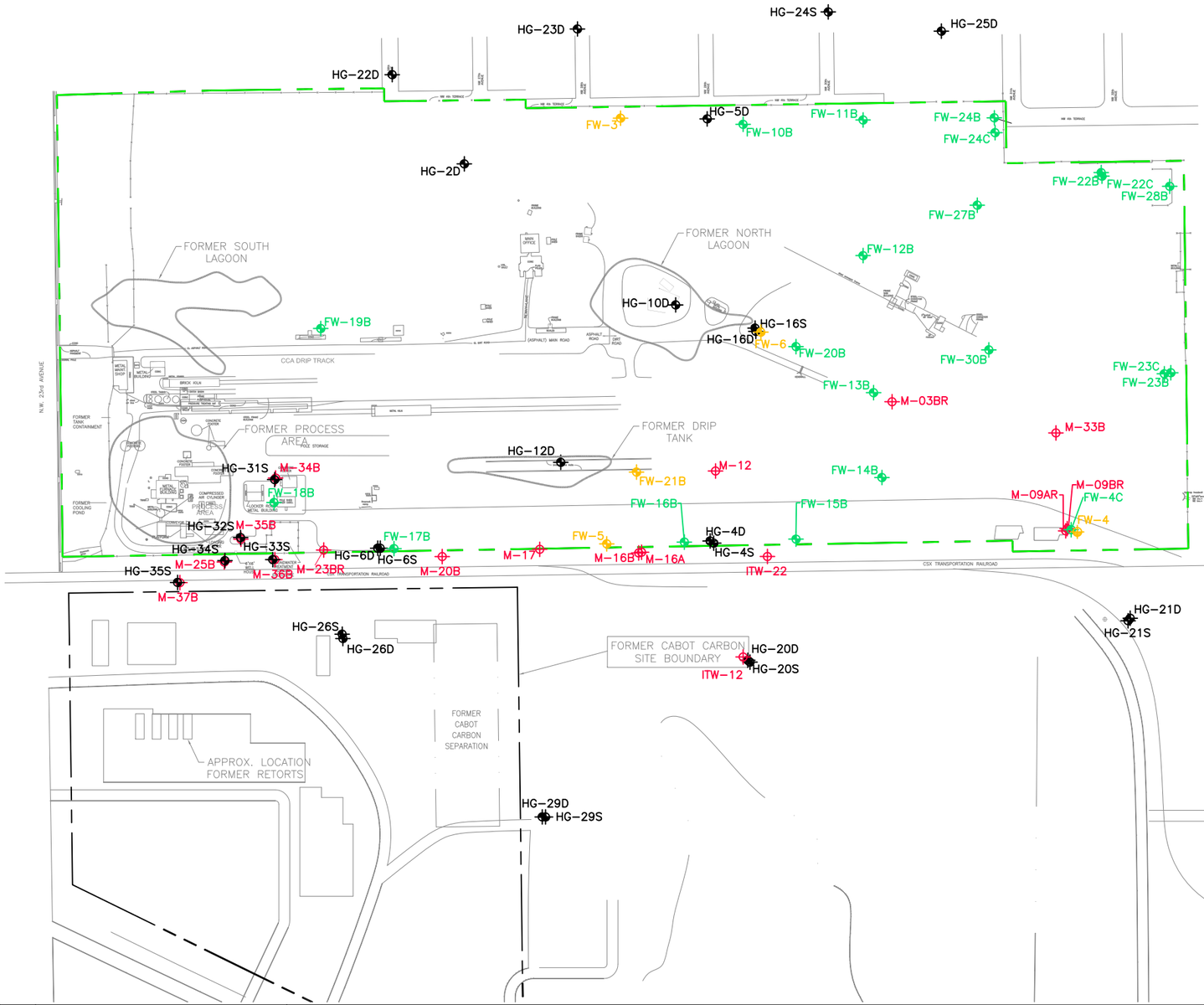
FIELD & TECHNICAL SERVICES, LLC
200 THIRD AVENUE
CARNEGIE, PA 15106

2016 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

SITE LOCATION MAP

PROJECT NO: OM045016
DRAWING NUMBER
FIGURE 1

FILE: Q:\PROJECTS\BEAZER PROJECTS\GAINESVILLE\CADD\1SA GW COMP REPORT 2016\FIGURE-1.DWG



LEGEND

- FW-21B — FLORIDAN STANDARD CONSTRUCTION MONITORING WELL
- FW-19B — FLORIDAN WESTBAY MONITORING WELL
- FW-25B — FLORIDAN SENTINEL MONITORING WELL
- HG-25D — HAWTHORN MONITORING WELL
- ITW-22 — SURFICIAL MONITORING WELL
- SUBJECT SITE PROPERTY LINE (APPROXIMATE)
- FORMER CABOT CARBON SITE BOUNDARY

0 350 700 FEET

REV #	DATE	DESCRIPTION	APPD
1			
2			
3			

REFERENCE: GEOTRANS 2010 FIGURES COMPREHENSIVE GROUNDWATER MONITORING AND SAMPLING PLAN; AUGUST 4, 2010.

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN:	KC	DATE:	08/04/16
CHKD:	RMB	DATE:	08/04/16
APPD:	AMG	DATE:	10/04/16
SCALE:	AS SHOWN		
ISSUE DATE:			

FIELD & TECHNICAL SERVICES, LLC
200 THIRD AVENUE
CARNEGIE, PA 15106

2016 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

MONITORING WELL LOCATION MAP

PROJECT NO: 0M045016
DRAWING NUMBER
FIGURE 2

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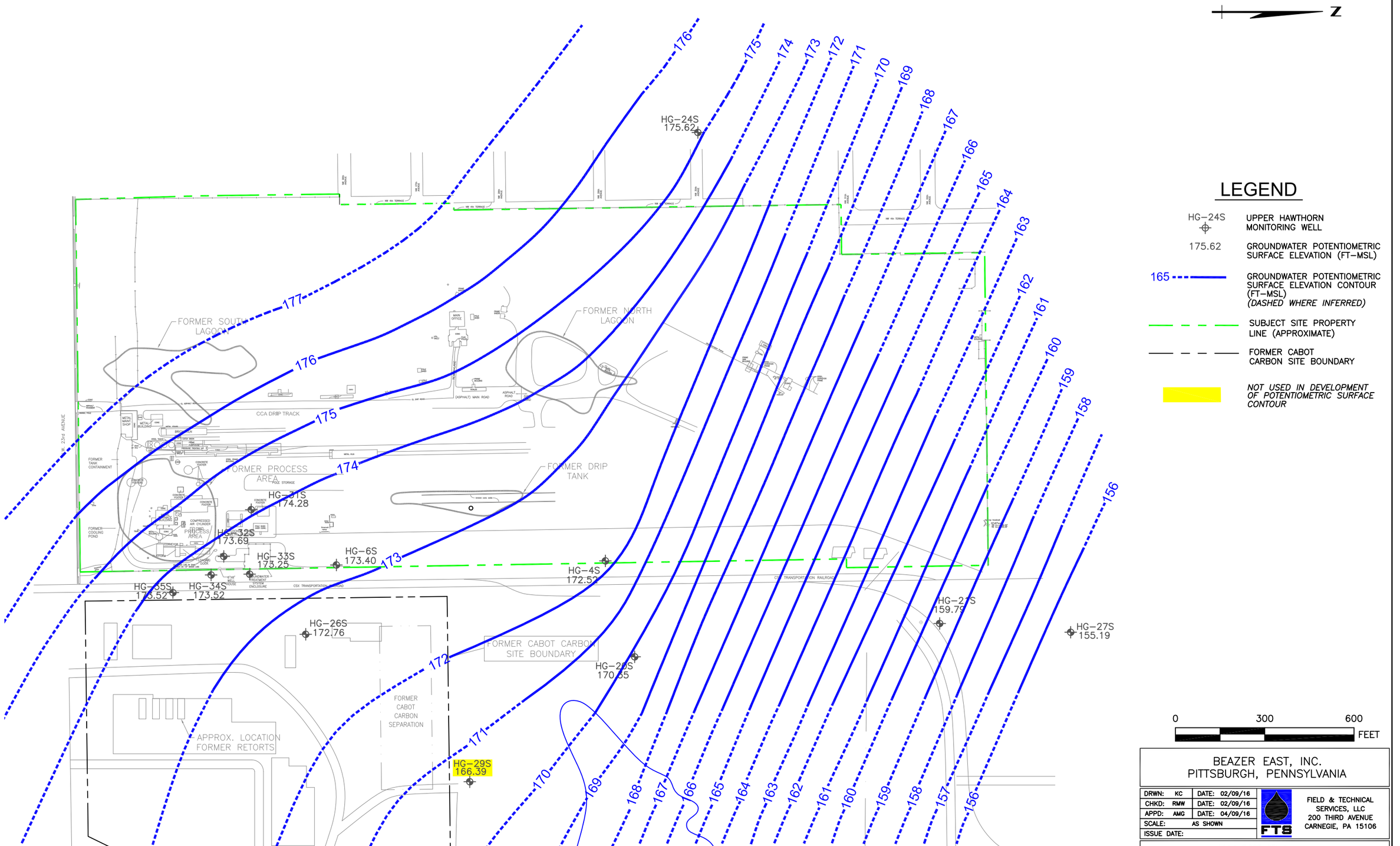

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN: KC	DATE: 02/09/16	FTS	FIELD & TECHNICAL SERVICES, LLC 200 THIRD AVENUE CARNEGIE, PA 15106
CHKD: RMW	DATE: 02/09/16		
APPD: AMG	DATE: 04/09/16		
SCALE: AS SHOWN			
ISSUE DATE:			

2016 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

UPPER HAWTHORN POTENTIOMETRIC SURFACE CONTOURS – FEBRUARY 2016

PROJECT NO: OM045016
DRAWING NUMBER
FIGURE 3a

REV #	DATE	DESCRIPTION	APPD
△			
△			
△			

REFERENCE: GEOTRANS 2010 FIGURES COMPREHENSIVE GROUNDWATER MONITORING AND SAMPLING PLAN; AUGUST 4, 2010.

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N

HG-23D
138.44

HG-25D
133.78

HG-22D
144.95

HG-5D
136.03

HG-2D
138.77

FORMER SOUTH LAGOON

FORMER NORTH LAGOON

HG-16D
142.68

CCA DRIP TRACK

N.W. 23rd AVENUE

FORMER TANK CONTAINMENT

FORMER PROCESS AREA

HG-12D
142.50

FORMER DRIP TANK

FORMER COOLING POND

HG-6D
147.13

HG-4D
141.43

CSX TRANSPORTATION RAILROAD

HG-21D
134.53

HG-27D
133.05

HG-26D
146.10

FORMER CABOT CARBON SITE BOUNDARY

HG-20D
139.90

FORMER CABOT CARBON SEPARATION

APPROX. LOCATION FORMER REPORTS

HG-29D
140.87

138 137 136 135 134 143 142 141 140 139 144 145 146 147

LEGEND

HG-25D ⊕	LOWER HAWTHORN MONITORING WELL
133.78	GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION (FT-MSL)
135	GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION CONTOUR (FT-MSL) *(DASHED WHERE INFERRED)*
	SUBJECT SITE PROPERTY LINE (APPROXIMATE)
	FORMER CABOT CARBON SITE BOUNDARY

0 300 600 FEET

REV #	DATE	DESCRIPTION	APPD
1			
2			
3			

REFERENCE: GEOTRANS 2010 FIGURES COMPREHENSIVE GROUNDWATER MONITORING AND SAMPLING PLAN; AUGUST 4, 2010.
HG-22D NOT USED IN CONTOURING.

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN:	KC	DATE:	02/09/16
CHKD:	RMW	DATE:	02/09/16
APPD:	AMG	DATE:	04/09/16
SCALE:	AS SHOWN		
ISSUE DATE:			

FTS
FIELD & TECHNICAL SERVICES, LLC
200 THIRD AVENUE
CARNEGIE, PA 15106

2016 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

LOWER HAWTHORN POTENTIOMETRIC SURFACE CONTOURS – FEBRUARY 2016

PROJECT NO: 0M045016
DRAWING NUMBER
FIGURE 3b

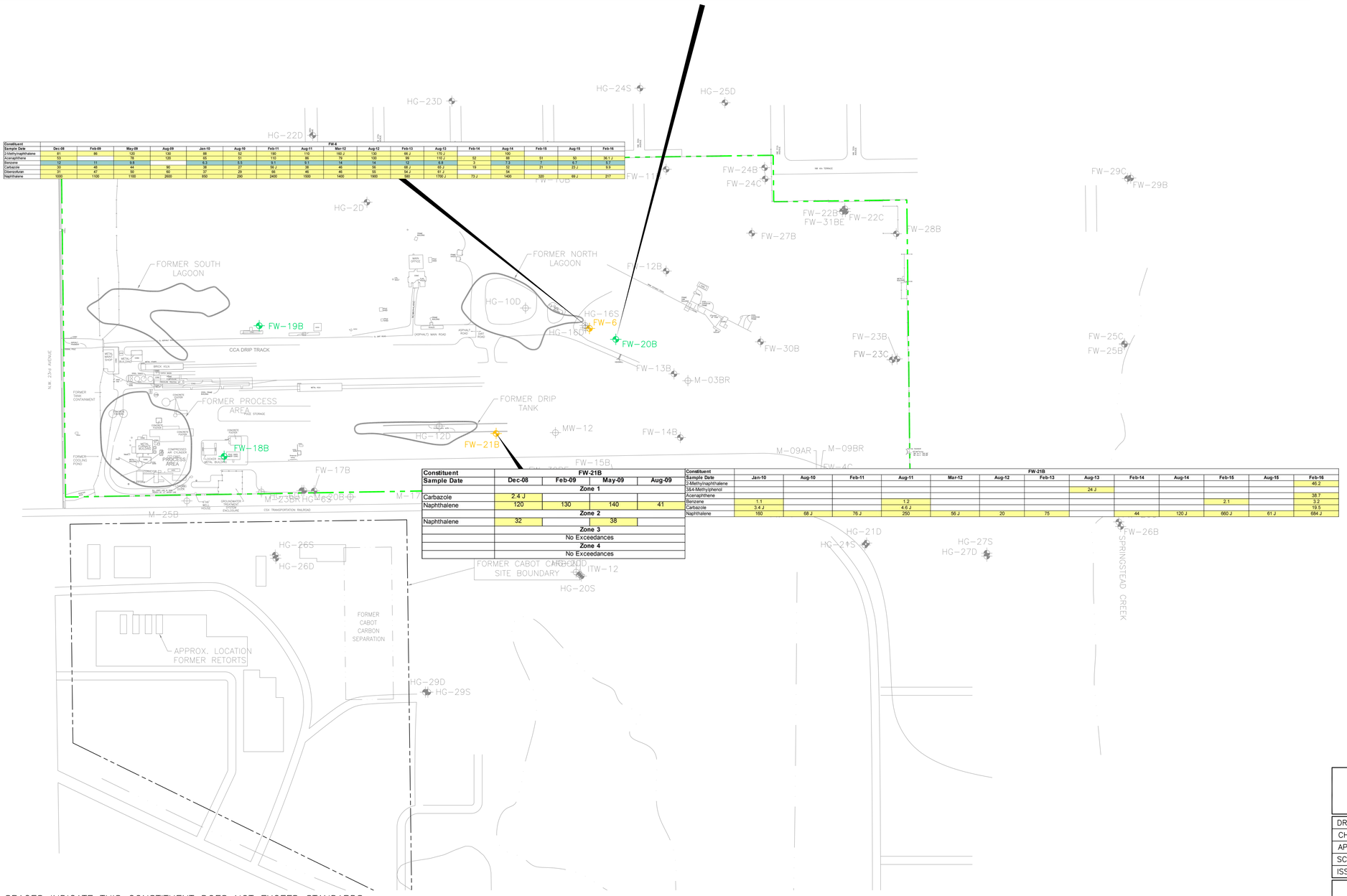
q:\projects\beazer projects\gainesville\cadd\1so gw comp report 2016\figure-3b.dwg Last Saved By: Kchintella 5/4/2016 8:07 PM Plotted By: Kendra L. Chintella 5/4/2016 8:08 PM Scale: 1:1

