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October 19, 2011

Mr. Scott Miller
Remedial Project Manager
U.S. Environmental Protection Agency, Region IV
4WD-SRTMB
61 Forsyth Street
Atlanta, GA 30303-3415

RE: 2011 First Semiannual Comprehensive Groundwater Monitoring Report
Cabot Carbon/ Koppers Superfund Site
Gainesville, Florida

Dear Mr. Miller:

On behalf of Beazer East, Inc. (Beazer), enclosed are three copies of the 2011 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. Mitchell Brourman, Beazer Environmental Manager, at (412) 208-8805 or Ms. Angie Gatchie of Field & Technical Services LLC (FTS) at 412-429-2694.

Sincerely,

Field & Technical Services LLC

Angie Gatchie
Project Scientist

Attachments

cc: W. O'Steen, U.S. EPA
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2011 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
200 Third Avenue
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October 19, 2011

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ABBREVIATIONS/ACRONYMS

Beazer	Beazer East, Inc.
BTEX	Benzene, Toluene, Ethylbenzene, and Xylene
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
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 2011 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 2011 (January 1, 2011 through June 30, 2011) 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, March 31, 2011, *Comprehensive Groundwater Monitoring and Sample Analysis Plan Revision 02*,Cabot Carbon/Koppers Superfund Site, Gainesville, Florida, submitted to U.S. EPA.

2.0 MONITORING ACTIVITIES

Field activities associated with the first quarter 2011 were conducted January 31, 2011 through February 4, 2011. Field activities associated with the second quarter 2011 were conducted June 6 through 9, 2011 and June 13, 2011. 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 2011:

- 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;
- Groundwater potentiometric surface elevation data for the multi-port monitoring wells were measured using the Westbay sampling tool equipped with an integral pressure transducer as described in the CGMSAP. Using the sampling tool, an ambient atmospheric pressure reading was taken at each sample location on each day of sampling. The sampling tool is then lowered down-hole to engage the desired discrete interval sampling port and a pore pressure was measured;
- 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 multi-port monitoring wells and the Floridan Aquifer sentinel monitoring wells FW-29B and FW-29C, see below). Monitoring wells were purged using either a peristaltic pump and dedicated Teflon®-lined tubing, a QED bladder equipped with disposable Teflon® bladders and dedicated Teflon®-lined tubing, or by direct fill from spigot (Floridan Aquifer pumping wells FW-6 and FW-21B). 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;
- Traditional three to five well-volume purge sampling procedures were implemented during the purging and sampling of the Floridan Aquifer sentinel monitoring wells FW-29B and FW-29C. Monitoring wells were purged using a Grundfos Redi Flo-2 pump and dedicated Teflon®-lined tubing. The purge volume was measured by calculating flow rate over time with a graduated 5-gallon bucket;
- Water-quality parameters were measured with a YSI-556 or an Oakton PC-10 water-quality meter and 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 traditional sampling procedures were collected and 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 Columbia Analytical Services, Inc. of Jacksonville, Florida for analysis; and,
- 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 and 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. Thirteen 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.

Eleven Surficial Aquifer monitoring wells were sampled during the first quarter 2011 event (Table 2). No Surficial Aquifer monitoring wells were sampled during the second quarter 2011 event. The monitoring locations and sampling frequency for the Surficial Aquifer is provided in Table 1.

All Surficial Aquifer monitoring wells were sampled for a select list of semi-volatile organic constituents (SVOCs) and benzene, ethylbenzene, toluene, and xylenes (BTEX) as presented in Table 5-3 of the CGMSAP. In addition, select monitoring wells were sampled for total and dissolved arsenic, total and dissolved chromium, and pentachlorophenol (Table 5-3).

2.3 HAWTHORN GROUP

Hawthorn Group 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 24 HG monitoring wells are used to monitor groundwater quality (Figure 2).

No HG monitoring wells were sampled during the first quarter 2011 event. Fourteen HG monitoring wells were sampled during the second quarter 2011 event (Table 2). Ten HG monitoring wells were sampled along the eastern property boundary and four monitoring wells were sampled along the western property boundary. The monitoring locations and sampling frequency for the HG is provided in Table 2.

The list of analytes for the HG monitoring wells is tailored to the known constituent distributions established from the comprehensive sampling performed in December 2007. All HG monitoring wells were sampled for select SVOCs and BTEX as presented in Table 5-4 of the CGMSAP.

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.

Eighteen Floridan Aquifer monitoring wells were sampled during the first quarter 2011 event and seven Floridan Aquifer monitoring wells were sampled during the second quarter 2011 event (Table 3).

Floridan Aquifer pumping wells FW-6 and FW-21B could not be gauged during the first and second quarter 2011 due to dedicated pumping equipment installed in these wells. Floridan Aquifer monitoring well FW-22B was sampled on June 13, 2011.

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 SVOCs and BTEX consistent with the CGMSAP. In addition, select Floridan Aquifer monitoring wells (FW-24B, FW-24C, FW-27B, FW-28B, FW-29B, FW-29C, and FW-30B) were sampled for total and dissolved arsenic.

2.5 QUALITY ASSURANCE

Quality assurance/quality control (QA/QC) samples collected during the first and second quarter 2011 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	Monitoring Well ID	QA/QC ID	QA/QC Type
First Quarter 2011			
Surficial Aquifer	M-16A	M-99A-020111	Duplicate
	M-33B	M-99B-020211	Duplicate
	M-23BR	--	MS/MSD
Floridan Aquifer	FW-23C Zone 2	FW-99A-013111	Duplicate
	FW-28B Zone 4	FW-99B-020111	Duplicate
	FW-24B Zone 4	FW-99C-020211	Duplicate
	FW-21B	FW-99D-020211	Duplicate
	FW-20B	FW-99E-020411	Duplicate
	FW-22C	--	MS/MSD
	FW-29C	--	MS/MSD
	FW-6	--	MS/MSD
Second Quarter 2011			
Hawthorn Group	HG-25D	HG-99B-060811	Duplicate
	HG-26D	HG-99C-060911	Duplicate
	HG-27D	--	MS/MSD
Floridan Aquifer	FW-24B Zone 4	FW-99A-060711	Duplicate
	FW-29B	FW-99B-060911	Duplicate
	FW-20B 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 Columbia Analytical Services, Inc, Environmental Standards validated the data, using the protocols of the U.S. EPA National Functional Guidelines (U.S. EPA 2008[3], 2009[4], and 2010[5]) and U.S. EPA method

[3] U.S. EPA, June 2008. *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, January 2010. *U.S. EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*.

specifications. Environmental Standards found the majority of the data acceptable with the summarized qualifications, including rejected data, listed in Appendix B. Appendix B also contains the data validations and analytical reports. Appendix C contains the analytical data tables in Microsoft Excel format.

2.6 MONITORING WELL INSPECTION

Monitoring well inspections were completed on January 31, 2011 and June 6, 2011. The FTS field crew documented observed defects or maintenance activities associated with the monitoring wells included in the first and second quarter 2011 events (Appendix A). Only minor defects were observed during the first quarter 2011 monitoring well inspection, these minor defects included surficial pad cracks (HG-21S, HG-22D, and HG-26D), missing or rusted bolts (HG-26D and HG-29D), and hinges needed repaired (ITW-22). All defects were repaired prior to the second quarter event. There were no monitoring well defects observed during the second quarter 2011 monitoring well inspection.

2.7 DEVIATIONS FROM THE CGMSAP

The following deviations from the approved CGMSAP occurred during the reporting period:

- Floridan Aquifer monitoring wells FW-6 and FW-21B were not gauged during the first and second quarter 2011 sampling events due to dedicated pumping equipment installed in these monitoring wells.

3.0 MONITORING RESULTS

The non-aqueous phase liquids (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 on a bi-monthly basis in six Upper Hawthorn monitoring wells. The DNAPL recovery is performed as an IRM and is reported in the monthly status reports for this Site. One of the six DNAPL recovery wells (HG-16S) is also included under this semi-annual monitoring program. DNAPL was detected in monitoring well HG-16S located near the former North Lagoon during the first and second quarter 2011 monitoring events (Table 4a and Table 4b). No measureable DNAPL thickness was detected in Lower Hawthorn monitoring wells during both the first and second quarter 2011; however, similar to historical monitoring in monitoring well HG-10D, minor DNAPL staining was detected on the probe during measurements in this monitoring well. In Upper Hawthorn monitoring well HG-16S, DNAPL was detected at thicknesses of 0.39 feet during the first quarter 2011 and 0.26 during the second quarter 2011. Light non-aqueous phase liquid (LNAPL) was not detected in any of the Surficial Aquifer, HG, or Floridan Aquifer monitoring wells during the first and second quarter 2011 monitoring events (Table 4a and Table 4b).

3.2 GROUNDWATER FLOW

Groundwater potentiometric elevations were obtained in 46 monitoring well locations during the first quarter 2011 (Table 4a) and in 52 monitoring well locations during the second quarter 2011 (Table 4b). The monitoring well groundwater elevations were used to construct the potentiometric surface contour maps for the first quarter 2011 (Figures 3a, 3b, 3c, and 3d) and for the second quarter 2011 (Figures 4a, 4b, 4c, and 4d). The following subsections discuss the first and second quarter 2011 groundwater elevation data for the Surficial Aquifer, Upper Hawthorn Aquifer, Lower Hawthorn Aquifer, 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 2011. 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. Total combined groundwater recovery from the well/drain system during first quarter

2011 was approximately 45 gallons per minute (gpm) and second quarter 2011 was approximately 52 gpm.

The principal direction for groundwater flow in the Surficial Aquifer is to the northeast; however, groundwater is being captured locally by the hydraulic-containment system in continuous operation at the Site (Figures 3a and 4a). The hydraulic gradient varies from a low gradient across the southern three quarters of the Site to a significantly higher gradient on the northern one quarter of the Site. The average hydraulic gradient across the southern three quarters of the Site is approximately 0.003 ft/ft, whereas the average hydraulic gradient across the northern quarter of the Site is approximately 0.01 ft/ft. This increase in the hydraulic gradient from the southern to the northern area of the Site is likely due to a combination of factors including: (1) a decrease in the Surficial Aquifer transmissivity (hydraulic conductivity times aquifer thickness) in the northern area of the Site; and (2) a lowering of the water table by the hydraulic-containment system groundwater recovery in this area. Groundwater flow directions and hydraulic gradients for the first and second quarter 2011 events were consistent with historical Site conditions.

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.

Upper Hawthorn

Groundwater flow in the Upper Hawthorn closely mimics the flow direction in the Surficial Aquifer, with a primarily northeastern flow direction across the Site (Figures 3b and 4b). 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; however the magnitude of this hydraulic-gradient change is not as large as in the Surficial Aquifer.

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 (Figures 3c and 4c). 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 to 7 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 42 years of pumping at this wellfield. Because of groundwater withdrawals at the Murphree Wellfield, the average groundwater flow direction at the Site is to the northeast. Monitoring well data at the Site also indicate a

localized northern to northwestern groundwater flow direction on the western portion of the Site (Figures 3d and 4d). This flow direction has recently been correlated with groundwater impacts observed in monitoring well FW-22B. The groundwater flow direction on the eastern portion of the Site appears to be predominantly to the northeast, consistent with regional flow for this aquifer.

Eight Floridan Aquifer monitoring wells were gauged during the first quarter 2011 event and fifteen Floridan Aquifer monitoring wells were gauged during the second quarter 2011 event; twelve monitoring wells are completed in the Upper Transmissive Zone (UTZ) and three monitoring wells are completed in the Lower Transmissive Zone (LTZ). The average hydraulic gradient in the Floridan Aquifer is relatively flat, with an average horizontal gradient of 0.00025 feet/feet. The Floridan Aquifer average groundwater flow direction at the Site is to the north and northeast. The hydraulic gradient across the site and groundwater flow direction measured in January 2011 and June 2011 are approximately consistent with those observed in previous events.

The vertical hydraulic gradient from the UTZ to the LTZ is generally downward at the Site. The three sentinel monitoring well pairs (monitoring wells completed in the UTZ and LTZ) provide the best data for estimating the current vertical hydraulic gradient between the UTZ and LTZ. The vertical hydraulic gradient at the sentinel monitoring well locations indicate an approximately flat hydraulic gradient between the UTZ and LTZ at this location (Tables 4a and 4b). The relatively low vertical hydraulic gradient between the UTZ and LTZ is likely a result of groundwater withdrawals at the Murphree Wellfield that are tending to reduce the vertical hydraulic gradient between these two units.

3.3 GROUNDWATER QUALITY

Groundwater samples were collected from 29 monitoring wells during the first quarter 2011 and from 21 monitoring wells during the second quarter 2011 in accordance with the CGMSAP. The following subsections discuss groundwater quality observations for the Surficial Aquifer, HG deposits, and Floridan Aquifer during the first and second quarter 2011.

3.3.1 Surficial Aquifer

Groundwater samples were collected from 11 Surficial Aquifer monitoring wells during the first quarter 2011 (Figure 2). Table 5 presents a summary of the February 2011 analytical results. 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 Surficial Aquifer monitoring wells (Figures 5 and 6, respectively). The field forms associated with the

sampling of these monitoring wells during the first quarter 2011 event are included in Appendix A. The analytical laboratory results are included in Appendix B.

Surficial Aquifer monitoring well M-12, is located near the central portion of the eastern property boundary of the Site; monitoring well ITW-22 is located off-Site to the east of the property boundary. No organic constituents exceeded groundwater standards in these monitoring wells.

Three Surficial Aquifer monitoring wells are located in the northeastern area of the Site (M-09AR, M-09BR, and M-33B). Surficial Aquifer monitoring well M-09AR did not contain any constituents that exceeded standards. Surficial Aquifer monitoring well M-09BR had select organic constituents that exceed Florida GCTLs; however, none of the detected select organic constituents exceeded U.S. EPA MCL standards. The constituent concentrations in monitoring well M-09BR are similar to the concentrations measured in previous events. Surficial Aquifer monitoring well M-33B had select organic constituents that exceed Florida GCTLs and U.S. EPA MCL standards. The first quarter naphthalene (2,600 µg/L) and benzene (12 µg/L) concentrations for monitoring well M-33B are approximately a factor of four greater than the third quarter 2010 concentrations.

Six Surficial Aquifer monitoring wells located along the southern half of eastern property boundary (M-16A, M-16B, M-17, M-20B, M-23BR, and M-25B) contained organic constituents that exceeded Florida GCTLs. Five Surficial Aquifer monitoring wells (M-16B, M-17, M-20B, M-23BR, and M-25B) contained pentachlorophenol that exceeded its Florida GCTL and U.S. EPA MCL. The concentrations for these monitoring wells are approximately similar to the third quarter 2010 sampling event. All of these monitoring wells are within the capture area of the hydraulic-containment system and reflect impacted groundwater that is being contained and treated by this system.

Three Surficial Aquifer monitoring wells contained arsenic concentrations that exceeded the Florida GCTL and U.S. EPA MCL of 10 micrograms per liter (µg/L), as presented in Table 5 and Figure 6; M-17, M-20B, and M-23BR, consistent with results from previous sampling events.

The groundwater quality results for the Surficial Aquifer monitoring wells included in the CGMSAP represent groundwater impacts that are within the capture zone of the hydraulic-containment system perimeter wells. The elevated organic and inorganic concentrations represent impacted groundwater that is being pulled from on-Site sources into the groundwater capture system. Hence, elevated concentrations measured in these monitoring wells are not representative of groundwater quality flowing off-Site, but rather represent impacted groundwater being captured by the containment system.

3.3.2 Hawthorn Group

Groundwater samples were collected from 14 HG monitoring wells during the second quarter 2011. Four of the monitoring wells are located along the western boundary of the Site and the remaining ten monitoring wells are located along the eastern boundary of the Site (Figure 2). Tables 6a and 6b present summaries of the June 2011 Upper and Lower HG analytical results. A graphical summary of organic constituents that exceed the U.S. EPA MCLs and the Florida GCTLs is provided for the Upper and Lower Hawthorn monitoring wells (Figures 7a and 7b, respectively). The field forms, associated with the sampling of these monitoring wells during the June 2011 event, are included in Appendix A. The analytical laboratory results are included in Appendix B.

Off-Site monitoring wells located to the west of the Site consist of three Lower Hawthorn monitoring wells (HG-22D, HG-23D, and HG-25D) and one Upper Hawthorn monitoring well (HG-24S). All organic constituent concentrations for these monitoring wells were nondetect, consistent with results from previous sampling events at these monitoring wells.

Monitoring well pair HG-27S/D is located approximately 400 feet northeast off-Site. All organic constituent concentrations for these monitoring wells were nondetect, consistent with results from previous sampling events.

Monitoring well nests HG-21S/D, HG-20S/D and HG-26S/D are located approximately 200 to 300 feet off-Site to the east. Monitoring well pair HG-21S/D is located to the northeast of the Site. No organic constituents exceeded groundwater standards in the Upper Hawthorn monitoring well, HG-21S. However, the Lower Hawthorn monitoring well (HG-21D) contained benzene, ethylbenzene, xylenes, 2,4-dimethyphenol and naphthalene concentrations that exceeded Florida GCTL standards. In addition, the benzene concentration in this monitoring well (42 µg/L) exceeded the U.S. EPA MCL standard. The June 2011 naphthalene concentration (1,200 µg/L) in monitoring well HG-21D decreased when compared to the December 2010 sampling event results (1,700 µg/L), however there has been an overall increase in naphthalene concentrations since the May 2010 sampling event. Paired monitoring well HG-21S is nondetect for all organic constituents and monitoring well HG-27D, which is approximately downgradient of this monitoring well, continues to be nondetect for all organic constituents.

Monitoring well pair HG-20S/D is located off-Site to the east of the former drip track area. One constituent, 3&4 methylphenol, exceeded groundwater standards in the Lower Hawthorn monitoring well (HG-20D), this constituent has not been detected in this monitoring well during previous sampling events. Three organic constituents (benzene, carbazole, and naphthalene) exceeded GCTLs in the Upper Hawthorn monitoring well

HG-20S; the results for this monitoring well are consistent with previous sampling events.

Monitoring well pair HG-26S/D is located to the east on the former Cabot Carbon property. Both the Upper and Lower Hawthorn monitoring wells have select organic constituents that exceed the Florida GCTL. The Upper Hawthorn monitoring well HG-26S also contained benzene (11 µg/L) which exceeded the U.S. EPA MCL.

Monitoring well pair HG-29S/D is located downgradient of the former Cabot Carbon lagoons. Both the Upper and Lower Hawthorn monitoring wells have select organic constituents that exceed the Florida GCTL. The Upper and Lower Hawthorn monitoring wells also contained benzene concentrations (24 µg/L and 110 µg/L) which exceed the U.S. EPA MCL. The organic constituents detected in this monitoring well pair are consistent with previous sampling events that have correlated impacts in these monitoring wells with the former Cabot Carbon lagoons.

3.3.3 Floridan Aquifer

Groundwater samples were collected from 18 Floridan Aquifer monitoring wells during the first quarter 2011 and seven Floridan Aquifer monitoring wells were sampled during the second quarter 2011 (Figure 2). Table 7 presents a summary of the first and second quarter 2011 analytical results for the single-screened Floridan Aquifer monitoring wells. Summaries of the first and second quarter 2011 analytical results for the multi-screened, multi-port UTZ and LTZ Floridan Aquifer monitoring wells are presented in Tables 8a and 8b, respectively. A graphical summary of organic and inorganic constituents that exceed the U.S. EPA MCLs and the Florida GCTLs are provided for the source area monitoring wells (Figure 8), transect monitoring wells (Figures 9 and 10), boundary monitoring wells (Figures 11 and 12), and sentinel monitoring wells (Figures 13 and 14). Figures 15 and 16 show a summary of the Floridan Aquifer organic and 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, boundary, and sentinel monitoring wells.

3.3.3.1 Source Area Monitoring Wells

The source area UTZ monitoring wells in the former North Lagoon (FW-6 and FW-20B) contained select organic constituents, with concentrations above Florida GCTL standards; and benzene above its respective USEPA MCL (Figure 8). Source area monitoring well FW-21B located in the former Drip Track area contained naphthalene above its respective Florida GCTL standard.

The February 2011 sample collected from UTZ extraction well FW-6 contained six organic constituents: benzene, 2-methylnaphthalene, acenaphthene, carbazole, dibenzofuran, and naphthalene that exceed Florida GCTL standards. The sample collected during the February 2011 sampling event also contained benzene that exceeds its respective U.S. EPA MCL. There has been a continued increase in constituent concentrations for FW-6 since the third quarter 2010 event. The first quarter 2011 naphthalene concentration is approximately a factor of eight higher than the third quarter 2010 concentration. The increased constituent concentration for extraction well FW-6 is an indication that higher concentration groundwater pumping is being capturing at this location.

The February and June 2011 samples collected from the upper two Zones (Zones 1 and 2) for monitoring well FW-20B contain select organic constituents that exceed Florida GCTL standards. The February and June 2011 samples collected from Zone 1 contained five organic constituents (benzene, acenaphthene, carbazole, dibenzofuran, and naphthalene) that exceed their respective Florida GCTL standards. Zone 2 contained two organic constituents (acenaphthene and naphthalene) that exceeded their respective Florida GCTL standards during the February and June 2011 sampling events. The samples collected from Zone 1 during the February 2011 and June 2011 sampling events also contained benzene that exceeds its respective U.S. EPA MCL. The 2011 naphthalene and benzene concentrations in monitoring well FW-20B (Zone 1) have approximately double since third quarter 2010. This concentration increase was first observed during the 4th quarter 2010 monitoring event and concentrations continued to be elevated into first half of 2011. The increase in constituent concentration for this monitoring well coincide with increased concentrations observed at extraction well FW-6. The FW-20B (Zone 2) constituent concentrations for 2011 were approximately equal to the 2010 concentrations.

Floridan monitoring well FW-21B has been converted from a multi-screened, multi-port monitoring well to a single-screened extraction well and has dedicated pumping equipment installed inside it. The February 2011 sample collected from extraction well FW-21B contained naphthalene that exceeded its respective Florida GCTL standard. The 2011 naphthalene concentrations for this extraction well were slightly elevated from the third quarter 2010 concentrations.

3.3.3.2 Transect Monitoring Wells

There are a total of ten UTZ transect monitoring wells. Only four UTZ transect monitoring wells were sampled during the reporting period (FW-12B, FW-16B Zone 1, FW-27B and FW-30B). Consistent with historical sampling events, monitoring well FW-30B did not exceed the Florida GCTLs or the USEPA MCL standards. Samples collected from three monitoring wells FW-12B (Zones 1, 3 and 4), FW-16B (Zone 1),

and FW-27B (Zones 1-6) contained select organic constituents that exceed the Florida GCTLs. The samples collected from monitoring well FW-27B (Zone 3) also contained benzene that exceeds the USEPA MCL standard (Table 8a and Figure 9). In addition, monitoring wells FW-27B and FW-30B were sampled for total and dissolved arsenic; results from both monitoring wells are below State and Federal standards Table 8a and Figure 10).

Three of the four Zones (Zones 1, 3, and 4) for monitoring well FW-12B contain select organic constituents that exceed Florida GCTL standards. 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 much lower concentrations. The constituent temporal trends for impacts in the two lower monitoring zones are consistent with the conceptual model of impacts infiltrating upgradient of this monitoring well location and migrating diagonally downward as they are transported to the north. In general, 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 slightly elevated benzene concentrations in excess of Florida GCTL standards and low naphthalene concentrations in excess of Florida GCTL standards during the February and June 2011 sampling events. The February and June 2011 organic constituent concentrations in monitoring well FW-16B were similar with previous sampling events.

All zones (Zones 1, 2, 3, 4, 5, and 6) for monitoring well FW-27B contain select organic constituents that exceed Florida GCTL standards. FW-27B Zone 3 contains benzene that exceeds the USEPA MCL standard. In Zone 1, benzene, acenaphthene, and naphthalene exceeded their respective Florida GCTL standards. Zone 2 contain five organic constituents (benzene, acenaphthene, carbazole, dibenzofuran, and naphthalene) that exceed Florida GCTL standards. Zones 3, 4, 5 and 6 all contain six organic constituents (benzene, 2-methylnaphthalene, acenaphthene, carbazole, dibenzofuran, and naphthalene) that exceed Florida GCTL standards. The sample collected from Zones 3 also contains benzene that exceeds its respective USEPA MCL.

3.3.3.3 Boundary Monitoring Wells

As shown on Figures 11 and 12, all organic constituents were below the USEPA MCLs and the Florida GCTLs in 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 in the multi-screened, multi-port UTZ property boundary monitoring wells FW-22B, FW-23B, FW-24B, and FW-28B during the reporting period. In addition, boundary monitoring wells FW-24B and FW-28B were sampled for total and dissolved arsenic. Total and dissolved arsenic concentrations were

elevated above Federal and State standards in Zones 1 and 2 in monitoring well FW-24B, which is consistent with previous sampling events.

3.3.3.4 Sentinel Monitoring Wells

Groundwater samples were collected from the two sentinel monitoring wells FW-29B and FW-29C during the reporting period. The sentinel monitoring wells are below U.S. EPA MCLs and Florida GCTLs standards for all organic and inorganic constituents (Figures 13 and 14).

4.0 SUMMARY AND CONCLUSIONS

4.1 HYDROGEOLOGY

The principal direction for groundwater flow in the Surficial Aquifer is to the northeast; however, on-Site groundwater is being captured by the hydraulic containment system that has been in continuous operation at the Site, since 1995. Groundwater flow directions and hydraulic gradients in the Surficial Aquifer are consistent with historical site conditions.

Similar to the Surficial 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.

Groundwater flow in the Floridan Aquifer is primarily controlled by groundwater withdrawals at the Murphree Wellfield. Because of groundwater withdrawals at the Murphree Wellfield, the average groundwater flow direction at the Site is to the northeast. Monitoring well data at the Site also indicate a localized northern to northwestern groundwater flow direction on the western portion of the Site. The groundwater flow direction on the eastern portion of the Site appears to be predominantly to the northeast, consistent with regional flow for this aquifer.

4.2 NAPL MOBILITY

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 semi-annual program. A measurable quantity of DNAPL was detected in monitoring wells HG-16S located near the former North Lagoon during the first and second quarter 2011 monitoring events. LNAPL was not detected in any of the Surficial Aquifer, HG, or Floridan Aquifer monitoring wells during the first and second quarter 2011 monitoring events. The NAPL thickness measurements are consistent with historical observations.

4.3 GROUNDWATER QUALITY

Groundwater quality observed during the first and second quarter 2011 sampling events in the Surficial Aquifer, HG, and 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 or in the off-Site sentinel monitoring wells. Monitoring well FW-27B contained dissolved-phase impacts which are consistent with historical impacts observed in upgradient monitoring wells located within the plume footprint. The width of the plume is fairly small and well defined by existing monitoring wells; however, impacts were observed in the lowest monitoring zone in FW-27B completed approximately 50 feet into the semi-confining unit. 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.

The quarterly sampling requirements for Surficial Aquifer monitoring well M-16A has been completed and this monitoring well will be sampled on a semi-annual basis starting in the second semi-annual period of 2011.

The semi-annual sampling requirements for Surficial Aquifer monitoring wells ITW-22, M-9AR, M-9BR, M-16B, M-20B, M-23BR, M-25B, and M-33B have been completed and these monitoring wells will be sampled on an annual basis starting with the next annual event in the third quarter 2011.

The semi-annual sampling requirements for HG monitoring wells HG-20S/D through HG-29S/D have been completed and these monitoring wells will be sampled on an annual basis starting in the fourth quarter 2011.

The quarterly sampling requirements for Floridan Aquifer monitoring wells FW-27B, FW-28B, FW-29B, FW-29C, and FW-30B have been completed and these monitoring wells will be sampled on a semi-annual basis starting in the third quarter 2011. Additionally, total and dissolved arsenic is no longer required in Floridan Aquifer monitoring wells FW-29B and FW-29C.

TABLES

Table 1
Surficial Aquifer Monitoring Wells and Program Parameters
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 2011	Second Quarter 2011	Third Quarter 2011	Fourth Quarter 2011
ITW-12	A	SVOCs	VOCs	--	--	--	Annual	--	--	X	--
ITW-22	A	SVOCs	VOCs	--	--	--	SA (4 events)[5] then Annual	X	--	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)	--	--	SA (4 events)[5] then Annual	X	--	X	--
M-9BR	B	SVOCs	VOCs	Arsenic (total and dissolved)	--	--	SA (4 events)[5] then Annual	X	--	X	--
M-12	A	SVOCs	VOCs	Arsenic (total and dissolved)	Chromium (total and dissolved)	Pentachlorophenol	SA (4 events) then Annual	X	--	X	--
M-16A	A	SVOCs	VOCs	Arsenic (total and dissolved)	--	Pentachlorophenol	QTR (4 events) [4]/ SA (2 events) / then Annual	X	--	X	--
M-16B	B	SVOCs	VOCs	Arsenic (total and dissolved)	--	Pentachlorophenol	SA (4 events)[5] then Annual	X	--	X	--
M-17	A	SVOCs	VOCs	Arsenic (total and dissolved)	--	Pentachlorophenol	SA (2 events) / then Annual	X	--	X	--
M-20B	B	SVOCs	VOCs	Arsenic (total and dissolved)	--	Pentachlorophenol	SA (4 events)[5] then Annual	X	--	X	--
M-23BR	B	SVOCs	VOCs	Arsenic (total and dissolved)	--	Pentachlorophenol	SA (4 events)[5] then Annual	X	--	X	--
M-25B	B	SVOCs	VOCs	Arsenic (total and dissolved)	--	Pentachlorophenol	SA (4 events)[5] then Annual	X	--	X	--
M-33B	B	SVOCs	VOCs	--	--	--	SA (4 events)[5] then Annual	X	--	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.
(4) As of the First Quarter 2011 M-16A has met its quarterly sampling requirements and will be sampled on a semiannual basis starting in the second semiannual period of 2011.
(5) As of the First Quarter 2011 the semiannual sampling requirements have been completed and these wells will be sampled on an annual basis starting with the next annual event in the Third Quarter 2011.

Table 2
Hawthorn Group Monitoring Wells and Program Parameters
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 2011	Second Quarter 2011	Third Quarter 2011	Fourth Quarter 2011
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	SA (2 events)[4] / then Annual	--	X	--	X
HG-20D	SVOCs	VOCs	SA (2 events)[4] / then Annual	--	X	--	X
HG-21S	SVOCs	VOCs	SA (2 events)[4] / then Annual	--	X	--	X
HG-21D	SVOCs	VOCs	SA (2 events)[4] / then Annual	--	X	--	X
HG-22D	SVOCs	VOCs	SA (2 events)[4] / then Annual	--	X	--	X
HG-23D	SVOCs	VOCs	SA (2 events)[4] / then Annual	--	X	--	X
HG-24S	SVOCs	VOCs	SA (2 events)[4] / then Annual	--	X	--	X
HG-25D	SVOCs	VOCs	SA (2 events)[4] / then Annual	--	X	--	X
HG-26S	SVOCs	VOCs	SA (2 events)[4] / then Annual	--	X	--	X
HG-26D	SVOCs	VOCs	SA (2 events)[4] / then Annual	--	X	--	X
HG-27S	SVOCs	VOCs	SA (2 events)[4] / then Annual	--	X	--	X
HG-27D	SVOCs	VOCs	SA (2 events)[4] / then Annual	--	X	--	X
HG-29S	SVOCs	VOCs	SA (2 events)[4] / then Annual	--	X	--	X
HG-29D	SVOCs	VOCs	SA (2 events)[4] / then Annual	--	X	--	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.

(4) As of the Second Quarter 2011 the semiannual sampling requirements have been completed and these wells will be sampled on an annual basis starting in the Fourth Quarter 2011

Table 3
Floridan Aquifer Monitoring Wells and Program Parameters
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 2011	Second Quarter 2011	Third Quarter 2011	Fourth Quarter 2011
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
		VOCs	--		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
		VOCs	--		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[5]	X	--	X	--
FW-25B	SVOCs	VOCs	--	Sentinel	n/a	Annual	--	--	X	--
FW-25C	SVOCs	VOCs	--	Sentinel	n/a	Annual	--	--	X	--
FW-26B	SVOCs	VOCs	As (total and dissolved)	Sentinel	n/a	Annual[6]	--	--	X	--
FW-26C	SVOCs	VOCs	--	Sentinel	n/a	Annual	--	--	X	--
FW-27B	SVOCs	VOCs	As (total and dissolved)	Transect area	all	QTR (4 events)[7] / SA (2 events) / then annual	X	--	X	--
FW-28B	SVOCs	VOCs	As (total and dissolved)	Boundary	all	QTR (4 events)[7] / SA (2 events) / then annual	X	--	X	--
FW-29B	SVOCs	VOCs	As (total and dissolved)[4][8]	Sentinel	n/a	QTR (4 events)[7] / SA (2 events) / then annual	X	X (As only)	X	--
FW-29C	SVOCs	VOCs	As (total and dissolved)[4][8]	Sentinel	n/a	QTR (4 events)[7] / SA (2 events) / then annual	X	--	X	--
FW-30B	SVOCs	VOCs	As (total and dissolved)	Transect area	all	QTR (4 events)[7] / SA (2 events) / then annual	X	--	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) FW-29B and FW-29C will be sampled for arsenic quarterly until it is either confirmed by two successive sampling events that arsenic is not detected or it is confirmed by four successive sampling events that the arsenic concentration, where present, consistently does not exceed 10 µg/l MCL.

(5) 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.

(6) Note that FW-26B has met its arsenic requirements but will be additionally sampled for total and dissolved arsenic during the Third Quarter 2011.

(7) As of the First Quarter 2011 FW-27B, FW-28B, FW-29B, FW-29C, FW-30B have met their quarterly and semi-annual sampling requirements and will be sampled on an semiannual basis starting in the Third Quarter 2011.

(8) Arsenic is no longer required in FW-29C (as of the First Quarter 2011) and FW-29B (as of the Second Quarter 2011).

Table 4a
Summary of Groundwater Elevations
First Quarter 2011 Groundwater Monitoring Event
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)
ITW-12	1/31/11	177.49	9.81	20.01	NP	NP	167.68
ITW-22	1/31/11	180.54	13.11	16.79	NP	NP	167.43
M-03BR	1/31/11	179.60	12.10	26.55	NP	NP	167.50
M-09AR	1/31/11	173.80	12.98	17.80	NP	NP	160.82
M-09BR	1/31/11	173.22	12.33	28.52	NP	NP	160.89
M-12	1/31/11	181.06	13.45	14.35	NP	NP	167.61
M-16A	1/31/11	180.96	13.10	15.54	NP	NP	167.86
M-16B	1/31/11	180.56	12.70	23.35	NP	NP	167.86
M-17	1/31/11	182.86	14.52	15.37	NP	NP	168.34
M-20B	1/31/11	183.67	13.11	25.54	NP	NP	170.56
M-23BR	1/31/11	185.10	13.58	26.10	NP	NP	171.52
M-25B	1/31/11	186.15	13.78	25.28	NP	NP	172.37
M-32B	1/31/11	186.01	13.20	25.30	NP	NP	172.81
M-33B	1/31/11	176.39	12.58	27.33	NP	NP	163.81
HG-2D	1/31/11	188.88	55.51	112.92	NP	NP	133.37
HG-4D	1/31/11	180.91	44.88	107.91	NP	NP	136.03
HG-4S	1/31/11	180.41	14.13	52.50	NP	NP	166.28
HG-5D	1/31/11	187.73	57.49	112.79	NP	NP	130.24
HG-6D	1/31/11	185.02	43.30	107.85	NP	NP	141.72
HG-6S	1/31/11	184.86	16.32	52.80	NP	NP	168.54
HG-10D	1/31/11	186.84	49.70	114.51	NP	Trace	137.14
HG-12D	1/31/11	184.64	47.61	119.01	NP	NP	137.03
HG-16D	1/31/11	185.07	47.99	117.43	NP	NP	137.08
HG-16S	1/31/11	185.07	18.72	63.90	NP	0.39	166.35
HG-20D	1/31/11	174.33	39.69	84.39	NP	NP	134.64
HG-20S	1/31/11	174.37	9.21	39.83	NP	NP	165.16
HG-21D	1/31/11	167.90	38.19	94.95	NP	NP	129.71
HG-21S	1/31/11	167.72	11.60	41.15	NP	NP	156.12
HG-22D	1/31/11	186.15	46.89	82.83	NP	NP	139.26
HG-23D	1/31/11	186.70	53.77	89.74	NP	NP	132.93
HG-24S	1/31/11	184.28	16.35	71.76	NP	NP	167.93
HG-25D	1/31/11	181.30	52.86	86.10	NP	NP	128.44
HG-26D	1/31/11	182.92	42.14	94.09	NP	NP	140.78
HG-26S	1/31/11	183.21	14.82	44.35	NP	NP	168.39
HG-27D	1/31/11	162.42	34.05	96.41	NP	NP	128.37
HG-27S	1/31/11	162.48	9.61	59.90	NP	NP	152.87
HG-29D	1/31/11	179.17	43.02	96.91	NP	NP	136.15
HG-29S	1/31/11	179.17	14.35	54.83	NP	NP	164.82
FW-3	1/31/11	188.56	147.90	154.42	NP	NP	40.66
FW-4	1/31/11	173.91	131.42	159.90	NP	NP	42.49
FW-6	NM	NM	NM	NM	NM	NM	NM
FW-21B	NM	NM	NM	NM	NM	NM	NM
FW-25B	1/31/11	152.59	110.33	229.40	NP	NP	42.26
FW-25C	1/31/11	153.22	110.85	379.48	NP	NP	42.37
FW-26B	1/31/11	154.85	112.60	230.00	NP	NP	42.25
FW-26C	1/31/11	154.71	112.48	393.96	NP	NP	42.23
FW-29B	1/31/11	162.76	120.41	246.33	NP	NP	42.35
FW-29C	1/31/11	163.08	120.70	379.84	NP	NP	42.38

Notes:
ft msl - feet above mean sea level
ft toc - feet below top of casing
NM = not measured; pumping well
NP = no product measured or observed
LNAPL = Light Non-Aqueous Phase Liquid
DNAPL = Dense Non-Aqueous Phase Liquid

Table 4b
Summary of Groundwater Elevations
Second Quarter 2011 Groundwater Monitoring Event
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)
ITW-12	6/6/11	177.49	9.80	20.03	NP	NP	167.69
ITW-22	6/6/11	180.54	13.16	16.79	NP	NP	167.38
M-03BR	6/6/11	179.60	12.70	26.50	NP	NP	166.90
M-09AR	6/6/11	173.80	13.70	17.76	NP	NP	160.10
M-09BR	6/6/11	173.22	13.08	28.52	NP	NP	160.14
M-12	6/6/11	181.06	12.89	14.38	NP	NP	168.17
M-16A	6/6/11	180.96	12.70	15.54	NP	NP	168.26
M-16B	6/6/11	180.56	12.28	23.30	NP	NP	168.28
M-17	6/6/11	182.86	14.08	15.37	NP	NP	168.78
M-20B	6/6/11	183.67	13.12	25.54	NP	NP	170.55
M-23BR	6/6/11	185.10	13.60	25.96	NP	NP	171.50
M-25B	6/6/11	186.15	13.98	25.25	NP	NP	172.17
M-32B	6/6/11	186.01	13.60	25.30	NP	NP	172.41
M-33B	6/6/11	176.39	13.25	27.23	NP	NP	163.14
HG-2D	6/6/11	188.88	55.70	112.92	NP	NP	133.18
HG-4D	6/6/11	180.91	44.91	107.90	NP	NP	136.00
HG-4S	6/6/11	180.41	13.90	52.57	NP	NP	166.51
HG-5D	6/6/11	187.73	57.71	112.79	NP	NP	130.02
HG-6D	6/6/11	185.02	43.31	107.91	NP	NP	141.71
HG-6S	6/6/11	184.86	16.26	52.80	NP	NP	168.60
HG-10D	6/6/11	186.84	49.68	114.47	NP	Trace	137.16
HG-12D	6/6/11	184.64	47.68	115.51	NP	NP	136.96
HG-16D	6/6/11	185.07	48.09	117.49	NP	NP	136.98
HG-16S	6/7/11	185.07	18.46	64.00	NP	0.26	166.61
HG-20D	6/6/11	174.33	39.71	84.39	NP	NP	134.62
HG-20S	6/6/11	174.37	9.60	39.80	NP	NP	164.77
HG-21D	6/6/11	167.90	38.39	94.97	NP	NP	129.51
HG-21S	6/6/11	167.72	11.75	41.15	NP	NP	155.97
HG-22D	6/6/11	186.15	46.89	82.83	NP	NP	139.26
HG-23D	6/6/11	186.70	53.91	89.49	NP	NP	132.79
HG-24S	6/6/11	184.28	16.40	71.68	NP	NP	167.88
HG-25D	6/6/11	181.30	53.20	86.16	NP	NP	128.10
HG-26D	6/6/11	182.92	41.98	94.10	NP	NP	140.94
HG-26S	6/6/11	183.21	14.74	44.32	NP	NP	168.47
HG-27D	6/6/11	162.42	34.30	96.40	NP	NP	128.12
HG-27S	6/6/11	162.48	10.01	59.90	NP	NP	152.47
HG-29D	6/6/11	179.17	42.73	96.87	NP	NP	136.44
HG-29S	6/6/11	179.17	13.86	54.82	NP	NP	165.31

Table 4b
Summary of Groundwater Elevations
Second Quarter 2011 Groundwater Monitoring Event
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)
FW-1	6/6/11	175.08	134.34	165.61	NP	NP	40.74
FW-2	6/6/11	183.83	142.93	159.84	NP	NP	40.90
FW-3	6/6/11	188.56	147.45	154.42	NP	NP	41.11
FW-4	6/6/11	173.91	133.33	159.94	NP	NP	40.58
FW-5	6/6/11	182.26	141.35	155.29	NP	NP	40.91
FW-6	NM	NM	NM	NM	NM	NM	NM
FW-7	6/6/11	168.55	128.11	157.36	NP	NP	40.44
FW-8	6/6/11	186.96	145.67	152.52	NP	NP	41.29
FW-9	6/6/11	184.55	143.55	155.87	NP	NP	41.00
FW-21B	NM	NM	NM	NM	NM	NM	NM
FW-25B	6/6/11	152.59	112.35	229.80	NP	NP	40.24
FW-25C	6/6/11	153.22	112.90	379.98	NP	NP	40.32
FW-26B	6/6/11	154.85	114.89	230.60	NP	NP	39.96
FW-26C	6/6/11	154.71	114.82	393.36	NP	NP	39.89
FW-29B	6/6/11	162.76	122.44	246.02	NP	NP	40.32
FW-29C	6/6/11	163.08	122.72	379.85	NP	NP	40.36

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 Surficial Aquifer Monitoring Wells
2011 First Semiannual Comprehensive Groundwater Monitoring Report
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

Analyte	Federal MCL [1] (ug/l)	Florida GCTL [2] (ug/l)	ITW-22 2/1/2011 SMP	M-09AR 2/1/2011 SMP	M-09BR 2/1/2011 SMP	M-12 2/1/2011 SMP	M-16A 2/1/2011 SMP	M-16A 2/1/2011 DUP	M-16B 2/2/2011 SMP
Temperature (°C)	NA	NA	21.44	21.07	23.48	23.40	21.80	--	21.81
pH (S.U.)	NA	NA	5.24	5.39	4.76	5.54	5.85	--	4.74
Conductivity (mS/cm)	NA	NA	0.091	0.106	0.073	0.085	0.172	--	0.066
Oxidation Reduction Potential (mV)	NA	NA	-251.4	-255.7	-280.4	-251.0	-259.0	--	-240.1
Dissolved Oxygen (mg/l)	NA	NA	0.75	1.16	0.19	1.50	0.48	--	0.35
Turbidity (NTU)	NA	NA	2.15	6.99	2.87	6.34	7.22	--	2.69
METALS									
ARSENIC (dissolved)	10	10	--	4.8	3.9	0.5 U	5.8	6.1 J	9.8 J
ARSENIC (total)	10	10	--	4.7	4.9	0.5 U	6.4	5.4 J	8.4 J
CHROMIUM (dissolved)	100	100	--	--	--	2.3	--	--	--
CHROMIUM (total)	100	100	--	--	--	3.4	--	--	--
VOCs									
BENZENE	5	1	1 U	1 U	1 U	1 U	1 U	1 U	2.2
ETHYLBENZENE	700	30	1 U	1 U	1.5	1 U	1 U	1 U	3.5
TOLUENE	10000	40	1 U	1 U	1 U	1 U	1 U	1 U	2.8
XYLENE (total)	1000	20	3 U	3 U	3 U	3 U	3 U	3 U	9.3
SVOCs									
2,4-DIMETHYLPHENOL	-	140	5.7 UJ	5.7 UJ	5.6 UJ	5.7 UJ	5.3 UJ	5.6 UJ	56 UJ
2-METHYLNAPHTHALENE	-	28	5.7 U	5.7 U	5.6 U	5.7 U	5.3 U	5.6 U	610
2-METHYLPHENOL	-	35	5.7 UJ	5.7 UJ	5.6 UJ	5.7 UJ	5.3 UJ	5.6 UJ	5.6 UJ
3&4-METHYLPHENOL	-	3.5[3]	5.7 UJ	5.7 UJ	5.6 UJ	5.7 UJ	5.3 UJ	5.6 UJ	5.6 UJ
ACENAPHTHENE	-	20	5.7 U	5.7 U	44	5.7 U	39	41	340
ACENAPHTHYLENE	-	210	5.7 U	5.7 U	5.6 U	5.7 U	5.3 U	5.6 U	16
ANTHRACENE	-	2100	5.7 U	5.7 U	5.6 U	5.7 U	5.3 U	5.6 U	5.6 U
CARBAZOLE	-	1.8	0.85 U	0.84 U	45 J	0.84 U	97 J	130 J	530 J
DIBENZOFURAN	-	28	5.7 U	5.7 U	32	5.7 U	30	33	210
FLUORANTHENE	-	280	5.7 U	5.7 U	5.6 U	5.7 U	5.3 U	5.6 U	5.6 U
FLUORENE	-	280	5.7 U	5.7 U	42	5.7 U	38	42	140
NAPHTHALENE	-	14	5.7 U	5.7 U	15	5.7 U	5.3 U	5.6 U	5700
PENTACHLOROPHENOL	1	1	0.77 U	0.76 U	0.75 U	0.76 UJ	0.71 UJ	0.75 UJ	11 J
PHENANTHRENE	-	210	5.7 U	5.7 U	5.6 U	5.7 U	10	13	87
PHENOL	-	10	5.7 UJ	5.7 UJ	5.6 UJ	5.7 UJ	5.3 UJ	5.6 UJ	5.6 UJ
PYRENE	-	210	5.7 U	5.7 U	5.6 U	5.7 U	5.3 U	5.6 U	5.6 U

Table 5
Summary of Analytical Data for Surficial Aquifer Monitoring Wells
2011 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 / Sample Date / Sample Type: M-17 2/2/2011 SMP	M-20B 2/2/2011 SMP	M-23BR 2/2/2011 SMP	M-25B 2/2/2011 SMP	M-33B 2/2/2011 SMP	M-33B 2/2/2011 DUP
Temperature (°C)	NA	NA	19.73	20.96	22.42	21.34	22.78	--
pH (S.U.)	NA	NA	5.44	4.41	5.00	6.5	4.94	--
Conductivity (mS/cm)	NA	NA	0.153	0.135	0.144	0.497	0.064	--
Oxidation Reduction Potential (mV)	NA	NA	-255.3	-256.9	-273.0	-344.2	-312.4	--
Dissolved Oxygen (mg/l)	NA	NA	1.00	0.25	0.14	0.09	0.18	--
Turbidity (NTU)	NA	NA	8.00	0.92	3.85	5.78	8.03	--
METALS								
ARSENIC (dissolved)	10	10	48	54	4530	4.7	--	--
ARSENIC (total)	10	10	47	54	4220	5.3	--	--
CHROMIUM (dissolved)	100	100	--	--	--	--	--	--
CHROMIUM (total)	100	100	--	--	--	--	--	--
VOCs								
BENZENE	5	1	1 U	1.8	1.1	660	12	12
ETHYLBENZENE	700	30	5.3	7.5	2.3	740	12	11
TOLUENE	10000	40	2.8	5.5	2	1100	22	21
XYLENE (total)	1000	20	14.5	17.3	9.8	1400	36	34
SVOCs								
2,4-DIMETHYLPHENOL	-	140	5.5 UJ	8.8 J	6.1 UJ	570 J	180 J	240 J
2-METHYLNAPHTHALENE	-	28	68	170	230	1400	140	150
2-METHYLPHENOL	-	35	5.5 UJ	5.7 UJ	6.1 UJ	240 J	50 J	55 J
3&4-METHYLPHENOL	-	3.5[3]	5.5 UJ	5.7 UJ	6.1 UJ	370 J	40 J	43 J
ACENAPHTHENE	-	20	120	240	300	280	160	180
ACENAPHTHYLENE	-	210	5.5 U	5.7 U	6.1 U	14	5.8 U	5.8 U
ANTHRACENE	-	2100	5.5 U	5.7 U	21	13	5.8 U	5.8 U
CARBAZOLE	-	1.8	110 J	130 J	85 J	300 J	140 J	150 J
DIBENZOFURAN	-	28	56	170	260	200	82	96
FLUORANTHENE	-	280	5.5 U	5.7 U	6.1 U	5.7 U	5.8 U	5.8 U
FLUORENE	-	280	55	180	270	160	81	96
NAPHTHALENE	-	14	610	1200	420	17000	2400	2800
PENTACHLOROPHENOL	1	1	17 J	77 J	5300 J	51 J	0.77 U	0.77 U
PHENANTHRENE	-	210	16	82	230	94	12	15
PHENOL	-	10	5.5 UJ	5.7 UJ	6.1 UJ	87 J	5.8 UJ	5.8 UJ
PYRENE	-	210	5.5 U	5.7 U	6.1 U	5.7 U	5.8 U	5.8 U

Notes:

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

[2] Florida Groundwater Cleanup Target Levels (GCTLs) are guidelines as 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.

Table 6a
Summary of Analytical Data for Upper Hawthorn Group Monitoring Wells
2011 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: HG-20S Sample Date: 6/9/2011 Sample Type: SMP	HG-21S 6/9/2011 SMP	HG-24S 6/8/2011 SMP	HG-26S 6/9/2011 SMP	HG-27S 6/8/2011 SMP	HG-29S 6/9/2011 SMP
Temperature (°C)	NA	NA	24.53	23.47	22.51	25.8	25.38	25.34
pH (S.U.)	NA	NA	5.90	7.43	7.2	6.30	8.45	5.94
Conductivity (mS/cm)	NA	NA	0.214	0.267	0.200	0.513	0.240	0.482
ORP (mV)	NA	NA	-319.1	-320.5	-59.4	-282.4	-220.6	-284.8
Dissolved Oxygen (mg/l)	NA	NA	0.15	0.28	0.53	0.32	0.40	0.15
Turbidity (NTU)	NA	NA	1.03	0.67	2.21	1.86	1.70	2.69
VOCs								
BENZENE	5	1	2.9	1 U	1 U	11	1 U	24
ETHYLBENZENE	700	30	4.1	1 U	1 U	21	1 U	19
TOLUENE	10000	40	1.7	1 U	1 U	7.2	1 U	170
XYLENE (total)	1000	20	7.4	3.8	3 U	40.9	3 U	45.1
SVOCs								
2,4-DIMETHYLPHENOL	-	140	62 U	17 J	5.7 UJ	54 U	5.6 UJ	560
2-METHYLNAPHTHALENE	-	28	62 U	6.3 U	5.7 U	150	5.6 U	64 U
2-METHYLPHENOL	-	35	62 U	6.3 UJ	5.7 UJ	54 U	5.6 UJ	890
3&4-METHYLPHENOL	-	3.5[3]	62 U	6.3 UJ	5.7 UJ	54 U	5.6 UJ	1700
ACENAPHTHENE	-	20	62 U	6.3 U	5.7 U	220	5.6 U	64 U
ACENAPHTHYLENE	-	210	62 U	6.3 U	5.7 U	54 U	5.6 U	64 U
CARBAZOLE	-	1.8	18 J	0.93 U	0.83 U	130	0.82 U	9.5 U
DIBENZOFURAN	-	28	62 U	6.3 U	5.7 U	85	5.6 U	64 U
FLUORANTHENE	-	280	62 U	6.3 U	5.7 U	54 U	5.6 U	64 U
FLUORENE	-	280	62 U	6.3 U	5.7 U	83	5.6 U	64 U
NAPHTHALENE	-	14	210	6.3 U	5.7 U	2100	5.6 U	64 U
PENTACHLOROPHENOL	1	1	8.3 U	0.85 UJ	0.76 UJ	7.3 U	0.74 UJ	8.6 U
PHENANTHRENE	-	210	62 U	6.3 U	5.7 U	54 U	5.6 U	64 U
PHENOL	-	10	62 UJ	6.3 UJ	5.7 UJ	54 UJ	5.6 UJ	1000 J
PYRENE	-	210	62 U	6.3 U	5.7 U	54 U	5.6 U	64 U

Notes:

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

J - Indicates result is estimated

B - Indicates field blank contamination

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 (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.

Table 6b
Summary of Analytical Data for Lower Hawthorn Group Monitoring Wells
2011 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: / Sample Date: / Sample Type: HG-20D 6/9/2011 SMP	HG-21D 6/9/2011 SMP	HG-22D 6/8/2011 SMP	HG-23D 6/8/2011 SMP	HG-25D 6/8/2011 SMP	HG-25D 6/8/2011 DUP	HG-26D 6/9/2011 SMP	HG-26D 6/9/2011 DUP	HG-27D 6/8/2011 SMP	HG-29D 6/9/2011 SMP
Temperature (°C)	NA	NA	23.35	25.29	24.09	23.94	24.23	--	24.3	--	25.55	24.98
pH (S.U.)	NA	NA	7.25	7.22	7.55	7.36	8.83	--	7.32	--	7.68	6.11
Conductivity (mS/cm)	NA	NA	0.361	0.341	0.310	0.276	0.269	--	0.273	--	0.277	3.883
ORP (mV)	NA	NA	-118.8	-3.0	-39.6	-107.9	-22.8	--	-136.7	--	-265.9	-89.2
Dissolved Oxygen (mg/l)	NA	NA	0.40	3.61	6.37	0.48	1.14	--	0.41	--	0.20	0.93
Turbidity (NTU)	NA	NA	1.56	29.10	9.06	1.98	4.10	--	1.07	--	2.27	1.17
VOCs												
BENZENE	5	1	1 U	42	1 U	1 U	1 U	1 U	3.5	3.3	1 U	110
ETHYLBENZENE	700	30	1 U	33	1 U	1 U	1 U	1 U	1 U	1 U	1 U	46
TOLUENE	10000	40	1 U	15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	310
XYLENE (total)	1000	20	3 U	72	3 U	3 U	3 U	3 U	3 U	3 U	3 U	93
SVOCs												
2,4-DIMETHYLPHENOL	-	140	9.9 J	2100	5.6 UJ	5.7 UJ	5.7 UJ	5.7 UJ	38 J	43	5.7 UJ	3700
2-METHYLNAPHTHALENE	-	28	5.5 U	57 U	5.6 U	5.7 U	5.7 U	5.7 U	5.5 U	5.7 U	5.7 U	54 U
2-METHYLPHENOL	-	35	5.5 UJ	57 U	5.6 UJ	5.7 UJ	5.7 UJ	5.7 UJ	5.5 UJ	5.7 U	5.7 UJ	4100
3&4-METHYLPHENOL	-	3.5[3]	16 J	57 U	5.6 UJ	5.7 UJ	5.7 UJ	5.7 UJ	6.8 J	5.7 U	5.7 UJ	26000
ACENAPHTHENE	-	20	5.5 U	57 U	5.6 U	5.7 U	5.7 U	5.7 U	5.5 U	5.7 U	5.7 U	54 U
ACENAPHTHYLENE	-	210	5.5 U	57 U	5.6 U	5.7 U	5.7 U	5.7 U	5.5 U	5.7 U	5.7 U	54 U
CARBAZOLE	-	1.8	0.82 U	8.4 U	0.83 U	0.83 U	0.84 U	0.85 U	1.1 J	1.6 J	0.84 U	7.9 U
DIBENZOFURAN	-	28	5.5 U	57 U	5.6 U	5.7 U	5.7 U	5.7 U	5.5 U	5.7 U	5.7 U	54 U
FLUORANTHENE	-	280	5.5 U	57 U	5.6 U	5.7 U	5.7 U	5.7 U	5.5 U	5.7 U	5.7 U	54 U
FLUORENE	-	280	5.5 U	57 U	5.6 U	5.7 U	5.7 U	5.7 U	5.5 U	5.7 U	5.7 U	54 U
NAPHTHALENE	-	14	5.5 U	1200	5.6 U	5.7 U	5.7 U	5.7 U	68	73	5.7 U	230
PENTACHLOROPHENOL	1	1	0.74 UJ	7.6 U	0.75 UJ	0.76 UJ	0.76 UJ	0.77 UJ	0.73 UJ	0.76 U	0.76 UJ	7.2 U
PHENANTHRENE	-	210	5.5 U	57 U	5.6 U	5.7 U	5.7 U	5.7 U	5.5 U	5.7 U	5.7 U	54 U
PHENOL	-	10	5.5 UJ	57 UJ	5.6 UJ	5.7 UJ	5.7 UJ	5.7 UJ	5.5 UJ	5.7 UJ	5.7 UJ	4200 J
PYRENE	-	210	5.5 U	57 U	5.6 U	5.7 U	5.7 U	5.7 U	5.5 U	5.7 U	5.7 U	54 U

Notes:

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

J - Indicates result is estimated

B - Indicates field blank contamination

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 (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.