Constituent	FW-20B																																				
Sample Date	Mar-06	Jul-06	Sep-06	Dec-06	Mar-07	Jun-07	Sep-07	Dec-07	Feb-08	Jun-08	Sep-08	Dec-08	Feb-09	May-09	Aug-09	Jan-10	May-10	Aug-10	Dec-10	Feb-11	Jun-11	Aug-11	Dec-11	Mar-12	Jun-12	Aug-12	Dec-12	Feb-13	Apr-13	Aug-13	Nov-13	Feb-14	Jun-14	Aug-14	Dec-14	Feb-15	May-15	Aug-15	Dec-15	Feb-16	May-16
	Zone 1																																						
2-Methylnaphthalene		62	49	35	30								29	42	60	53	110	86	160			100	110	180	120	89	85	130	170	81	190 J	110	180	160	80	98	60	36	61		51.6
Acenaphthene	54	63	65	59	58	60	39	58	30	42	44	42	53	74	60	47	63	60	96 J	78	110	92	83	110	99	86	79	84	90	58	140 J	78	95	120	70	85	62	61	67	33.2 J	59.5
Benzene	2.4	5.3	5.9	4.5	3.7	3.6	3.7	2.5	2.6	1.9	3	3.5	2.9	3.6	3.3	7.3	5.2	4.6		9.9	6	12	12	6.4	12	10	9.9	12	8.5	13	9.8	17	15	14 J	12	12	11	5.9	10	9.5	9.2
Carbazole	26	22	25	17	14	9	3.4 J									6.2	14	19		25 J	30	31	32	41	38	20	23	30	44	35 J	70	49	59	74	45 J	42 J	30 J	27	32	20.8 J	17.5
Dibenzofuran		33	37	35	34	35		33				36	29	35	38	29	35	38	53	47	53	46	51	69	53	44	39	48	55	35	68	49	58	79				30	34		29.4
Naphthalene		650	720	510	550	450	380	210	450	260	310	420	730	1000	870	690	1100	840	2000 J	1800	2300	1700	2200	2200	2100	1600	1400	1900	2100	790	2600	1300	2200	2800	1200	1600	870	180	1200	290 J	653
Phenol																																			310 J						
	Zone 2																																						
2-Methylnaphthalene																			33												32	36	61	55					46 J		
Acenaphthene		31	40	43	44	41	32	50		42	34	31	38	42	40	33	39	44	45	52	45	47	40	32			38	53	58	34	71	63	80	110	74	65	61	53	74 J	39.9 J	40 J
Benzene		3.1	2.5	2.9	2.7	2.2	1.9	1.3									1.1										1.1		1.1		4.2	7.8	5.6	5.7	6.9	6.6	7	6.3	7.3 J	7.9	6.9
Carbazole	2.1 J	9.6	13	12	10	5.4 J	2.7 J																						2.3		17	25	30	32	23 J			16 J	21 J	14.1	13.6 J
Dibenzofuran																			33 J												36	37	44	49					36 J		
Naphthalene	53	370	140	120	140	85	94	99	49	100	58	73	96	150	170	63	240	230	450 J	160	200	180	44 J					150	330	280	68	810	780	990	1400	850	720	650	450	820 J	329 J	891 J
	Zone 3																																						
	No Exceedances															NS	NS	[No Exceedances]	NS	NS	NS	[No Exceedances]	NS	NS	NS	[No Exceedances]	NS	NS	NS	[No Exceedances]	NS	NS	NS	[No Exceedances]	NS	NS	NS	[No Exceedances]	NS	NS	NS
	Zone 4																																						
	No Exceedances															NS	NS	[No Exceedances]	NS	NS	NS	[No Exceedances]	NS	NS	NS	[No Exceedances]	NS	NS	NS	[No Exceedances]	NS	NS	NS	[No Exceedances]	NS	NS	NS	[No Exceedances]	NS	NS	NS

Constituent	FW-4																	
Sample Date	Dec-08	Feb-09	May-09	Aug-09	Jan-10	Aug-10	Feb-11	Aug-11	Mar-12	Aug-12	Feb-13	Aug-13	Feb-14	Aug-14	Feb-15	Aug-15	Feb-16	
2-Methylnaphthalene	61	86	120	150	66	92	190	110	160 J	130	66 J	170 J		160	51	90	36 J J	
Acenaphthene	53		78	100	65	51	110	55	79	100	59	110 J	52	55	51	90	36 J J	
Benzene	12	11	9.8		6.3	5.5	9.1	9.1	14	14	12	6.8	3	7.3	7	8.1	5.7	
Carbazole	30	48	44	90	36	27	56 J	38	46	56	68 J	65 J	18	52	21	33 J	5.9	
Dibenzofuran	31	47	50	60	37	29	66	46	46	55	54 J	61 J		54				
Naphthalene	1000	1100	1100	2600	850	290	3400	1550	1400	1900	980	1700 J	73 J	1400	320	69 J	217	

Constituent	FW-21B			
Sample Date	Dec-08	Feb-09	May-09	Aug-09
	Zone 1			
Carbazole	2.4 J			
Naphthalene	120	130	140	41
	Zone 2			
Naphthalene	32		38	
	Zone 3			
	No Exceedances			
	Zone 4			
	No Exceedances			

Constituent	FW-21B												
Sample Date	Jan-10	Aug-10	Feb-11	Aug-11	Mar-12	Aug-12	Feb-13	Aug-13	Feb-14	Aug-14	Feb-15	Aug-15	Feb-16
2-Methylnaphthalene													46 J
3&4-Methylphenol								24 J					
Acenaphthene													38.7
Benzene	1.1			1.2							2.1		3.2
Carbazole	3.4 J			4.6 J									19.5
Naphthalene	160	68 J	76 J	250	56 J	20	75		44	120 J	660 J	61 J	694 J



LEGEND

- FW-20B — FLORIDAN WESTBAY MONITORING WELL
- FW-25B — FLORIDAN STANDARD CONSTRUCTION MONITORING WELL
- SUBJECT SITE PROPERTY LINE (APPROXIMATE)
- FORMER CABOT CARBON SITE BOUNDARY
- NS — NOT SAMPLED
- * — DEDICATED PUMPING EQUIPMENT INSTALLED

STANDARDS

Constituent	Federal MCL(1) (ug/L)	Florida GCTL(2) (ug/L)
Organic Chemicals		
2,4-Dimethylphenol	-	140
2-Methylnaphthalene	-	28
2-Methylphenol	-	35
3&4-Methylphenol	-	3.5(3)
Acenaphthene	-	20
Acenaphthylene	-	210
Anthracene	-	2100
Benzene	5	1
Carbazole	-	1.8
Dibenzofuran	-	28
Ethylbenzene	700	30
Fluoranthene	-	280
Fluorene	-	280
Naphthalene	-	14
Pentachlorophenol	1	1
Phenanthrene	-	210
Phenol	-	10
Pyrene	-	210
Toluene	10000	40
Xylene (total)	1000	20

0 200 400 FEET

NOTE: BLANK SPACES INDICATE THIS CONSTITUENT DOES NOT EXCEED STANDARDS

REV #	DATE	DESCRIPTION	APPD
3			
2			
1			

REFERENCE: GEOTRANS 2010 FIGURES COMPREHENSIVE GROUNDWATER MONITORING AND SAMPLING PLAN; AUGUST 4, 2010.

Concentration exceeds Florida GCTL.
Concentration exceeds Federal MCL.
All results are in the units ug/L.

(1) FEDERAL MAXIMUM CONTAMINANT LEVELS (MCLS) REPRESENT THE NATIONAL PRIMARTY DRINKING WATER STANDARDS.
(2) FLORIDA GROUNDWATER CLEANUP TARGET LEVELS (GCTLS) ARE GUIDELINES SET FORTH IN 62-777 FLORIDA ADMINISTRATIVE CODE (F.A.C)
(3) 3-METHYLPHENOL AND 4-METHYLPHENOL CANNOT BE QUANTIFIED SEPERATELY USING USEPA SW-846 METHOD 8270C.

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN:	KC	DATE:	08/04/16
CHKD:	KC	DATE:	08/04/16
APPD:	AMG	DATE:	10/04/16
SCALE:	AS SHOWN		
ISSUE DATE:			

FIELD & TECHNICAL SERVICES, LLC
200 THIRD AVENUE
CARNEGIE, PA 15106

2016 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

FLORIDAN AQUIFER SOURCE AREA MONITORING WELLS
ORGANIC ANALYTICAL EXCEEDANCES

PROJECT NO: 0M045016
DRAWING NUMBER
FIGURE 4

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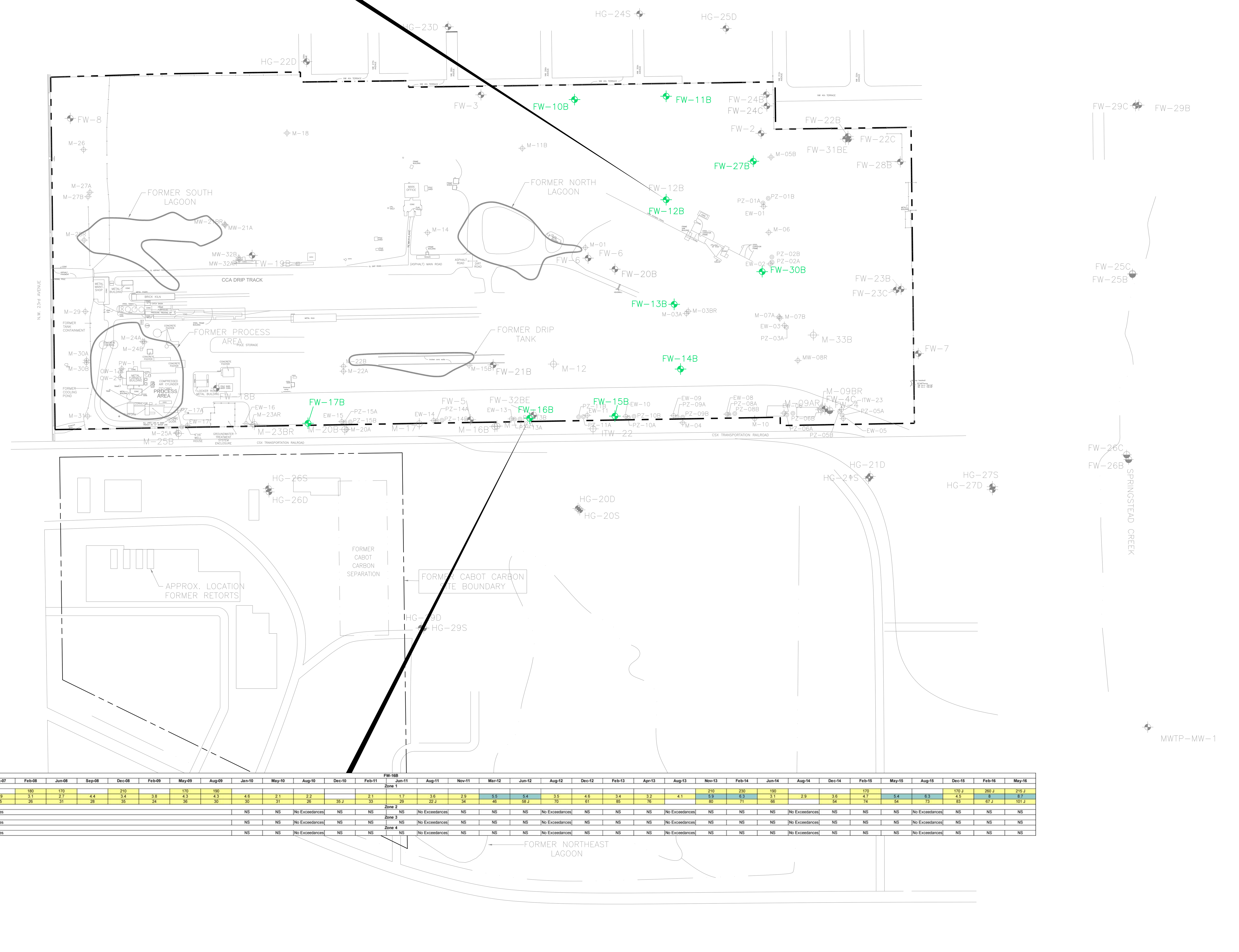
FW-12B (Part 1 of 2)

Constituent / Sample Date	Jan-06	Mar-06	Jul-06	Sep-06	Dec-06	Mar-07	Jun-07	Sep-07	Dec-07	Feb-08	Jul-08	Sep-08	Dec-08	Feb-09	May-09	Aug-09	Jan-10	May-10	Aug-10	Dec-10
Zone 1																				
2-Methylphenol								38												
4-Methylphenol																				3.8 J
Benzene			1.5		1.6	1.6	1.7	2	2		1.3	2.2	2.8	1.5	2.4	2.8	2.9	3.1	2.4	3.5
Naphthalene			49	40	45	44	46	47			48	55	20	65	85	95	76	86	61	110 J
Zone 2																				
Benzene										1.2		1.1	1.3	1.2		1.1				
Naphthalene			15		17	15	16	21	21 B											
Zone 3																				
2-Methylnaphthalene							44	80	50		71	41 J	49	36	44	98	58	75	60	43
Acenaphthene	29	28	52	35	33	35	43	56	54	26	53	46 J	43	64	52	69	54	63	54	57
Benzene	1.7				2.1	3	4	3.4	3.9	2.7	2.7	5.3	4.6	2.3	4	5	5.6	5.2	2.8	5
Carbazole	4.6 J	1.9 J									3.4 J		2.5 J		3.9 J	8.1	9.9	16	18	31
Dibenzofuran			29						29									30	31	42 J
Naphthalene	160	380	500	370	410	540	780	830	550	760	870	770	280	750	950	970	750	870	850	1000 J
Zone 4																				
2-Methylnaphthalene			32	31	33	32	41	47	32		29									32 J
Acenaphthene	40	45	61	55	55	52	60	55	53	29 J	49	45	45	44	44	44	32	39	39	62 J
Benzene	2.2	3.1	4.2		4.1	3.5	3.6	3.1	3.9	2.9	2	2.7	4	1.8	2.8	3.2	3.5	3.3	1.7	3.2 J
Carbazole	16	23	32	34	31	31	32	34	29	13 J	25	20 J	21	20	17	18	15	15	12	6.9
Dibenzofuran				29	33	30	38	35	35		32		33						32	45 J
Naphthalene	280	660	650	630	550	620	780	630	500	240	330	570	430	590	690	680	360	520	490	630 J

FW-12B (Part 2 of 2)

Constituent / Sample Date	Feb-11	Jun-11	Aug-11	Nov-11	Mar-12	Jun-12	Aug-12	Dec-12	Feb-13	Apr-13	Aug-13	Nov-13	Feb-14	Jun-14	Aug-14	Dec-14	Feb-15	May-15	Aug-15	Dec-15	Feb-16	May-16
Zone 1																						
2-Methylphenol												43	49	39	39			41				
4-Methylphenol																						
Benzene	3.3	2.1	2.8	3.1	1.8	2.1	2.1	2	1.9	1.9	3.3	4.2	3.9	1.6	2.3	3.7	2.6	4.1	4	2.7	3.9	4.1
Naphthalene	140	170	120 J	170	18	260	190	300	290	240	73		260	280		210	160	250	140		98.5 J	249
Zone 2																						
Benzene																						
Naphthalene																						
Zone 3																						
2-Methylnaphthalene	70	43	36	47			36		34	39									38	45	42.8 J	88.1
Acenaphthene	72	94	61	65	64	42	60	68	76	69	44	72	39 J	67	59		46	54	60	50	44.7 J	66.6
Benzene	2.7	2.6	3.9	4.5	3.5	3.8	2.9	2.3	2.3	2.6	3.8	3.8	2.1	2.3	2.1	4.8	5.4	6	6	4.9	7	6.7
Carbazole	20 J	24	16	20	15	14	10	17	19	23	11	14	8.8	6.9	3.6 J						3.07 J	6.02
Dibenzofuran	36	44		36	35		31	37	49	48		43	30 J	45	41		29		33			31.1
Naphthalene	1100	1300	830 J	1100	180	610 J	770	700	970	1000	410	820 J	350 J	830	640	710	640	750	740	910	404 J	1300
Zone 4																						
2-Methylnaphthalene																						30.5
Acenaphthene	48	40	36	41	30	38	32	38	42	44	27	63	32	56	40		46		31	26	24.4 J	38.8
Benzene	3.3		2.7	3.1	3.8	2.8	2.1	2	1.7 J	3.1 J	3.3	3.6	3.6	3.8	2.1	3.8	3.7	3.8	4.3	3	4.3	4.1 J
Carbazole																						
Dibenzofuran	33			31					29	32		42		40			30					
Naphthalene	740	710	480 J	740	32	540	440	450	580	640	310	850	420	770	510	630	770	440	370		310 J	673



LEGEND

FW-20B — FLORIDAN WESTBAY MONITORING WELL

SUBJECT SITE PROPERTY LINE (APPROXIMATE)

FORMER CABOT CARBON SITE BOUNDARY

STANDARDS

Constituent	Federal MCL[1] (ug/L)	Florida GCTL[2] (ug/L)
Organic Chemicals		
2,4-Dimethylphenol	-	140
2-Methylnaphthalene	-	28
2-Methylphenol	-	35
3&4-Methylphenol	-	3.5[3]
Acenaphthene	-	20
Acenaphthylene	-	210
Anthracene	-	2100
Benzene	5	1
Carbazole	-	1.8
Dibenzofuran	-	28
Ethylbenzene	700	30
Fluoranthene	-	280
Fluorene	-	280
Naphthalene	-	14
Pentachlorophenol	1	1
Phenanthrene	-	210
Phenol	-	10
Pyrene	-	210
Toluene	10000	40
Xylene (total)	1000	20

0 200 400 FEET

FW-16B (Part 1 of 2)

Constituent / Sample Date	Jan-06	Mar-06	Jun-06	Sep-06	Dec-06	Mar-07	Jun-07	Sep-07	Dec-07	Feb-08	Jun-08	Sep-08	Dec-08	Feb-09	May-09	Aug-09	Jan-10	May-10	Aug-10	Dec-10
Zone 1																				
2,4-Dimethylphenol							160 D			180	170		210		170	190				
Benzene			1.7	2.8	2.5	2.7	2.7	2.9	2.9	3.1	2.7	4.4	3.4	3.8	4.3	4.3	4.6	2.1	2.2	
Naphthalene				15	16	16	28	29	35	26	31	28	35	24	36	30	30	31	26	35 J
Zone 2	No Exceedances																NS	NS	No Exceedances	NS
Zone 3	No Exceedances																NS	NS	No Exceedances	NS
Zone 4	No Exceedances																NS	NS	No Exceedances	NS

FW-16B (Part 2 of 2)

Constituent / Sample Date	Feb-11	Jun-11	Aug-11	Nov-11	Mar-12	Jun-12	Aug-12	Dec-12	Feb-13	Apr-13	Aug-13	Nov-13	Feb-14	Jun-14	Aug-14	Dec-14	Feb-15	May-15	Aug-15	Dec-15	Feb-16	May-16
Zone 1																						
2,4-Dimethylphenol												210	230	190			170			170 J	260 J	215 J
Benzene	2.1	1.7	3.6	2.9	5.5	5.4	3.5	4.6	3.4	3.2	4.1	5.9	6.3	3.1	2.9	3.6	4.7	5.4	6.3	4.5	8	8.7
Naphthalene	33	29	22 J	34	46	58 J	70	61	85	76		80	71	66		54	74	54	73	83	67 J	101 J
Zone 2	NS	NS	No Exceedances	NS	NS	NS	No Exceedances	NS	NS	NS	No Exceedances	NS	NS	NS	No Exceedances	NS	NS	NS	No Exceedances	NS	NS	NS
Zone 3	NS	NS	No Exceedances	NS	NS	NS	No Exceedances	NS	NS	NS	No Exceedances	NS	NS	NS	No Exceedances	NS	NS	NS	No Exceedances	NS	NS	NS
Zone 4	NS	NS	No Exceedances	NS	NS	NS	No Exceedances	NS	NS	NS	No Exceedances	NS	NS	NS	No Exceedances	NS	NS	NS	No Exceedances	NS	NS	NS

BLANK SPACES INDICATE THIS CONSTITUENT DOES NOT EXCEED STANDARDS

REFERENCE: GEOTRANS 2010 FIGURES COMPREHENSIVE GROUNDWATER MONITORING AND SAMPLING PLAN; AUGUST 4, 2010.