Table 7
Summary of Analytical Data for Floridan Aquifer Monitoring Wells
2011 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: 2/2/2011 Sample Type: SMP	FW-6 2/2/2011 SMP	FW-21B 2/2/2011 SMP	FW-21B 2/2/2011 DUP	FW-29B 2/3/2011 SMP	FW-29B 6/9/2011 SMP	FW-29B 6/9/2011 DUP	FW-29C 2/3/2011 SMP
Temperature (°C)	NA	NA	23.05	23.03	23.52	--	23.04	24.40	--	23.26
pH (S.U.)	NA	NA	7.66	7.77	7.73	--	7.77	7.90	--	7.84
Conductivity (mS/cm)	NA	NA	0.357	0.419	0.518	--	0.412	0.401	--	0.388
METALS										
ARSENIC (dissolved)	10	10	--	--	--	--	6.1 R	0.73	0.87	0.5 U
ARSENIC (total)	10	10	--	--	--	--	1.5 R	0.84	0.95	0.94
VOCs										
BENZENE	5	1	1 U	9.1	1 U	1 U	1 U	--	--	1 U
ETHYLBENZENE	700	30	1 U	1.4	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	5.7	3 U	3 U	3 U	--	--	3 U
SVOCs										
2,4-DIMETHYLPHENOL	-	140	5.3 UJ	17 J	5.8 UJ	5.9 UJ	5.5 UJ	--	--	5.6 UJ
2-METHYLNAPHTHALENE	-	28	5.3 U	190	5.8 U	5.9 U	5.5 U	--	--	5.6 U
2-METHYLPHENOL	-	35	5.3 UJ	5.3 UJ	5.8 UJ	5.9 UJ	5.5 UJ	--	--	5.6 UJ
3&4-METHYLPHENOL	-	3.5[3]	0.81 UJ	0.81 UJ	0.89 UJ	0.98 J	0.85 UJ	--	--	0.86 UJ
ACENAPHTHENE	-	20	5.3 U	110	6.4	6.5	5.5 U	--	--	5.6 U
ACENAPHTHYLENE	-	210	5.3 U	5.3 U	5.8 U	5.9 U	5.5 U	--	--	5.6 U
ANTHRACENE	-	2100	5.3 U	5.3 U	5.8 U	5.9 U	5.5 U	--	--	5.6 U
CARBAZOLE	-	1.8	0.78 U	56 J	0.85 U	0.86 U	0.81 U	--	--	0.83 U
DIBENZOFURAN	-	28	5.3 U	66	5.8 U	5.9 U	5.5 U	--	--	5.6 U
FLUORANTHENE	-	280	5.3 U	8.8	5.8 U	5.9 U	5.5 U	--	--	5.6 U
FLUORENE	-	280	5.3 U	75	5.8 U	5.9 U	5.5 U	--	--	5.6 U
NAPHTHALENE	-	14	5.3 U	2400	76 J	94 J	5.5 U	--	--	5.6 U
PHENANTHRENE	-	210	5.3 U	55	5.8 U	5.9 U	5.5 U	--	--	5.6 U
PHENOL	-	10	5.3 UJ	5.3 UJ	5.8 UJ	5.9 UJ	5.5 UJ	--	--	5.6 UJ
PYRENE	-	210	5.3 U	5.3 U	5.8 U	5.9 U	5.5 U	--	--	5.6 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 Maximum Contaminant Levels (MCLs) represent the National Primary Drinking Water Standards.

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

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

Table 8a
Summary of Analytical Data for Westbay Upper Transmissive Zone Monitoring Wells
2011 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							
			Zone 1	Zone 1	Zone 2	Zone 2	Zone 3	Zone 3	Zone 4	Zone 4
		Sample Date:	2/3/2011	6/8/2011	2/3/2011	6/8/2011	2/3/2011	6/8/2011	2/3/2011	6/8/2011
METALS										
ARSENIC (dissolved)	10	10	--	--	--	--	--	--	--	--
ARSENIC (total)	10	10	--	--	--	--	--	--	--	--
VOCs										
BENZENE	5	1	3.3	2.1	1 U	1 U	2.7	2.6	3.3	1 U
ETHYLBENZENE	700	30	2.2	1.4	1 U	1 U	1 U	1 U	1 U	1 U
TOLUENE	10000	40	5.5	3.6	1 U	1 U	1 U	1 U	1 U	1 U
XYLENE (total)	1000	20	4.1	3 U	3 U	3 U	2.6	2.4	5.5	3 U
SVOCs										
2,4-DIMETHYLPHENOL	-	140	29 J	32 J	5.6 UJ	5.5 UJ	5.6 UJ	6.1 U	5.4 UJ	5.7 UJ
2-METHYLNAPHTHALENE	-	28	6.5 U	6.2 U	5.6 U	5.5 U	70	43	28	15
2-METHYLPHENOL	-	35	27 J	27 J	5.6 UJ	5.5 UJ	5.6 UJ	6.1 UJ	5.4 UJ	5.7 UJ
3&4-METHYLPHENOL	-	3.5[3]	2.4 J	1.9 J	0.86 UJ	0.84 UJ	0.86 UJ	0.94 UJ	0.83 UJ	0.88 UJ
ACENAPHTHENE	-	20	6.5 U	6.2 U	5.6 U	5.5 U	72	94	48	40
ACENAPHTHYLENE	-	210	6.5 U	6.2 U	5.6 U	5.5 U	5.6 U	6.1 U	5.4 U	5.7 U
ANTHRACENE	-	2100	6.5 U	6.2 U	5.6 U	5.5 U	5.6 U	6.1 U	5.4 U	5.7 U
CARBAZOLE	-	1.8	0.96 U	0.91 U	0.83 U	0.81 U	20 J	24	0.8 U	0.84 U
DIBENZOFURAN	-	28	6.5 U	6.2 U	5.6 U	5.5 U	36	44	33	26
FLUORANTHENE	-	280	6.5 U	6.2 U	5.6 U	5.5 U	5.6 U	6.1 U	5.4 U	5.7 U
FLUORENE	-	280	6.5 U	6.2 U	5.6 U	5.5 U	42	56	31	26
NAPHTHALENE	-	14	140	170	5.6 U	5.5 U	1100	1300	740	710
PHENANTHRENE	-	210	6.5 U	6.2 U	5.6 U	5.5 U	26	29	5.4 U	5.7 U
PHENOL	-	10	6.5 UJ	6.2 UJ	5.6 UJ	5.5 UJ	5.6 UJ	6.1 UJ	5.4 UJ	5.7 UJ
PYRENE	-	210	6.5 U	6.2 U	5.6 U	5.5 U	5.6 U	6.1 U	5.4 U	5.7 U

Table 8a
Summary of Analytical Data for Westbay Upper Transmissive Zone Monitoring Wells
2011 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-16B		WELL ID FW-20B				
			Zone 1	Zone 1	Zone 1	Zone 1	Zone 2	Duplicate	Zone 2
		Sample Date:	2/3/2011	6/7/2011	2/4/2011	6/8/2011	2/4/2011	2/4/2011	6/8/2011
METALS									
ARSENIC (dissolved)	10	10	--	--	--	--	--	--	--
ARSENIC (total)	10	10	--	--	--	--	--	--	--
VOCs									
BENZENE	5	1	2.1	1.7	9.9	8	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	1.5	1.3	1 U	1 U	1 U	1 U	1 U
XYLENE (total)	1000	20	3 U	3 U	6.7	3 U	3 U	3 U	3 U
SVOCs									
2,4-DIMETHYLPHENOL	-	140	51 J	88 J	6.1 UJ	300 UJ	5.4 UJ	5.5 UJ	6 UJ
2-METHYLNAPHTHALENE	-	28	5.9 U	5.6 U	610 U	300 U	5.6	6.9	7.9
2-METHYLPHENOL	-	35	5.9 UJ	5.7 J	6.1 UJ	5.9 UJ	5.4 UJ	5.5 UJ	6 UJ
3&4-METHYLPHENOL	-	3.5[3]	0.91 UJ	0.86 UJ	0.93 UJ	0.91 UJ	0.83 UJ	0.85 UJ	0.92 UJ
ACENAPHTHENE	-	20	5.9 U	5.6 U	78	110	52	60	45
ACENAPHTHYLENE	-	210	5.9 U	5.6 U	6.1 U	5.9 U	5.4 U	5.5 U	6 U
ANTHRACENE	-	2100	5.9 U	5.6 U	6.1 U	5.9 U	5.4 U	5.5 U	6 U
CARBAZOLE	-	1.8	0.87 U	0.82 U	25 J	30	0.8 U	0.82 U	0.88 U
DIBENZOFURAN	-	28	5.9 U	5.6 U	47	53	26	26	20
FLUORANTHENE	-	280	5.9 U	5.6 U	8.5	7.6	5.4 U	5.5 U	6 U
FLUORENE	-	280	5.9 U	5.6 U	51	57	32	35	26
NAPHTHALENE	-	14	33	29	1800	2300	160	180	200
PHENANTHRENE	-	210	5.9 U	5.6 U	39	46	5.7	6.5	6 U
PHENOL	-	10	5.9 UJ	5.6 UJ	6.1 UJ	5.9 UJ	5.4 UJ	5.5 UJ	6 UJ
PYRENE	-	210	5.9 U	5.6 U	6.1 U	5.9 U	5.4 U	5.5 U	6 U

Table 8a
Summary of Analytical Data for Westbay Upper Transmissive Zone Monitoring Wells
2011 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-22B							
			Zone 1	Zone 1	Zone 2	Zone 2	Zone 3	Zone 3	Zone 4	Zone 4
		Sample Date:	2/2/2011	6/13/2011	2/2/2011	6/13/2011	2/2/2011	6/13/2011	2/2/2011	6/13/2011
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 U
ETHYLBENZENE	700	30	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
XYLENE (total)	1000	20	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
SVOCs										
2,4-DIMETHYLPHENOL	-	140	5.3 UJ	6.5 UJ	5.2 UJ	5.3 UJ	5.4 UJ	5.4 UJ	5.9 UJ	5.9 UJ
2-METHYLNAPHTHALENE	-	28	5.3 U	6.5 UJ	5.2 U	5.3 UJ	5.4 U	5.4 UJ	5.9 U	5.9 UJ
2-METHYLPHENOL	-	35	5.3 UJ	6.5 UJ	5.2 UJ	5.3 UJ	5.4 UJ	5.4 UJ	5.9 UJ	5.9 UJ
3&4-METHYLPHENOL	-	3.5[3]	0.82 UJ	0.99 UJ	0.8 UJ	0.81 UJ	0.83 UJ	0.82 UJ	0.91 UJ	0.91 UJ
ACENAPHTHENE	-	20	6.9	6.5 UJ	11	11 J	7.6	5.4 UJ	5.9 U	5.9 UJ
ACENAPHTHYLENE	-	210	5.3 U	6.5 UJ	5.2 U	5.3 UJ	5.4 U	5.4 UJ	5.9 U	5.9 UJ
ANTHRACENE	-	2100	5.3 U	6.5 UJ	5.2 U	5.3 UJ	5.4 U	5.4 UJ	5.9 U	5.9 UJ
CARBAZOLE	-	1.8	0.78 U	0.95 UJ	0.77 U	0.78 UJ	0.8 U	0.79 UJ	0.87 U	0.87 UJ
DIBENZOFURAN	-	28	5.3 U	6.5 UJ	5.2 U	5.3 UJ	5.4 U	5.4 UJ	5.9 U	5.9 UJ
FLUORANTHENE	-	280	5.3 U	6.5 UJ	5.2 U	5.3 UJ	5.4 U	5.4 UJ	5.9 U	5.9 UJ
FLUORENE	-	280	5.3 U	6.5 UJ	5.2 U	5.3 UJ	5.4 U	5.4 UJ	5.9 U	5.9 UJ
NAPHTHALENE	-	14	5.3 U	6.5 UJ	5.2 U	5.3 UJ	5.4 U	5.4 UJ	5.9 U	5.9 UJ
PHENANTHRENE	-	210	5.3 U	6.5 UJ	5.2 U	5.3 UJ	5.4 U	5.4 UJ	5.9 U	5.9 UJ
PHENOL	-	10	5.3 UJ	6.5 UJ	5.2 UJ	5.3 UJ	5.4 UJ	5.4 UJ	5.9 UJ	5.9 UJ
PYRENE	-	210	5.3 U	6.5 UJ	5.2 U	5.3 UJ	5.4 U	5.4 UJ	5.9 U	5.9 UJ

Table 8a
Summary of Analytical Data for Westbay Upper Transmissive Zone Monitoring Wells
2011 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							
			Zone 1	Zone 1	Zone 2	Zone 2	Zone 3	Zone 3	Zone 4	Zone 4
		Sample Date:	1/31/2011	6/6/2011	1/31/2011	6/6/2011	1/31/2011	6/7/2011	1/31/2011	6/7/2011
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 U
ETHYLBENZENE	700	30	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
XYLENE (total)	1000	20	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
SVOCs										
2,4-DIMETHYLPHENOL	-	140	5.5 UJ	5.4 UJ	5.7 UJ	6.1 UJ	5.4 UJ	5.6 UJ	5.3 UJ	5.6 UJ
2-METHYLNAPHTHALENE	-	28	5.5 U	5.4 U	5.7 U	6.1 U	5.4 U	5.6 U	5.3 U	5.6 U
2-METHYLPHENOL	-	35	5.5 UJ	5.4 UJ	5.7 UJ	6.1 UJ	5.4 UJ	5.6 UJ	5.3 UJ	5.6 UJ
3&4-METHYLPHENOL	-	3.5[3]	0.84 UJ	0.83 UJ	0.87 UJ	0.93 UJ	0.83 UJ	0.86 UJ	0.82 UJ	0.86 UJ
ACENAPHTHENE	-	20	5.5 U	5.4 U	5.7 U	6.1 U	5.4 U	5.6 U	5.3 U	5.6 U
ACENAPHTHYLENE	-	210	5.5 U	5.4 U	5.7 U	6.1 U	5.4 U	5.6 U	5.3 U	5.6 U
ANTHRACENE	-	2100	5.5 U	5.4 U	5.7 U	6.1 U	5.4 U	5.6 U	5.3 U	5.6 U
CARBAZOLE	-	1.8	0.81 U	0.8 U	0.84 U	0.9 U	0.8 U	0.82 U	0.79 U	0.83 U
DIBENZOFURAN	-	28	5.5 U	5.4 U	5.7 U	6.1 U	5.4 U	5.6 U	5.3 U	5.6 U
FLUORANTHENE	-	280	5.5 U	5.4 U	5.7 U	6.1 U	5.4 U	5.6 U	5.3 U	5.6 U
FLUORENE	-	280	5.5 U	5.4 U	5.7 U	6.1 U	5.4 U	5.6 U	5.3 U	5.6 U
NAPHTHALENE	-	14	5.5 U	5.4 U	5.7 U	6.1 U	5.4 U	5.6 U	5.3 U	5.6 U
PHENANTHRENE	-	210	5.5 U	5.4 U	5.7 U	6.1 U	5.4 U	5.6 U	5.3 U	5.6 U
PHENOL	-	10	5.5 UJ	5.4 UJ	5.7 UJ	6.1 UJ	5.4 UJ	5.6 UJ	5.3 UJ	5.6 UJ
PYRENE	-	210	5.5 U	5.4 U	5.7 U	6.1 U	5.4 U	5.6 U	5.3 U	5.6 U

Table 8a
Summary of Analytical Data for Westbay Upper Transmissive Zone Monitoring Wells
2011 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	Zone 3	Zone 4	Duplicate	Zone 4	Duplicate
		Sample Date:	2/2/2011	6/7/2011	2/2/2011	6/7/2011	2/2/2011	6/7/2011	2/2/2011	2/2/2011	6/7/2011	6/7/2011
METALS												
ARSENIC (dissolved)	10	10	166	158	24	15	1.4	0.5 U	0.88	0.85	0.8	0.7
ARSENIC (total)	10	10	174	174	29	16	1.8	1	1.1 J	0.54 J	0.9	1.2
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	6.1 UJ	5.9 UJ	6 UJ	6 UJ	5.3 UJ	6 U	5.4 UJ	5.4 UJ	5.4 UJ	5.1 UJ
2-METHYLNAPHTHALENE	-	28	6.1 U	5.9 U	6 U	6 U	5.3 U	6 U	5.4 U	5.4 U	5.4 U	5.1 U
2-METHYLPHENOL	-	35	6.1 UJ	5.9 UJ	6 UJ	6 UJ	5.3 UJ	6 U	5.4 UJ	5.4 UJ	5.4 UJ	5.1 UJ
3&4-METHYLPHENOL	-	3.5[3]	0.93 UJ	0.91 UJ	0.93 UJ	0.93 UJ	0.81 UJ	0.92 U	0.82 UJ	0.84 UJ	0.83 UJ	0.78 UJ
ACENAPHTHENE	-	20	6.1 U	5.9 U	6 U	6 U	5.3 U	6 U	5.4 U	5.4 U	5.4 U	5.1 U
ACENAPHTHYLENE	-	210	6.1 U	5.9 U	6 U	6 U	5.3 U	6 U	5.4 U	5.4 U	5.4 U	5.1 U
ANTHRACENE	-	2100	6.1 U	5.9 U	6 U	6 U	5.3 U	6 U	5.4 U	5.4 U	5.4 U	5.1 U
CARBAZOLE	-	1.8	0.9 U	0.87 U	0.89 U	0.89 U	0.78 U	0.89 U	0.79 U	0.8 U	0.79 U	0.75 U
DIBENZOFURAN	-	28	6.1 U	5.9 U	6 U	6 U	5.3 U	6 U	5.4 U	5.4 U	5.4 U	5.1 U
FLUORANTHENE	-	280	6.1 U	5.9 U	6 U	6 U	5.3 U	6 U	5.4 U	5.4 U	5.4 U	5.1 U
FLUORENE	-	280	6.1 U	5.9 U	6 U	6 U	5.3 U	6 U	5.4 U	5.4 U	5.4 U	5.1 U
NAPHTHALENE	-	14	6.1 U	5.9 U	6 U	6 U	5.3 U	6 U	5.4 U	5.4 U	5.4 U	5.1 U
PHENANTHRENE	-	210	6.1 U	5.9 U	6 U	6 U	5.3 U	6 U	5.4 U	5.4 U	5.4 U	5.1 U
PHENOL	-	10	6.1 UJ	5.9 UJ	6 UJ	6 UJ	5.3 UJ	6 U	5.4 UJ	5.4 UJ	5.4 UJ	5.1 UJ
PYRENE	-	210	6.1 U	5.9 U	6 U	6 U	5.3 U	6 U	5.4 U	5.4 U	5.4 U	5.1 U

Table 8a
Summary of Analytical Data for Westbay Upper Transmissive Zone Monitoring Wells
2011 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-27B					
			Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
		Sample Date:	2/3/2011	2/3/2011	2/3/2011	2/3/2011	2/3/2011	2/3/2011
METALS								
ARSENIC (dissolved)	10	10	0.5 U	0.99	0.5 U	0.5 U	2	6.5
ARSENIC (total)	10	10	0.5 U	1.3	0.5 U	0.5 U	1.8	5.9
VOCs								
BENZENE	5	1	2.2	3.8	6.5	2.1	3.8	4.6
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	2.1	2.2	5.9	2.1	3.2	5.4
SVOCs								
2,4-DIMETHYLPHENOL	-	140	5.8 UJ	6.1 R	5.4 UJ	5.3 UJ	5.2 UJ	5.6 UJ
2-METHYLNAPHTHALENE	-	28	19	130 R	100	71	72	50
2-METHYLPHENOL	-	35	5.8 UJ	6.1 R	5.4 UJ	5.3 UJ	5.2 UJ	5.6 UJ
3&4-METHYLPHENOL	-	3.5[3]	0.89 UJ	0.94 R	0.83 UJ	0.81 UJ	0.8 UJ	0.86 UJ
ACENAPHTHENE	-	20	29	94 J	86	67	70	65
ACENAPHTHYLENE	-	210	5.8 U	6.1 R	5.4 U	5.3 U	5.2 U	5.6 U
ANTHRACENE	-	2100	5.8 U	6.5 J	6.4	5.3 U	5.2 U	5.6 U
CARBAZOLE	-	1.8	0.85 U	18 J	14 J	10 J	19 J	12 J
DIBENZOFURAN	-	28	15	57 J	56	39	38	38
FLUORANTHENE	-	280	5.8 U	8.7 J	5.7	5.3 U	5.2 U	5.6 U
FLUORENE	-	280	17	71 J	64	47	45	44
NAPHTHALENE	-	14	480	1500 J	1300	1300	1200	990
PHENANTHRENE	-	210	11	55 J	43	32	29	25
PHENOL	-	10	5.8 UJ	6.1 R	5.4 UJ	5.3 UJ	5.2 UJ	5.6 UJ
PYRENE	-	210	5.8 U	6.1 R	5.4 U	5.3 U	5.2 U	5.6 U

Table 8a
Summary of Analytical Data for Westbay Upper Transmissive Zone Monitoring Wells
2011 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-28B					WELL ID FW-30B			
			Zone 1	Zone 2	Zone 3	Zone 4	Duplicate	Zone 1	Zone 2	Zone 3	Zone 4
		Sample Date:	2/1/2011	2/1/2011	2/1/2011	2/1/2011	2/1/2011	2/2/2011	2/1/2011	2/1/2011	2/1/2011
METALS											
ARSENIC (dissolved)	10	10	1.5	0.75	1.5	1	0.9	2.4	0.84	0.5 U	0.5 U
ARSENIC (total)	10	10	1.5	0.5 U	1.4	0.5 UJ	1.1 J	2.2	0.69	0.76	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
ETHYLBENZENE	700	30	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
XYLENE (total)	1000	20	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
SVOCs											
2,4-DIMETHYLPHENOL	-	140	5.6 UJ	5.6 UJ	5.3 UJ	6 UJ	5.4 UJ	6 UJ	5.7 UJ	5.8 UJ	5.8 UJ
2-METHYLNAPHTHALENE	-	28	5.6 U	5.6 U	5.3 U	6 U	5.4 U	6 U	5.7 U	5.8 U	5.8 U
2-METHYLPHENOL	-	35	5.6 UJ	5.6 UJ	5.3 UJ	6 UJ	5.4 UJ	6 UJ	5.7 UJ	5.8 UJ	5.8 UJ
3&4-METHYLPHENOL	-	3.5[3]	0.86 UJ	0.86 UJ	0.81 UJ	0.92 UJ	0.82 UJ	0.92 UJ	0.87 UJ	0.89 UJ	0.88 UJ
ACENAPHTHENE	-	20	5.6 U	5.6 U	5.3 U	6 U	5.4 U	6 U	5.7 U	5.8 U	5.8 U
ACENAPHTHYLENE	-	210	5.6 U	5.6 U	5.3 U	6 U	5.4 U	6 U	5.7 U	5.8 U	5.8 U
ANTHRACENE	-	2100	5.6 U	5.6 U	5.3 U	6 U	5.4 U	6 U	5.7 U	5.8 U	5.8 U
CARBAZOLE	-	1.8	0.83 U	0.83 U	0.78 U	0.88 U	0.79 U	0.89 U	0.84 U	0.86 U	0.85 U
DIBENZOFURAN	-	28	5.6 U	5.6 U	5.3 U	6 U	5.4 U	6 U	5.7 U	5.8 U	5.8 U
FLUORANTHENE	-	280	5.6 U	5.6 U	5.3 U	6 U	5.4 U	6 U	5.7 U	5.8 U	5.8 U
FLUORENE	-	280	5.6 U	5.6 U	5.3 U	6 U	5.4 U	6 U	5.7 U	5.8 U	5.8 U
NAPHTHALENE	-	14	5.6 U	5.6 U	5.3 U	6 U	5.4 U	6 U	5.7 U	5.8 U	5.8 U
PHENANTHRENE	-	210	5.6 U	5.6 U	5.3 U	6 U	5.4 U	6 U	5.7 U	5.8 U	5.8 U
PHENOL	-	10	5.6 UJ	5.6 UJ	5.3 UJ	6 UJ	5.4 UJ	6 UJ	5.7 UJ	5.8 UJ	5.8 UJ
PYRENE	-	210	5.6 U	5.6 U	5.3 U	6 U	5.4 U	6 U	5.7 U	5.8 U	5.8 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 Maximum Contaminant Levels (MCLs) represent the National Primary Drinking Water Standards.

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

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

Table 8b
Summary of Analytical Data for Westbay Lower Transmissive Zone Monitoring Wells
2011 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:	1/31/2011	1/31/2011	1/31/2011	1/31/2011	1/31/2011	2/1/2011
VOCs								
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	5.9 UJ	5.3 UJ	5.9 UJ	5.3 UJ	5.7 UJ	5.3 UJ
2-METHYLNAPHTHALENE	-	28	5.9 U	5.3 U	5.9 U	5.3 U	5.7 U	5.3 U
2-METHYLPHENOL	-	35	5.9 UJ	5.3 UJ	5.9 UJ	5.3 UJ	5.7 UJ	5.3 UJ
3&4-METHYLPHENOL	-	3.5[3]	0.91 UJ	0.82 UJ	0.91 UJ	0.81 UJ	0.88 UJ	0.82 UJ
ACENAPHTHENE	-	20	5.9 U	5.3 U	5.9 U	5.3 U	5.7 U	5.3 U
ACENAPHTHYLENE	-	210	5.9 U	5.3 U	5.9 U	5.3 U	5.7 U	5.3 U
ANTHRACENE	-	2100	5.9 U	5.3 U	5.9 U	5.3 U	5.7 U	5.3 U
CARBAZOLE	-	1.8	0.88 U	0.79 U	0.88 U	0.78 U	0.84 U	0.78 U
DIBENZOFURAN	-	28	5.9 U	5.3 U	5.9 U	5.3 U	5.7 U	5.3 U
FLUORANTHENE	-	280	5.9 U	5.3 U	5.9 U	5.3 U	5.7 U	5.3 U
FLUORENE	-	280	5.9 U	5.3 U	5.9 U	5.3 U	5.7 U	5.3 U
NAPHTHALENE	-	14	5.9 U	5.3 U	5.9 U	5.3 U	5.7 U	5.3 U
PHENANTHRENE	-	210	5.9 U	5.3 U	5.9 U	5.3 U	5.7 U	5.3 U
PHENOL	-	10	5.9 UJ	5.3 UJ	5.9 UJ	5.3 UJ	5.7 UJ	5.3 UJ
PYRENE	-	210	5.9 U	5.3 U	5.9 U	5.3 U	5.7 U	5.3 U

Table 8b
Summary of Analytical Data for Westbay Lower Transmissive Zone Monitoring Wells
2011 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	Duplicate	Zone 3	Zone 1	Zone 2	Zone 3	Zone 4
		Sample Date:	1/31/2011	1/31/2011	1/31/2011	1/31/2011	2/1/2011	2/1/2011	2/1/2011	2/1/2011
VOCs										
BENZENE	5	1	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
TOLUENE	10000	40	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
SVOCs										
2,4-DIMETHYLPHENOL	-	140	5.2 UJ	5.7 UJ	5.4 UJ	5.3 UJ	5.4 UJ	5.4 UJ	5.3 UJ	5.2 UJ
2-METHYLNAPHTHALENE	-	28	5.2 U	5.7 U	5.4 U	5.3 U	5.4 U	5.4 U	5.3 U	5.2 U
2-METHYLPHENOL	-	35	5.2 UJ	5.7 UJ	5.4 UJ	5.3 UJ	5.4 UJ	5.4 UJ	5.3 UJ	5.2 UJ
3&4-METHYLPHENOL	-	3.5[3]	0.8 UJ	0.88 UJ	0.83 UJ	0.81 UJ	0.83 UJ	0.82 UJ	0.81 UJ	0.8 UJ
ACENAPHTHENE	-	20	5.2 U	5.7 U	5.4 U	5.3 U	5.4 U	5.4 U	5.3 U	5.2 U
ACENAPHTHYLENE	-	210	5.2 U	5.7 U	5.4 U	5.3 U	5.4 U	5.4 U	5.3 U	5.2 U
ANTHRACENE	-	2100	5.2 U	5.7 U	5.4 U	5.3 U	5.4 U	5.4 U	5.3 U	5.2 U
CARBAZOLE	-	1.8	0.77 U	0.85 U	0.8 U	0.78 U	0.79 U	0.79 U	0.78 U	0.77 U
DIBENZOFURAN	-	28	5.2 U	5.7 U	5.4 U	5.3 U	5.4 U	5.4 U	5.3 U	5.2 U
FLUORANTHENE	-	280	5.2 U	5.7 U	5.4 U	5.3 U	5.4 U	5.4 U	5.3 U	5.2 U
FLUORENE	-	280	5.2 U	5.7 U	5.4 U	5.3 U	5.4 U	5.4 U	5.3 U	5.2 U
NAPHTHALENE	-	14	5.2 U	5.7 U	5.4 U	5.3 U	5.4 U	5.4 U	5.3 U	5.2 U
PHENANTHRENE	-	210	5.2 U	5.7 U	5.4 U	5.3 U	5.4 U	5.4 U	5.3 U	5.2 U
PHENOL	-	10	5.2 UJ	5.7 UJ	5.4 UJ	5.3 UJ	5.4 UJ	5.4 UJ	5.3 UJ	5.2 UJ
PYRENE	-	210	5.2 U	5.7 U	5.4 U	5.3 U	5.4 U	5.4 U	5.3 U	5.2 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