J: The quantity is an estimated value.

Concentration exceeds Florida GCTL.
Concentration exceeds Federal MCL.

All results are in the units ug/L.

NS = NOT SAMPLED

(1) FEDERAL MAXIMUM CONTAMINANT LEVELS (MCLS) REPRESENT THE NATIONAL PRIMARTY DRINKING WATER STANDARDS.
(2) FLORIDA GROUNDWATER CLEANUP TARGET LEVELS (GCTLS) ARE GUIDELINES SET FORTH IN 62-777 FLORIDA ADMINISTRATIVE CODE (F.A.C)
(3) 3-METHYLPHENOL AND 4-METHYLPHENOL CANNOT BE QUANTIFIED SEPERATELY USING USEPA SW-846 METHOD 8270C.

REV #	DATE	DESCRIPTION	APPD
△			
△			
△1			

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN: KC	DATE: 08/04/16	FIELD & TECHNICAL SERVICES, LLC 200 THIRD AVENUE CARNEGIE, PA 15106
CHKD: KC	DATE: 08/04/16	
APPD: AMG	DATE: 10/04/16	
SCALE: AS SHOWN		
ISSUE DATE:		

FTS

2016 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

FLORIDAN AQUIFER TRANSECT AREA MONITORING WELLS ORGANIC ANALYTICAL EXCEEDANCES

PROJECT NO: OM045016
DRAWING NUMBER
FIGURE 5

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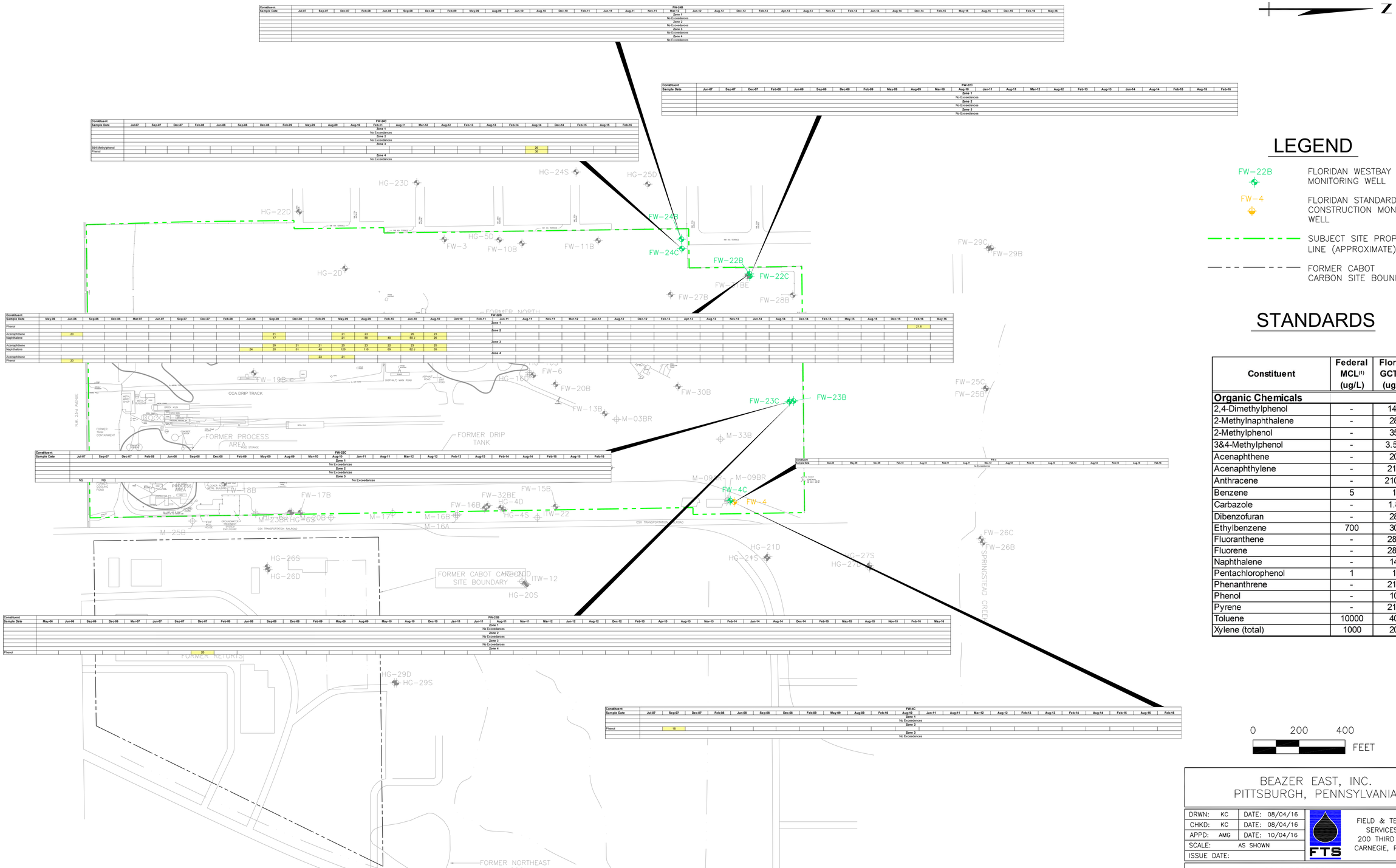

LEGEND

- FW–22B — FLORIDAN WESTBAY MONITORING WELL
- FW–4 — FLORIDAN STANDARD CONSTRUCTION MONITORING WELL
- SUBJECT SITE PROPERTY LINE (APPROXIMATE)
- FORMER CABOT CARBON SITE BOUNDARY

STANDARDS

Constituent	Federal MCL[1] (ug/L)	Florida GCTL[2] (ug/L)
Organic Chemicals		
2,4-Dimethylphenol	-	140
2-Methylnaphthalene	-	28
2-Methylphenol	-	35
3&4-Methylphenol	-	3.5[3]
Acenaphthene	-	20
Acenaphthylene	-	210
Anthracene	-	2100
Benzene	5	1
Carbazole	-	1.8
Dibenzofuran	-	28
Ethylbenzene	700	30
Fluoranthene	-	280
Fluorene	-	280
Naphthalene	-	14
Pentachlorophenol	1	1
Phenanthrene	-	210
Phenol	-	10
Pyrene	-	210
Toluene	10000	40
Xylene (total)	1000	20

0 200 400 FEET

NOTE: BLANK SPACES INDICATE THIS CONSTITUENT DOES NOT EXCEED STANDARDS

REV #	DATE	DESCRIPTION	APPD
1			
2			
3			

REFERENCE: GEOTRANS 2010 FIGURES COMPREHENSIVE GROUNDWATER MONITORING AND SAMPLING PLAN; AUGUST 4, 2010.

Concentration exceeds Florida GCTL.
Concentration exceeds Federal MCL.
All results are in the units ug/L.

(1) FEDERAL MAXIMUM CONTAMINANT LEVELS (MCLS) REPRESENT THE NATIONAL PRIMARY DRINKING WATER STANDARDS.
(2) FLORIDA GROUNDWATER CLEANUP TARGET LEVELS (GCTLS) ARE GUIDELINES SET FORTH IN 62–777 FLORIDA ADMINISTRATIVE CODE (F.A.C)
(3) 3–METHYLPHENOL AND 4–METHYLPHENOL CANNOT BE QUANTIFIED SEPERATELY USING USEPA SW–846 METHOD 8270C.

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN:	KC	DATE: 08/04/16
CHKD:	KC	DATE: 08/04/16
APPD:	AMG	DATE: 10/04/16
SCALE:	AS SHOWN	
ISSUE DATE:		

FTS
FIELD & TECHNICAL SERVICES, LLC
200 THIRD AVENUE
CARNEGIE, PA 15106

2016 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

FLORIDAN AQUIFER BOUNDARY MONITORING WELLS ORGANIC ANALYTICAL EXCEEDANCES

PROJECT NO: 0M045016
DRAWING NUMBER
FIGURE 6

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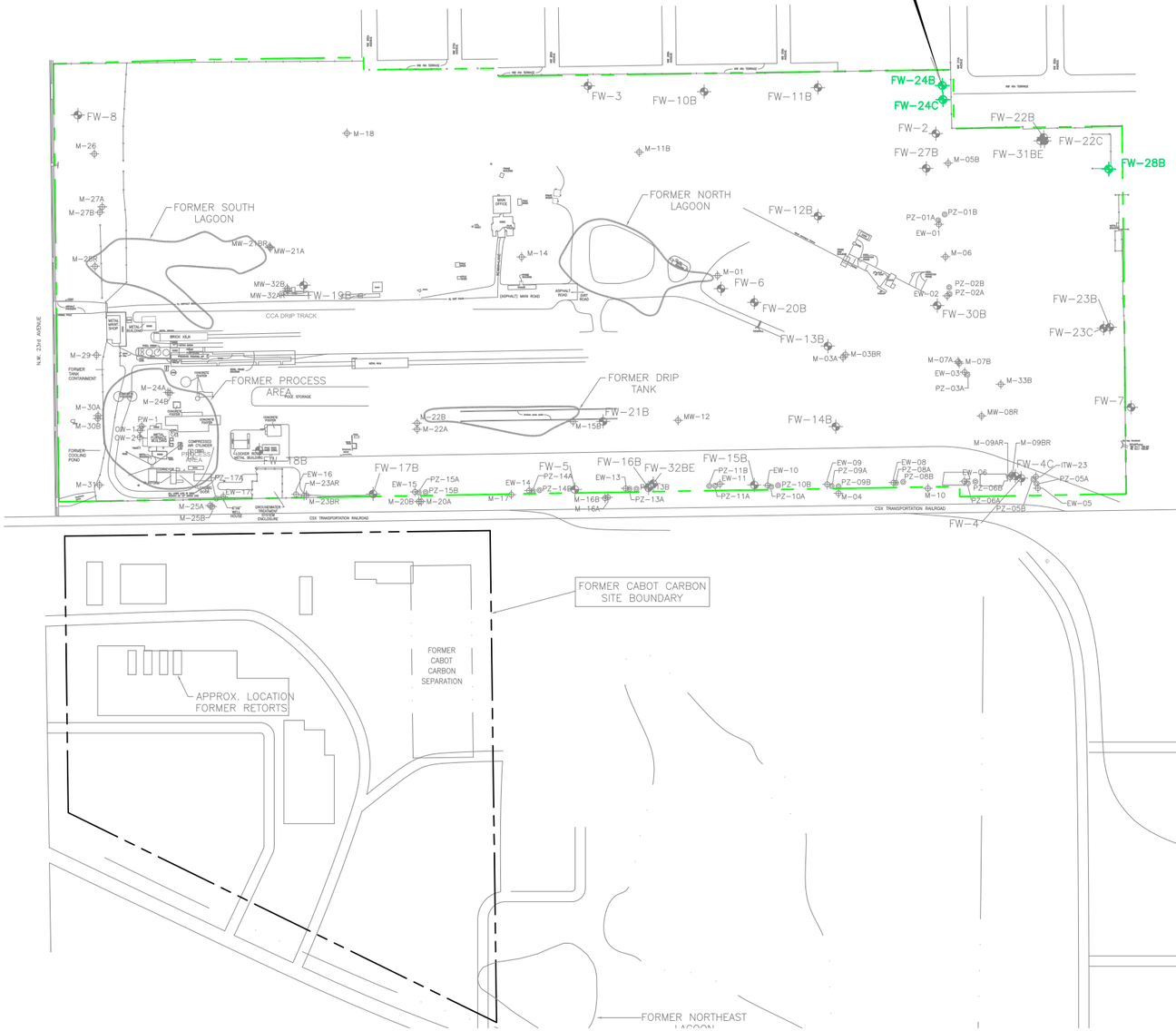
Constituent	FW-24B																																		
Sample Date	Jul-07	Sep-07	Dec-07	Feb-08	Jun-08	Sep-08	Dec-08	Feb-09	May-09	Aug-09	Jun-10	Aug-10	Dec-10	Feb-11	Jun-11	Aug-11	Nov-11	Mar-12	Jun-12	Aug-12	Dec-12	Feb-13	Aug-13	Nov-13	Feb-14	Jun-14	Aug-14	Dec-14	Feb-15	May-15	Aug-15	Dec-15	Feb-16	May-16
Zone 1																																			
Arsenic, (dissolved)	140	78	86	99	107	101	122	105	134	120	165	159	178	166	158	172	207	172	159	162	162	168	124	135	120	51	84	65	59	52	44	40	38	28
Arsenic, (total)											156	162	184	174	174	174	198	185	160	157	180	162	131	138	128	92	88	79	63	48	44	46	43	34
Zone 2																																			
Arsenic, (dissolved)	48	18	58	61	60	75	90	86	92	94	45	27	25	24	15	14	14		12																
Arsenic, (total)											42	26	24	29	16	14	15	11	13	20															
Zone 3																																			
Arsenic, (dissolved)	13																																		
Zone 4																																			
Arsenic, (dissolved)	No Exceedances																																		



LEGEND

- FW-22B — FLORIDAN WESTBAY MONITORING WELL
- SUBJECT SITE PROPERTY LINE (APPROXIMATE)
- FORMER CABOT CARBON SITE BOUNDARY
- NS — NOT SAMPLED

STANDARDS

Constituent	Federal MCL[1] (ug/L)	Florida GCTL[2] (ug/L)
Metals		
Arsenic, dissolved	10	10
Arsenic, total	10	10

0 400 800 FEET

NOTE: BLANK SPACES INDICATE THIS CONSTITUENT DOES NOT EXCEED STANDARDS

REV #	DATE	DESCRIPTION	APPD
3			
2			
1			

REFERENCE: GEOTRANS 2010 FIGURES COMPREHENSIVE GROUNDWATER MONITORING AND SAMPLING PLAN; AUGUST 4, 2010.

Concentration exceeds Florida GCTL.
Concentration exceeds Federal MCL.
All results are in the units ug/L.