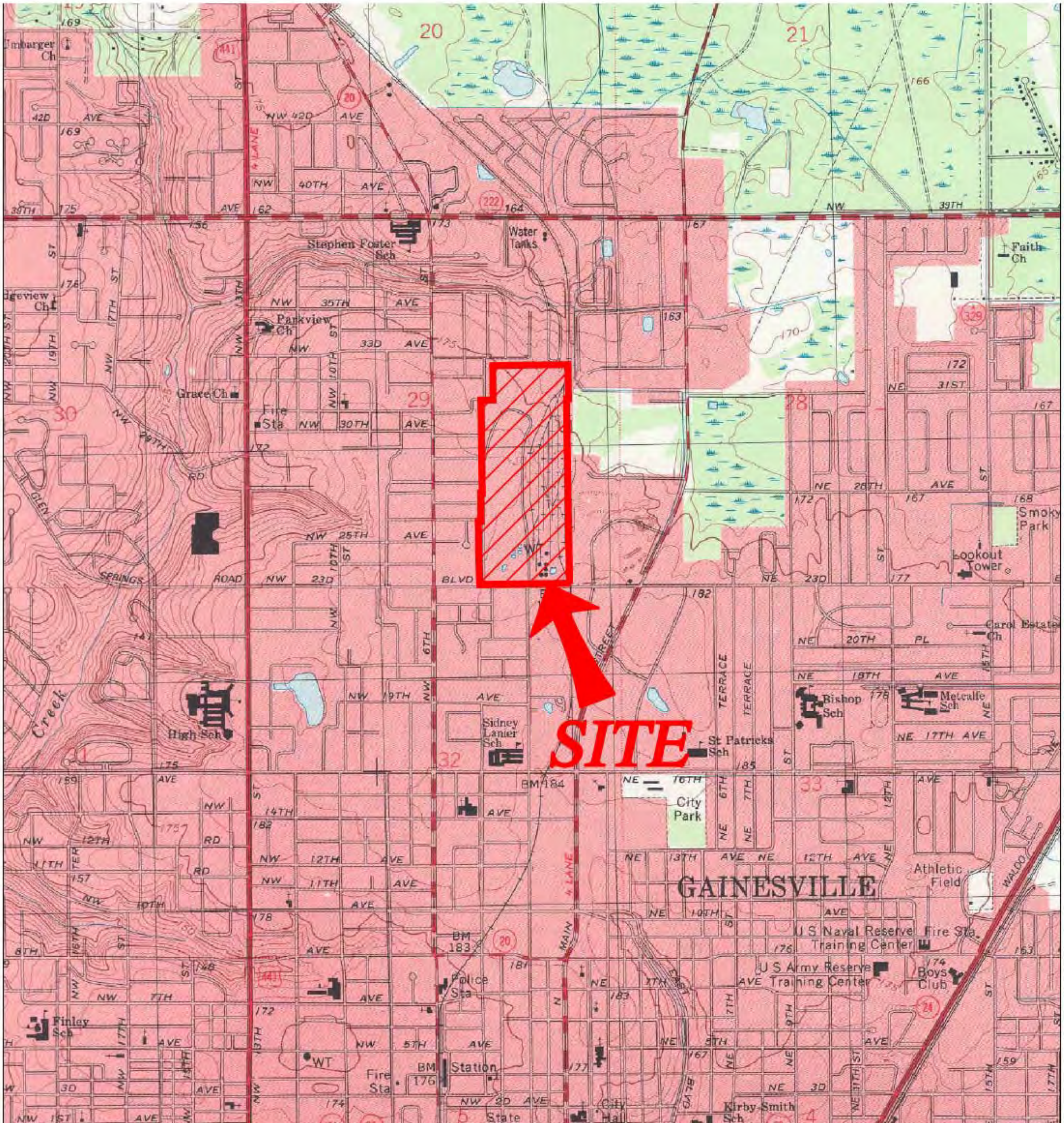
Concentration exceeds Federal MCL

(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



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

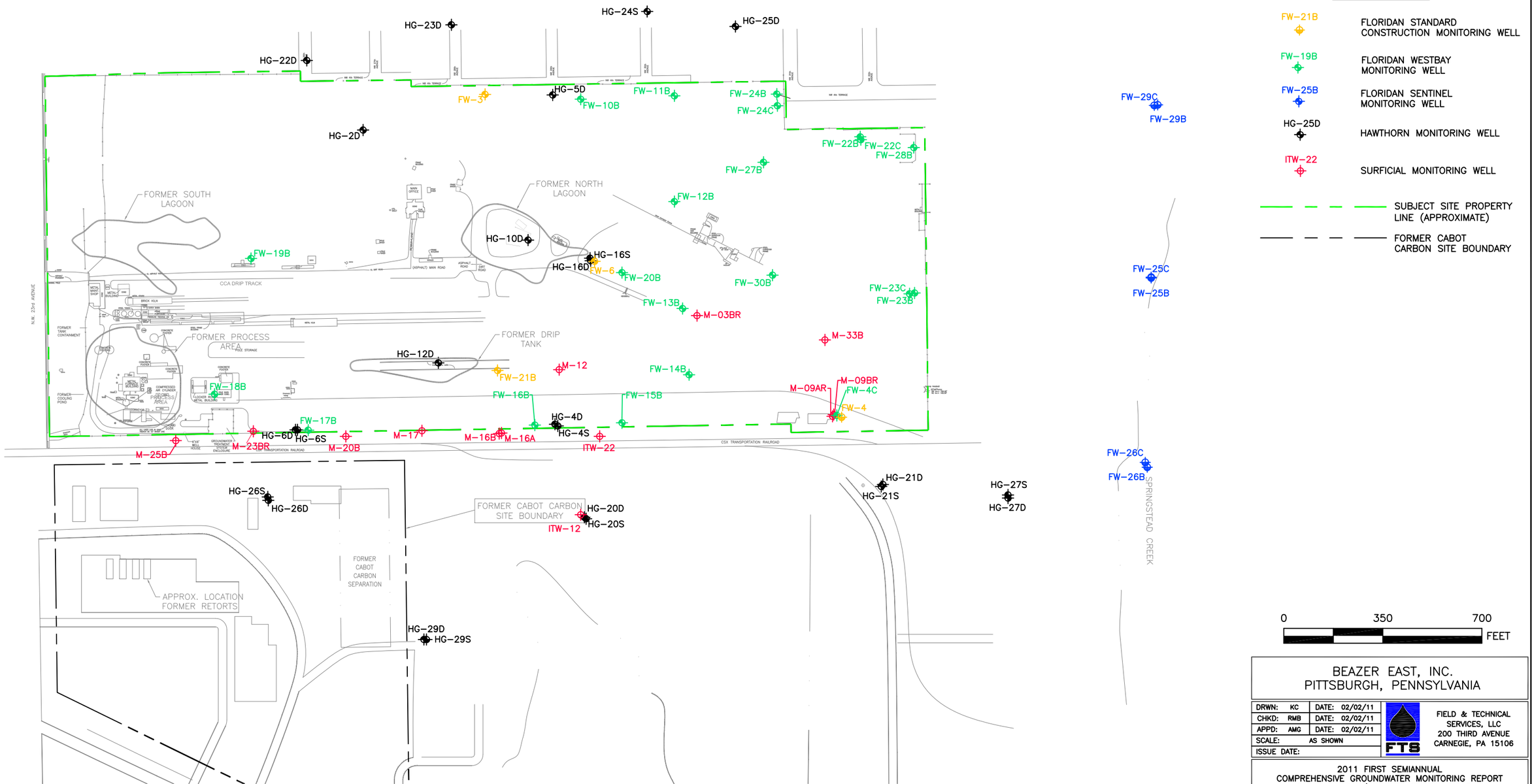
BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN: KC	DATE: 02/02/11	FIELD & TECHNICAL SERVICES, LLC 200 THIRD AVENUE CARNEGIE, PA 15106
CHKD: AMG	DATE: 02/02/11	
APPD: AMG	DATE: 02/02/11	
SCALE:	1" = 1000'	
ISSUE DATE:		

2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

SITE LOCATION MAP

PROJECT NO: OM045011
DRAWING NUMBER
FIGURE 1



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
3			
2			
1			

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

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN: KC	DATE: 02/02/11	FIELD & TECHNICAL SERVICES, LLC 200 THIRD AVENUE CARNEGIE, PA 15106
CHKD: RMB	DATE: 02/02/11	
APPD: AMG	DATE: 02/02/11	
SCALE: AS SHOWN		
ISSUE DATE:		

2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

MONITORING WELL LOCATION MAP

PROJECT NO: OM045011
DRAWING NUMBER
FIGURE 2

G:\projects\beazer projects\gainesville\cadd\isa gw comp report 2011\figure-2.dwg Last Saved By: Kchintella 10/11/2011 10:43 AM Plotted By: Kendra L. Chintella 10/11/2011 10:43 AM Scale: 1:1

Explanation

160.82 / 160.89 — Surficial Aquifer well location and February 2010 potentiometric elevation (A-well in black, B-well in green)

168.24 — Location of Surficial Aquifer well gauged as part of IRM activities and January 2011 potentiometric elevation

EW-1 — Extraction well

−165− — Potentiometric surface contour, with posted contour elevation

Former potential source areas

Horizontal drain

Drainage ditch

0 300 600

Scale in Feet

N

160 161 162 163 164 165 166 167 168 169 170 171 172 173 174

EW-1 EW-2 EW-3 EW-5 EW-6 EW-8 EW-9 EW-10 EW-11 EW-13 EW-14 EW-15 EW-16 EW-17

160.82 160.89 163.81 167.50 167.43 167.68 167.61 167.86 167.86 168.34 170.56 171.52 172.37

168.24 167.50 172.82 172.81 172.92 172.84

Koppers, Inc. Site

Former Lagoons

Cabot Carbon Site

NW 23rd Av

T:\Gainesville\MapInfo\WatLev\2011\WatLev_Surficial_Jan2011.WOR

TITLE:	SURFICIAL AQUIFER POTENTIOMETRIC SURFACE CONTOURS FOR JANUARY 2011
LOCATION:	Cabot Carbon/Koppers Superfund Site, Gainesville, Florida

TETRA TECH GEO

CHECKED	DB
DRAFTED	LAD
FILE	WatLev Surf Jan11
DATE	09-29-11

FIGURE: 3a

N

LEGEND

- HG–24S ⊕ — UPPER HAWTHORN MONITORING WELL
- 167.93 — GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION (FT–MSL)
- 168 — GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION CONTOUR (FT–MSL) *(DASHED WHERE INFERRED)*
- SUBJECT SITE PROPERTY LINE (APPROXIMATE)
- FORMER CABOT CARBON SITE BOUNDARY

HG–24S 167.93
HG–16S 166.35
HG–4S 166.28
HG–6S 168.54
HG–26S 168.39
HG–20S 165.16
HG–29S 164.82
HG–21S 156.12
HG–27S 152.87

FORMER SOUTH LAGOON
FORMER NORTH LAGOON
FORMER PROCESS AREA
FORMER DRIP TANK
FORMER CABOT CARBON SITE BOUNDARY
FORMER CABOT CARBON SEPARATION
APPROX. LOCATION FORMER RETORTS
CCA DRIP TRACK
BRICK KILN
(ASPHALT) MAIN ROAD
ASPHALT ROAD
DIRT ROAD
CSX TRANSPORTATION RAILROAD
N.W. 23rd AVENUE

0 300 600 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:	02/02/11
CHKD:	RMW	DATE:	02/02/11
APPD:	AMG	DATE:	02/02/11
SCALE:	AS SHOWN		
ISSUE DATE:			

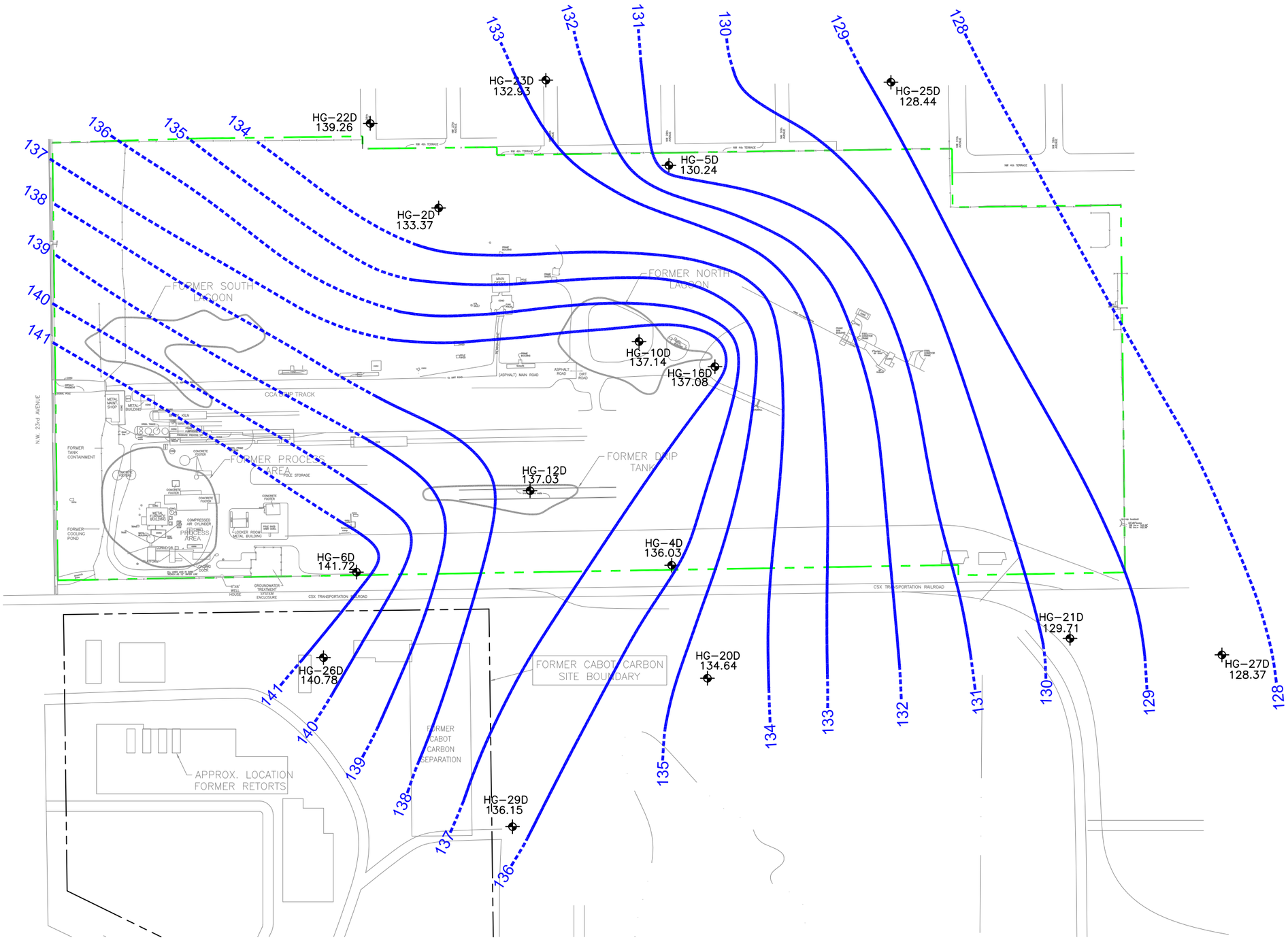
FTS
FIELD & TECHNICAL SERVICES, LLC
200 THIRD AVENUE
CARNEGIE, PA 15106

2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

UPPER HAWTHORN POTENTIOMETRIC SURFACE CONTOURS – JANUARY 2011

PROJECT NO: OM045011
DRAWING NUMBER
FIGURE 3b

q:\projects\beazer projects\gainesville\cadd\1so gw comp report 2011\figure-3b.dwg Last Saved By: Kchintella 10/7/2011 11:06 AM Plotted By: Kendra L. Chintella 10/11/2011 12:09 PM Scale: 1:1



LEGEND

HG–25D ⊕	LOWER HAWTHORN MONITORING WELL
128.44	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
3			
2			
1			

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:	02/02/11
CHKD:	RMW	DATE:	02/02/11
APPD:	AMG	DATE:	02/02/11
SCALE:	AS SHOWN		
ISSUE DATE:			

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

2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

LOWER HAWTHORN POTENTIOMETRIC SURFACE CONTOURS – JANUARY 2011

PROJECT NO: 0M045011
DRAWING NUMBER
FIGURE 3c

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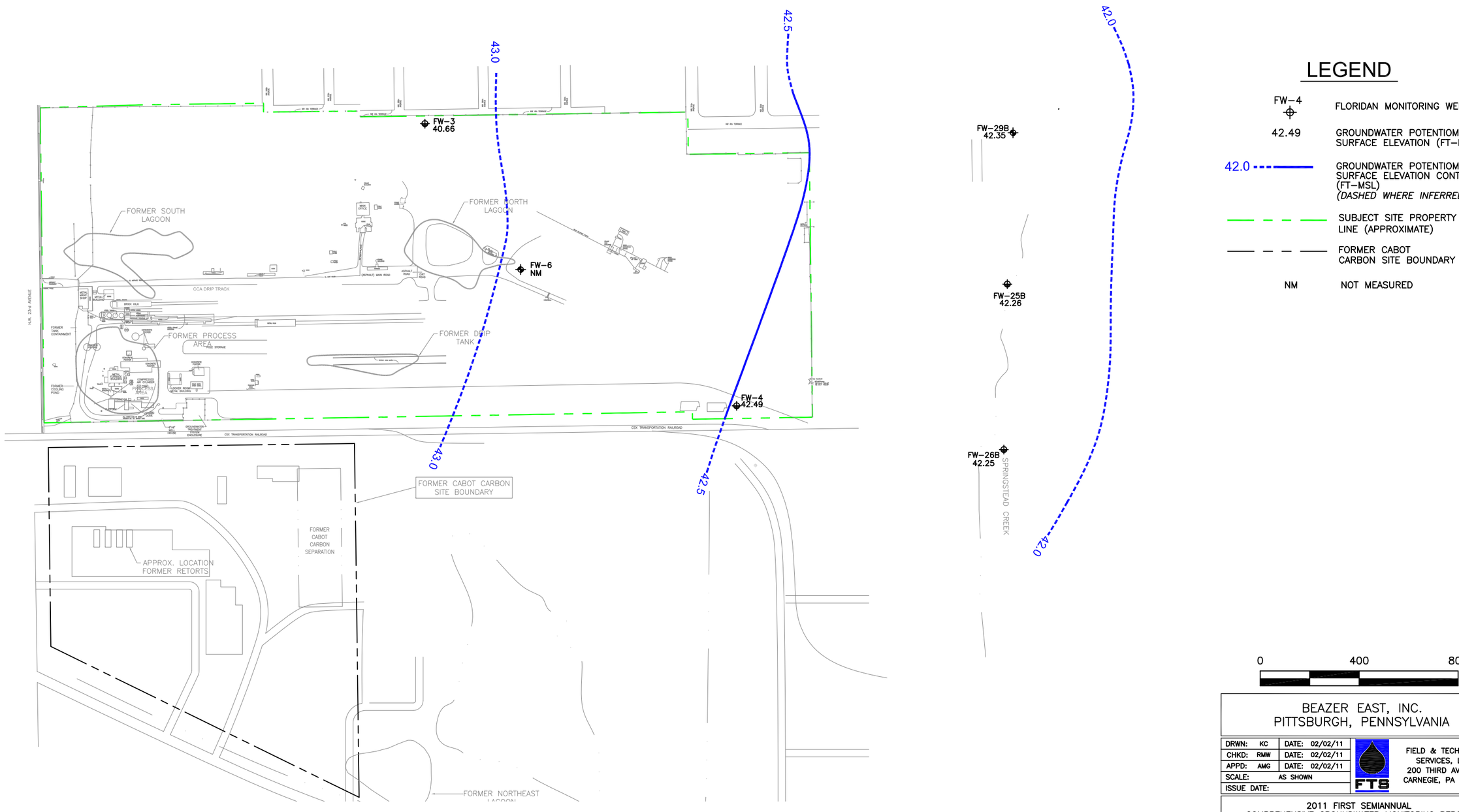

LEGEND

FW–4 ⊕	FLORIDAN MONITORING WELL
42.49	GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION (FT–MSL)
42.0	GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION CONTOUR (FT–MSL) *(DASHED WHERE INFERRED)*
	SUBJECT SITE PROPERTY LINE (APPROXIMATE)
	FORMER CABOT CARBON SITE BOUNDARY
NM	NOT MEASURED

0 400 800 FEET

REV #	DATE	DESCRIPTION	APPD
3			
2			
1			

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

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN:	KC	DATE:	02/02/11
CHKD:	RMW	DATE:	02/02/11
APPD:	AMG	DATE:	02/02/11
SCALE:	AS SHOWN		
ISSUE DATE:			

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

2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

FLORIDAN AQUIFER
POTENTIOMETRIC SURFACE CONTOURS
JANUARY 2011

PROJECT NO: 0M045011
DRAWING NUMBER
FIGURE 3d

q:\projects\beazer projects\gainesville\cadd\sa gw comp report 2011\figure-3d.dwg Last Saved By: Kchintella 10/7/2011 9:46 AM Plotted By: Kendra L. Chintella 10/7/2011 9:47 AM Scale: 1:1

Explanation

160.10
160.14 — Surficial Aquifer well location and June 2011 potentiometric elevation (A-well in black, B-well in green)

168.85 — Location of Surficial Aquifer well monitored as part of IRM activities and June 2011 potentiometric elevation

EW-1 — Extraction well

−165− — Potentiometric surface contour, with posted contour elevation

Former potential source areas

Horizontal drain

Drainage ditch

0 300 600

Scale in Feet

N

160 161 162 163 164 165 166 167 168 169 170 171 172 173 174

EW-1 EW-2 EW-3 EW-5 EW-6 EW-8 EW-9 EW-10 EW-11 EW-13 EW-14 EW-15 EW-16 EW-17

160.10 160.14 163.14 166.90 167.38 167.69 168.17 168.26 168.28 168.78 170.55 171.50 172.17

168.85 168.39 172.41 172.41 172.80 172.74

168 168 172 171

Koppers, Inc. Site

Former Lagoons

Cabot Carbon Site

NW 23rd Av

T:\Gainesville\MapInfo\WatLev\2011\WatLev_Surficial_Jun11.WOR

TITLE:	SURFICIAL AQUIFER POTENTIOMETRIC SURFACE CONTOURS FOR JUNE 2011
LOCATION:	Cabot Carbon/Koppers Superfund Site, Gainesville, Florida

TETRA TECH GEO

CHECKED	DB
DRAFTED	LAD
FILE	WatLev Surf Jun11
DATE	09-29-11

FIGURE: 4a

N

LEGEND

- HG–24S ⊕ — UPPER HAWTHORN MONITORING WELL
- 167.88 — GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION (FT–MSL)
- 168 — GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION CONTOUR (FT–MSL) *(DASHED WHERE INFERRED)*
- SUBJECT SITE PROPERTY LINE (APPROXIMATE)
- FORMER CABOT CARBON SITE BOUNDARY

HG–24S 167.88
HG–16S 166.61
HG–6S 168.60
HG–4S 166.51
HG–26S 168.47
HG–20S 164.77
HG–29S 165.31
HG–21S 155.97
HG–27S 152.47

FORMER SOUTH LAGOON
FORMER NORTH LAGOON
CCA DRIP TRACK
FORMER PROCESS AREA
FORMER DRIP TANK
FORMER TANK CONTAINMENT
FORMER COOLING POND
FORMER CABOT CARBON SITE BOUNDARY
FORMER CABOT CARBON SEPARATION
APPROX. LOCATION FORMER RETORTS
CSX TRANSPORTATION RAILROAD
N.W. 23rd AVENUE

0 300 600 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:	06/07/11
CHKD:	RMW	DATE:	06/07/11
APPD:	AMG	DATE:	06/07/11
SCALE:	AS SHOWN		
ISSUE DATE:			

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

2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

UPPER HAWTHORN POTENTIOMETRIC SURFACE CONTOURS – JUNE 2011

PROJECT NO: 0M045011
DRAWING NUMBER
FIGURE 4b

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N

LEGEND

HG–25D ⊕	LOWER HAWTHORN MONITORING WELL
128.10	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

HG–22D 139.26
HG–23D 132.79
HG–25D 128.10
HG–5D 130.02
HG–2D 133.18
HG–16D 136.98
HG–10D 137.16
HG–12D 136.96
HG–4D 136.00
HG–6D 141.71
HG–21D 129.51
HG–27D 128.12
HG–26D 140.94
HG–20D 134.62
HG–29D 136.44

133 132 131 130 129 128 136 135 134 137 138 139 140 141

FORMER SOUTH LAGOON
FORMER NORTH LAGOON
FORMER PROCESS AREA
FORMER DRIP TANK
FORMER TANK CONTAINMENT
FORMER COOLING POND
FORMER CABOT CARBON SITE BOUNDARY
FORMER CABOT CARBON SEPARATION
APPROX. LOCATION FORMER RETORTS
MAIN OFFICE
BRICK KILN
RCA DRIP TRACK
(ASPHALT) MAIN ROAD
ASPHALT ROAD
DIRT ROAD
CSX TRANSPORTATION RAILROAD
N.W. 23rd AVENUE
N.W. 40th TERRACE

0 300 600 FEET

REV #	DATE	DESCRIPTION	APPD
3			
2			
1			

REFERENCE: GEOTRANS 2010 FIGURES COMPREHENSIVE GROUNDWATER MONITORING AND SAMPLING PLAN; AUGUST 4, 2010.
HG–22D AND HG–12D NOT USED IN CONTOURING.

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN: KC	DATE: 06/07/11	FIELD & TECHNICAL SERVICES, LLC 200 THIRD AVENUE CARNEGIE, PA 15106
CHKD: RMW	DATE: 06/07/11	
APPD: AMG	DATE: 06/07/11	
SCALE: AS SHOWN		
ISSUE DATE:		

2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

LOWER HAWTHORN POTENTIOMETRIC SURFACE CONTOURS – JUNE 2011

PROJECT NO: 0M045011
DRAWING NUMBER
FIGURE 4c

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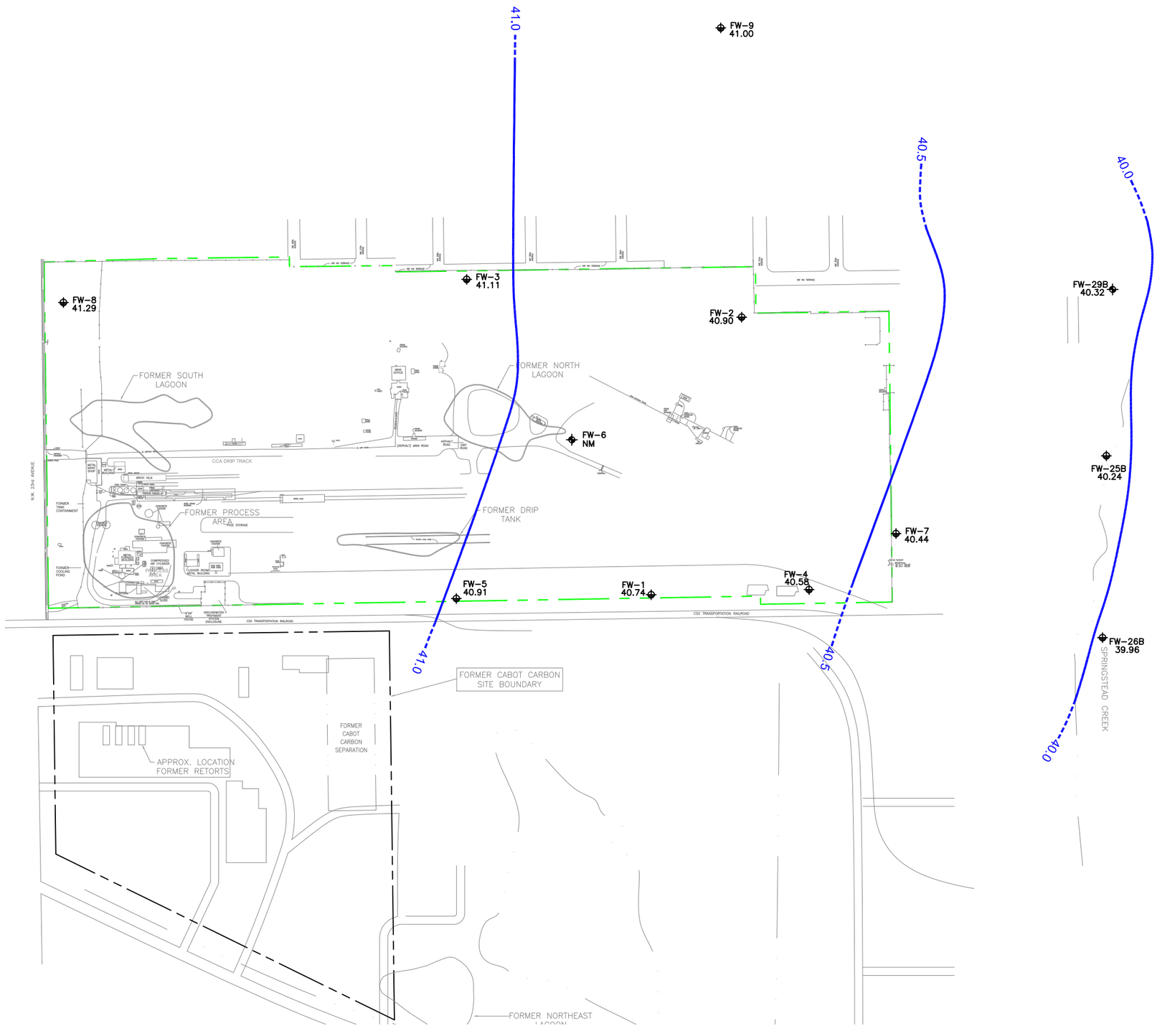

LEGEND

FW–4 ⊕	FLORIDAN MONITORING WELL
40.58	GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION (FT–MSL)
42.0	GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION CONTOUR (FT–MSL) *(DASHED WHERE INFERRED)*
	SUBJECT SITE PROPERTY LINE (APPROXIMATE)
	FORMER CABOT CARBON SITE BOUNDARY
NM	NOT MEASURED

0 400 800 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

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2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

FLORIDAN AQUIFER
POTENTIOMETRIC SURFACE CONTOURS
JUNE 2011

PROJECT NO: 0M045011
DRAWING NUMBER
FIGURE 4d

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Constituent	M-17				
Sample Date	Nov-09	Feb-10	May-10	Aug-10	Feb-11
2-Methylnaphthalene	90				68
Acenaphthene	78	70 J	27	58	120
Carbazole	61	42	25	60	110 J
Dibenzofuran	69	59 J	31	51	56
Naphthalene	510		30	96 J	610
Pentachlorophenol	310 J	5.2 J		2.3 J	17 J

Constituent	M-33B			
Sample Date	Nov-09	May-10	Aug-10	Feb-11
2,4-Dimethylphenol				180 J
2-Methylnaphthalene			37	140
2-Methylphenol				50 J
3&4-Methylphenol				40 J
Acenaphthene	37	43	50	160
Benzene	4.6	4.2	3.8	12
Carbazole	59	63	64	140 J
Dibenzofuran	45	45	49	82
Naphthalene	460	670	570	2400
Xylenes, total				36

Constituent	M-20B			
Sample Date	Nov-09	Feb-10	Aug-10	Feb-11
2-Methylnaphthalene	120	56	190	170
Acenaphthene	160	77	260	240
Benzene	1.3		1.7	1.8
Carbazole	130	56	130	130 J
Dibenzofuran	150	68	220	170
Naphthalene	340	300	880	1200
Pentachlorophenol	34 J	41	55 J	77 J

Constituent	M-23BR			
Sample Date	Nov-09	Feb-10	Aug-10	Feb-11
2-Methylnaphthalene	330	260	380	230
Acenaphthene	310	250	360	300
Benzene	2	1.3	1.5	1.1
Carbazole	82	59	100	85 J
Dibenzofuran	200	130	320	260
Fluorene			330	
Naphthalene	560	400	660	420
Pentachlorophenol	2100 J	2700	4800 J	5300 J
Phenanthrene			310	230

Constituent	M-09BR			
Sample Date	Nov-09	Feb-10	Aug-10	Feb-11
Acenaphthene	47 J	44	42	44
Benzene	1.8			
Carbazole	45 J	34	39	45 J
Dibenzofuran	32 J		30	32
Naphthalene	44 J	27	16	15

Constituent	M-09AR			
Sample Date	Nov-09	Feb-10	Aug-10	Feb-11
No Exceedances				

Constituent	M-12		
Sample Date	May-10	Aug-10	Feb-11
No Exceedances			

Constituent	ITW-22			
Sample Date	Nov-09	Feb-10	Aug-10	Feb-11
No Exceedances				

Constituent	M-25B			
Sample Date	Nov-09	Feb-10	Aug-10	Feb-11
2,4-Dimethylphenol	330		830 J	570 J
2-Methylnaphthalene	1100	900	840 J	1400
2-Methylphenol		41 J		240 J
3&4-Methylphenol		64	650 J	370 J
Acenaphthene	410	330		280
Benzene	110	120	750	660
Carbazole	340	170	250 J	300 J
Dibenzofuran	260	130		200
Ethylbenzene	76	110	400	740
Naphthalene	8000	6000	10000 J	17000
Pentachlorophenol	460	6.7 J		51 J
Phenol	57 J	20 J		87 J
Toluene	200	210	950	1100
Xylenes, total	249	340	1120	1400

Constituent	M-16A			
Sample Date	May-10	Aug-10	Dec-10	Feb-11
Acenaphthene		24	76 J	39
Carbazole	55	86		97 J
Dibenzofuran			52 J	30

Constituent	M-16B			
Sample Date	Nov-09	Feb-10	Aug-10	Feb-11
2-Methylnaphthalene	600	540	460 J	610
Acenaphthene	370	270	250 J	340
Benzene	1.8	2	2.1	2.2
Carbazole	430	500	400 J	530 J
Dibenzofuran	190	130	91 J	210
Naphthalene	6300	5000	6700 J	5700
Pentachlorophenol	1.3 J	5.7 J	43 J	11 J

LEGEND

- M-33B — SURFICIAL 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

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 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.