(1) FEDERAL MAXIMUM CONTAMINANT LEVELS (MCLS) REPRESENT THE NATIONAL PRIMARTY DRINKING WATER STANDARDS.
(2) FLORIDA GROUNDWATER CLEANUP TARGET LEVELS (GCTLS) ARE GUIDELINES SET FORTH IN 62-777 FLORIDA ADMINISTRATIVE CODE (F.A.C)

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN:	KC	DATE:	08/04/16
CHKD:	KC	DATE:	08/04/16
APPD:	AMG	DATE:	10/04/16
SCALE:	AS SHOWN		
ISSUE DATE:			

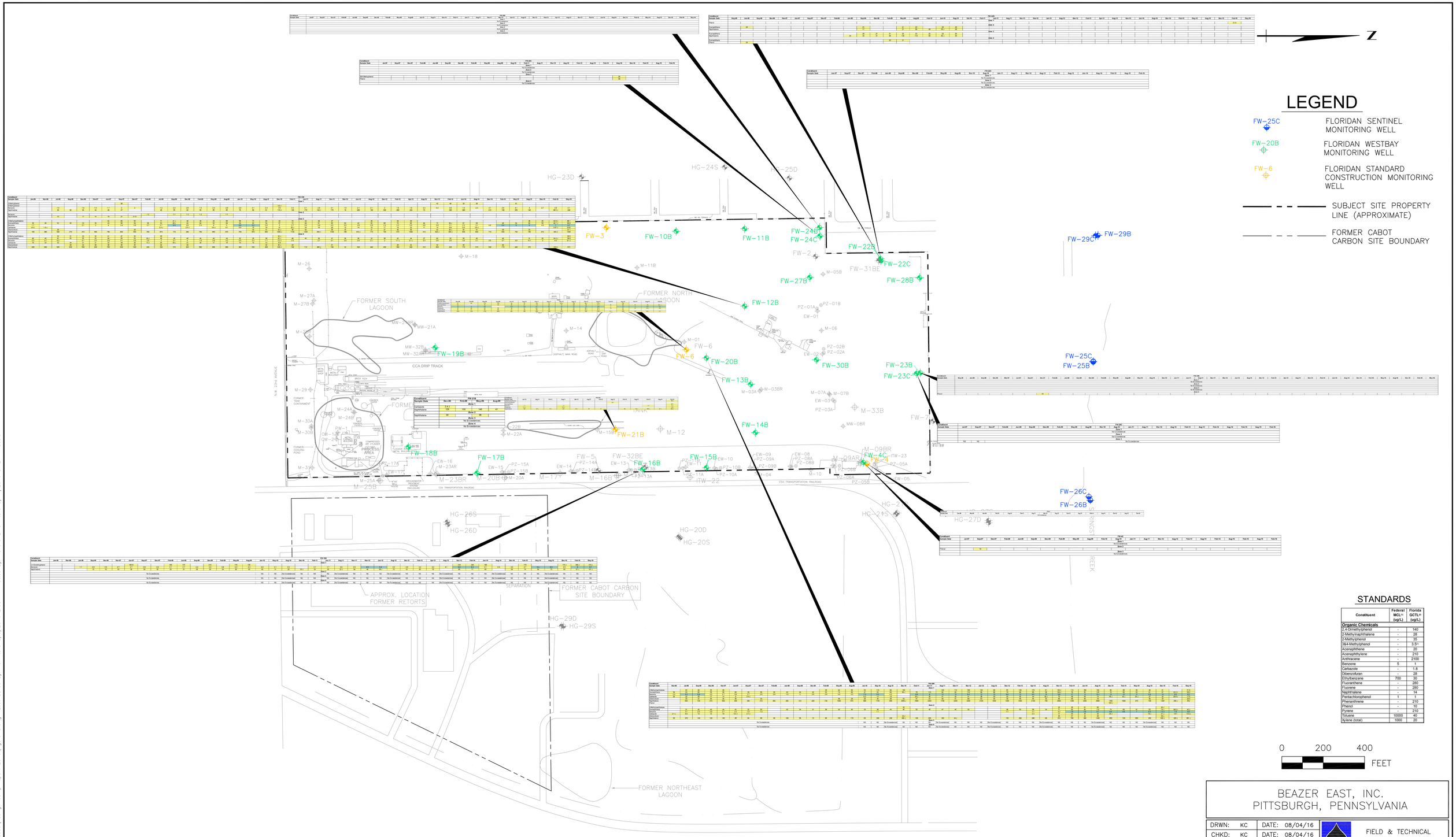
FIELD & TECHNICAL SERVICES, LLC
200 THIRD AVENUE
CARNEGIE, PA 15106

2016 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

FLORIDAN AQUIFER BOUNDARY
MONITORING WELLS
INORGANIC ANALYTICAL EXCEEDANCES

PROJECT NO: 0M045016
DRAWING NUMBER
FIGURE 7

q:\projects\beazer projects\gainesville\cadd\1so gw comp report 2016\figure-7.dwg Last Saved By: Kchintello 8/3/2016 1:46 PM Plotted By: Shelly Comer 9/28/2016 10:39 AM Scale: 1:1



STANDARDS

Constituent	Federal MCL= (ug/L)	Florida GCTL= (ug/L)
Organic Chemicals		
2,4-Dimethylphenol	-	140
2-Methylnaphthalene	-	28
2-Methylphenol	-	35
3&4-Methylphenol	-	3.5(3)
Acenaphthene	-	20
Acenaphthylene	-	210
Anthracene	-	2100
Benzene	5	1
Carbazole	-	1.8
Dibenzofuran	-	28
Ethylbenzene	700	30
Fluoranthene	-	280
Fluorene	-	280
Naphthalene	-	14
Pentachlorophenol	1	1
Phenanthrene	-	210
Phenol	-	10
Pyrene	-	210
Toluene	10000	40
Xylene (total)	1000	20

0 200 400 FEET

BLANK SPACES INDICATE THIS CONSTITUENT DOES NOT EXCEED STANDARDS

REV #	DATE	DESCRIPTION	APPD
1			
2			
3			

REFERENCE: GEOTRANS 2010 FIGURES COMPREHENSIVE GROUNDWATER MONITORING AND SAMPLING PLAN; AUGUST 4, 2010.

J: The quantity is an estimated value.

Concentration exceeds Florida GCTL.

Concentration exceeds Federal MCL.

All results are in the units ug/L.

NS = NOT SAMPLED

(1) FEDERAL MAXIMUM CONTAMINANT LEVELS (MCLS) REPRESENT THE NATIONAL PRIMARTY DRINKING WATER STANDARDS.
(2) FLORIDA GROUNDWATER CLEANUP TARGET LEVELS (GCTLS) ARE GUIDELINES SET FORTH IN 62-777 FLORIDA ADMINISTRATIVE CODE (F.A.C)
(3) 3-METHYLPHENOL AND 4-METHYLPHENOL CANNOT BE QUANTIFIED SEPERATELY USING USEPA SW-846 METHOD 8270C.

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN:	KC	DATE:	08/04/16
CHKD:	KC	DATE:	08/04/16
APPD:	AMG	DATE:	10/04/16
SCALE:	AS SHOWN		
ISSUE DATE:			

FTS
FIELD & TECHNICAL SERVICES, LLC
200 THIRD AVENUE
CARNEGIE, PA 15106

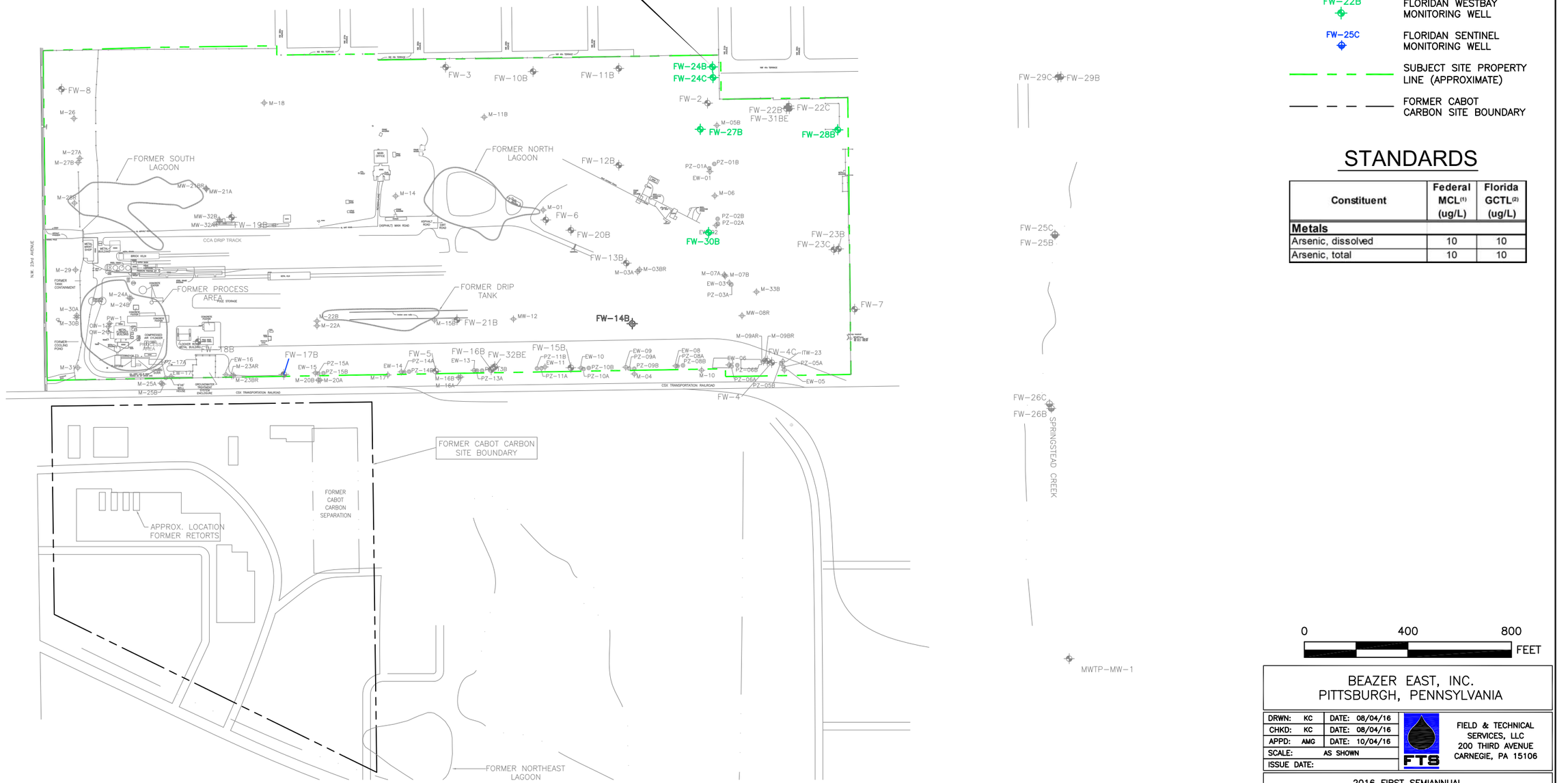
2016 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

SUMMARY OF FLORIDAN WELLS ORGANIC ANALYTICAL EXCEEDANCES

PROJECT NO: 0M045016
DRAWING NUMBER
FIGURE 8

I:\projects\beazer projects\gainesville\cadd\1sa gw comp report 2016\figure-8.dwg Last Saved By: Kchintello 8/3/2016 2:05 PM Plotted By: Kendra L. Chintello 9/14/2016 3:42 PM Scale: 1:1

Constituent / Sample Date	Jul-07	Sep-07	Dec-07	Feb-08	Jun-08	Sep-08	Dec-08	Feb-09	May-09	Aug-09	Jun-10	Aug-10	Dec-10	Feb-11	Jun-11	Aug-11	Nov-11	Mar-12	Jun-12	Aug-12	Dec-12	Feb-13	Aug-13	Nov-13	Feb-14	Jun-14	Aug-14	Dec-14	Feb-15	May-15	Aug-15	Dec-15	Feb-16	May-16
FW-24B																																		
Zone 1																																		
Arsenic, (dissolved)	140	78	86	99	107	101	122	105	134	120	165	159	178	166	158	172	207	172	159	162	162	168	114	135	120	51	84	65	59	52	44	40	38	28
Arsenic, (total)											156	162	184	174	174	174	198	180	160	157	180	162	131	138	129	92	88	79	63	48	44	46	43	34
Zone 2																																		
Arsenic, (dissolved)	48	18	58	61	60	75	90	86	92	94	45	27	25	24	15	14	14		12															
Arsenic, (total)											42	26	24	29	16	14	15	11	13	20														
Zone 3																																		
Arsenic, (dissolved)	13																																	
Zone 4																																		
Arsenic, (dissolved)	No Exceedances																																	



NOTE: BLANK SPACES INDICATE THIS CONSTITUENT DOES NOT EXCEED STANDARDS

REV #	DATE	DESCRIPTION	APPD
3			
2			
1			

REFERENCE: GEOTRANS 2010 FIGURES COMPREHENSIVE GROUNDWATER MONITORING AND SAMPLING PLAN; AUGUST 4, 2010.

Concentration exceeds Florida GCTL.
Concentration exceeds Federal MCL.
All results are in the units ug/L.

(1) FEDERAL MAXIMUM CONTAMINANT LEVELS (MCLS) REPRESENT THE NATIONAL PRIMARTY DRINKING WATER STANDARDS.
(2) FLORIDA GROUNDWATER CLEANUP TARGET LEVELS (GCTLS) ARE GUIDELINES SET FORTH IN 62-777 FLORIDA ADMINISTRATIVE CODE (F.A.C)

N

LEGEND

- FW-22B — FLORIDAN WESTBAY MONITORING WELL
- FW-25C — FLORIDAN SENTINEL MONITORING WELL
- SUBJECT SITE PROPERTY LINE (APPROXIMATE)
- FORMER CABOT CARBON SITE BOUNDARY

STANDARDS

Constituent	Federal MCL[1] (ug/L)	Florida GCTL[2] (ug/L)
Metals		
Arsenic, dissolved	10	10
Arsenic, total	10	10

0 400 800 FEET

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN:	KC	DATE:	08/04/16
CHKD:	KC	DATE:	08/04/16
APPD:	AMG	DATE:	10/04/16
SCALE:	AS SHOWN		
ISSUE DATE:			

FTS
FIELD & TECHNICAL SERVICES, LLC
200 THIRD AVENUE
CARNEGIE, PA 15106

2016 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

SUMMARY OF FLORIDAN WELLS INORGANIC ANALYTICAL EXCEEDANCES

PROJECT NO: 0M045016
DRAWING NUMBER
FIGURE 9

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APPENDIX A

FIELD FORMS

GAUGING SHEET

Project Name: Gainesville 2016 1st Quarter GW Sampling
Client: Beazer East, Inc.
Project Number: OM-0450-16-091
Location: Gainesville

Order	Well	Date	Time	Previous Depth to Ground Water (ft)	Depth to Ground water (ft)	Previous Total Depth (ft)	Total Depth (ft)	Previous Depth to LNAPL (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Previous Depth to DNAPL (ft)	Depth to DNAPL (ft)	DNAPL Thickness (ft)	PID reading (ppm)	Technician	Notes
1	FW-32BE	2/8/16	6:59	143.34	141.73	N/M	N/M	NP	NP	N/A	NP	NP	N/A	0	SC	pumping well
2	EW-2	2/8/16	7:22	4.43	5.95	21.71	21.71	NP	NP	N/A	NP	NP	N/A	0	SC	pumping well
3	EW-1	2/8/16	7:26	5.77	7.67	25.45	25.45	NP	NP	N/A	NP	NP	N/A	0	SC	pumping well
4	FW-4	2/9/16	11:10	125.61	122.95	NM*	NM*	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
5	M-32B	2/8/16	7:43	6.35	8.02	NM*	NM*	NM*	NP	N/A	NM*	NP	N/A	0	SC	
6	HG-23D	2/8/16	8:01	48.81	48.26	NM*	89.36	NM*	NP	N/A	NM*	NP	N/A	0	SC	
7	HG-24S	2/8/16	8:07	7.11	8.66	NM*	71.23	NM*	NP	N/A	NM*	NP	N/A	0	SC	
8	HG-25D	2/8/16	8:19	48.18	47.52	NM*	85.94	NM*	NP	N/A	NM*	NP	N/A	0	SC	
9	HG-27S	2/8/16	9:28	6.66	7.29	NM*	59.84	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
10	HG-27D	2/8/16	9:30	30.29	29.37	NM*	96.40	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
11	HG-22D	2/8/16	9:39	41.81	41.20	NM*	82.64	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
12	HG-5D	2/8/16	9:45	52.67	51.70	NM*	112.68	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
13	EW-10	2/8/16	9:53	2.20	4.63	27.72	27.72	NP	NP	N/A	NP	NP	N/A	0.0	SC	pumping well
14	HG-20D	2/8/16	10:07	35.38	34.43	NM*	84.30	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
15	HG-21S	2/8/16	11:01	7.28	7.93	NM*	41.10	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
16	EW-3	2/8/16	11:13	3.94	5.89	23.82	23.83	NP	NP	N/A	NP	NP	N/A	0.0	SC	pumping well
17	EW-8	2/8/16	11:40	1.32	3.05	25.99	26.00	NP	NP	N/A	NP	NP	N/A	0.0	SC	pumping well
18	EW-9	2/8/16	11:43	2.53	3.83	30.90	30.92	NP	NP	N/A	NP	NP	N/A	0.0	SC	pumping well
19	EW-11	2/8/16	11:45	3.04	27.40	30.37	30.33	NP	NP	N/A	NP	NP	N/A	0.0	SC	pumping well

Notes:
N/A = not available
ND = not determined
NP = no product
NM = not measured
NM*=To be measure after sampling

Print Date: 2/15/2016
Print Time: 9:33:32AM

GAUGING SHEET

Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Client: Beazer East, Inc.
Location: Gainesville

Order	Well	Date	Time	Previous Depth to Ground Water (ft)	Depth to Ground water (ft)	Previous Total Depth (ft)	Total Depth (ft)	Previous Depth to LNAPL (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Previous Depth to DNAPL (ft)	Depth to DNAPL (ft)	DNAPL Thickness (ft)	PID reading (ppm)	Technician	Notes
20	EW-5	2/8/16	11:50	6.40	8.36	26.00	26.01	NP	NP	N/A	NP	NP	N/A	0.0	SC	pumping well
21	HG-35S	2/8/16	12:03	10.91	12.95	NM*	71.11	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
22	FW-21B	2/8/16	12:11	N/M	N/M	N/M	N/M	N/M	N/M	N/M	N/M	N/M	N/M	N/M	SC	Pumping Well
23	M-3BR	2/8/16	12:15	4.82	5.27	NM*	NM*	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
24	FW-31BE	2/8/16	12:19	N/M	N/M	N/M	N/M	N/M	N/M	N/M	N/M	N/M	N/M	N/M	SC	Pumping Well
25	EW-6	2/8/16	12:22	3.47	5.50	29.22	29.22	NP	NP	N/A	NP	NP	N/A	0.0	SC	pumping well
26	HG-20S	2/8/16	12:29	4.04	4.02	NM*	39.80	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
27	FW-6	2/8/16	12:34	N/M	N/M	N/M	N/M	N/M	N/M	N/M	N/M	N/M	N/M	N/M	SC	Pumping Well
28	HG-6S	2/8/16	12:37	10.16	11.46	NM*	52.57	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
29	EW-15	2/8/16	12:39	12.01	10.46	27.60	27.60	NP	NP	N/A	NP	NP	N/A	0.0	SC	pumping well
30	EW-14	2/8/16	12:41	9.93	8.76	27.78	27.75	NP	NP	N/A	NP	NP	N/A	0.0	SC	pumping well
31	M-37B	2/8/16	12:45	9.36	10.38	NM*	26.61	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
32	HG-2D	2/8/16	12:49	50.81	50.11	NM*	112.85	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
33	EW-16	2/8/16	12:53	8.95	11.33	22.98	22.97	NP	NP	N/A	NP	NP	N/A	0.0	SC	
34	EW-13	2/8/16	12:54	6.61	8.85	27.51	27.48	NP	NP	N/A	NP	NP	N/A	0.0	SC	
35	HG-26D	2/8/16	13:01	36.52	36.82	NM*	NM*	NP	NP	N/A	NP	NP	N/A	0.0	SC	
36	HG-4D	2/8/16	13:12	40.28	39.48	NM*	107.84	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
37	M-12	2/8/16	13:19	4.61	5.94	NM*	NM*	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
38	HG-26S	2/8/16	13:25	10.21	10.45	NM*	NM*	NP	NP	N/A	NP	NP	N/A	0.0	SC	

Notes:
N/A = not available
ND = not determined
NP = no product
NM = not measured
NM*=To be measure after sampling

Print Date: 2/23/2016
Print Time: 2:19:52PM

GAUGING SHEET

Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Client: Beazer East, Inc.
Location: Gainesville

Order	Well	Date	Time	Previous Depth to Ground Water (ft)	Depth to Ground water (ft)	Previous Total Depth (ft)	Total Depth (ft)	Previous Depth to LNAPL (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Previous Depth to DNAPL (ft)	Depth to DNAPL (ft)	DNAPL Thickness (ft)	PID reading (ppm)	Technician	Notes
39	M-34B	2/8/16	13:29	7.35	10.07	NM*	25.21	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
40	M-25B	2/8/16	13:35	10.73	9.40	NM*	NM*	NP	NP	N/A	NP	NP	N/A	0.0	SC	
41	HG-21D	2/8/16	13:40	34.28	33.37	NM*	94.96	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
42	HG-12D	2/8/16	13:52	41.99	42.14	NM*	NM*	NP	NP	N/A	NP	NP	N/A	0.0	SC	
43	HG-34S	2/8/16	13:58	11.79	11.93	NM*	NM*	NP	NP	N/A	NP	NP	N/A	0.0	SC	
44	M-36B	2/8/16	14:05	10.47	10.30	NM*	25.73	NP	NP	N/A	NP	NP	N/A	0.0	SC	
45	NORTH LAGOON DRAIN	2/8/16	14:12	8.53	8.90	18.30	18.32	NP	NP	N/A	NP	NP	N/A	0.0	SC	pumping well
46	HG-33S	2/8/16	14:24	11.51	11.66	NM*	NM*	NP	NP	N/A	NP	NP	N/A	0.0	SC	
47	EW-17	2/8/16	14:32	13.63	23.82	26.63	26.61	NP	NP	N/A	NP	NP	N/A	0.0	SC	pumping well
48	DRIP TRACK DRAIN	2/8/16	14:40	5.88	7.97	18.68	18.68	NP	NP	N/A	NP	NP	N/A	0.0	SC	pumping well
49	HG-31S	2/8/16	14:49	8.66	11.25	NM*	58.26	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
50	SOUTH LAGOON DRAIN	2/8/16	14:55	4.88	6.47	17.69	17.68	NP	NP	N/A	NP	NP	N/A	0.0	SC	pumping well
51	HG-6D	2/8/16	15:02	37.61	37.89	NM*	NM*	NP	NP	N/A	NP	NP	N/A	0.0	SC	
52	PROCESS AREA DRAIN	2/8/16	15:10	4.75	8.17	17.75	17.77	NP	NP	N/A	NP	NP	N/A	0.0	SC	pumping well
53	HG-4S	2/8/16	14:15	6.84	7.89	NM*	52.58	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
54	M-35B	2/8/16	14:19	8.58	10.43	NM*	26.34	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
55	HG-32S	2/8/16	14:21	9.71	12.35	NM*	58.20	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
56	HG-29D	2/8/16	15:36	38.69	38.30	NM*	96.74	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	

Notes:
N/A = not available
ND = not determined
NP = no product
NM = not measured
NM*=To be measure after sampling

Print Date: 2/15/2016
Print Time: 9:33:32AM

GAUGING SHEET

Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Client: Beazer East, Inc.
Location: Gainesville

Order	Well	Date	Time	Previous Depth to Ground Water (ft)	Depth to Ground water (ft)	Previous Total Depth (ft)	Total Depth (ft)	Previous Depth to LNAPL (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Previous Depth to DNAPL (ft)	Depth to DNAPL (ft)	DNAPL Thickness (ft)	PID reading (ppm)	Technician	Notes
57	HG-29S	2/8/16	15:45	20.15	12.78	NM*	54.80	NM*	NP	N/A	NM*	NP	N/A	0.0	SC	
58	M-25A	2/8/16	16:00	10.29	9.89	NM*	NM*	NP	NP	N/A	NP	NP	N/A	0.0	SC	
59	HG-16D	2/8/16	16:11	42.18	42.39	NM*	117.49	NP	NP	N/A	Trace	Trace	Trace	2.1	SC	

Notes:
N/A = not available
ND = not determined
NP = no product
NM = not measured
NM*=To be measure after sampling

Print Date: 2/15/2016
Print Time: 9:33:32AM

WELL INSPECTION REPORT

Project No.: OM-0450-16-091
Project Name: Gainesville 2016 1st Quarter GW Sam
Location: Gainesville

Well	Date	Well Type	Well Outer Casing			Well Inner Casing			Well Pad Condition	Vegetation/ Accessibility	Potential Hazard	Well Head Locked & Secure @ Departure	Photo	Technician	Notes
			Label	Lock	Condition	Survey Mark Present	Cap	Condition							
FW-32BE	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	True	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
EW-2	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	True	Not Applicable	Good	Good	Clear		YES	No	SC	Well not pumping.
EW-1	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	True	Not Applicable	Good	Good	Clear		True	No	SC	
FW-4	2/9/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
M-32B	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-23D	2/8/16	Flush Mount	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-24S	2/8/16	Flush Mount	YES	Yes - Secure on Arrival	Good	True	Yes - Secure on Arrival	Issue noted see comment	Requires Attention	Clear		YES	No	SC	Well pad cracked.
HG-25D	2/8/16	Flush Mount	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-27S	2/8/16	Flush Mount	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-27D	2/8/16	Flush Mount	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-22D	2/8/16	Flush Mount	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-5D	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
EW-10	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-20D	2/8/16	Flush Mount	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-21S	2/8/16	Flush Mount	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
EW-3	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
EW-8	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
EW-9	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	

Notes:
N/A = not available
ND = not determined
NP = no Product

Print Date: 2/15/2016
Print Time: 9:44:33AM

WELL INSPECTION REPORT

Project No.: OM-0450-16-091
Project Name: Gainesville 2016 1st Quarter GW Sam
Location: Gainesville

Well	Date	Well Type	Well Outer Casing			Well Inner Casing			Well Pad Condition	Vegetation/ Accessibility	Potential Hazard	Well Head Locked & Secure @ Departure	Photo	Technician	Notes
			Label	Lock	Condition	Survey Mark Present	Cap	Condition							
EW-11	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
EW-5	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-35S	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
FW-21B	2/8/16	Pumping Well	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
M-3BR	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
FW-31BE	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
EW-6	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-20S	2/8/16	Flush Mount	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
FW-6	2/8/16	Pumping Well	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-6S	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
EW-15	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
EW-14	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
M-37B	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-2D	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
EW-16	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
EW-13	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-26D	2/8/16	Flush Mount	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-4D	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	

Notes:
N/A = not available
ND = not determined
NP = no Product

Print Date: 2/15/2016
Print Time: 9:44:33AM

WELL INSPECTION REPORT

Project No.: OM-0450-16-091
Project Name: Gainesville 2016 1st Quarter GW Sam
Location: Gainesville

Well	Date	Well Type	Well Outer Casing			Well Inner Casing			Well Pad Condition	Vegetation/ Accessibility	Potential Hazard	Well Head Locked & Secure @ Departure	Photo	Technician	Notes
			Label	Lock	Condition	Survey Mark Present	Cap	Condition							
M-12	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-26S	2/8/16	Flush Mount	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
M-34B	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
M-25B	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-21D	2/8/16	Flush Mount	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-12D	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-34S	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
M-36B	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
NORTH LAG	2/8/16	Drain	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-33S	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
EW-17	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
DRIP TRACK	2/8/16	Drain	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-31S	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
SOUTH LAG	2/8/16	Drain	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-6D	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
PROCESS A	2/8/16	Drain	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-4S	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
M-35B	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	

Notes:
N/A = not available
ND = not determined
NP = no Product

Print Date: 2/15/2016
Print Time: 9:44:33AM

WELL INSPECTION REPORT

Project No.: OM-0450-16-091
Project Name: Gainesville 2016 1st Quarter GW Sam
Location: Gainesville

Well	Date	Well Type	Well Outer Casing			Well Inner Casing			Well Pad Condition	Vegetation/ Accessibility	Potential Hazard	Well Head Locked & Secure @ Departure	Photo	Technician	Notes
			Label	Lock	Condition	Survey Mark Present	Cap	Condition							
HG-32S	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-29D	2/8/16	Flush Mount	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-29S	2/8/16	Flush Mount	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
M-25A	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	
HG-16D	2/8/16	Stick up	YES	Yes - Secure on Arrival	Good	YES	Yes - Secure on Arrival	Good	Good	Clear		YES	No	SC	

Notes:
N/A = not available
ND = not determined
NP = no Product

Print Date: 2/15/2016
Print Time: 9:44:33AM

GRAB GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-21B

Client:	Beazer East, Inc.	Sample Location:	FW-21B
Project Name:	Gainesville 2016 1st Quarter GW Sampling	Sampling Technician:	Tim Kennelly
Project Number:	OM-0450-16-091	Date:	02/09/2016 1230
Location:	Gainesville	Weather Conditions:	Sunny 50s

1. Sample Location Information: Pumping Well

2. Sample Collection Method: Direct Fill from Spigot

Field Testing Equipment	Calibrated
LaMotte 2020we Turbidmeter 5271-0515	Yes
YSI 556 MPS 10K101399	Yes

Sampling Equipment	Dedicated
N/A	No

3. Purge Data

Reading #	Volume (Gal)	Temp (Degrees C)	pH (s.u.)	Spec. Cond. (ms/cm)	Turbidity (NTU)	Notes
1	3.00	19.95	7.42	0.481	3.66	

4. Sample Collection Data

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-21B-020916
Blind Duplicate :GAIN-FW-99A-020916

Sample Start time: 02/09/2016 1235

Sample Finish time: 02/09/2016 1256

Comments:

Print Date: 2/15/2016
Print Time: 9:49:51AM

GRAB GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-6

Client:	Beazer East, Inc.	Sample Location:	FW-6
Project Name:	Gainesville 2016 1st Quarter GW Sampling	Sampling Technician:	Tim Kennelly
Project Number:	OM-0450-16-091	Date:	02/09/2016 1437
Location:	Gainesville	Weather Conditions:	Sunny 50s

1. Sample Location Information: Pumping Well

2. Sample Collection Method: Direct Fill from Spigot

Field Testing Equipment	Calibrated
LaMotte 2020we Turbidmeter 5271-0515	Yes
YSI 556 MPS 10K101399	No

Sampling Equipment	Dedicated
N/A	No

3. Purge Data

Reading #	Volume (Gal)	Temp (Degrees C)	pH (s.u.)	Spec. Cond. (ms/cm)	Turbidity (NTU)	Notes
1	3.25	23.29	7.49	0.400	2.11	

4. Sample Collection Data

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-6-020916
MS/MSD Blank :GAIN-MS/MSD-FW-6-020916
Blind Duplicate :GAIN-FW-99B-020916

Sample Start time: 02/09/2016 1440
Sample Finish time: 02/09/2016 1516

Comments:

Print Date: 2/15/2016
Print Time: 9:49:51AM

WELL No.: FW-4

LOW-FLOW GROUNDWATER SAMPLE COLLECTION RECORD

Client:	Beazer East, Inc.	**Well ID:**	FW-4
Project Name:	Gainesville 2016 1st Quarter GW Sampling	**Date:**	02/10/2016 0900
Project Number:	OM-0450-16-091	**Technician:**	Brendan Rick
Location:	Gainesville	**Weather Conditions:**	clear 40

WATER LEVEL DATA

a.) Depth To Groundwater:	123.24	(ft)	e.) Depth to LNAPL:	NP	(ft)
b.) Total Well Depth:	159.94	(ft)	f.) Depth to DNAPL:	NP	(ft)
c.) Length of Water Column:	N/A	(ft)	g.) LNAPL Thickness:	N/A	(ft)
d.) Well Volume:	N/A	(gal)	h.) DNAPL Thickness:	N/A	(ft)

WATER PURGE DATA

Purge Method: Non-Dedicated Bladder Pump

Purge Start: 02/10/2016 0946

Conductivity Unit: ms/cm

Purge End: 02/10/2016 1016

Total Volume Removed (gals): 0.79

Field Equipment	Calibrated
YSI 556 MPS 05M1500AD	Yes
LaMotte 2020e 457-5010	Yes
Heron Dipper T Water Level Meter 200' 1310-T	No

Sampling Equipment	Dedicated
QED Bladder Pump System - Controller 11483	No
QED Bladder Pump System - Compressor S/N 21575	No
Geotech Bladder Pump 165	No

PRE-PURGE VALUES

Reading #	Time	Purge Rate ml/minute	Temp (degrees C)	pH (s.u.)	Specific Conductivity (ms/cm)	Eh/ORP (mV)	Dissolved O2 (mg/l)	Turbidity (NTU)	Water Level (ft)	Notes
			Constant	+- 0.20	+- 3.000 %	+- 10	+- 10 %	< 10		
Initial	0946	100	10.10	7.52	0.288	120.7	2.42	2.84	123.32	

PURGE VALUES

Reading #	Time	Purge Rate ml/minute	Temp (degrees C)	pH (s.u.)	Specific Conductivity (ms/cm)	Eh/ORP (mV)	Dissolved O2 (mg/l)	Turbidity (NTU)	Water Level (ft)	Notes
			Constant	+- 0.20	+- 3.000 %	+- 10	+- 10 %	< 10		
1	0951	100	10.93	7.59	0.289	101.5	1.86	2.46	123.34	
2	0956	100	11.69	7.59	0.294	74.2	1.59	2.21	123.34	
3	1001	100	11.72	7.59	0.296	57.3	1.42	2.35	123.34	
4	1006	100	11.71	7.59	0.297	35.7	1.43	2.28	123.34	
5	1011	100	11.73	7.59	0.298	28.6	1.40	2.33	123.34	
6	1016	100	11.74	7.58	0.299	26.9	1.38	2.27	123.34	

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)
Normal Sample :GAIN-FW-4-021016
Trip Blank :GAIN-TB-01-021016
Field Blank :GAIN-FB-03-021016
Equipment Blank :GAIN-EB-03-021016

Sample Start time: 02/10/2016 1021

Sample Finish time: 02/10/2016 1049

Comments: Pump Settings: Discharge: 10 Refill: 26 PSI: 85

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-12B-01

Client:	Beazer East, Inc.	**Well ID:**	FW-12B-01
Project Name:	Gainesville 2016 1st Quarter GW Sampling	**Date:**	02/11/2016 0914
Project Number:	OM-0450-16-091	**Technician:**	Brendan Rick
Location:	Gainesville	**Weather Condition:**	Clear 43

Sampling Equipment	Dedicated
MOSDAX 2743	NO
Westbay 4071	NO

Sampling Start Time: 02/11/2016 0922
Sampling End Time: 02/11/2016 1012
Ambient Barometric: 14.64

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	156.0	16.62	☑	25.27	☑	25.27	☑	☑	16.61	4
2	☑	☑	☑	☑	☑	☑	155.9	16.62	☑	25.27	☑	25.27	☑	☑	16.60	4
3	☑	☑	☑	☑	☑	☑	155.9	16.60	☑	25.27	☑	25.27	☑	☑	16.59	3