0 400 800 FEET

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN:	KC	DATE:	03/09/11
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200 THIRD AVENUE
CARNEGIE, PA 15106

2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

SURFICIAL AQUIFER MONITORING WELLS
ORGANIC ANALYTICAL EXCEEDANCES

PROJECT NO: 0M045011
DRAWING NUMBER
FIGURE 5

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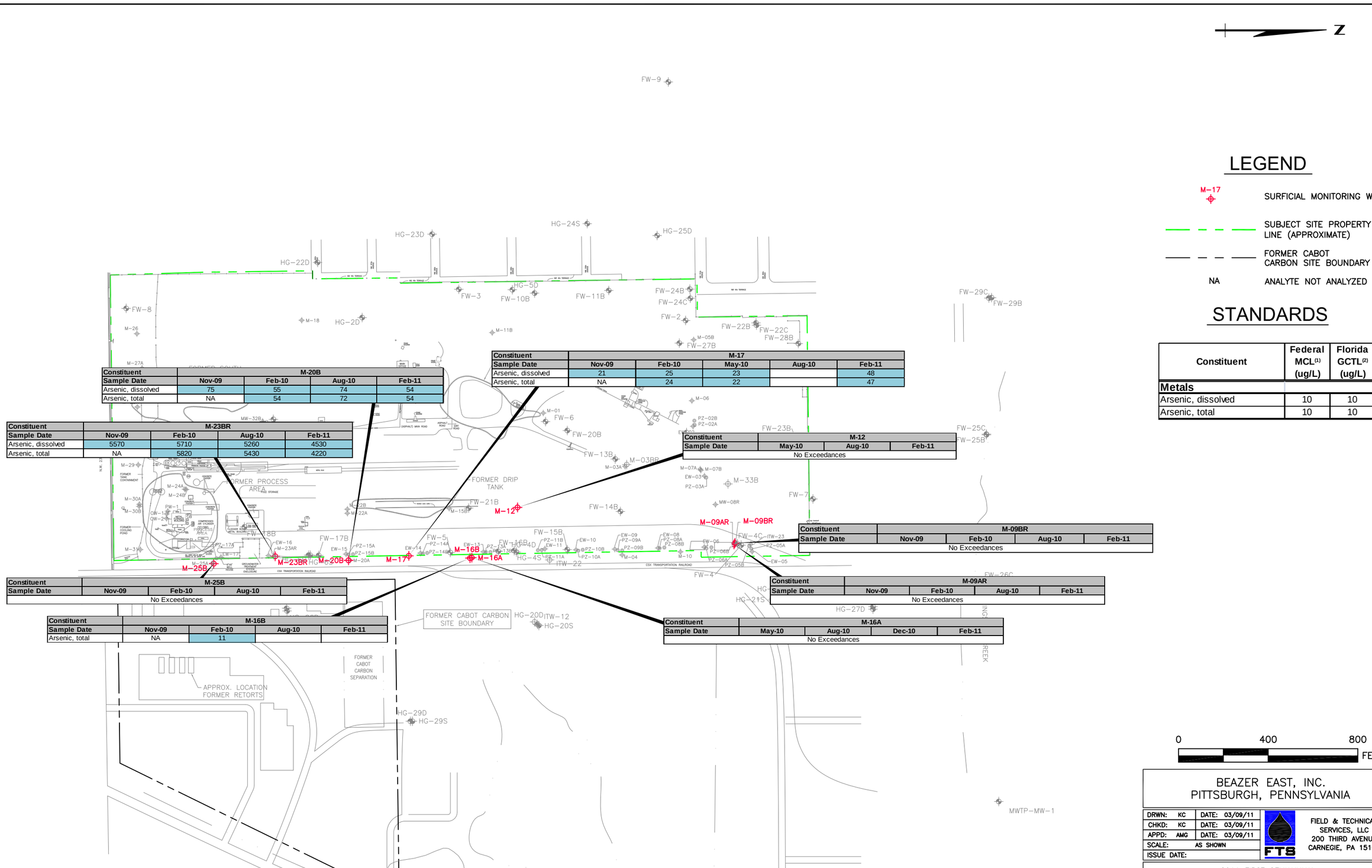

Constituent	M-20B				
Sample Date	Nov-09	Feb-10	Aug-10	Feb-11	
Arsenic, dissolved	75	55	74	54	
Arsenic, total	NA	54	72	54	

Constituent	M-17				
Sample Date	Nov-09	Feb-10	May-10	Aug-10	Feb-11
Arsenic, dissolved	21	25	23		48
Arsenic, total	NA	24	22		47

Constituent	M-23BR			
Sample Date	Nov-09	Feb-10	Aug-10	Feb-11
Arsenic, dissolved	5570	5710	5260	4530
Arsenic, total	NA	5820	5430	4220

Constituent	M-12		
Sample Date	May-10	Aug-10	Feb-11
No Exceedances			

Constituent	M-09BR			
Sample Date	Nov-09	Feb-10	Aug-10	Feb-11
No Exceedances				

Constituent	M-25B			
Sample Date	Nov-09	Feb-10	Aug-10	Feb-11
No Exceedances				

Constituent	M-09AR			
Sample Date	Nov-09	Feb-10	Aug-10	Feb-11
No Exceedances				

Constituent	M-16B			
Sample Date	Nov-09	Feb-10	Aug-10	Feb-11
Arsenic, total	NA	11		

Constituent	M-16A			
Sample Date	May-10	Aug-10	Dec-10	Feb-11
No Exceedances				

LEGEND

M-17 — SURFICIAL MONITORING WELL

SUBJECT SITE PROPERTY LINE (APPROXIMATE)

FORMER CABOT CARBON SITE BOUNDARY

NA — ANALYTE NOT ANALYZED

STANDARDS

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

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

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2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

SURFICIAL AQUIFER MONITORING WELLS
INORGANIC ANALYTICAL EXCEEDANCES

PROJECT NO: 0M045011
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FIGURE 6

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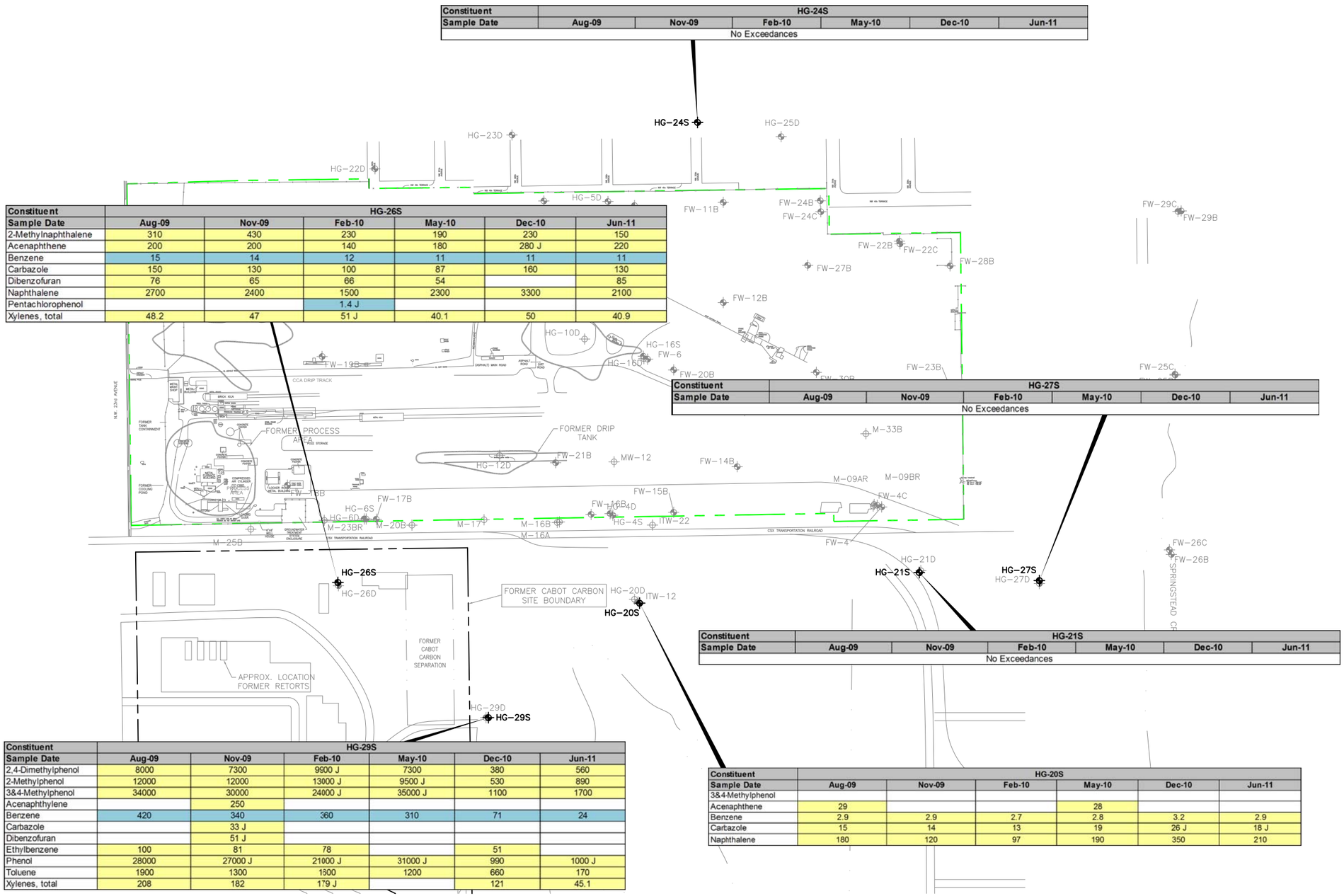

Constituent	HG-24S					
Sample Date	Aug-09	Nov-09	Feb-10	May-10	Dec-10	Jun-11
No Exceedances						

Constituent	HG-26S					
Sample Date	Aug-09	Nov-09	Feb-10	May-10	Dec-10	Jun-11
2-Methylnaphthalene	310	430	230	190	230	150
Acenaphthene	200	200	140	180	280 J	220
Benzene	15	14	12	11	11	11
Carbazole	150	130	100	87	160	130
Dibenzofuran	76	65	66	54		85
Naphthalene	2700	2400	1500	2300	3300	2100
Pentachlorophenol			1.4 J			
Xylenes, total	48.2	47	51 J	40.1	50	40.9

Constituent	HG-27S					
Sample Date	Aug-09	Nov-09	Feb-10	May-10	Dec-10	Jun-11
No Exceedances						

Constituent	HG-21S					
Sample Date	Aug-09	Nov-09	Feb-10	May-10	Dec-10	Jun-11
No Exceedances						

Constituent	HG-29S					
Sample Date	Aug-09	Nov-09	Feb-10	May-10	Dec-10	Jun-11
2,4-Dimethylphenol	8000	7300	9600 J	7300	380	560
2-Methylphenol	12000	12000	13000 J	9500 J	530	890
3&4-Methylphenol	34000	30000	24000 J	35000 J	1100	1700
Acenaphthylene		250				
Benzene	420	340	360	310	71	24
Carbazole		33 J				
Dibenzofuran		51 J				
Ethylbenzene	100	81	78		51	
Phenol	28000	27000 J	21000 J	31000 J	990	1000 J
Toluene	1900	1300	1300	1200	660	170
Xylenes, total	208	182	179 J		121	45.1

Constituent	HG-20S					
Sample Date	Aug-09	Nov-09	Feb-10	May-10	Dec-10	Jun-11
3&4-Methylphenol						
Acenaphthene	29			28		
Benzene	2.9	2.9	2.7	2.8	3.2	2.9
Carbazole	15	14	13	19	26 J	18 J
Naphthalene	180	120	97	190	350	210

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.

N

LEGEND

HG-6D — HAWTHORN 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

0 400 800 FEET

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

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APPD:	AMG	DATE: 07/25/11
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CARNEGIE, PA 15106

2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

UPPER HAWTHORN GROUP
MONITORING WELLS
ORGANIC ANALYTICAL EXCEEDANCES

PROJECT NO: 0M045011
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FIGURE 7a

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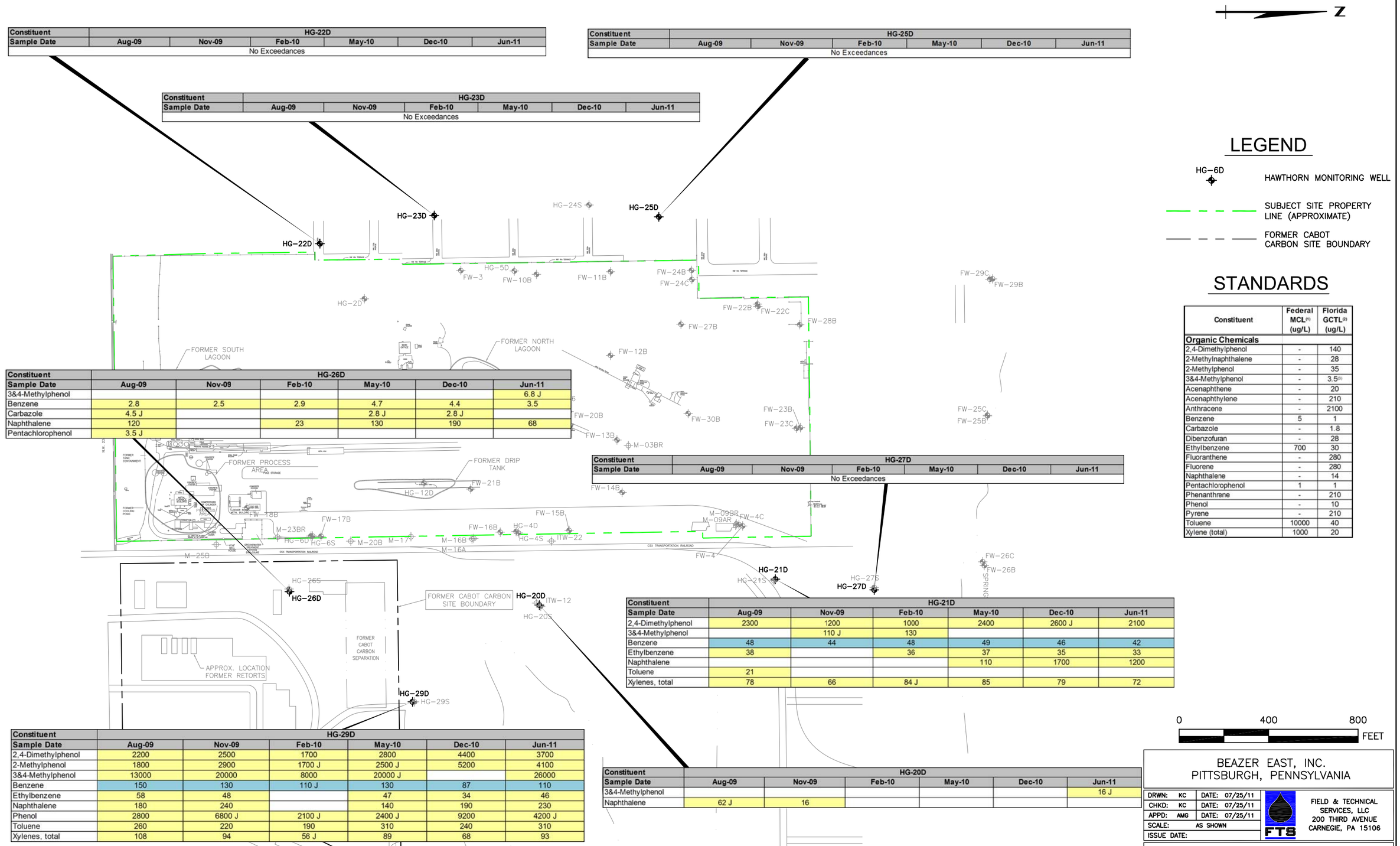

Constituent	HG-22D					
Sample Date	Aug-09	Nov-09	Feb-10	May-10	Dec-10	Jun-11
No Exceedances						

Constituent	HG-25D					
Sample Date	Aug-09	Nov-09	Feb-10	May-10	Dec-10	Jun-11
No Exceedances						

Constituent	HG-23D					
Sample Date	Aug-09	Nov-09	Feb-10	May-10	Dec-10	Jun-11
No Exceedances						

Constituent	HG-26D					
Sample Date	Aug-09	Nov-09	Feb-10	May-10	Dec-10	Jun-11
3&4-Methylphenol						6.8 J
Benzene	2.8	2.5	2.9	4.7	4.4	3.5
Carbazole	4.5 J			2.8 J	2.8 J	
Naphthalene	120		23	130	190	68
Pentachlorophenol	3.5 J					

Constituent	HG-27D					
Sample Date	Aug-09	Nov-09	Feb-10	May-10	Dec-10	Jun-11
No Exceedances						

Constituent	HG-21D					
Sample Date	Aug-09	Nov-09	Feb-10	May-10	Dec-10	Jun-11
2,4-Dimethylphenol	2300	1200	1000	2400	2600 J	2100
3&4-Methylphenol		110 J	130			
Benzene	48	44	48	49	46	42
Ethylbenzene	38		36	37	35	33
Naphthalene				110	1700	1200
Toluene	21					
Xylenes, total	78	66	84 J	85	79	72

Constituent	HG-29D					
Sample Date	Aug-09	Nov-09	Feb-10	May-10	Dec-10	Jun-11
2,4-Dimethylphenol	2200	2500	1700	2800	4400	3700
2-Methylphenol	1800	2900	1700 J	2500 J	5200	4100
3&4-Methylphenol	13000	20000	8000	20000 J		26000
Benzene	150	130	110 J	130	87	110
Ethylbenzene	58	48		47	34	46
Naphthalene	180	240		140	190	230
Phenol	2800	6800 J	2100 J	2400 J	9200	4200 J
Toluene	260	220	190	310	240	310
Xylenes, total	108	94	56 J	89	68	93

Constituent	HG-20D					
Sample Date	Aug-09	Nov-09	Feb-10	May-10	Dec-10	Jun-11
3&4-Methylphenol						16 J
Naphthalene	62 J	16				

N

LEGEND

HG-6D — HAWTHORN 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

0 400 800 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 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:	07/25/11
CHKD:	KC	DATE:	07/25/11
APPD:	AMG	DATE:	07/25/11
SCALE:	AS SHOWN		
ISSUE DATE:			

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

2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

LOWER HAWTHORN GROUP
MONITORING WELLS
ORGANIC ANALYTICAL EXCEEDANCES

PROJECT NO: OM045011
DRAWING NUMBER
FIGURE 7b

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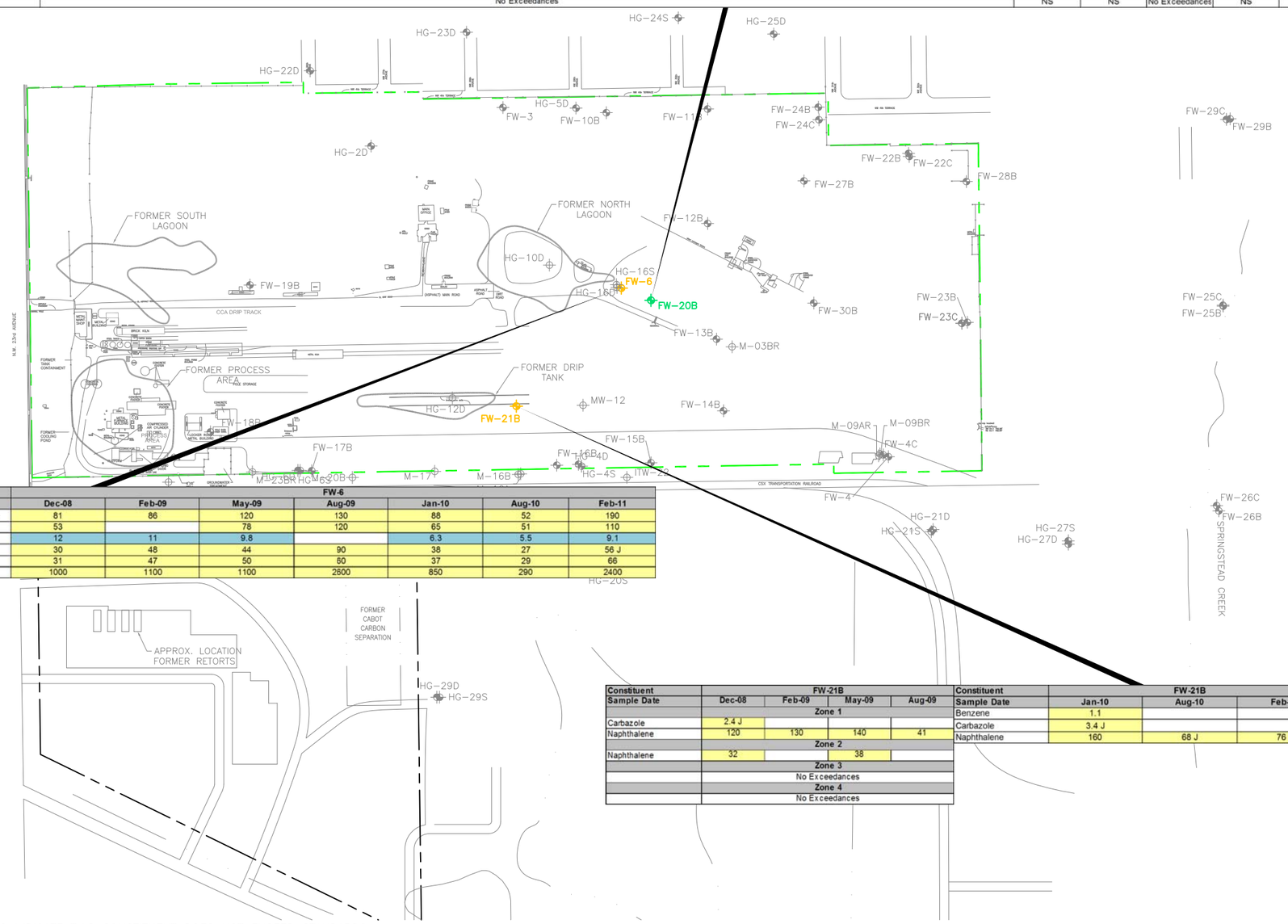
Constituent	FW-20B																				
Sample Date	Mar-06	Jul-06	Sep-06	Dec-06	Mar-07	Jun-07	Sep-07	Dec-07	Feb-08	Jun-08	Sep-08	Dec-08	Feb-09	May-09	Aug-09	Jan-10	May-10	Aug-10	Dec-10	Feb-11	Jun-11
Zone 1																					
2-Methylnaphthalene		62	49	35	30								29	42	60	53	110	86	160		
Acenaphthene	54	63	65	59	58	60	39	58	30	42	44	42	53	74	60	47	63	60	96 J	78	110
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	8
Carbazole	26	22	25	17	14	9	3.4 J									6.2	14	19		25 J	30
Dibenzofuran		33	37	35	34	35		33						36	29	29	35	38	53	47	53
Naphthalene		650	720	510	550	450	380	210	450	260	310	420	730	1000	870	690	1100	840	2000 J	1800	2300
Zone 2																					
2-Methylnaphthalene																			33		
Acenaphthene		31	40	43	44	41	32	50		42	34	31	38	42	40	33	39	44	45	52	45
Benzene		3.1	2.5	2.9	2.7	2.2	1.9	1.3									1.1				
Carbazole	2.1 J	9.6	13	12	10	5.4 J	2.7 J														
Dibenzofuran																			33 J		
Naphthalene	53	370	140	120	140	85	94	99	49	100	58	73	96	150	170	63	240	230	480 J	160	200
Zone 3																					
No Exceedances																NS	NS	No Exceedances	NS	NS	NS
Zone 4																					
No Exceedances																NS	NS	No Exceedances	NS	NS	NS



Constituent	FW-6						
Sample Date	Dec-08	Feb-09	May-09	Aug-09	Jan-10	Aug-10	Feb-11
2-Methylnaphthalene	81	86	120	130	88	52	190
Acenaphthene	53		78	120	65	51	110
Benzene	12	11	9.8		6.3	5.5	9.1
Carbazole	30	48	44	90	38	27	56 J
Dibenzofuran	31	47	50	80	37	29	66
Naphthalene	1000	1100	1100	2600	850	290	2400

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
Benzene	1.1		
Carbazole	3.4 J		
Naphthalene	160	68 J	76 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

0 400 800 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)
(3) 3-METHYLPHENOL AND 4-METHYLPHENOL CANNOT BE QUANTIFIED SEPERATELY USING USEPA SW-846 METHOD 8270C.