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-12B-01-021116

Print Date: 2/15/2016
Print Time: 11:03:36AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-12B-02

Client:	Beazer East, Inc.	**Well ID:**	FW-12B-02
Project Name:	Gainesville 2016 1st Quarter GW Sampling	**Date:**	02/11/2016 0829
Project Number:	OM-0450-16-091	**Technician:**	Brendan Rick
Location:	Gainesville	**Weather Condition:**	sunny 35

Sampling Equipment	Dedicated
Westbay 4071	NO
MOSDAX MAGI 2743	NO

Sampling Start Time: 02/11/2016 0832
Sampling End Time: 02/11/2016 0913
Ambient Barometric: 14.61

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	175.9	25.36	☑	33.90	☑	33.90	☑	☑	25.36	4
2	☑	☑	☑	☑	☑	☑	175.9	25.35	☑	33.90	☑	33.90	☑	☑	25.35	4
3	☑	☑	☑	☑	☑	☑	175.9	24.85	☑	33.90	☑	33.90	☑	☑	24.80	3

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-12B-02-021116

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-12B-03

Client:	Beazer East, Inc.	**Well ID:**	FW-12B-03
Project Name:	Gainesville 2016 1st Quarter GW Sampling	**Date:**	02/11/2016 1014
Project Number:	OM-0450-16-091	**Technician:**	Brendan Rick
Location:	Gainesville	**Weather Condition:**	Clear 50

Sampling Equipment	Dedicated
Westbay 4071	NO
MOSDAX 2743	NO

Sampling Start Time: 02/11/2016 1023
Sampling End Time: 02/11/2016 1052
Ambient Barometric: 14.64

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	195.7	34.65	☑	42.58	☑	42.58	☑	☑	34.65	5
2	☑	☑	☑	☑	☑	☑	195.7	34.65	☑	42.58	☑	42.60	☑	☑	34.65	5

SAMPLE COLLECTION INFORMATION

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-12B-03-021116

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-12B-04

Client: Beazer East, Inc.
Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville
Weather Condition: Clear 55

Well ID: FW-12B-04
Date: 02/11/2016 1054
Technician: Brendan Rick

Sampling Equipment	Dedicated
Wesrbay 4071	NO
MOSDAX 2743	NO

Sampling Start Time: 02/11/2016 1103
Sampling End Time: 02/11/2016 1132
Ambient Barometric: 14.65

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressur e (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	215.5	43.35	☑	51.23	☑	51.23	☑	☑	43.32	5
2	☑	☑	☑	☑	☑	☑	215.5	43.34	☑	51.23	☑	51.23	☑	☑	43.33	5

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-12B-04-021116

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-16B-01

Client:	Beazer East, Inc.	**Well ID:**	FW-16B-01
Project Name:	Gainesville 2016 1st Quarter GW Sampling	**Date:**	02/11/2016 0902
Project Number:	OM-0450-16-091	**Technician:**	Nathan Bachik
Location:	Gainesville	**Weather Condition:**	40, Sunny

Sampling Equipment	Dedicated
WESTBAY 3535	NO
MOSDAX MGI4129	NO

Sampling Start Time: 02/11/2016 0905
Sampling End Time: 02/11/2016 0933
Ambient Barometric: 14.68

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	164.1	22.67	☑	30.38	☑	30.38	☑	☑	22.66	5
2	☑	☑	☑	☑	☑	☑	164.0	22.63	☑	30.36	☑	30.36	☑	☑	22.66	5

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-16B-01-021116

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-20B-01

Client: Beazer East, Inc.
Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville
Weather Condition: Sunny 66 breezy

Well ID: FW-20B-01
Date: 02/11/2016 1436
Technician: Brendan Rick

Sampling Equipment	Dedicated
Mosdax 2743	NO
Westbay 4071	NO

Sampling Start Time: 02/11/2016 1440
Sampling End Time: 02/11/2016 1523
Ambient Barometric: 14.55

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	156.8	19.85	☑	26.13	☑	26.13	☑	☑	19.83	5
2	☑	☑	☑	☑	☑	☑	156.8	19.83	☑	26.13	☑	26.13	☑	☑	19.79	5

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-20B-01-021116

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-20B-02

Client:	Beazer East, Inc.	**Well ID:**	FW-20B-02
Project Name:	Gainesville 2016 1st Quarter GW Sampling	**Date:**	02/11/2016 1359
Project Number:	OM-0450-16-091	**Technician:**	Brendan Rick
Location:	Gainesville	**Weather Condition:**	Sunny 65 breezy

Sampling Equipment	Dedicated
MOSDAX MAGI 2743	NO
WESTBAY 4071	NO

Sampling Start Time: 02/11/2016 1408
Sampling End Time: 02/11/2016 1433
Ambient Barometric: 14.64

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressur e (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	176.5	28.52	☑	34.73	☑	34.73	☑	☑	28.51	5
2	☑	☑	☑	☑	☑	☑	176.5	28.51	☑	34.73	☑	34.73	☑	☑	28.50	5

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-20B-02-021116

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-22B-01

Client: Beazer East, Inc.
Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville
Weather Condition: Clear 32

Well ID: FW-22B-01
Date: 02/09/2016 0726
Technician: Steven Clark

Sampling Equipment	Dedicated
Westbay 3535	NO
MAGI 4129	NO

Sampling Start Time: 02/09/2016 0737
Sampling End Time: 02/09/2016 0813
Ambient Barometric: 14.61

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	155.2	23.57	☑	26.09	☑	26.09	☑	☑	23.57	4
2	☑	☑	☑	☑	☑	☑	155.4	23.55	☑	26.09	☑	26.09	☑	☑	23.54	4
3	☑	☑	☑	☑	☑	☑	155.3	23.54	☑	26.09	☑	26.09	☑	☑	23.55	2

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-22B-01-020916
Trip Blank :GAIN-TB-02-020916

Print Date: 2/15/2016
Print Time: 11:03:51AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-22B-02

Client: Beazer East, Inc.
Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville
Weather Condition: 42 Clear

Well ID: FW-22B-02
Date: 02/09/2016 0815
Technician: Steven Clark

Sampling Equipment	Dedicated
Westbay 3535	NO
MOSDAX 4129	NO

Sampling Start Time: 02/09/2016 0824
Sampling End Time: 02/09/2016 0856
Ambient Barometric: 14.61

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressur e (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	175.2	32.19	☑	34.73	☑	34.73	☑	☑	32.18	4
2	☑	☑	☑	☑	☑	☑	175.1	32.18	☑	34.73	☑	34.73	☑	☑	32.18	4
3	☑	☑	☑	☑	☑	☑	175.2	30.71	☑	34.73	☑	34.73	☑	☑	30.70	1

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-22B-02-020916

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-22B-03

Client:	Beazer East, Inc.	**Well ID:**	FW-22B-03
Project Name:	Gainesville 2016 1st Quarter GW Sampling	**Date:**	02/09/2016 0901
Project Number:	OM-0450-16-091	**Technician:**	Steven Clark
Location:	Gainesville	**Weather Condition:**	43 Clear

Sampling Equipment	Dedicated
Westbay 3535	NO
MOSDAX 4129	NO

Sampling Start Time: 02/09/2016 0905
Sampling End Time: 02/09/2016 0937
Ambient Barometric: 14.61

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure in MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressur e (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	194.9	40.76	☑	43.37	☑	43.37	☑	☑	40.76	4
2	☑	☑	☑	☑	☑	☑	194.9	40.76	☑	43.37	☑	43.37	☑	☑	40.76	4
3	☑	☑	☑	☑	☑	☑	194.8	39.78	☑	43.37	☑	43.36	☑	☑	39.78	4

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-22B-03-020916

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-22B-04

Client: Beazer East, Inc.
Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville
Weather Condition: 46 Clear

Well ID: FW-22B-04
Date: 02/09/2016 0941
Technician: Steven Clark

Sampling Equipment	Dedicated
Westbay 3535	NO
MOSDAX 4129	NO

Sampling Start Time: 02/09/2016 0953
Sampling End Time: 02/09/2016 1022
Ambient Barometric: 14.60

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	209.3	47.25	☑	49.80	☑	49.80	☑	☑	47.25	4
2	☑	☑	☑	☑	☑	☑	209.2	47.23	☑	49.80	☑	49.80	☑	☑	47.23	4
3	☑	☑	☑	☑	☑	☑	209.6	46.24	☑	49.80	☑	49.80	☑	☑	46.23	4

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-22B-04-020916

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-22C-01

Client:	Beazer East, Inc.	**Well ID:**	FW-22C-01
Project Name:	Gainesville 2016 1st Quarter GW Sampling	**Date:**	02/10/2016 0840
Project Number:	OM-0450-16-091	**Technician:**	Nathan Bachik
Location:	Gainesville	**Weather Condition:**	39 Clear

Sampling Equipment	Dedicated
MOSDAX MGI 4129	NO
WESTBAY 3535	NO

Sampling Start Time: 02/10/2016 0845
Sampling End Time: 02/10/2016 0904
Ambient Barometric: 14.66

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressur e (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	322.3	96.34	☑	98.68	☑	98.68	☑	☑	96.34	4
2	☑	☑	☑	☑	☑	☑	322.3	96.30	☑	98.68	☑	98.68	☑	☑	96.30	4

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-22C-01-021016

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-22C-02

Client:	Beazer East, Inc.	**Well ID:**	FW-22C-02
Project Name:	Gainesville 2016 1st Quarter GW Sampling	**Date:**	02/10/2016 0809
Project Number:	OM-0450-16-091	**Technician:**	Nathan Bachik
Location:	Gainesville	**Weather Condition:**	35, Sunny

Sampling Equipment	Dedicated
WESTBAY 3535	NO
MOSDAX MGI4129	NO

Sampling Start Time: 02/10/2016 0816
Sampling End Time: 02/10/2016 0838
Ambient Barometric: 14.66

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	350.1	108.51	☑	110.74	☑	110.74	☑	☑	108.51	4
2	☑	☑	☑	☑	☑	☑	350.0	108.49	☑	110.74	☑	110.74	☑	☑	108.48	4

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-22C-02-021016

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-22C-03

Client: Beazer East, Inc.
Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville
Weather Condition: 35, Sunny

Well ID: FW-22C-03
Date: 02/10/2016 0904
Technician: Nathan Bachik

Sampling Equipment	Dedicated
MOSDAX MGI4129	NO
WESTBAY 3535	NO

Sampling Start Time: 02/10/2016 0910
Sampling End Time: 02/10/2016 0932
Ambient Barometric: 14.66

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressur e (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	364.8	114.88	☑	117.22	☑	117.22	☑	☑	114.88	4
2	☑	☑	☑	☑	☑	☑	364.7	114.86	☑	117.22	☑	117.22	☑	☑	114.86	4

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-22C-03-021016

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-23B-01

Client: Beazer East, Inc.
Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville
Weather Condition: 60, Sunny

Well ID: FW-23B-01
Date: 02/08/2016 1232
Technician: Nathan Bachik

Sampling Equipment	Dedicated
WESTBAY 4071	NO
MOSDAX MGI2743	NO

Sampling Start Time: 02/08/2016 1239
Sampling End Time: 02/08/2016 1312
Ambient Barometric: 14.48

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	151.8	19.25	☑	28.50	☑	28.50	☑	☑	19.25	4
2	☑	☑	☑	☑	☑	☑	151.9	19.21	☑	28.50	☑	28.50	☑	☑	19.21	4

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-23B-01-020816
Trip Blank :GAIN-TB-01-020816

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-23B-02

Client:	Beazer East, Inc.	**Well ID:**	FW-23B-02
Project Name:	Gainesville 2016 1st Quarter GW Sampling	**Date:**	02/08/2016 1327
Project Number:	OM-0450-16-091	**Technician:**	Nathan Bachik
Location:	Gainesville	**Weather Condition:**	60, Sunny

Sampling Equipment	Dedicated
MOSDAX MGI2743	NO
WESTBAY 4071	NO

Sampling Start Time: 02/08/2016 1336
Sampling End Time: 02/08/2016 1405
Ambient Barometric: 14.47

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	171.8	27.86	☑	37.14	☑	37.14	☑	☑	27.85	4
2	☑	☑	☑	☑	☑	☑	171.9	27.76	☑	37.14	☑	37.14	☑	☑	27.76	4

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-23B-02-020816

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-23B-03

Client: Beazer East, Inc.
Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville
Weather Condition: 60. Partly cloudy

Well ID: FW-23B-03
Date: 02/08/2016 1425
Technician: Nathan Bachik

Sampling Equipment	Dedicated
MOSDAX MGI2743	NO
WESTBAY 4071	NO

Sampling Start Time: 02/08/2016 1432
Sampling End Time: 02/08/2016 1458
Ambient Barometric: 14.38

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressur e (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	191.7	36.29	☑	45.80	☑	45.80	☑	☑	36.29	4
2	☑	☑	☑	☑	☑	☑	191.7	36.25	☑	45.80	☑	45.80	☑	☑	36.25	4

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-23B-03-020816

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-23B-04

Client:	Beazer East, Inc.	**Well ID:**	FW-23B-04
Project Name:	Gainesville 2016 1st Quarter GW Sampling	**Date:**	02/08/2016 1502
Project Number:	OM-0450-16-091	**Technician:**	Nathan Bachik
Location:	Gainesville	**Weather Condition:**	60 Sunny

Sampling Equipment	Dedicated
MOSDAX MGI2743	NO
WESTBAY 4071	NO

Sampling Start Time: 02/08/2016 1510
Sampling End Time: 02/08/2016 1542
Ambient Barometric: 14.37

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressur e (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	211.7	44.90	☑	54.44	☑	54.44	☑	☑	44.90	4
2	☑	☑	☑	☑	☑	☑	211.7	44.87	☑	54.44	☑	54.44	☑	☑	44.87	4

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-23B-04-020816
Equipment Blank :GAIN-EB-01-020816

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-23C-01

Client:	Beazer East, Inc.	**Well ID:**	FW-23C-01
Project Name:	Gainesville 2016 1st Quarter GW Sampling	**Date:**	02/09/2016 1612
Project Number:	OM-0450-16-091	**Technician:**	Nathan Bachik
Location:	Gainesville	**Weather Condition:**	55, Breezy

Sampling Equipment	Dedicated
WESTBAY 3535	NO
MOSDAX MGI4129	NO

Sampling Start Time: 02/09/2016 1616
Sampling End Time: 02/09/2016 1641
Ambient Barometric: 14.55

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	312.7	100.82	☑	98.24	☑	98.24	☑	☑	100.81	4
2	☑	☑	☑	☑	☑	☑	312.4	100.88	☑	98.24	☑	98.24	☑	☑	100.75	4

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-23C-01-020916

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-23C-02

Client: Beazer East, Inc.
Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville

Well ID: FW-23C-02
Date: 02/09/2016 1643
Technician: Nathan Bachik
Weather Condition: 55, Partly cloudy, Breezy

Sampling Equipment	Dedicated
MOSDAX MGI4129	NO
WESTBAY 3535	NO

Sampling Start Time: 02/09/2016 1703
Sampling End Time: 02/09/2016 1726
Ambient Barometric: 14.53

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	344.1	114.54	☑	112.04	☑	112.04	☑	☑	114.54	4
2	☑	☑	☑	☑	☑	☑	344.4	114.54	☑	112.04	☑	112.04	☑	☑	114.54	4

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-23C-02-020916

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-23C-03

Client:	Beazer East, Inc.	**Well ID:**	FW-23C-03
Project Name:	Gainesville 2016 1st Quarter GW Sampling	**Date:**	02/09/2016 1442
Project Number:	OM-0450-16-091	**Technician:**	Nathan Bachik
Location:	Gainesville	**Weather Condition:**	55, Sunny, Breezy

Sampling Equipment	Dedicated
WESTBAY 3535	NO
MOSDAX MGI4129	NO

Sampling Start Time: 02/09/2016 1534
Sampling End Time: 02/09/2016 1610
Ambient Barometric: 14.56

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	364.7	122.49	☑	120.66	☑	120.66	☑	☑	122.47	2
2	☑	☑	☑	☑	☑	☑	364.5	122.45	☑	120.67	☑	120.67	☑	☑	122.45	2
3	☑	☑	☑	☑	☑	☑	364.2	122.43	☑	120.66	☑	120.66	☑	☑	122.44	2
4	☑	☑	☑	☑	☑	☑	364.5	122.44	☑	120.66	☑	120.66	☑	☑	122.44	2

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-23C-03-020916

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-24B-01

Client: Beazer East, Inc.
Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville

Well ID: FW-24B-01
Date: 02/10/2016 1343
Technician: Nathan Bachik
Weather Condition: 52, Sunny, Breezy

Sampling Equipment	Dedicated
WESTBAY 3535	NO
MOSDAX MGI4129	NO

Sampling Start Time: 02/10/2016 1349
Sampling End Time: 02/10/2016 1417
Ambient Barometric: 14.69

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressur e (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	164.1	18.53	☑	29.56	☑	29.56	☑	☑	18.53	5
2	☑	☑	☑	☑	☑	☑	164.1	18.51	☑	29.56	☑	29.56	☑	☑	18.51	5

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-24B-01-021016

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-24B-02

Client: Beazer East, Inc.
Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville

Well ID: FW-24B-02
Date: 02/10/2016 1418
Technician: Nathan Bachik
Weather Condition: 53, Sunny, Breezy

Sampling Equipment	Dedicated
WESTBAY 3535	NO
MOSDAX MGI4129	NO

Sampling Start Time: 02/10/2016 1423
Sampling End Time: 02/10/2016 1449
Ambient Barometric: 14.64

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	184.0	27.19	☑	38.20	☑	38.20	☑	☑	27.19	5
2	☑	☑	☑	☑	☑	☑	184.0	27.17	☑	38.20	☑	38.20	☑	☑	27.18	5

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-24B-02-021016

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-24B-03

Client:	Beazer East, Inc.	**Well ID:**	FW-24B-03
Project Name:	Gainesville 2016 1st Quarter GW Sampling	**Date:**	02/10/2016 1242
Project Number:	OM-0450-16-091	**Technician:**	Nathan Bachik
Location:	Gainesville	**Weather Condition:**	50, Sunny, Breezy

Sampling Equipment	Dedicated
MOSDAX MGI4129	NO
WESTBAY 3535	NO

Sampling Start Time: 02/10/2016 1245
Sampling End Time: 02/10/2016 1342
Ambient Barometric: 14.67

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	203.7	36.04	☑	46.82	☑	46.82	☑	☑	36.02	5
2	☑	☑	☑	☑	☑	☑	203.8	35.99	☑	46.85	☑	46.85	☑	☑	35.99	5
3	☑	☑	☑	☑	☑	☑	203.8	35.97	☑	46.82	☑	46.82	☑	☑	35.97	5
4	☑	☑	☑	☑	☑	☑	203.8	35.94	☑	46.84	☑	46.84	☑	☑	35.94	5

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-24B-03-021016
Blind Duplicate :GAIN-FW-99D-021016

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-24B-04

Client:	Beazer East, Inc.	**Well ID:**	FW-24B-04
Project Name:	Gainesville 2016 1st Quarter GW Sampling	**Date:**	02/10/2016 1449
Project Number:	OM-0450-16-091	**Technician:**	Nathan Bachik
Location:	Gainesville	**Weather Condition:**	53, Sunny, Breezy

Sampling Equipment	Dedicated
MOSDAX 4129	NO
WESTBAY 3535	NO

Sampling Start Time: 02/10/2016 1454
Sampling End Time: 02/10/2016 1517
Ambient Barometric: 14.68

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	223.8	44.65	☑	55.48	☑	55.48	☑	☑	44.64	5
2	☑	☑	☑	☑	☑	☑	223.8	44.62	☑	55.49	☑	55.49	☑	☑	44.62	5

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-24B-04-021016
Filter Blank :GAIN-Filter Blank-021016

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-24C-01

Client: Beazer East, Inc.
Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville

Well ID: FW-24C-01
Date: 02/10/2016 1055
Technician: Nathan Bachik
Weather Condition: 45, Sunny, Gentle breeze

Sampling Equipment	Dedicated
WESTBAY 3535	NO
MOSDAX MGI4129	NO

Sampling Start Time: 02/10/2016 1101
Sampling End Time: 02/10/2016 1121
Ambient Barometric: 14.69

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	307.6	87.03	☑	91.59	☑	91.59	☑	☑	87.03	4
2	☑	☑	☑	☑	☑	☑	307.4	86.99	☑	91.59	☑	91.59	☑	☑	86.99	4

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-24C-01-021016

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-24C-02

Client: Beazer East, Inc.
Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville
Weather Condition: 40, Sunny

Well ID: FW-24C-02
Date: 02/10/2016 0945
Technician: Nathan Bachik

Sampling Equipment	Dedicated
MOSDAX MGI4129	NO
WESTBAY 3535	NO

Sampling Start Time: 02/10/2016 1000
Sampling End Time: 02/10/2016 1023
Ambient Barometric: 14.69

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	327.5	95.77	☑	100.21	☑	100.21	☑	☑	95.65	4
2	☑	☑	☑	☑	☑	☑	327.6	95.78	☑	100.21	☑	100.21	☑	☑	95.79	4

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-24C-02-021016

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-24C-03

Client:	Beazer East, Inc.	**Well ID:**	FW-24C-03
Project Name:	Gainesville 2016 1st Quarter GW Sampling	**Date:**	02/10/2016 1124
Project Number:	OM-0450-16-091	**Technician:**	Nathan Bachik
Location:	Gainesville	**Weather Condition:**	47, Breezy

Sampling Equipment	Dedicated
WESTBAY 3535	NO
MOSDAX MGI4129	NO

Sampling Start Time: 02/10/2016 1127
Sampling End Time: 02/10/2016 1145
Ambient Barometric: 14.68

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	347.5	104.26	☑	108.85	☑	108.85	☑	☑	104.26	4
2	☑	☑	☑	☑	☑	☑	347.1	104.23	☑	108.85	☑	108.85	☑	☑	104.23	4

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-24C-03-021016

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-24C-04

Client: Beazer East, Inc.
Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville

Well ID: FW-24C-04
Date: 02/10/2016 1024
Technician: Nathan Bachik
Weather Condition: 42, Sunny, Gentle breeze

Sampling Equipment	Dedicated
WESTBAY 3535	NO
MOSDAX MGI4129	NO

Sampling Start Time: 02/10/2016 1030
Sampling End Time: 02/10/2016 1055
Ambient Barometric: 14.65

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	367.3	113.07	☑	117.49	☑	117.49	☑	☑	113.07	4
2	☑	☑	☑	☑	☑	☑	367.5	113.04	☑	117.49	☑	117.49	☑	☑	113.04	4

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-24C-04-021016

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-4C-01

Client: Beazer East, Inc.
Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville

Well ID: FW-4C-01
Date: 02/08/2016 1625
Technician: Nathan Bachik
Weather Condition: 60, Partly cloudy

Sampling Equipment	Dedicated
MOSDAX MGI2743	NO
WESTBAY 4071	NO

Sampling Start Time: 02/08/2016 1631
Sampling End Time: 02/08/2016 1658
Ambient Barometric: 14.41

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	315.6	101.77	☑	99.29	☑	99.29	☑	☑	101.75	4
2	☑	☑	☑	☑	☑	☑	315.7	101.77	☑	99.29	☑	99.29	☑	☑	101.72	4

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-4C-01-020816

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-4C-02

Client: Beazer East, Inc.
Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville
Weather Condition: 60, Partly cloudy

Well ID: FW-4C-02
Date: 02/08/2016 1706
Technician: Nathan Bachik

Sampling Equipment	Dedicated
MOSDAX MGI2743	NO
WESTBAY 4071	NO

Sampling Start Time: 02/08/2016 1709
Sampling End Time: 02/08/2016 1736
Ambient Barometric: 14.36

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	344.9	113.95	☑	111.77	☑	111.77	☑	☑	113.92	4
2	☑	☑	☑	☑	☑	☑	344.7	113.92	☑	111.77	☑	111.77	☑	☑	113.88	4

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-4C-02-020816

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-4C-03

Client: Beazer East, Inc.
Project Name: Gainesville 2016 1st Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville
Weather Condition: 40, Sunny

Well ID: FW-4C-03
Date: 02/09/2016 0817
Technician: Nathan Bachik

Sampling Equipment	Dedicated
MOSDAX MGI2743	NO
WESTBAY 4071	NO

Sampling Start Time: 02/09/2016 0822
Sampling End Time: 02/09/2016 0954
Ambient Barometric: 14.44

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	365.0	123.09	☑	120.45	☑	120.45	☑	☑	123.03	4
2	☑	☑	☑	☑	☑	☑	365.3	122.99	☑	120.45	☑	120.45	☑	☑	122.92	4
3	☑	☑	☑	☑	☑	☑	365.0	122.89	☑	120.45	☑	120.45	☑	☑	122.86	4
4	☑	☑	☑	☑	☑	☑	365.4	122.77	☑	120.45	☑	120.45	☑	☑	122.71	4
5	☑	☑	☑	☑	☑	☑	365.4	122.70	☑	120.45	☑	120.45	☑	☑	122.66	4

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 1Q Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 1Q Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-4C-03-020916
MS/MSD Blank :GAIN-MS/MSD-01-FW-4C-03-020916

Print Date: 2/15/2016
Print Time: 9:58:33AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-12B-01

Client: Beazer East, Inc.
Project Name: Gainesville 2016 2nd Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville

Well ID: FW-12B-01
Date: 05/11/2016 1709
Technician: Nathan Bachik
Weather Condition: 87, Mostly sunny, gentle breeze

Sampling Equipment	Dedicated
MOSDAX 2743	NO
Westbay 4071	NO

Sampling Start Time: 05/11/2016 1713
Sampling End Time: 05/11/2016 1745
Ambient Barometric: 14.49

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	155.7	17.18	☑	24.80	☑	24.80	☑	☑	17.21	5
2	☑	☑	☑	☑	☑	☑	155.7	17.74	☑	24.85	☑	24.85	☑	☑	17.74	6

SAMPLE COLLECTION INFORMATION

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-12B-01-051116

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 2nd Quarter Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001

Print Date: 5/16/2016
Print Time: 11:04:46AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-12B-02

Client: Beazer East, Inc.
Project Name: Gainesville 2016 2nd Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville

Well ID: FW-12B-02
Date: 05/11/2016 1631
Technician: Nathan Bachik
Weather Condition: 86, Mostly sunny, gentle breeze

Sampling Equipment	Dedicated
Westbay 4071	NO
MOSDAX 2743	NO

Sampling Start Time: 05/11/2016 1641
Sampling End Time: 05/11/2016 1707
Ambient Barometric: 14.52

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	175.7	25.94	☑	33.49	☑	33.49	☑	☑	25.97	5
2	☑	☑	☑	☑	☑	☑	175.6	25.41	☑	33.50	☑	33.50	☑	☑	25.41	6

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-12B-02-051116

Print Date: 5/16/2016
Print Time: 11:04:59AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-12B-03

Client: Beazer East, Inc.
Project Name: Gainesville 2016 2nd Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville
Weather Condition: 65, Sunny

Well ID: FW-12B-03
Date: 05/12/2016 0726
Technician: Nathan Bachik

Sampling Equipment	Dedicated
MOSDAX 2743	NO
Westbay 4071	NO

Sampling Start Time: 05/12/2016 0732
Sampling End Time: 05/12/2016 0801
Ambient Barometric: 14.51

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	195.3	34.70	☑	42.10	☑	42.10	☑	☑	34.73	5
2	☑	☑	☑	☑	☑	☑	195.3	35.17	☑	42.11	☑	42.11	☑	☑	35.17	6

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 2nd Quarter Floridan_001
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-12B-03-051216
Trip Blank :GAIN-TB-04-051216

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-12B-04

Client:	Beazer East, Inc.	**Well ID:**	FW-12B-04
Project Name:	Gainesville 2016 2nd Quarter GW Sampling	**Date:**	05/12/2016 0803
Project Number:	OM-0450-16-091	**Technician:**	Nathan Bachik
Location:	Gainesville	**Weather Condition:**	69, Sunny

Sampling Equipment	Dedicated
Westbay 4071	NO
MOSDAX 2743	NO

Sampling Start Time: 05/12/2016 0808
Sampling End Time: 05/12/2016 0839
Ambient Barometric: 14.50

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressur e (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	215.4	43.31	☑	50.75	☑	50.75	☑	☑	43.23	5
2	☑	☑	☑	☑	☑	☑	215.5	43.19	☑	50.74	☑	50.74	☑	☑	43.23	5
3	☑	☑	☑	☑	☑	☑	215.4	41.30	☑	50.75	☑	50.75	☑	☑	41.32	1

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-12B-04-051216

Print Date: 5/16/2016
Print Time: 11:04:59AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-16B-01

Client: Beazer East, Inc.
Project Name: Gainesville 2016 2nd Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville
Weather Condition: 87, Mostly sunny

Well ID: FW-16B-01
Date: 05/11/2016 1537
Technician: Nathan Bachik

Sampling Equipment	Dedicated
MOSDAX 2743	NO
Westbay 4071	NO

Sampling Start Time: 05/11/2016 1540
Sampling End Time: 05/11/2016 1611
Ambient Barometric: 14.52

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	164.3	22.34	☑	29.80	☑	29.80	☑	☑	22.36	5
2	☑	☑	☑	☑	☑	☑	164.3	22.83	☑	29.80	☑	29.80	☑	☑	22.86	6

SAMPLE COLLECTION INFORMATION

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-16B-01-051116

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-20B-01

Client:	Beazer East, Inc.	**Well ID:**	FW-20B-01
Project Name:	Gainesville 2016 2nd Quarter GW Sampling	**Date:**	05/12/2016 1044
Project Number:	OM-0450-16-091	**Technician:**	Nathan Bachik
Location:	Gainesville	**Weather Condition:**	79, Sunny

Sampling Equipment	Dedicated
MOSDAX 2743	NO
Westbay 4071	NO

Sampling Start Time: 05/12/2016 1048
Sampling End Time: 05/12/2016 1123
Ambient Barometric: 14.52

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	156.8	19.73	☑	25.63	☑	25.63	☑	☑	19.77	5
2	☑	☑	☑	☑	☑	☑	156.8	20.23	☑	25.64	☑	25.64	☑	☑	20.29	6

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-20B-01-051216
Equipment Blank :GAIN-EB-04-051216

Print Date: 5/16/2016
Print Time: 11:04:59AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-20B-02

Client: Beazer East, Inc.
Project Name: Gainesville 2016 2nd Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville
Weather Condition: 76, Sunny

Well ID: FW-20B-02
Date: 05/12/2016 1009
Technician: Nathan Bachik

Sampling Equipment	Dedicated
MOSDAX 2743	NO
Westbay 4071	NO

Sampling Start Time: 05/12/2016 1014
Sampling End Time: 05/12/2016 1043
Ambient Barometric: 14.62

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)							Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	176.7	28.40	☑	34.26	☑	34.26	☑	☑	28.44	5
2	☑	☑	☑	☑	☑	☑	176.6	28.91	☑	34.27	☑	34.27	☑	☑	28.93	6

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-20B-02-051216
Filter Blank :GAIN-Filter Blank-01-051216

Print Date: 5/16/2016
Print Time: 11:04:59AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-22B-01

Client: Beazer East, Inc.
Project Name: Gainesville 2016 2nd Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville
Weather Condition: 87, Sunny

Well ID: FW-22B-01
Date: 05/09/2016 1541
Technician: Nathan Bachik

Sampling Equipment	Dedicated
MOSDAX 4129	NO
Westbay 3535	NO

Sampling Start Time: 05/09/2016 1546
Sampling End Time: 05/09/2016 1611
Ambient Barometric: 14.62

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	154.8	23.35	☑	25.67	☑	25.39	☑	☑	23.37	4
2	☑	☑	☑	☑	☑	☑	154.8	23.43	☑	25.66	☑	25.66	☑	☑	23.47	5

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-22B-01-050916

Print Date: 5/16/2016
Print Time: 11:04:59AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-22B-02

Client:	Beazer East, Inc.	**Well ID:**	FW-22B-02
Project Name:	Gainesville 2016 2nd Quarter GW Sampling	**Date:**	05/09/2016 1616
Project Number:	OM-0450-16-091	**Technician:**	Nathan Bachik
Location:	Gainesville	**Weather Condition:**	86, Sunny

Sampling Equipment	Dedicated
MOSDAX 4129	NO
Westbay 3535	NO

Sampling Start Time: 05/09/2016 1620
Sampling End Time: 05/09/2016 1646
Ambient Barometric: 14.63

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	174.7	31.98	☑	34.30	☑	34.30	☑	☑	31.98	4
2	☑	☑	☑	☑	☑	☑	174.7	32.45	☑	34.31	☑	34.41	☑	☑	32.45	5

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-22B-02-050916

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-22B-03

Client: Beazer East, Inc.
Project Name: Gainesville 2016 2nd Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville

Well ID: FW-22B-03
Date: 05/10/2016 0737
Technician: Nathan Bachik
Weather Condition: 67, Mostly sunny

Sampling Equipment	Dedicated
Westbay 3535	NO
MOSDAX 4129	NO

Sampling Start Time: 05/10/2016 0742
Sampling End Time: 05/10/2016 0830
Ambient Barometric: 14.62

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	194.6	41.11	☑	42.96	☑	42.96	☑	☑	41.05	5
2	☑	☑	☑	☑	☑	☑	194.6	41.00	☑	42.96	☑	42.96	☑	☑	40.93	5
3	☑	☑	☑	☑	☑	☑	194.8	40.88	☑	42.95	☑	42.95	☑	☑	40.83	5
4	☑	☑	☑	☑	☑	☑	194.8	39.34	☑	42.94	☑	42.94	☑	☑	39.31	2

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-22B-03-051016
Trip Blank :GAIN-TB-02-051016
Blind Duplicate :GAIN-FW-99B-051016

Print Date: 5/16/2016
Print Time: 11:04:59AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-22B-04

Client: Beazer East, Inc.
Project Name: Gainesville 2016 2nd Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville
Weather Condition: 70, Mostly sunny

Well ID: FW-22B-04
Date: 05/10/2016 0832
Technician: Nathan Bachik

Sampling Equipment	Dedicated
MOSDAX 4129	NO
Westbay 3535	NO

Sampling Start Time: 05/10/2016 0838
Sampling End Time: 05/10/2016 0906
Ambient Barometric: 14.63