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN:	KC	DATE:	07/25/11
CHKD:	KC	DATE:	07/25/11
APPD:	AMG	DATE:	07/25/11
SCALE:	AS SHOWN		
ISSUE DATE:			

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

2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

FLORIDAN AQUIFER SOURCE AREA
MONITORING WELLS
ORGANIC ANALYTICAL EXCEEDANCES

PROJECT NO: OM045011
DRAWING NUMBER
FIGURE 8

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Constituent	FW-12B																					
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	Feb-11	Jun-11
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	3.3	2.1
Naphthalene			49	40	45	44	46	47			48	55	20	65	85	95	76	86	61	110 J	140	170
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	70	43
Acenaphthene	29	28	52	35	33	35	43	56	54	26	53	46 J	43	64	52	69	54	63	54	57	72	94
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	2.7	2.6
Carbazole	4.6 J	1.9 J									3.4 J		2.5 J		3.9 J	8.1	9.9	16	18	31	20 J	24
Dibenzofuran			29						29									30	31	42 J	36	44
Naphthalene	160	380	500	370	410	540	780	830	550	760	870	770	280	750	950	970	750	870	850	1000 J	1100	1300
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	48	40
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	3.3	
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	33	
Naphthalene	280	660	650	630	550	620	780	630	500	240	330	570	430	590	690	680	360	520	490	630 J	740	710

Constituent	FW-27B			
Sample Date	Jun-10	Aug-10	Oct-10	Feb-11
Zone 1				
Acenaphthene	39	35	41	29
Benzene	2.1		2.7	2.2
Carbazole			1.9 J	
Naphthalene	560	450	590	480
Zone 2				
2-Methylnaphthalene	130	96	110	
Acenaphthene	98	78	75	94 J
Benzene	4.1	6	8.4	3.8
Carbazole	24	19	17	18 J
Dibenzofuran	60	49	49	57 J
Naphthalene	1700	1100	1600	1500 J
Zone 3				
2-Methylnaphthalene	80	86	59	100
Acenaphthene	62	72	58	86
Benzene	5.7	5.3	6.7	6.5
Carbazole	11	9.5	11	14 J
Dibenzofuran	38	41	36	56
Naphthalene	1100	1100	620	1300
Zone 4				
2-Methylnaphthalene	59	47	42	71
Acenaphthene	68	54	51	67
Benzene	3	3.3	4.5	2.1
Carbazole	10	7.2	8.3	10 J
Dibenzofuran	36	32	31	39
Naphthalene	1100	650	830	1300
Zone 5				
2-Methylnaphthalene	110	79	84	72
Acenaphthene	69	60	62	70
Benzene	4.2	2.6	5.6	3.8
Carbazole	15	14	18	19 J
Dibenzofuran	34	33	38	38
Naphthalene	1200	880	1300	1200
Zone 6				
2-Methylnaphthalene	46	33		50
Acenaphthene	54	48	48	65
Benzene	3.8	2.6	4.4	4.6
Carbazole	10	9.6	10	12 J
Dibenzofuran	35	29	29	38
Naphthalene	850	540	98	990

Constituent	FW-30B			
Sample Date	May-10	Aug-10	Oct-10	Feb-11
Zone 1				
	No Exceedances			
Zone 2				
	No Exceedances			
Zone 3				
	No Exceedances			
Zone 4				
	No Exceedances			

Constituent	FW-16B																					
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	Feb-11	Jun-11
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		2.1	1.7
Naphthalene				15	16	16	28	29	35	26	31	28	35	24	36	30	30	31	26	35 J	33	29
Zone 2																						
	No Exceedances																NS	NS	No Exceedances	NS	NS	NS
Zone 3																						
	No Exceedances																NS	NS	No Exceedances	NS	NS	NS
Zone 4																						
	No Exceedances																NS	NS	No Exceedances	NS	NS	NS

BLANK SPACES INDICATE THIS CONSTITUENT DOES NOT EXCEED STANDARDS

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

REV #	DATE	DESCRIPTION	APPD
3			
2			
1			

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:	07/25/11
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APPD:	AMG	DATE:	07/25/11
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ISSUE DATE:			

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

2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

FLORIDAN AQUIFER TRANSECT AREA
ORGANIC ANALYTICAL EXCEEDANCES
MONITORING WELLS

PROJECT NO: 0M045011
DRAWING NUMBER
FIGURE 9

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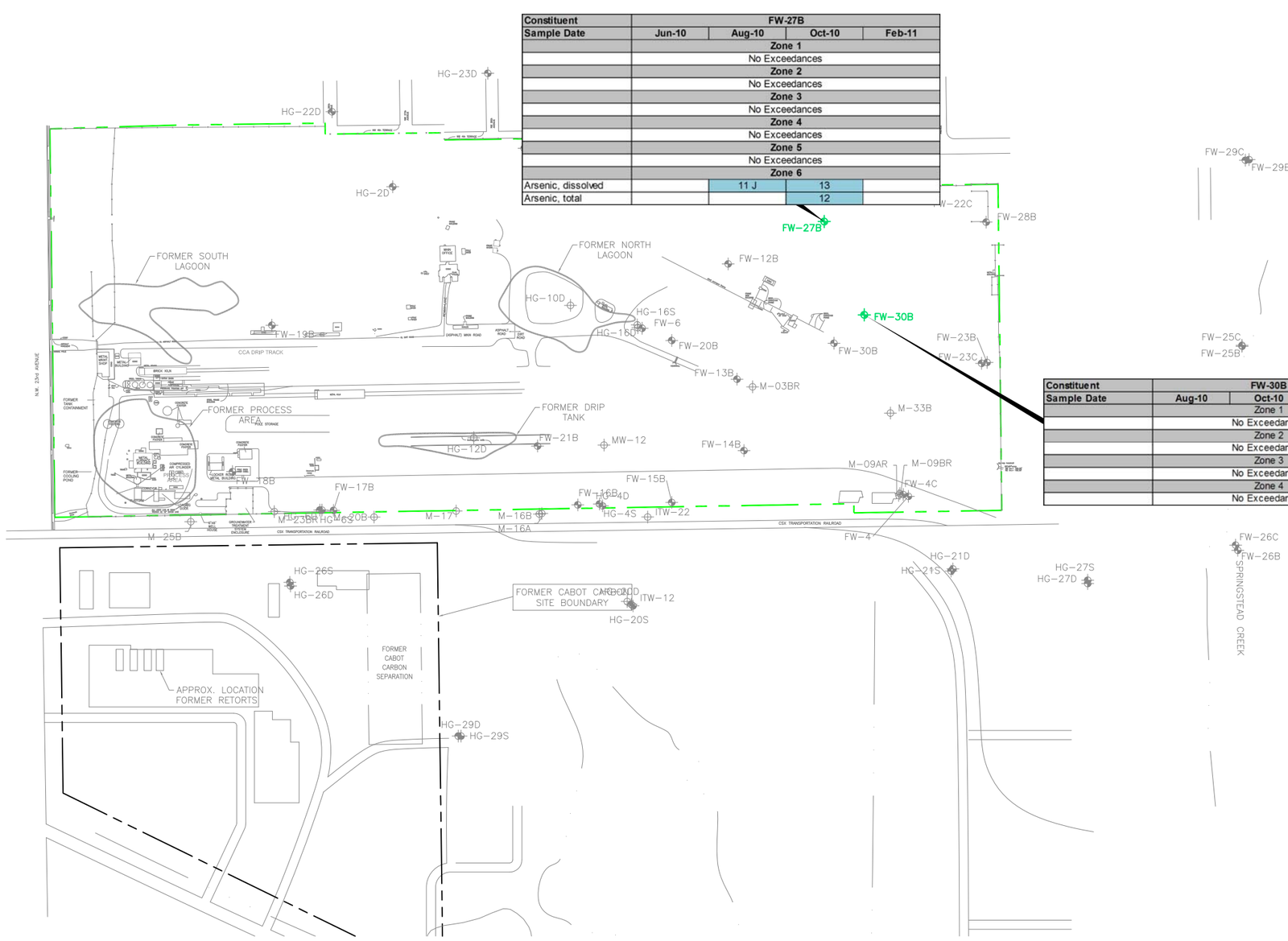
N

Constituent	FW-27B			
Sample Date	Jun-10	Aug-10	Oct-10	Feb-11
	Zone 1			
	No Exceedances			
	Zone 2			
	No Exceedances			
	Zone 3			
	No Exceedances			
	Zone 4			
	No Exceedances			
	Zone 5			
	No Exceedances			
	Zone 6			
Arsenic, dissolved		11 J	13	
Arsenic, total			12	

Constituent	FW-30B		
Sample Date	Aug-10	Oct-10	Feb-11
	Zone 1		
	No Exceedances		
	Zone 2		
	No Exceedances		
	Zone 3		
	No Exceedances		
	Zone 4		
	No Exceedances		



LEGEND

- FW-27B — 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)
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:	07/25/11
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APPD:	AMG	DATE:	07/25/11
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FIELD & TECHNICAL SERVICES, LLC
200 THIRD AVENUE
CARNEGIE, PA 15106

2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

FLORIDAN AQUIFER TRANSECT AREA
MONITORING WELLS
INORGANIC ANALYTICAL EXCEEDANCES

PROJECT NO: 0M045011
DRAWING NUMBER
FIGURE 10

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

0 400 800 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)
(3) 3-METHYLPHENOL AND 4-METHYLPHENOL CANNOT BE QUANTIFIED SEPERATELY USING USEPA SW-846 METHOD 8270C.

BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA

DRWN:	KC	DATE:	07/25/11
CHKD:	KC	DATE:	07/25/11
APPD:	AMG	DATE:	07/25/11
SCALE:	AS SHOWN		
ISSUE DATE:			

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2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

FLORIDAN AQUIFER BOUNDARY
MONITORING WELLS
ORGANIC ANALYTICAL EXCEEDANCES

PROJECT NO: 0M045011
DRAWING NUMBER
FIGURE 11

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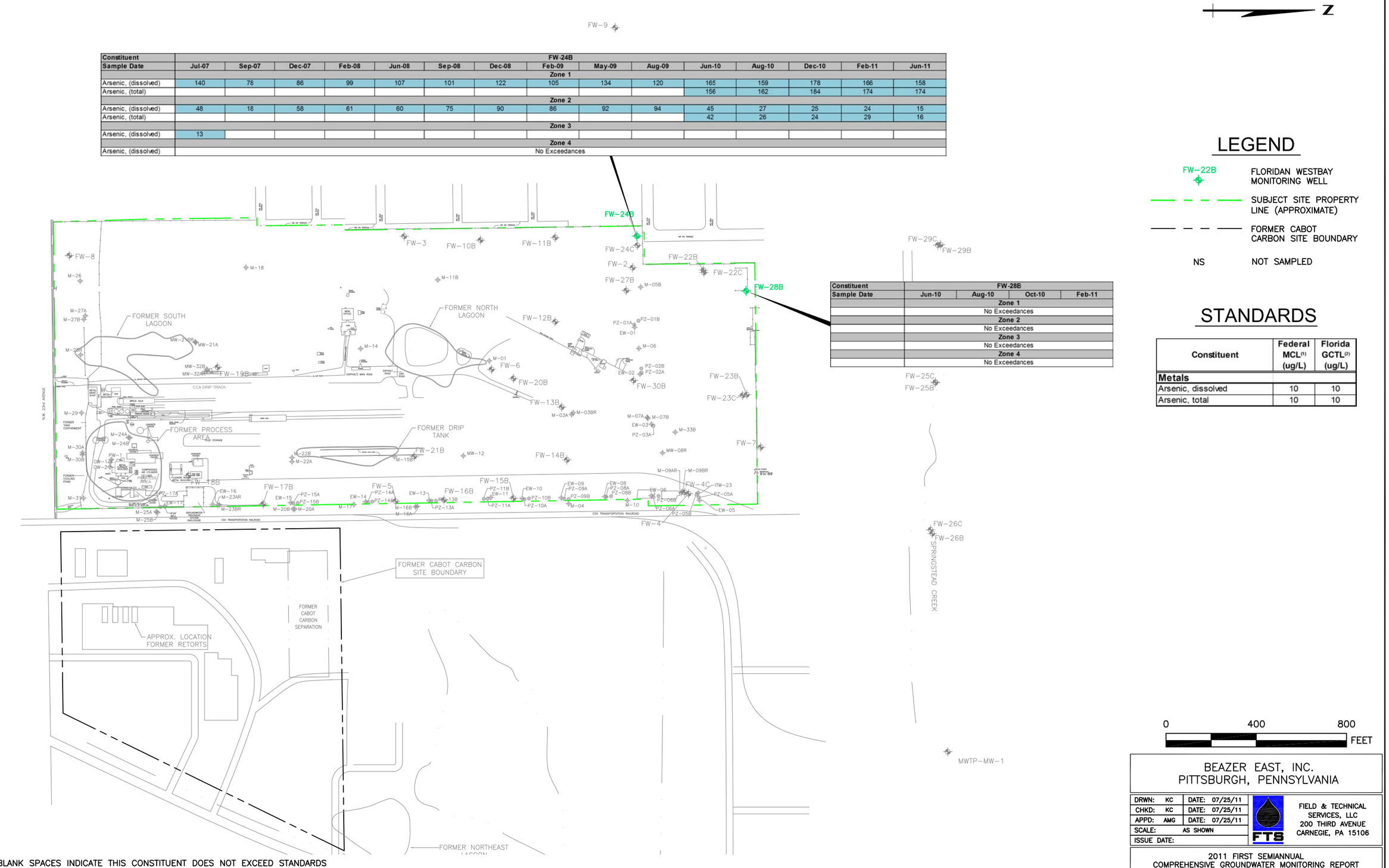
Plotted By: Kendra L. Chintella 9/22/2011 9:24 AM

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
	Zone 1														
Arsenic, (dissolved)	140	78	86	99	107	101	122	105	134	120	165	159	178	166	158
Arsenic, (total)											156	162	184	174	174
	Zone 2														
Arsenic, (dissolved)	48	18	58	61	60	75	90	86	92	94	45	27	25	24	15
Arsenic, (total)											42	26	24	29	16
	Zone 3														
Arsenic, (dissolved)	13														
	Zone 4														
Arsenic, (dissolved)	No Exceedances														

Constituent	FW-28B			
Sample Date	Jun-10	Aug-10	Oct-10	Feb-11
	Zone 1			
	No Exceedances			
	Zone 2			
	No Exceedances			
	Zone 3			
	No Exceedances			
	Zone 4			
	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:	07/25/11
CHKD:	KC	DATE:	07/25/11
APPD:	AMG	DATE:	07/25/11
SCALE:	AS SHOWN		
ISSUE DATE:			

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

2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

FLORIDAN AQUIFER BOUNDARY
MONITORING WELLS
INORGANIC ANALYTICAL EXCEEDANCES

PROJECT NO: 0M045011
DRAWING NUMBER
FIGURE 12

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Constituent	FW-29C			
Sample Date	May-10	Aug-10	Dec-10	Feb-11
No Exceedances				

Constituent	FW-29B			
Sample Date	May-10	Aug-10	Dec-10	Feb-11
No Exceedances				

LEGEND

- 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)
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

0 400 800 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 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:	03/17/11
CHKD:	KC	DATE:	03/17/11
APPD:	AMG	DATE:	03/17/11
SCALE:	AS SHOWN		
ISSUE DATE:			

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

2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

SENTINEL MONITORING WELLS
ORGANIC ANALYTICAL EXCEEDANCES

PROJECT NO: 0M045011
DRAWING NUMBER
FIGURE 13

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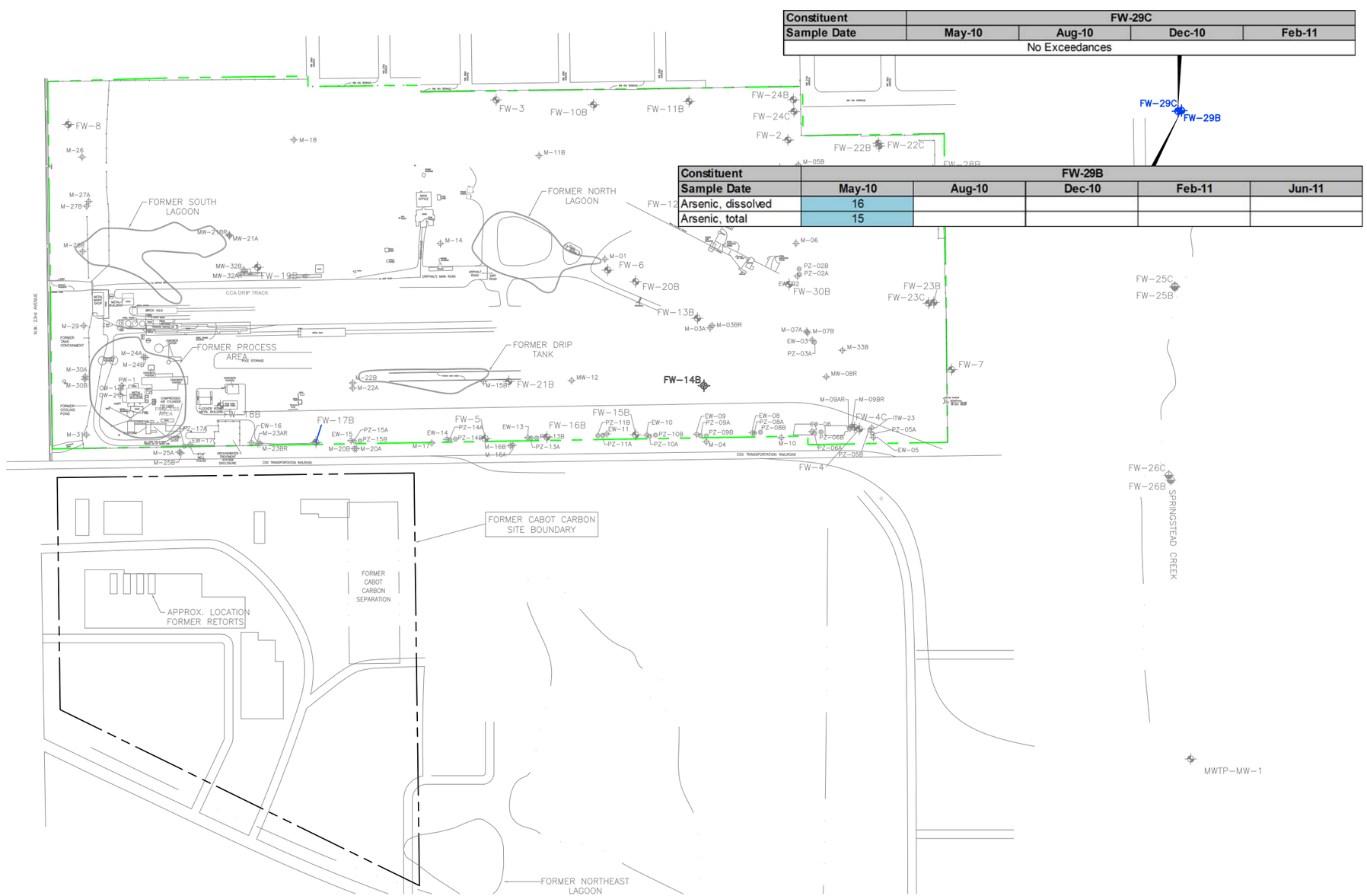

Constituent	FW-29C			
Sample Date	May-10	Aug-10	Dec-10	Feb-11
No Exceedances				

Constituent	FW-29B				
Sample Date	May-10	Aug-10	Dec-10	Feb-11	Jun-11
Arsenic, dissolved	16				
Arsenic, total	15				

LEGEND

- 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

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:	07/25/11
CHKD:	KC	DATE:	07/25/11
APPD:	AMG	DATE:	07/25/11
SCALE:	AS SHOWN		
ISSUE DATE:			

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

2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

SENTINEL MONITORING WELLS
INORGANIC ANALYTICAL EXCEEDANCES

PROJECT NO: 0M045011
DRAWING NUMBER
FIGURE 14

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FW-24B

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
Zone 1	No Exceedances														
Zone 2	No Exceedances														
Zone 3	No Exceedances														
Zone 4	No Exceedances														

FW-24C

Constituent / Sample Date	Jul-07	Sep-07	Dec-07	Feb-08	Jun-08	Sep-08	Dec-08	Feb-09	May-09	Aug-09	Aug-10	Feb-11
Zone 1	No Exceedances											
Zone 2	No Exceedances											
Zone 3	No Exceedances											
Zone 4	No Exceedances											

FW-22B

Constituent / Sample Date	May-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	Feb-10	Jun-10	Aug-10	Oct-10	Feb-11	Jun-11
Zone 1	No Exceedances																				
Zone 2																					
Acenaphthene		20									21			21	23		26	23			
Naphthalene											17			21	58	49	50 J	26			
Zone 3																					
Acenaphthene											29	21	21	25	23	22	23	25			
Naphthalene										24	20	31	48	120	110	69	82 J	35			
Zone 4																					
Acenaphthene													23	21							
Phenol		20																			

FW-22C

Constituent / Sample Date	Jun-07	Sep-07	Dec-07	Feb-08	Jun-08	Sep-08	Dec-08	Feb-09	May-09	Aug-09	Mar-10	Aug-10	Jan-11
Zone 1	No Exceedances												
Zone 2	No Exceedances												
Zone 3	No Exceedances												

FW-28B

Constituent / Sample Date	Mar-10	Jun-10	Aug-10	Oct-10	Feb-11
Zone 1					
Phenol	12 J				
Zone 2	No Exceedances				
Zone 3	No Exceedances				
Zone 4	No Exceedances				

FW-29B

Constituent / Sample Date	May-10	Aug-10	Dec-10	Feb-11
	No Exceedances			

FW-29C

Constituent / Sample Date	May-10	Aug-10	Dec-10	Feb-11
	No Exceedances			

FW-27B

Constituent / Sample Date	Jun-10	Aug-10	Oct-10	Feb-11
Zone 1				
Acenaphthene	39	35	41	29
Benzene	2.1		2.7	2.2
Carbazole			1.9 J	
Naphthalene	560	450	590	480
Zone 2				
2-Methylnaphthalene	130	96	110	
Acenaphthene	98	78	75	94 J
Benzene	4.1	6	8.4	3.8
Carbazole	24	18	17	18 J
Dibenzofuran	60	49	48	57 J
Naphthalene	1700	1100	1600	1500 J
Zone 3				
2-Methylnaphthalene	80	86	59	100
Acenaphthene	62	72	58	86
Benzene	5.7	5.3	6.7	6.5
Carbazole	11	9.5	11	14 J
Dibenzofuran	38	41	36	56
Naphthalene	1100	1100	620	1300
Zone 4				
2-Methylnaphthalene	59	47	42	71
Acenaphthene	68	54	51	67
Benzene	3	3.3	4.5	2.1
Carbazole	10	7.2	8.3	10 J
Dibenzofuran	36	32	31	39
Naphthalene	1100	650	830	1300
Zone 5				
2-Methylnaphthalene	110	79	84	72
Acenaphthene	69	60	62	70
Benzene	4.2	2.6	5.6	3.8
Carbazole	15	14	18	19 J
Dibenzofuran	34	33	38	38
Naphthalene	1200	880	1300	1200
Zone 6				
2-Methylnaphthalene	46	33		50
Acenaphthene	54	48	48	65
Benzene	3.8	2.6	4.4	4.6
Carbazole	10	9.6	10	12 J
Dibenzofuran	35	29	29	38
Naphthalene	850	540	98	990

FW-12B

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	Feb-11	Jun-11
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	3.3	2.1
Naphthalene			49	40	45	44	46	47			48	55	20	65	85	95	76	86	61	110 J	140	170
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	70	43
Acenaphthene	29	28	52	35	33	35	43	56	54	26	53	46 J	43	64	52	69	54	63	54	57	72	94
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	2.7	2.6
Carbazole	4.6 J	1.9 J									3.4 J		2.5 J		3.9 J	8.1	9.9	16	18	31	20 J	24
Dibenzofuran			29						29									30	31	42 J	36	44
Naphthalene	160	380	500	370	410	540	780	830	550	780	870	770	280	750	950	970	750	870	850	1000 J	1100	1300
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	48	40
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	3.3	
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	33	
Naphthalene	280	660	650	630	550	620	780	630	500	240	330	570	430	590	690	680	360	520	490	630 J	740	710

FW-6

Constituent / Sample Date	Dec-08	Feb-09	May-09	Aug-09	Jan-10	Aug-10	Feb-11
2-Methylnaphthalene	81	86	120	130	88	52	190
Acenaphthene	53		78	120	65	51	110
Benzene	12	11	9.8		6.3	5.5	9.1
Carbazole	30	48	44	90	38	27	56 J
Dibenzofuran	31	47	50	60	37	29	66
Naphthalene	1000	1100	1100	2600	850	290	2400

FW-21B

Constituent / 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			

FW-21B

Constituent / Sample Date	Jan-10	Aug-10	Feb-11
Benzene	1.1		
Carbazole	3.4 J		
Naphthalene	160	68 J	76 J

FW-30B

Constituent / Sample Date	May-10	Aug-10	Oct-10	Feb-11
Zone 1	No Exceedances			
Zone 2	No Exceedances			
Zone 3	No Exceedances			
Zone 4	No Exceedances			

FW-23B

Constituent / Sample Date	May-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	May-10	Aug-10	Dec-10	Jan-11	Jun-11
Zone 1	No Exceedances																			
Zone 2	No Exceedances																			
Zone 3	No Exceedances																			
Zone 4																				
Phenol								20												

FW-23C

Constituent / Sample Date	Jul-07	Sep-07	Dec-07	Feb-08	Jun-08	Sep-08	Dec-08	Feb-09	May-09	Aug-09	Mar-10	Aug-10	Jan-11
Zone 1	No Exceedances												
Zone 2	No Exceedances												
Zone 3	NS	NS	No Exceedances										

FW-4

Constituent / Sample Date	Dec-08	May-09	Nov-09	Feb-10	Aug-10	Feb-11
	No Exceedances					

FW-4C

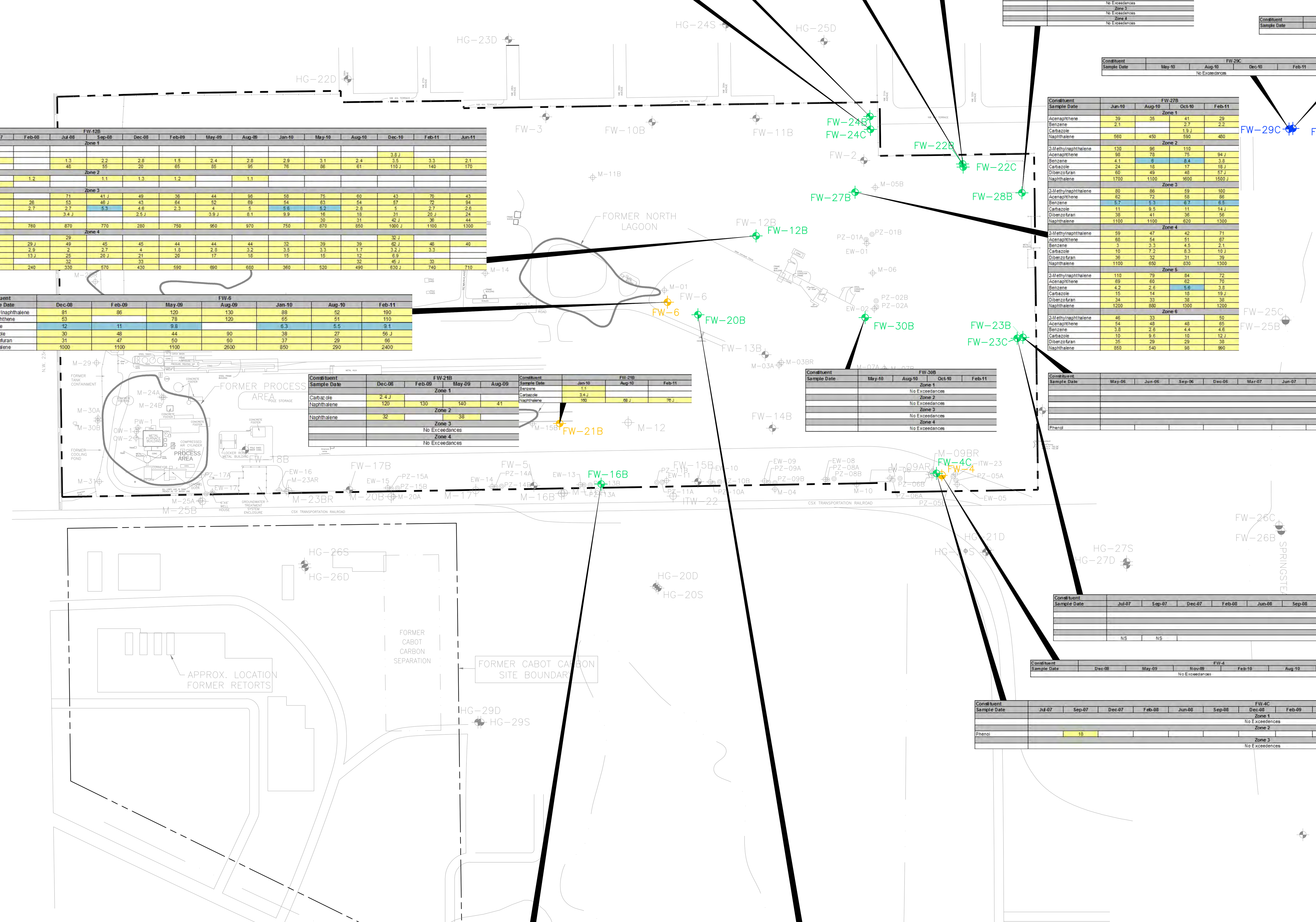
Constituent / Sample Date	Jul-07	Sep-07	Dec-07	Feb-08	Jun-08	Sep-08	Dec-08	Feb-09	May-09	Aug-09	Feb-10	Aug-10	Jan-11
Zone 1	No Exceedances												
Zone 2													
Phenol		18											
Zone 3	No Exceedances												

FW-16B

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	Feb-11	Jun-11
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		2.1	1.7
Naphthalene				15	16	16	28	29	35	26	31	28	35	24	36	30	30	31	26	35 J	33	29
Zone 2	No Exceedances																NS	NS	No Exceedances	NS	NS	NS
Zone 3	No Exceedances																NS	NS	No Exceedances	NS	NS	NS
Zone 4	No Exceedances																NS	NS	No Exceedances	NS	NS	NS

FW-20B

Constituent / 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
Zone 1																					
2-Methylnaphthalene		62	49	35	30								29	42	60	53	110	86	160		
Acenaphthene	54	63	65	59	58	60	39	58	30	42	44	42	53	74	60	47	63	60	96 J	78	110
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	8
Carbazole	26	22	25	17	14	9	3.4 J									6.2	14	19		25 J	30
Dibenzofuran		33	37	35	34	35		33						36	29	29	35	38	53	47	53
Naphthalene		650	720	510	550	450	380	210	450	260	310	420	730	1000	870	690	1100	840	2000 J	1800	2300
Zone 2																					
2-Methylnaphthalene																			33		
Acenaphthene		31	40	43	44	41	32	50		42	34	31	38	42	40	33	39	44	45	52	45
Benzene		3.1	2.5	2.9	2.7	2.2	1.9	1.3									1.1				
Carbazole	2.1 J	9.6	13	12	10	5.4 J	2.7 J														
Dibenzofuran																			33 J		
Naphthalene	53	370	140	120	140	85	94	99	49	100	58	73	96	150	170	63	240	230	480 J	160	200
Zone 3	No Exceedances															NS	NS	No Exceedances	NS	NS	NS
Zone 4	No Exceedances															NS	NS	No Exceedances	NS	NS	NS



LEGEND

- FW-25C — FLORIDAN SENTINEL MONITORING WELL
- FW-20B — FLORIDAN WESTBAY MONITORING WELL
- FW-6 — 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

BLANK SPACES INDICATE THIS CONSTITUENT DOES NOT EXCEED STANDARDS

REV #	DATE	DESCRIPTION	APPD
1			

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

J: The quantity is an estimated value.

Concentration exceeds Florida GCTL. (yellow)
Concentration exceeds Federal MCL. (blue)

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: 07/25/11	FIELD & TECHNICAL SERVICES, LLC 200 THIRD AVENUE CARNEGIE, PA 15106
CHKD: KC	DATE: 07/25/11	
APPD: AMG	DATE: 07/25/11	
SCALE: AS SHOWN		
ISSUE DATE:		

FTS

2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

SUMMARY OF FLORIDAN WELLS ORGANIC ANALYTICAL EXCEEDANCES

PROJECT NO: 0M045011
DRAWING NUMBER
FIGURE 15

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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
								Zone 1							
Arsenic, (dissolved)	140	78	86	99	107	101	122	105	134	120	165	159	178	166	158
Arsenic, (total)											156	162	184	174	174
								Zone 2							
Arsenic, (dissolved)	48	18	58	61	60	75	90	86	92	94	45	27	25	24	15
Arsenic, (total)											42	26	24	29	16
								Zone 3							
Arsenic, (dissolved)	13														
								Zone 4							
Arsenic, (dissolved)	No Exceedances														

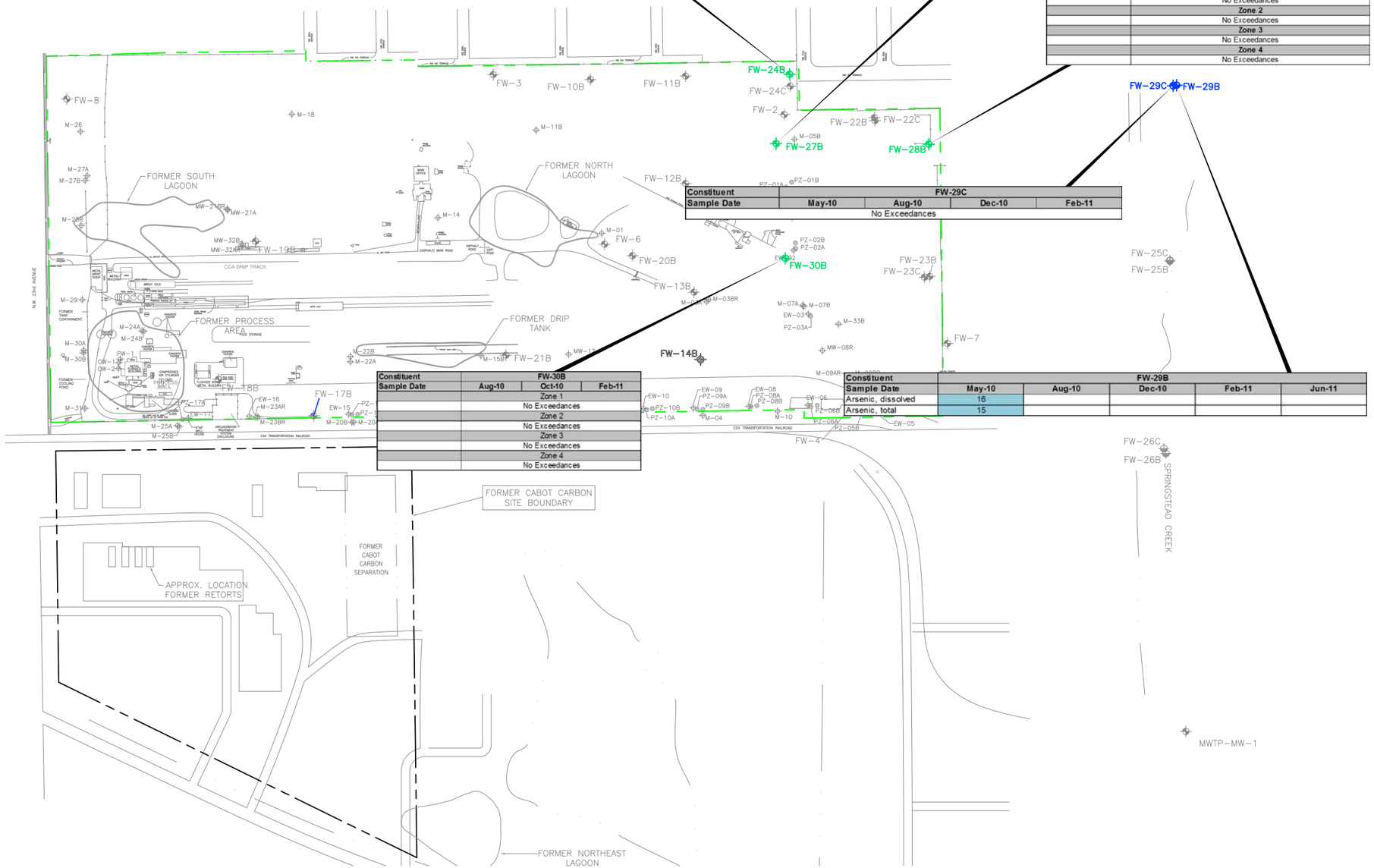
Constituent	FW-27B			
Sample Date	Jun-10	Aug-10	Oct-10	Feb-11
	Zone 1			
	No Exceedances			
	Zone 2			
	No Exceedances			
	Zone 3			
	No Exceedances			
	Zone 4			
	No Exceedances			
	Zone 5			
	No Exceedances			
	Zone 6			
Arsenic, dissolved		11 J	13	
Arsenic, total			12	

Constituent	FW-28B			
Sample Date	Jun-10	Aug-10	Oct-10	Feb-11
	Zone 1			
	No Exceedances			
	Zone 2			
	No Exceedances			
	Zone 3			
	No Exceedances			
	Zone 4			
	No Exceedances			

Constituent	FW-29C			
Sample Date	May-10	Aug-10	Dec-10	Feb-11
	No Exceedances			

Constituent	FW-30B		
Sample Date	Aug-10	Oct-10	Feb-11
	Zone 1		
	No Exceedances		
	Zone 2		
	No Exceedances		
	Zone 3		
	No Exceedances		
	Zone 4		
	No Exceedances		

Constituent	FW-29B				
Sample Date	May-10	Aug-10	Dec-10	Feb-11	Jun-11
Arsenic, dissolved	16				
Arsenic, total	15				



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

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 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:	07/25/11
CHKD:	KC	DATE:	07/25/11
APPD:	AMG	DATE:	07/25/11
SCALE:	AS SHOWN		
ISSUE DATE:			

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

2011 FIRST SEMIANNUAL
COMPREHENSIVE GROUNDWATER MONITORING REPORT
CABOT CARBON/KOPPERS SUPERFUND SITE
GAINESVILLE, FLORIDA

SUMMARY OF FLORIDAN WELLS INORGANIC ANALYTICAL EXCEEDANCES

PROJECT NO: 0M045011
DRAWING NUMBER
FIGURE 16

q:\projects\beazer projects\gainesville\cadd\isa gw comp report 2011\figure-16.dwg Last Saved By: Tdebogovich 9/12/2011 2:31 PM Plotted By: Kendra L. Chintella 9/22/2011 9:26 AM Scale: 1:1

APPENDIX A

FIELD FORMS

WELL NO.: FW-4

GROUNDWATER SAMPLE COLLECTION RECORD

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer Inc.

Project Name: Gainesville 1st Qtr 2011 Project Location: Gainesville, FL

Weather Conditions: Sunny, calm 70° Sampling Date: 2/2/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 131.50 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 159.90 (ft)

e. LNAPL Thickness: (a-b) (ft) f. DNAPL Thickness: (c-d) (ft)

g. Length of Water Column: 28.4 (ft) (a-d)

h. Well Volume: 4.63 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Bladder pump w/ dedicated teflon-lined tubing

b. Field Testing Equipment: YSI 556 #10K101399 /Lamotte 2020e #457-5010

c. Required Total Purge Volume (1f x 2e) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 11.4 L =

e. Begin Purge Time: 0932 End Purge Time: 1010

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) Constant	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10%)	Diss O2 (mg/L) (±10%)	TURBIDITY (<10NTU) or Stable		Water Level (ft)	Notes
PRE PURGE VALUES											
Int.	1003	300	22.96	7.80	0.380	-300	1.21	86		131.61	
PURGING VALUES											
1	0940	300	23.00	7.77	0.377	-355.1	0.66	55		131.61	
2	0945	300	22.15	7.76	0.375	-356.4	0.58	24.8		131.61	
3	0950	300	22.97	7.71	0.361	-325.0	0.31	8.51		131.61	
4	0955	300	23.01	7.67	0.361	-316.6	0.25	8.44		131.61	
5	1000	300	23.02	7.66	0.358	-305.1	0.22	8.37		131.61	
6	1005	300	23.03	7.66	0.357	-308.1	0.21	8.34		131.61	
7	1010	300	23.05	7.66	0.357	-310.5	0.20	8.31		131.61	
8											
9											
10											
11											
12											
13											
14											

3. SAMPLE COLLECTION DATA Sampling Personnel: RH, DB

Sampling Method(s) & Equip: Grundfos Redi-Flow/teflon-lined tubing

Sample I.D. (Name, Date, Time): FW-4-020211, 2/2/11, 1010

Sample Analytical Parameters/Method:

BTEX 8260B, SVOC 8270C

Sample Start Time: 1010 End SampleTime: 1030

COMMENTS:

WL # 11311

FTS

WELL NO.: FW-6

GROUNDWATER SAMPLE COLLECTION RECORD

Project No.: OM045011-091 Date: 2/2/11 Time: Start: 1308 am/pm
Project Name: Gainesville 1st Qtr 20 Finish: am/pm
Location: Gainesville, FL
Weather Conditions: Overcast, 70° Collector: R Hanczar / D. Bentley (Print) Sign

1. WATER LEVEL DATA (measured from top of well casing)
   a. Total Casing Length: NA (ft) b. Well Casing Type: Steel Stainless
   c. Depth to Water: NA (ft) d. Casing Diameter: 2 (in)
   e. Length of Water Column: NA (ft) (a-c)
   f. Well Volume: NA (gal)

Conversion Factors (cf) (e x cf = f)

Casing I.D. (in)	Conv. Fact.
1	0.041
2	0.163
3	0.367
4	0.653
6	1.470

2. WELL PURGE DATA
   a. Purge Method: Dedicated well pump
   b. Field Testing Equipment: YSI 556 (10K101399) La Motte 2020we (457-5010)
   c. Number of Well Volumes to Remove: ~~Three - Five~~
   d. Required Total Purge Volume (1f x 2c): NA

Vol. Purged (total gal)	Temp° C Constant	pH (+/-0.2s.u.)	Spec. Cond. (+/- 3%)	Turbidity < 10NTU or stable	Notes
I (2gal)	23.05	7.79	0.421	1.13	
I (5gal)	23.03	7.77	0.419	0.92	

2/2/11

3. SAMPLE COLLECTION INFORMATION
   Sampling Method(s): Direct sample from spigot
   Sample Identification (name, time, date): FW6-020211, 1320, 2/2/11
   QC Samples (name, time, date): FW-6-020211-MSMSD, 1320, 2/2/11
   Analytical Parameters and Methods: BTEX 8260B, SVOC's 8270C, Total & Diss As 6020

Comments:

WELL NO.: FW-21B

GROUNDWATER SAMPLE COLLECTION RECORD

Project No.: OM045011-091 Date: 2/2/11 Time: Start: 1232 am/pm
Project Name: Gainesville 1st Qtr 20 Finish: 1259 am/pm
Location: Gainesville, FL
Weather Conditions: Overcast, 70° Collector: R. Hanczar, D.B. (Print) (Sign)

1. WATER LEVEL DATA (measured from top of well casing)

a. Total Casing Length: NA (ft) b. Well Casing Type: Steel
c. Depth to Water: NA (ft) d. Casing Diameter: 4 (in)
e. Length of Water Column: NA (ft) (a-c)
f. Well Volume: NA (gal)

Conversion Factors (cf)
(e x cf = f)

Casing I.D. (in)	Conv. Fact.
1	0.041
2	0.163
3	0.367
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Dedicated well pump
b. Field Testing Equipment: YSI 556 (10C101399) LaMotte 2020we (457-5010)
c. Number of Well Volumes to Remove: ~~Three~~ Five 2/2/11
d. Required Total Purge Volume (1f x 2c): NA

Vol. Purged (total gal)	Temp° C Constant	pH (+/-0.2s.u.)	Spec. Cond. (+/- 3%)	Turbidity < 10NTU or stable	Notes
1 (2gal)	23.48	7.71	0.519	2.31	
1 (5gal)	23.52	7.73	0.518	2.16	
					2/2/11

3. SAMPLE COLLECTION INFORMATION

Sampling Method(s): Direct sample from spigot
Sample Identification (name, time, date): FW21B-020211, 1240
QC Samples (name, time, date): IRMDUP-020211, 1200, 2/2/11 & FW99D-020211 (BTEX & SVOC only) 1200
Analytical Parameters and Methods: BTEX 8260B, SVOC 8270C
Total & Dissolved As for IRM only
Comments: (Metals only)

WELL NO.: FW29B

GROUNDWATER SAMPLE COLLECTION RECORD

Project No.:	OM045011-091	Date:	2/3/11	Time: Start:	1340 am/pm
Project Name:	Gainesville 1st Qtr 20			Finish:	am/pm
Location:	Gainesville, FL				
Weather Conditions:	Light drizzle, 50°	Collector:	Rory Hanczyc (Print)		(Sign)

1. WATER LEVEL DATA (measured from top of well casing)

a. Total Casing Length: 246.32 (ft) b. Well Casing Type: Steel

c. Depth to Water: 120.63 (ft) d. Casing Diameter: 4 (in)

e. Length of Water Column: 125.7 (ft) (a-c)

f. Well Volume: 82.1 (gal)

Conversion Factors (cf)
(e x cf = f)

Casing I.D. (in)	Conv. Fact.
1	0.041
2	0.163
3	0.367
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Rediflo 2 pump w/ dedicated teflon lined tubing

b. Field Testing Equipment: YSI 556 (10K101399) LaMotte 2020we (457-1059)

c. Number of Well Volumes to Remove: Three - Five

d. Required Total Purge Volume (1f x 2c): 246.3

Vol. Purged (total gal)	Temp° C Constant	pH (+/-0.2s.u.)	Spec. Cond. (+/- 3%)	Turbidity <10NTU or stable	Notes
± (10)	22.07	8.46	0.383	1.03	
85	23.01	7.91	0.419 ~~0.429~~ DB 2-3-11	0.58	DB 2-3-11
165	23.00	7.79	0.415	0.19	
250	23.04	7.77	0.412	0.17	
				DB 2-3-11	

3. SAMPLE COLLECTION INFORMATION

Sampling Method(s): Rediflo 2 Pump w/ dedicated Teflon-lined tubing.

Sample Identification (name, time, date): FW29B-020311, 1530, 2/3/11

QC Samples (name, time, date):

Analytical Parameters and Methods: BTEX 8260B, SVOC's 8270C, Total As 6020, Diss As 6020

Comments:

WELL NO.: FW-29C

GROUNDWATER SAMPLE COLLECTION RECORD

Project No.:	OM045011-091	Date: 2/3/11	Time: Start: 0905 am/pm
Project Name:	Gainesville 1st Qtr 20		Finish: 1330 am/pm
Location:	Gainesville, FL		
Weather Conditions:	Light drizzle, 50°	Collector: Print Rory Hanczar	Sign

1. WATER LEVEL DATA (measured from top of well casing)

a. Total Casing Length: 379.84 (ft) b. Well Casing Type: Steel

c. Depth to Water: 120.99 (ft) d. Casing Diameter: 4 (in)

e. Length of Water Column: 258.85 (ft) (a-c)

f. Well Volume: 169 (gal)

Conversion Factors (cf) (e x cf = f)

Casing I.D. (in)	Conv. Fact.
1	0.041
2	0.163
3	0.367
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Grundfos Redi flo-2

b. Field Testing Equipment: YSI 556 (10F101799) LaMotte 2020we (457-1050)

c. Number of Well Volumes to Remove: Three - Five

d. Required Total Purge Volume (1f x 2c): 776 gals

Vol. Purged (total gal)	Temp° C Constant	pH (+/-0.2s.u.)	Spec. Cond. (+/- 3%)	Turbidity < 10NTU or stable	Notes
± (15)	22.91	8.19	0.396	3.81	
260	23.66	~~8.09~~ 7.89 DB 2-3-11	0.363	2.01	
520	23.21	7.88	0.388	1.49	DB 2-3-11
780	23.26	7.84	0.388	1.56	
			DB 2-3-11		

3. SAMPLE COLLECTION INFORMATION

Sampling Method(s): Redi flo2 submersible pump w/ teflon-lined tubing

Sample Identification (name, time, date): FW29C-020311, 1200, 2/3/11

QC Samples (name, time, date): FW29C-020311-MS MSD, 1200, 2/3/11

Analytical Parameters and Methods: BTEX 8260B, SVOC 8270C, Total & Diss As 6020

Comments:

WELL NO.: ITW-22

GROUNDWATER SAMPLE COLLECTION RECORD

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer Inc.

Project Name: Gainesville 1st Qtr 2011 Project Location: Gainesville, FL

Weather Conditions: 70°F Cloudy Sampling Date: 2/1/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 13.11 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 16.79 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 3.68 (ft) (a-d)

h. Well Volume: 0.60 (gal)

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump (001102)

b. Field Testing Equipment: YSI 556 (10A101775)/Lamotte 2020e (10613)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 1.74 gal

e. Begin Purge Time: 1130 End Purge Time: 1203

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) Constant	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10%)	Diss O2 (mg/L) (±10%)	TURBIDITY (<10NTU) or Stable	Water Level (ft)	Notes
PRE PURGE VALUES										
Int.	1130	200	21.46	5.12	0.104	-174.9	1.60		7.32	13.21
PURGING VALUES										
1	1135	200	21.38	5.16	0.100	-189.2	1.35		5.18	13.21
2	1140	200	21.40	5.22	0.098	-202.0	1.22		2.53	13.21
3	1145	200	21.36	5.27	0.096	-220.9	1.10		2.21	13.21
4	1150	200	21.34	5.27	0.094	-232.5	1.00		2.17	13.21
5	1155	200	21.43	5.25	0.092	-250.1	0.81		2.20	13.21
6	1200	200	21.41	5.24	0.091	-250.8	0.77		2.16	13.21
7	1203	200	21.44	5.24	0.091	-251.4	0.75		2.15	13.21
8										
9										
10										
11						KR 2/1/11				
12										
13										
14										

KR 2/1/11

KR 2/1/11

3. SAMPLE COLLECTION DATA

Sampling Personnel: GR/KR

Sampling Method(s) & Equip: Peristaltic Pump (001102) w/ ded. teflon-lined tubing

Sample I.D. (Name, Date, Time): ITW-22-000111 2/1/11 1205

Sample Analytical Parameters/Method: BTEX 8260B, SVOC's 8270C

Sample Start Time: 1205 End SampleTime: 1230

COMMENTS:

WL: 20246 Creosote odor from creosote railroad ties surrounding well.

WELL NO.: M-09AR

GROUNDWATER SAMPLE COLLECTION RECORD

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer Inc.

Project Name: Gainesville 1st Qtr 2011 Project Location: Gainesville, FL

Weather Conditions: 60°F Calm Sampling Date: 2/1/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 12.96 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 17.80 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 4.84 (ft) (a-d)

h. Well Volume: 0.79 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump (001102)

b. Field Testing Equipment: YSI 556 (10A101775)/Lamotte 2020e (10613)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 2.69 gal

e. Begin Purge Time: 0940 End Purge Time: 1031

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) Constant	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10%)	Diss O2 (mg/L) (±10%)	TURBIDITY (<10NTU) or Stable		Water Level (ft)	Notes
PRE-PURGE VALUES											
Int.	0940	200	20.10	5.44	0.106	-130.2	3.50			7.55	13.00	
PURGING VALUES											
1	0945	200	20.55	5.37	0.098	-125.7	2.75			7.31	13.01	
2	0950	200	20.74	5.37	0.099	-133.8	2.57			7.16	13.01	
3	0955	200	20.85	5.37	0.098	-148.1	2.22			7.04	13.02	
4	1000	200	20.98	5.37	0.098	-193.9	2.00			7.01	13.02	
5	1005	200	21.03	5.37	0.099	-198.9	1.75			7.05	13.02	
6	1010	200	21.05	5.37	0.101	-225.1	1.62			7.00	13.02	
7	1015	200	21.07	5.38	0.104	-240.5	1.45			6.97	13.02	
8	1020	200	21.06	5.38	0.105	-250.9	1.34			6.93	13.02	
9	1025	200	21.09	5.38	0.105	-259.4	1.19			6.98	13.02	
10	1028	200	21.09	5.39	0.106	-256.8	1.17			7.01	13.02	
11	1031	200	21.07	5.39	0.106	-255.7	1.16			6.99	13.02	
12												
13						KR 2/1/11						
14												

3. SAMPLE COLLECTION DATA Sampling Personnel: GB / KR

Sampling Method(s) & Equip: Peristaltic Pump (001102) w/ ded. teflon-lined tubing.

Sample I.D. (Name, Date, Time): M-09AR-020111 2/1/11 1035

Sample Analytical Parameters/Method: BTEX 8260B, SVOCs 8270C, Total and Dissolved Arsenic 6020

Sample Start Time: 1035 End SampleTime: 1100

COMMENTS:

WL: 0846

WELL NO.: M-9BR

GROUNDWATER SAMPLE COLLECTION RECORD

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer Inc.

Project Name: Gainesville 1st Qtr 2011 Project Location: Gainesville, FL

Weather Conditions: 70°F Cloudy Sampling Date: 2/1/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 12.35 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 28.52 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 16.17 (ft) (a-d)

h. Well Volume: 2.64 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump (001100)

b. Field Testing Equipment: YSI 556 (10A101775)/Lamotte 2020e (10613)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 0.87 gal

e. Begin Purge Time: 1455 End Purge Time: 1508

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) Constant	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10%)	Diss O2 (mg/L) (±10%)	TURBIDITY (<10NTU) or Stable	Water Level (ft)	Notes
PRE-PURGE VALUES										
Int.	1455	100	23.12	4.26	0.077	-224.9	1.60		3.21	12.81	
PURGING VALUES										
1	1500	100	23.52	4.45	0.076	-249.9	0.63		3.15	12.88	
2	1505	100	23.50	4.56	0.075	-263.9	0.52		3.03	12.91	
3	1510	100	23.51	4.65	0.074	-271.8	0.39		3.00	12.94	
4	1515	100	23.47	4.70	0.073	-280.7	0.26		2.89	12.95	
5	1520	100	23.45	4.73	0.073	-283.0	0.20		2.85	12.95	
6	1525	100	23.45	4.75	0.073	-281.5	0.20		2.91	12.96	
7	1528	100	23.48	4.76	0.073	-280.4	0.19		2.87	12.96	
8											
9											
10											
11											
12											
13											
14											

KR 2/1/11

KR 2/1/11

KR 2/1/11

3. SAMPLE COLLECTION DATA Sampling Personnel: GB/KR

Sampling Method(s) & Equip: Peristaltic Pump (001100) w/ dedicated teflon-lined tubing

Sample I.D. (Name, Date, Time): M-9BR-020111 2/1/11 1530

Sample Analytical Parameters/Method: BTEX 8260B, SVOCs 8270c, Total and Dissolved Arsenic 6020

Sample Start Time: 1530 End SampleTime: 1553

COMMENTS: WL: 20946

WELL NO.: M-12

GROUNDWATER SAMPLE COLLECTION RECORD

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer Inc.

Project Name: Gainesville 1st Qtr 2011 Project Location: Gainesville, FL

Weather Conditions: 70°F Cloudy, Windy Sampling Date: 2/1/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 13.41 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 14.35 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 0.94 (ft) (a-d)

h. Well Volume: 0.15 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump (001102)

b. Field Testing Equipment: YSI 556 (10A101775) /Lamotte 2020e (10013)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 0.87 gal

e. Begin Purge Time: 1335 End Purge Time: 1408

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) Constant	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10%)	Diss O2 (mg/L) (±10%)	TURBIDITY (<10NTU) or Stable	Water Level (ft)	Notes
PRE PURGE VALUES										
Int.	1335	100	23.61	5.79	0.095	-143.9	1.49		10.52	13.58	
PURGING VALUES										
1	1340	100	23.55	5.45	0.089	-174.9	1.58		7.39	13.58	
2	1345	100	23.50	5.49	0.080	-217.5	1.40		6.41	13.58	
3	1350	100	23.47	5.49	0.080	-233.0	1.39		6.31	13.58	
4	1355	100	23.45	5.49	0.081	-238.5	1.41		6.29	13.58	
5	1400	100	23.43	5.55	0.083	-248.6	1.46		6.33	13.58	
6	1405	100	23.41	5.55	0.085	-250.4	1.47	KR 2/1/11	6.30	13.58	KR 2/1/11
7	1408	100	23.40	5.54	0.085	-251.0	1.50		6.34	13.58	
8											
9											
10											
11						KR 2/1/11					
12											
13											
14											

3. SAMPLE COLLECTION DATA Sampling Personnel: GB/KR

Sampling Method(s) & Equip: Peristaltic Pump (001102) w/ ded. Teflon-lined Tubing

Sample I.D. (Name, Date, Time): M-12-020111 2/1/11 1410

Sample Analytical Parameters/Method: BTEX 8260B, SVOCs 8270C, Pentachlorophenol 8270C, * Total and Dissolved Arsenic 6020, Total and Dissolved Chromium

Sample Start Time: 1410 End SampleTime: 1435

COMMENTS: WL: 20.96

strong winds blowing from demo site.

WELL NO.: M-16A

GROUNDWATER SAMPLE COLLECTION RECORD

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer Inc.

Project Name: Gainesville 1st Qtr 2011 Project Location: Gainesville, FL

Weather Conditions: 70°F Cloudy Sampling Date: 2/1/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 13.05 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 15.54 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 2.49 (ft) (a-d)

h. Well Volume: 0.41 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump (001102)

b. Field Testing Equipment: YSI 556 (10A101775) /Lamotte 2020e (10613)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 1.39 gal

e. Begin Purge Time: 1615 End Purge Time: 1650

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) Constant	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10%)	Diss O2 (mg/L) (±10%)	TURBIDITY (<10NTU) or Stable	Water Level (ft)	Notes
PRE PURGE VALUES										
Int.	1615	150	22.05	5.78	0.153	-182.0	0.90		12.9	13.19	
PURGING VALUES										
1	1620	150	22.04	5.85	0.158	-197.3	0.96		10.3	13.19	
2	1625	150	21.85	5.85	0.164	-214.1	0.79		7.32	13.19	
3	1630	150	21.87	5.86	0.168	-231.6	0.66		7.39	13.19	
4	1635	150	21.84	5.86	0.169	-242.2	0.65		7.46	13.19	
5	1640	150	21.82	5.86	0.170	-251.3	0.50		7.21	13.19	
6	1645	150	21.80	5.86	0.171	-256.3	0.46	KR 2/1/11	7.17	13.19	KR 2/1/11
7	1650	150	21.90	5.85	0.172	-259.0	0.48		7.22	13.19	
8											
9											
10											
11								KR 2/1/11			
12											
13											
14											

3. SAMPLE COLLECTION DATA Sampling Personnel: GB/KR

Sampling Method(s) & Equip: Peristaltic Pump (001102) w/ ded. Teflon-Lined Tubing

Sample I.D. (Name, Date, Time): M-16A-020111 2/1/11 1655

Sample Analytical Parameters/Method: BTEX 8260B, SVOCs 8270C, Pentachlorophenol

* 8270C, Total and Dissolved Arsenic 6020

Sample Start Time: 1655 End SampleTime: 1740

COMMENTS: WL: 20946

Took Duplicate M-99A @ 2000 (M-99A-020111). Took Field blank FB-020111 near well @ 1745

WELL NO.: M-16B

GROUNDWATER SAMPLE COLLECTION RECORD

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer Inc.

Project Name: Gainesville 1st Qtr 2011 Project Location: Gainesville, FL

Weather Conditions: 65°F Cloudy Sampling Date: 2/2/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 12.58 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 23.35 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 10.77 (ft) (a-d)

h. Well Volume: 1.76 (gal)

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump (001102)

b. Field Testing Equipment: YSI 556 (10A101775) /Lamotte 2020e (10613)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 0.99 gal

e. Begin Purge Time: 1550 End Purge Time: 1615

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) Constant	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10%)	Diss O2 (mg/L) (±10%)	TURBIDITY (<10NTU) or Stable	Water Level (ft)	Notes
PRE-PURGE VALUES										
Int.	1550	150	21.55	4.15	0.071	-183.8	0.70		5.18	12.84	
PURGING VALUES										
1	1555	150	21.77	4.46	0.070	-150.5	0.49		3.27	12.86	
2	1600	150	21.78	4.58	0.069	-155.9	0.44		2.91	12.86	
3	1605	150	21.77	4.66	0.066	-252.9	0.33		2.73	12.86	
4	1610	150	21.78	4.71	0.066	-248.3	0.33		2.62	12.86	
5	1615	150	21.81	4.74	0.066	-240.1	0.35		2.69	12.86	
6											
7											
8											
9											
10											
11											
12											
13											
14											

RE 2/3/11

RE 2/3/11

RE 2/3/11

3. SAMPLE COLLECTION DATA Sampling Personnel: GB/KR

Sampling Method(s) & Equip: Peristaltic Pump (001102) w/ ded. Teflon-Lined Tubing

Sample I.D. (Name, Date, Time): M-16B-020211 2/2/11 1620

Sample Analytical Parameters/Method: BTEX 8260B, SVOCs 8270C, Pentachlorophenol 8270C, Total and Dissolved Arsenic 6020

Sample Start Time: 1620 End SampleTime: 1640

COMMENTS: WL: 20246

WELL NO.: M-17

GROUNDWATER SAMPLE COLLECTION RECORD

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer Inc.