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressur e (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	209.6	46.83	☑	49.38	☑	49.38	☑	☑	46.83	4
2	☑	☑	☑	☑	☑	☑	209.7	46.80	☑	49.37	☑	49.37	☑	☑	46.80	4
3	☑	☑	☑	☑	☑	☑	209.8	46.53	☑	49.38	☑	49.38	☑	☑	46.50	1

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 2nd Quarter Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-22B-04-051016
Equipment Blank :GAIN-EB-02-051016

Print Date: 5/16/2016
Print Time: 11:04:59AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-23B-01

Client:	Beazer East, Inc.	**Well ID:**	FW-23B-01
Project Name:	Gainesville 2016 2nd Quarter GW Sampling	**Date:**	05/09/2016 1308
Project Number:	OM-0450-16-091	**Technician:**	Nathan Bachik
Location:	Gainesville	**Weather Condition:**	83, Sunny

Sampling Equipment	Dedicated
MOSDAX 4129	NO
Westbay 3535	NO

Sampling Start Time: 05/09/2016 1317
Sampling End Time: 05/09/2016 1342
Ambient Barometric: 14.62

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	151.9	19.42	☑	28.08	☑	28.08	☑	☑	19.43	4
2	☑	☑	☑	☑	☑	☑	151.9	19.45	☑	28.09	☑	28.09	☑	☑	19.48	5

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 2nd Quarter Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-23B-01-050916
Trip Blank :GAIN-TB-01-050916

Print Date: 5/16/2016
Print Time: 11:04:59AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-23B-02

Client: Beazer East, Inc.
Project Name: Gainesville 2016 2nd Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville
Weather Condition: 83, Sunny

Well ID: FW-23B-02
Date: 05/09/2016 1343
Technician: Nathan Bachik

Sampling Equipment	Dedicated
Westbay 3535	NO
MOSDAX 4129	NO

Sampling Start Time: 05/09/2016 1350
Sampling End Time: 05/09/2016 1416
Ambient Barometric: 14.63

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	171.9	27.63	☑	36.76	☑	36.76	☑	☑	27.64	4
2	☑	☑	☑	☑	☑	☑	171.8	27.62	☑	36.76	☑	36.76	☑	☑	27.62	5

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-23B-02-050916

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-23B-03

Client:	Beazer East, Inc.	**Well ID:**	FW-23B-03
Project Name:	Gainesville 2016 2nd Quarter GW Sampling	**Date:**	05/09/2016 1417
Project Number:	OM-0450-16-091	**Technician:**	Nathan Bachik
Location:	Gainesville	**Weather Condition:**	86,Sunny

Sampling Equipment	Dedicated
MOSDAX 4129	NO
Westbay 3535	NO

Sampling Start Time: 05/09/2016 1422
Sampling End Time: 05/09/2016 1446
Ambient Barometric: 14.65

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	191.8	36.28	☑	45.39	☑	45.39	☑	☑	36.28	4
2	☑	☑	☑	☑	☑	☑	191.9	36.30	☑	45.40	☑	45.40	☑	☑	36.32	5

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-23B-03-050916

Print Date: 5/16/2016
Print Time: 11:04:59AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-23B-04

Client:	Beazer East, Inc.	**Well ID:**	FW-23B-04
Project Name:	Gainesville 2016 2nd Quarter GW Sampling	**Date:**	05/09/2016 1447
Project Number:	OM-0450-16-091	**Technician:**	Nathan Bachik
Location:	Gainesville	**Weather Condition:**	83, Sunny

Sampling Equipment	Dedicated
MOSDAX 4129	NO
Westbay 3535	NO

Sampling Start Time: 05/09/2016 1454
Sampling End Time: 05/09/2016 1519
Ambient Barometric: 14.65

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)							Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	211.7	44.89	☑	54.05	☑	54.05	☑	☑	44.92	4
2	☑	☑	☑	☑	☑	☑	211.6	44.96	☑	54.06	☑	54.06	☑	☑	44.98	5

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 2nd Quarter Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-23B-04-050916
Equipment Blank :GAIN-EB-01-050916

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-24B-01

Client: Beazer East, Inc.
Project Name: Gainesville 2016 2nd Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville
Weather Condition: 68, Partly cloudy

Well ID: FW-24B-01
Date: 05/11/2016 0818
Technician: Nathan Bachik

Sampling Equipment	Dedicated
MOSDAX 4129	NO
Westbay 3535	NO

Sampling Start Time: 05/11/2016 0824
Sampling End Time: 05/11/2016 0853
Ambient Barometric: 14.64

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	163.9	18.54	☑	29.14	☑	29.14	☑	☑	18.58	5
2	☑	☑	☑	☑	☑	☑	163.9	18.51	☑	29.14	☑	29.14	☑	☑	18.53	5

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-24B-01-051116
Equipment Blank :GAIN-EB-03-051116

Print Date: 5/16/2016
Print Time: 11:04:59AM

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-24B-02

Client:	Beazer East, Inc.	**Well ID:**	FW-24B-02
Project Name:	Gainesville 2016 2nd Quarter GW Sampling	**Date:**	05/11/2016 0902
Project Number:	OM-0450-16-091	**Technician:**	Nathan Bachik
Location:	Gainesville	**Weather Condition:**	68, Mostly sunny

Sampling Equipment	Dedicated
MOSDAX 4129	NO
Westbay 3535	NO

Sampling Start Time: 05/11/2016 0906
Sampling End Time: 05/11/2016 1111
Ambient Barometric: 14.66

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	183.7	27.18	☑	37.78	☑	37.78	☑	☑	27.20	5
2	☑	☑	☑	☑	☑	☑	183.7	27.18	☑	37.79	☑	37.79	☑	☑	27.18	5
3	☑	☑	☑	☑	☑	☑	183.7	27.16	☑	37.79	☑	37.79	☑	☑	27.16	5
4	☑	☑	☑	☑	☑	☑	183.7	27.14	☑	37.78	☑	37.78	☑	☑	27.14	5
5	☑	☑	☑	☑	☑	☑	183.7	27.08	☑	37.79	☑	37.79	☑	☑	27.08	5
6	☑	☑	☑	☑	☑	☑	183.7	27.06	☑	37.79	☑	37.79	☑	☑	27.06	5

SAMPLE COLLECTION INFORMATION

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-24B-02-051116
MS/MSD Blank
:GAIN-FW-24B-02-MS/MSD-051116

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-24B-03

Client: Beazer East, Inc.
Project Name: Gainesville 2016 2nd Quarter GW Sampling
Project Number: OM-0450-16-091
Location: Gainesville
Weather Condition: 66, Cloudy

Well ID: FW-24B-03
Date: 05/11/2016 0738
Technician: Nathan Bachik

Sampling Equipment	Dedicated
Westbay 3535	NO
MOSDAX 4129	NO

Sampling Start Time: 05/11/2016 0746
Sampling End Time: 05/11/2016 0816
Ambient Barometric: 14.65

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressure (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	203.8	35.97	☑	46.44	☑	46.44	☑	☑	35.96	5
2	☑	☑	☑	☑	☑	☑	203.6	35.95	☑	46.43	☑	46.43	☑	☑	35.95	5

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 2nd Quarter Floridan_001
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-24B-03-051116
Trip Blank :GAIN-TB-03-051116

WESTBAY GROUNDWATER SAMPLE COLLECTION RECORD

WELL No.: FW-24B-04

Client:	Beazer East, Inc.	**Well ID:**	FW-24B-04
Project Name:	Gainesville 2016 2nd Quarter GW Sampling	**Date:**	05/11/2016 1127
Project Number:	OM-0450-16-091	**Technician:**	Nathan Bachik
Location:	Gainesville	**Weather Condition:**	81, Sunny

Sampling Equipment	Dedicated
Westbay 4071	NO
MOSDAX 2743	NO

Sampling Start Time: 05/11/2016 1134
Sampling End Time: 05/11/2016 1255
Ambient Barometric: 14.65

Comments:

Run #	Surface Function Tests						Position Sampler	Sample Collection Checks (Probe Located at samplin zone in MP casing)								Volumes Tubes
	Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate Port Arm Out Land Probe	Pressure In MP1	Shoe Out	Zone Pressure	Open Valve	Zone Pressur e (2)	Close Valve	Shoe In	Pressure in MP (2)	
1	☑	☑	☑	☑	☑	☑	223.3	44.37	☑	55.09	☑	55.09	☑	☑	44.37	5
2	☑	☑	☑	☑	☑	☑	223.3	44.35	☑	55.09	☑	55.09	☑	☑	44.33	5
3	☑	☑	☑	☑	☑	☑	223.3	44.22	☑	55.08	☑	55.08	☑	☑	44.22	5
4	☑	☑	☑	☑	☑	☑	223.3	44.21	☑	55.08	☑	55.08	☑	☑	44.21	5

SAMPLE COLLECTION INFORMATION

Lab	Parameter	Method	Bottle QTY Required	Bottle QTY Collected	BottleType	Preservative	Program
Columbia	Arsenic_AQ_DISS	Arsenic_AQ_DISS	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	SVOA_AQ	SW-846 8270D SIM	1	1	1 liter amber bottle	None	2016 2nd Quarter Floridan_001
Columbia	BTEX_AQ	SW-846 8260B	3	3	40 ml glass vial	HCL	2016 2nd Quarter Floridan_001
Columbia	Arsenic_AQ_TOTAL	Arsenic_AQ_TOTAL	1	1	250 ml plastic bottle	HNO3	2016 2nd Quarter Floridan_001

SAMPLE IDENTIFICATION(S)

Normal Sample :GAIN-FW-24B-04-051116
Blind Duplicate :GAIN-FW-99C-051116

Print Date: 5/16/2016
Print Time: 11:04:59AM

APPENDIX B

ANALYTICAL LABORATORY REPORTS

Appendix B

Quality Control Sample Summary
2016 First Semiannual Comprehensive Groundwater Monitoring Report
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

SDG	Collection Date	QC ID	Parameters Detected	Qualifier	Associated Samples
J1600983	2/8-9/2016	Equipment Blank Contamination	Phenol	U	FW-4C-02, FW-4C-01, FW-23B-03, FW-23B-01
		Duplicate Percent Difference	Naphthalene	J	FW-21B, FW-99A
		MS/MSD	2-Methylnaphthalene	J	FW-6, FW-99B
			Acenaphthene		
			Dibenzofuran		
			Phenol	UJ	
J1601039	2/10-11/2016	Surrogate Recovery	2,4-Dimethylphenol	J/UJ	FW-22C-01, FW-20B-04, FW-20B-01
			2-Methylnaphthalene		FW-20B-04, FW-20B-01
			2-Methylphenol		FW-22C-01, FW-20B-04, FW-20B-01
			3&4-Methylphenol		FW-22C-01, FW-20B-04, FW-20B-01
			Acenaphthene		FW-20B-04
			Acenaphthylene		FW-20B-04, FW-20B-01
			Anthracene		FW-20B-04, FW-20B-01
			Carbazole		FW-20B-04
			Dibenzofuran		FW-20B-04, FW-20B-01
			Fluoranthene		FW-20B-04, FW-20B-01
			Fluorene		FW-20B-04
			Naphthalene		FW-20B-04, FW-20B-01
			Phenanthrene		FW-20B-04, FW-20B-01
			Phenol		FW-22C-01, FW-20B-04, FW-20B-01
			Pyrene		FW-20B-04, FW-20B-01
		Laboratory Control Sample	2-Methylnaphthalene	J/UJ	FW-24B-03, FW-22C-02, FW-24C-03, FW-24B-04, FW-24B-02, FW-24C-04, FW-99D, FW-24C-01, FW-24C-02, FW-24B-01, FW-22C-03, FW-22C-01, FW-20B-03, FW-20B-04, FW-99E, FW-12B-02, FW-12B-01, FW-16B-01, FW-12B-03, FW-20B-02, FW-12B-04, FW-20B-01
			Acenaphthene		FW-20B-03, FW-20B-04, FW-99E, FW-12B-02, FW-12B-01, FW-16B-01, FW-12B-03, FW-20B-02, FW-12B-04
			Acenaphthylene		FW-20B-03, FW-20B-04, FW-99E, FW-12B-02 FW-12B-01, FW-16B-01, FW-12B-03, FW-20B-02, FW-12B-03, FW-20B-02, FW-12B-04, FW-20B-01
			Anthracene		FW-20B-03, FW-20B-04, FW-99E, FW-12B-02 FW-12B-01, FW-16B-01, FW-12B-03, FW-20B-02, FW-12B-04, FW-20B-01
			Dibenzofuran		FW-20B-03, FW-20B-04, FW-99E, FW-12B-02 FW-12B-01, FW-16B-01, FW-12B-03, FW-20B-02, FW-12B-04, FW-20B-01
			Fluorene		FW-20B-03, FW-20B-04, FW-99E, FW-12B-02 FW-12B-01, FW-16B-01, FW-12B-03, FW-20B-02, FW-12B-04
			Naphthalene		FW-24B-03, FW-22C-02, FW-24C-03, FW-24B-04, FW-24B-02, FW-24C-04, FW-99D, FW-24C-01, FW-24C-02, FW-24B-01, FW-22C-03, FW-22C-01, FW-20B-03, FW-20B-04, FW-99E, FW-12B-02, FW-12B-01, FW-16B-01, FW-12B-03, FW-20B-02, FW-12B-04, FW-20B-01
			Phenanthrene		FW-20B-03, FW-20B-04, FW-99E, FW-12B-02, FW-12B-01, FW-16B-01, FW-12B-03, FW-20B-02, FW-12B-04, FW-20B-01
			Phenol		FW-20B-03, FW-20B-04, FW-99E, FW-12B-02, FW-12B-01, FW-16B-01, FW-12B-03, FW-20B-02, FW-12B-04, FW-20B-01
			Pyrene		FW-20B-03, FW-20B-04, FW-99E, FW-12B-02, FW-12B-01, FW-16B-01, FW-12B-03, FW-20B-02, FW-12B-04, FW-20B-01
		Holding Times	2,4-Dimethylphenol	J	FW-12B-01, FW-16B-01
			2-Methylphenol		FW-12B-01
			Acenaphthene		FW-20B-01
			Carbazole		FW-20B-01
			Fluorene		FW-20B-01

Appendix B

Quality Control Sample Summary
2016 First Semiannual Comprehensive Groundwater Monitoring Report
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

SDG	Collection Date	QC ID	Parameters Detected	Qualifier	Associated Samples
J1603454	5/9-10/2016	Laboratory Control Sample	2-Methylnaphthalene	UJ	FW-23B-01, FW-23B-02, FW-23B-03, FW-23B-04, FW-22B-01, FW-22B-02, FW-22B-03, FW-22B-04, FW-99B
			Acenaphthene		
			Acenaphthylene		
			Dibenzofuran		
			Naphthalene		
			Phenol		
		Sample Vial Headspace	Benzene	UJ	FW-23B-04, FW-22B-02
			Ethylbenzene		
			Toluene		
			m,p-Xylenes		
			o-Xylene		
		Surrogate Recovery	2,4-Dimethylphenol	UJ	FW-23B-03, FW-23B-04, FW-22B-01
			2-Methylnaphthalene		
			2-Methylphenol		
			3&4-Methylphenol		
			Acenaphthene		
			Acenaphthylene		
			Anthracene		
			Carbazole		
			Dibenzofuran		
			Fluoranthene		
			Fluorene		
			Naphthalene		
			Phenanthrene		
			Phenol		
			Pyrene		

Appendix B

Quality Control Sample Summary
2016 First Semiannual Comprehensive Groundwater Monitoring Report
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

SDG	Collection Date	QC ID	Parameters Detected	Qualifier	Associated Samples
J1603530	5/11-12/2016	Surrogate Recovery	2,4-Dimethylphenol	J/UJ	FW-24B-03, FW-20B-02
			2-Methylnaphthalene		
			2-Methylphenol		
			3&4-Methylphenol		
			Acenaphthene		
			Acenaphthylene		
			Anthracene		
			Carbazole		
			Dibenzofuran		
			Fluoranthene		
			Fluorene		
			Naphthalene		
			Phenanthrene		
			Phenol		
			Pyrene		
		Laboratory Control Sample	2-Methylnaphthalene	J/UJ	FW-24B-03, FW-24B-01, FW-24B-02, FW-24B-04, FW-16B-01
			Acenaphthene		
			Acenaphthylene		
			Dibenzofuran		
			Naphthalene		
			Phenol		
		Sample Vial Headspace	Benzene	J/UJ	FW-12B-04
			Ethylbenzene		
			Toluene		
			m,p-Xylenes		
			o-Xylene		
		MS/MSD	2-Methylnaphthalene	UJ	FW-24B-02
			Naphthalene		
			Phenol		
		Instrument Linear Range	2,4-Dimethylphenol	J	FW-16B-01
			Naphthalene		FW-16B-01, FW-20B-02
		Laboratory Blanks	Dissolved Arsenic	U	FW-24B-02
		Holding Times	2,4-Dimethylphenol	J	FW-16B-01
			Naphthalene		FW-20B-02

APPENDIX C

ELECTRONIC DATA SUBMITTALS
(PROVIDED TO U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION IV)