Project Name: Gainesville 1st Qtr 2011 Project Location: Gainesville, FL

Weather Conditions: 63°F Rain Sampling Date: 2/2/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 14.42 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 15.37 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 0.95 (ft) (a-d)

h. Well Volume: 0.15 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump (001102)

b. Field Testing Equipment: YSI 556 (10A101775)/Lamotte 2020e (10613)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 0.79 gal

e. Begin Purge Time: 0835 End Purge Time: 0905

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) Constant	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10%)	Diss O2 (mg/L) (±10%)	TURBIDITY (<10NTU) or Stable	Water Level (ft)	Notes
PRE PURGE VALUES										
Int.	0835	100	19.49	5.20	0.311	-200.3	1.37		10.42	14.59	
PURGING VALUES										
1	0840	100	19.65	5.27	0.236	-245.7	1.37		8.32	14.63	
2	0845	100	19.68	5.33	0.173	-256.1	1.25		8.16	14.66	
3	0850	100	19.70	5.40	0.153	-254.0	1.11		8.01	14.67	
4	0855	100	19.72	5.43	0.153	-260.2	1.05		8.10	14.67	
5	0900	100	19.73	5.44	0.153	-258.6	1.02		8.03	14.68	
6	0905	100	19.73	5.44	0.153	-255.3	1.00		8.00	14.68	
7											
8											
9											
10											
11											
12											
13											
14											

KR 2/2/11

KR 2/2/11

KR 2/2/11

3. SAMPLE COLLECTION DATA Sampling Personnel: GB/KR

Sampling Method(s) & Equip: Peristaltic Pump (001102) w/ ded. Teflon-Lined Tubing

Sample I.D. (Name, Date, Time): M-17-020211 2/2/11 0910

Sample Analytical Parameters/Method: BTEX 8260B, SVOC, 8270C, Pentachlorophenol 8270C, * Total and Dissolved Arsenic 6020.

Sample Start Time: 0910 End SampleTime: 0935

COMMENTS: WL: 20.96

WELL NO.: M-20B

GROUNDWATER SAMPLE COLLECTION RECORD

PERMIT NO.:

FTS

Project No.: OM045011-091 Client: Beazer Inc.

Project Name: Gainesville 1st Qtr 2011 Project Location: Gainesville, FL

Weather Conditions: 70°F Cloudy Sampling Date: 2/2/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 13.08 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 25.54 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 12.46 (ft) (a-d)

h. Well Volume: 2.03 (gal)

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump (00110a)

b. Field Testing Equipment: YSI 556 (10A101775) /Lamotte 2020e (10613)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 0.79 gal

e. Begin Purge Time: 1120 End Purge Time: 1150

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) Constant	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10%)	Diss O2 (mg/L) (±10%)	TURBIDITY (<10NTU) or Stable	Water Level (ft)	Notes
PRE PURGE VALUES										
Int.	1120	100	20.98	3.65	0.137	-189.3	1.30	4.20	13.71	
PURGING VALUES										
1	1125	100	21.04	3.99	0.137	-198.4	0.37	2.31	13.71	
2	1130	100	21.01	4.25	0.137	-244.9	0.32	1.32	13.71	
3	1135	100	20.99	4.27	0.137	-263.4	0.29	1.09	13.71	
4	1140	100	20.97	4.33	0.136	-258.3	0.28	0.99	13.71	
5	1145	100	20.96	4.39	0.135	-262.0	0.26	0.95	13.71	
6	1150	100	20.96	4.41	0.135	-256.9	0.25	0.92	13.71	
7										
8										
9										
10										
11										
12										
13										
14										

KR 2/2/11

KR 2/2/11

KR 2/2/11

3. SAMPLE COLLECTION DATA Sampling Personnel: GB/KR

Sampling Method(s) & Equip: Peristaltic Pump (00110D) w/ ded. Teflon-Lined Tubing

Sample I.D. (Name, Date, Time): M-20B-020211 2/2/11 1155

Sample Analytical Parameters/Method: BTEX 8260B, SVOCs 8270C, Pentachlorophenol 8270C,

* Total and Dissolved Arsenic 6020

Sample Start Time: 1155 End SampleTime: 1230

COMMENTS: WL: 20246

Q:\Projects\Beazer Projects\Seaboard\Misc. to be filed

WELL NO.: M-23BR

GROUNDWATER SAMPLE COLLECTION RECORD

PERMIT NO.:

Project No.:	OM045011-091	Client:	Beazer Inc.
Project Name:	Gainesville 1st Qtr 2011	Project Location:	Gainesville, FL
Weather Conditions:	65°F Cloudy, Windy	Sampling Date:	2/2/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 13.58 (ft)
c. Depth to DNAPL: NP (ft) d. Total Well Depth: 26.10 (ft)
e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)
g. Length of Water Column: 12.52 (ft) (a-d)
h. Well Volume: 2.04 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump (001102)
b. Field Testing Equipment: YSI 556 (10A101775) /Lamotte 2020e (10613)
c. Required Total Purge Volume (1f x 2c) (gals.): NA
d. Total Volume and Number of Well Volumes Removed: 1.59 gal
e. Begin Purge Time: 1430 End Purge Time: 1450

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) Constant	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10%)	Diss O2 (mg/L) (±10%)	TURBIDITY (<10NTU) or Stable	Water Level (ft)	Notes
PRE PURGE VALUES										
Int.	1420	200	22.18	4.80	0.148	-148.9	1.80		5.18	13.67	
PURGING VALUES										
1	1425	200	22.29	4.90	0.149	-148.0	0.64		5.00	13.67	
2	1430	200	22.36	4.96	0.146	-232.9	0.24		4.17	13.67	
3	1435	200	22.38	4.97	0.146	-222.5	0.26		4.08	13.67	
4	1440	200	22.41	4.98	0.145	-269.9	0.17		4.01	13.67	
5	1445	200	22.42	4.99	0.145	-263.0	0.15		3.91	13.67	
6	1450	200	22.42	5.00	0.144	-273.0	0.14		3.85	13.67	
7											
8											
9											
10											
11											
12											
13											
14											

3. SAMPLE COLLECTION DATA Sampling Personnel: GB/KR

Sampling Method(s) & Equip: Peristaltic Pump (001102) w/ ded. Teflon-Lined Tubing
Sample I.D. (Name, Date, Time): M-23BR-020211 2/2/11 1455
Sample Analytical Parameters/Method: BTEX 8260B, SVOCs 8270C, Pentachlorophenol 8270C,
* Total and Dissolved Arsenic 6020

Sample Start Time: 1455 End SampleTime: 1540

COMMENTS: WL: 20246. MS/MSD collected (M-23BR - MS/MSD - 020211)
Strong wind blowing from demo work towards well.

WELL NO.: M-25B

GROUNDWATER SAMPLE COLLECTION RECORD

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer Inc.

Project Name: Gainesville 1st Qtr 2011 Project Location: Gainesville, FL

Weather Conditions: 65°F Cloudy Sampling Date: 2/2/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 13.88 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 25.28 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 11.40 (ft) (a-d)

h. Well Volume: 1.86 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump (001102)

b. Field Testing Equipment: YSI 556 (10A101775) /Lamotte 2020e (10613)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 1.74 gal

e. Begin Purge Time: 1655 End Purge Time: 1728

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) Constant	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10%)	Diss O2 (mg/L) (±10%)	TURBIDITY (<10NTU) or Stable	Water Level (ft)	Notes
PRE PURGE VALUES										
Int.	16:55	200	21.01	6.33	0.596	-180.6	2.47		11.15	14.01	
PURGING VALUES										
1	1700	200	21.10	6.44	0.610	-230.1	0.74		7.92	14.02	
2	1705	200	21.18	6.51	0.603	-316.9	0.22		7.39	14.02	
3	1710	200	21.26	6.52	0.579	-347.3	0.14		7.11	14.02	
4	1715	200	21.31	6.52	0.542	-345.2	0.12		6.59	14.02	
5	1720	200	21.32	6.51	~~0.525~~ 0.535	-346.9	0.11		6.13	14.02	
6	1725	200	21.34	6.50	0.502	-334.8	0.10		6.01	14.02	
7	1728	200	21.34	6.50	0.497	-344.2	0.09		5.78	14.02	
8										
9										
10										
11										
12										
13										
14										

3. SAMPLE COLLECTION DATA Sampling Personnel: GB/KR

Sampling Method(s) & Equip: Peristaltic Pump (001102) w/ ded. Teflon-Lined Tubing

Sample I.D. (Name, Date, Time): M-25B-020911 2/2/11 1730

*Sample Analytical Parameters/Method: BTEX 8260B, SVOCs 8270C, Pentachlorophenol 8270C

Total and Dissolved Arsenic 6000

Sample Start Time: 1730 End SampleTime: 1730

COMMENTS: WL: 20246

WELL NO.: M-33B

GROUNDWATER SAMPLE COLLECTION RECORD

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer Inc.

Project Name: Gainesville 1st Qtr 2011 Project Location: Gainesville, FL

Weather Conditions: 63°F Rain Sampling Date: 2/2/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b. Depth to Water: 12.67 (ft)

c. Depth to DNAPL: NP (ft) d. Total Well Depth: 27.33 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 14.66 (ft) (a-d)

h. Well Volume: 2.39 (gal)

2. WELL PURGE DATA

a. Purge Method: Peristaltic Pump (001102)

b. Field Testing Equipment: YSI 556 (10A101775) /Lamotte 2020e (10613)

c. Required Total Purge Volume (1f x 2e) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 1.48gal

e. Begin Purge Time: 1000 End Purge Time: 1028

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (mL/min)	Temp (deg. C) Constant	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10%)	Diss O2 (mg/L) (±10%)	TURBIDITY (<10NTU) or Stable	Water Level (ft)	Notes
PRE PURGE VALUES										
Int.	1000	~~330~~ 730	22.03	4.78	0.070	-249.3	0.81		8.32	12.70	
PURGING VALUES										
1	1005	200	22.34	4.83	0.068	-250.7	0.37		8.27	12.70	
2	1010	200	22.61	4.91	0.066	-282.9	0.39		8.17	12.70	
3	1015	200	22.77	4.93	0.065	-286.5	0.24		8.03	12.70	
4	1020	200	22.79	4.94	0.064	-306.9	0.20		8.09	12.70	
5	1025	200	22.81	4.94	0.064	-310.2	0.17		8.00	12.70	
6	1028	200	22.78	4.94	0.064	-312.4	0.18	KR 2/2/11	8.03	12.70	KR 2/2/11
7											
8											
9											
10						KR 2/2/11					
11											
12											
13											
14											

3. SAMPLE COLLECTION DATA Sampling Personnel: GB/KR

Sampling Method(s) & Equip: Peristaltic Pump (001102) w/ ded. Teflon-Lined Tubing

Sample I.D. (Name, Date, Time): M-33B-020211 2/2/11 1030

Sample Analytical Parameters/Method: BTEX 8260B, SVOCs 8270C

Sample Start Time: 1030 End SampleTime: 1100

COMMENTS: WL: 20346

Took Duplicate M-998-020211 @ 2000

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No: FW-24C
Sampling Zone No(s): 1,2,4,3

Ambient - 14.62
probe # 4071

Date: 2/1/11
Start Time: 0900
End Time: 1050
Technicians: JB, CC

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time	Tubes
1	1								95.60		89.00		89.00			95.60		
1	1	✓	✓	✓	✓	✓	✓	307.6	94.94	✓	87.77	✓	87.77	✓	✓	94.94	0915	4
1	2								95.55		89.00		88.99			95.60		
1	2	✓	✓	✓	✓	✓	✓	307.9	94.91	✓	87.77	✓	87.77	✓	✓	94.91		4
1	3								95.55		88.99		88.99			95.55		
1	3																	
1	4								95.54		88.99		88.99			95.53		
1	4																	
1	5								95.55		88.99		88.99			95.55		
1	5																	
1	6								94.97		89.00		86.00			94.94		
1	6																	
1	7																	
																	Time	Tubes
2	1								103.60		97.61		97.61			103.58		
2	1	✓	✓	✓	✓	✓	✓	327.1	103.53	✓	96.36	✓	96.36	✓	✓	103.53	0940	4
2	2	✓	✓	✓	✓	✓	✓		103.60		97.61		97.61			103.60		4
2	2	✓	✓	✓	✓	✓	✓	327.2	103.30	✓	96.38	✓	96.38	✓	✓	103.30		4
2	3																	
2	4																	
2	5																	
2	6								CC									
2	7																	

Additional Comments: (pH, Turbidity, S.C., etc.)
Calm Sunny 58°F

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No: FW-24C
Sampling Zone No(s): 1,2,4,3

Date: 2/1/11
Start Time: 0900
End Time: 1250
Technicians: JB, CC

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time / Tubes
4	1								120.86		114.85		114.86			120.85	
4	1	✓	✓	✓	✓	✓	✓	366.6	120.77	✓	113.62	✓	113.62	✓	✓	120.75	1010 4
4	2								120.85		114.87		114.87			120.85	
4	2	✓	✓	✓	✓	✓	✓	366.7	120.69	✓	113.61	✓	113.61	✓	✓	120.69	4
4	3																
4	4																
4	5																
4	6																
4	7																
																	Time / Tubes
3	1								112.18		106.25		106.25			112.18	
3	1	✓	✓	✓	✓	✓	✓	346.9	111.96	✓	105.00	✓	105.00	✓	✓	111.95	1040 4
3	2								112.17		106.25		106.25			112.17	
3	2	✓	✓	✓	✓	✓	✓	347.5	111.92	✓	105.00	✓	105.00	✓	✓	111.92	4
3	3																
3	4																
3	5																
3	6																
3	7																

Additional Comments: (pH, Turbidity, S.C., etc.)

Calm Sunny 60°F

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No: FW-4C
Sampling Zone No(s): 1,2,3

Probe #3535

Ambient: 14.59

Date: 1/31/11
Start Time: 0800
End Time: 1100
Technicians: RH, DB

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Tubes Time
1	1								99.26		96.95		96.95			99.09	
1	1	✓	✓	✓	✓	✓	✓	316.2'	97.88	✓	95.75	✓	95.75	✓	✓	97.88	4 0915
1	2								98.12		96.95		96.94			98.17	
1	2	✓	✓	✓	✓	✓	✓	316.2	97.82	✓	95.75	✓	95.75	✓	✓	97.52	4
1	3								98.90		96.94		96.94			98.68	
1	3																
1	4																
1	5										1/31/11						
1	6																
1	7																
2	1								110.96		109.44		109.44			110.84	
2	1	✓	✓	✓	✓	✓	✓	345.0'	110.24	✓	108.24	✓	108.24	✓	✓	110.20	4 0950
2	2								110.80		109.44		109.44			110.74	
2	2	✓	✓	✓	✓	✓	✓	345.0	110.27	✓	108.24	✓	108.24	✓	✓	110.26	4
2	3																
2	4																
2	5										1/31/11						
2	6																
2	7																

Additional Comments: (pH, Turbidity, S.C., etc.)

Overcast, 60°, calm

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No: FW-4C
Sampling Zone No(s): 1,2,3

Date: 1/31/11
Start Time: 0800
End Time: 1100
Technicians: RH, DB

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Tubes	Time
3	1								120.62		118.12		118.17			120.36		
3	1	✓	✓	✓	✓	✓	✓	363.6'	118.97	✓	116.89	✓	116.90	✓	✓	118.89	4	1020
3	2								120.29		118.12		118.15			120.25		
3	2	✓	✓	✓	✓	✓	✓	365.0'	119.0	✓	116.88	✓	116.88	✓	✓	118.93	4	1101
3	3																	
3	4																	
3	5										1/31/11							
3	6																	
3	7																	

Additional Comments: (pH, Turbidity, S.C., etc.)

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No: FW-23B
Sampling Zone No(s): 1,2,3,4

Probe 7535
Ambient 14.65

Date: 1/31/11
Start Time: 0850
End Time: 1100
Technicians: BB, CC

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time	Tubes
1	1								32.36		25.22		25.21			32.36		
1	1	✓	✓	✓	✓	✓	✓	151.8	31.23	✓	24.95	✓	24.95	✓	✓	31.23	0850	5
1	2								32.32		25.19		25.20			32.33		
1	2	✓	✓	✓	✓	✓	✓	151.7	30.72	✓	25.08	✓	24.97	✓	✓	30.72		4
1	3								31.83		25.22		25.21			31.83		
1	3																	
1	4																	
1	5																	
1	6								CC									
1	7																	
																	Time	Tubes
2	1								40.23		33.87		33.87			40.22		
2	1	✓	✓	✓	✓	✓	✓	171.8	39.41	✓	33.64	✓	33.68	✓	✓	39.41	0930	4
2	2								40.18		33.87		33.86			39.97		
2	2	✓	✓	✓	✓	✓	✓	172.0	39.40	✓	33.68	✓	33.65	✓	✓	39.46		4
2	3																	
2	4																	
2	5																	
2	6								CC									
2	7																	

Additional Comments: (pH, Turbidity, S.C., etc.)

Cloudy 57°F

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No: FW-238
Sampling Zone No(s): 1,2,3,4

Probe 3535

Ambient 14.65

Date: 1/31/11
Start Time: 0950
End Time: 1100
Technicians: JB, CC

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time	Tubes
3	1								49.12		42.53		42.53			49.11		
3	1	✓	✓	✓	✓	✓	✓	192.2	48.08	✓	42.33	✓	42.31	✓	✓	48.08	1000	4
3	2								49.46		42.52		42.52			49.44		
3	2	✓	✓	✓	✓	✓	✓	192.7	~~46.05~~ 47.98	✓	42.30	✓	42.30	✓	✓	48.05		4
3	3																	
3	4																	
3	5																	
3	6								CC									
3	7																	
																	Time	Tubes
4	1								57.88		51.18		51.18			57.85		
4	1	✓	✓	✓	✓	✓	✓	212.01	56.73	✓	50.95	✓	50.95	✓	✓	56.73	1030	4
4	2								57.70		51.18		51.18			57.67		
4	2	✓	✓	✓	✓	✓	✓	211.07	56.41	✓	50.87	✓	50.87	✓	✓	56.61		4
4	3																	
4	4																	
4	5																	
4	6								CC									
4	7																	

Probe 4071

Additional Comments: (pH, Turbidity, S.C., etc.)

Cloudy, 57°F

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

probe # 4071

Ambient = 14.63

Project: Gainesville, FL
Monitoring Well No: FW-23C
Sampling Zone No(s): 3,1,2

Date: 1/31/11
Start Time: 1309
End Time: 1515
Technicians: DB, CC, RR

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Lend probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time	Tubes
3	1								118.38		118.28		118.28			118.39		
3	1	✓	✓	✓	✓	✓	✓	363.7	117.68	✓	117.09	✓	117.07	✓	✓	117.66	1300	2
3	2								118.34		118.29		118.28			118.34		
3	2	✓	✓	✓	✓	✓	✓	364.2	117.65	✓	117.07	✓	117.07	✓	✓	117.65		2
3	3								118.29		118.28		118.28			118.23		
3	3	✓	✓	✓	✓	✓	✓	364.3	117.63	✓	117.08	✓	117.08	✓	✓	117.63		2
3	4								118.11		118.27		118.27			118.10		
3	4	✓	✓	✓	✓	✓	✓	364.5	117.60	✓	117.08	✓	117.08	✓	✓	117.60		2
3	5																	
3	6																	
3	7								CC									
																	Time	Tubes
1	1								96.40		95.85		95.85			96.35		
1	1	✓	✓	✓	✓	✓	✓	312.8	95.98	✓	94.64	✓	94.64	✓	✓	95.98	1400	4
1	2								96.23		95.85		95.85			96.18		
1	2	✓	✓	✓	✓	✓	✓	312.5	95.93	✓	94.64	✓	94.64	✓	✓	95.93		4
1	3																	
1	4																	
1	5																	
1	6								CC									
1	7																	

Additional Comments: (pH, Turbidity, S.C., etc.)

Sunny 71°F

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No: FW-23C
Sampling Zone No(s): 3,1,2

probe # 4071
Ambient = 14.63

Date: 1/31/11
Start Time: 0700
End Time: 1515
Technicians: DB, CC, DB

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time	Vol
2	1								111.41		109.64		109.66			111.42		
2	1	✓	✓	✓	✓	✓	✓	344.4	110.23	✓	108.44	✓	108.44	✓	✓	110.23	1440	5
2	2								110.33		109.65		109.65			110.37		
2	2	✓	✓	✓	✓	✓	✓	344.4	110.18	✓	108.44	✓	108.44	✓	✓	110.18		5
2	3	✓	✓	✓	✓	✓	✓	344.3	110.14	✓	108.44	✓	108.44	✓	✓	110.13		5
2	4																	
2	5																	
2	6																	
2	7																	

Additional Comments: (pH, Turbidity, S.C., etc.)

Sunny 71°

Also collected Duplicate FW 23A at 1200 from Zone 2

Westbay Instruments Inc.
A Schlumberger Company

1/31/11
Ambient 14.6[illegible]
Probe #[illegible]

Groundwater Sampling
Field Data Sheet

Date: 1/31/11
Start Time: 15:50
End Time: 1730
Technicians: JB, CC, DB

Project: Gainesville, FL
Monitoring Well No: FW-22C
Sampling Zone No(s): 2,1,3

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time	Tubes
2	1								111.33		108.00		108.00			111.33		
2	1	✓	✓	✓	✓	✓	✓	350.4	111.34	✓	106.94	✓	106.94	✓	✓	111.33	1550	5
2	2								111.30		108.01		107.97			111.30		
2	2	✓	✓	✓	✓	✓	✓	350.0	111.27	✓	106.54	✓	106.94	✓	✓	111.25		5
2	3	✓	✓	✓	✓	✓	✓	350.2	111.21	✓	106.54	✓	106.54	✓	✓	111.26		5
2	4	✓	✓	✓	✓	✓	✓	349.5	111.15	✓	106.94	✓	106.54	✓	✓	111.20		5
2	5	✓	✓	✓	✓	✓	✓	345.9	111.18	✓	106.54	✓	106.54	✓	✓	111.18		3
2	6																	
2	7				CC	1/31/11												
																	Time	Tube
1	1								99.30		95.92		95.92			99.30		
1	1	✓	✓	✓	✓	✓	✓	322.1	98.46	✓	94.86	✓	94.85	✓	✓	98.46	1710	4
1	2								99.27		95.93		95.93			99.27		
1	2	✓	✓	✓	✓	✓	✓	322.0	98.40	✓	94.87	✓	94.87	✓	✓	98.40	1730	4
1	3																JB 1/31/11	
1	4																	
1	5																	
1	6					CC	1/31/11											
1	7																	

MS/MSD Collected

Additional Comments: (pH, Turbidity, S.C., etc.)

Calm winds
Sunny 74.0

Ambient 14.61

Probe # 4071

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Date: 2/1/11
Start Time: 0826
End Time: 0856
Technicians: JB CC DB

Project: Gainesville, FL
Monitoring Well No: FW-22C
Sampling Zone No(s): 2,1,3

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time	Tube
3	1								117.77		114.46		114.47			117.78		
3	1	✓	✓	✓	✓	✓	✓	365.2	116.89	✓	113.38	✓	113.58	✓	✓	116.89	0855	4
3	2								117.74		114.47		114.46			117.79		
3	2	✓	✓	✓	✓	✓	✓	365.2	116.87	✓	113.37	✓	113.35	✓	✓	116.87		4
3	3																	
3	4																	
3	5																	
3	6																	
3	7																	

CC 2/1/11

Additional Comments: (pH, Turbidity, S.C., etc.)

Calm Sunny 70°

Westbay instruments inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No: FW-28B
Sampling Zone No(s): 2,1,4,3

probe # 4071
Ambient - 14.59

Date: 8/1/11
Start Time: 1220
End Time: 1506
Technicians: SB, CC

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time	Tubes
2	1								43.67		40.69		40.69			43.67		
2	1	✓	✓	✓	✓	✓	✓	181.8	43.34	✓	39.69	✓	39.67	✓	✓	43.39	1230	5
2	2								43.63		40.68		40.69			34.62		
2	2	✓	✓	✓	✓	✓	✓	181.9	43.32	✓	39.69	✓	39.69	✓	✓	43.32		5
2	3																	
2	4																	
2	5																	
2	6								CC									
2	7																	
																	Time	Tubes
1	1								35.09		32.02		32.02			35.09		
1	1	✓	✓	✓	✓	✓	✓	182.0	34.57	✓	31.02	✓	31.02	✓	✓	34.57	1310	5
1	2								35.07		32.04		32.03			35.06		
1	2	✓	✓	✓	✓	✓	✓	171.9	34.53	✓	31.02	✓	31.02	✓	✓	34.53		5
1	3								35.04		32.02		32.00			35.04		
1	3																	
1	4								34.52		32.02		32.02			34.47		
1	4																	
1	5																	
1	6									CC								
1	7																	

Additional Comments: (pH, Turbidity, S.C., etc.)

Calm sunny 76°

1210 collected filter blank - 08/01/11

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No: FW-28B
Sampling Zone No(s): 2,1,4,3

probe # 4071
Ambient 14.59

Date: 2/1/11
Start Time: 1220
End Time: 15:00
Technicians: BS, CC

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)							Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time	Tubes
4	1								60.85		58.01		58.01			60.85		
4	1	✓	✓	✓	✓	✓	✓	231.6	60.57	✓	57.00	✓	57.00	✓	✓	60.57	1340	5
4	2								60.82		58.02		58.01			60.81		
4	2	✓	✓	✓	✓	✓	✓	231.5	60.54	✓	57.00	✓	57.00	✓	✓	60.53		5
4	3	✓	✓	✓	✓	✓	✓	231.9	60.50	✓	57.00	✓	57.00	✓	✓	60.48		5
4	4	✓	✓	✓	✓	✓	✓	232.0	60.48	✓	57.00	✓	57.00	✓	✓	60.50		5
4	5																	
4	6																	
4	7								CC									
3	1								52.29		49.36		49.35			52.28	Time	Tubes
3	1	✓	✓	✓	✓	✓	✓	211.9	51.77	✓	48.35	✓	48.35	✓	✓	51.78	1440	5
3	2								52.24		49.35		49.35			52.23		
3	2	✓	✓	✓	✓	✓	✓	211.9	51.71	✓	48.35	✓	48.35	✓	✓	51.71		5
3	3																	
3	4																	
3	5																	
3	6																	
3	7								CC									

Additional Comments: (pH, Turbidity, S.C., etc.)

Sunny Calm 70°F

Also collected Dup. on Zone 4 FW98B at 1130

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No: FW-30B
Sampling Zone No(s): 3,4,2,1

probe # 4071
Ambient 14.56

Date: 2/1/11 2/2/11
Start Time: 1515 0810
End Time: 1730 0942
Technicians: JB, CC

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time Tubes
3	1								46.99		43.95		43.95			46.99	
3	1	✓	✓	✓	✓	✓	✓	199.7	46.65	✓	42.89	✓	42.89	✓	✓	46.53	1530 5
3	2								46.95		43.95		43.95			46.95	
3	2	✓	✓	✓	✓			199.7	46.53	✓	42.89	✓	42.89	✓	✓	46.53	5
3	3								46.95		43.95		43.95			46.95	
3	3																
3	4																
3	5																
3	6								CC								
3	7																
																	Time Tubes
4	1								55.57		52.60		52.60			55.53	8
4	1	✓	✓	✓	✓	✓	✓	219.7	55.13	✓	51.54	✓	51.54	✓	✓	55.10	1630 5
4	2								55.50		52.60		52.59			55.48	
4	2	✓	✓	✓	✓	✓	✓	219.8	55.06	✓	51.55	✓	51.55	✓	✓	55.04	5
4	3																
4	4																
4	5																
4	6								CC								
4	7																

Additional Comments: (pH, Turbidity, S.C., etc.)

Sunny 79°F

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No: FW-308
Sampling Zone No(s): 3,4,2,1

2/1/11 Ambient - 14.56
2/2/11 Ambient - 14.58

Probe # 41071

Date:	2/1/11	2/2/11
Start Time:	1515	0810
End Time:	1730	0840
Technicians:		

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time	Tubes
2	1								38.00		35.27		35.27			38.36		
2	1	✓	✓	✓	✓	✓	✓	180.0	37.58	✓	34.23	✓	34.23	✓	✓	37.57	1710	5
2	2								38.30		35.27		35.28			38.33		
2	2	✓	✓	✓	✓	✓	✓	180.0	37.54	✓	34.23	✓	34.23	✓	✓	37.54		5
2	3																	
2	4																	
2	5																	
2	6																	
2	7																	
																	Time	Tubes
1	1								29.74		26.62		25.64			29.74		
1	1	✓	✓	✓	✓	✓	✓	160.1	28.86	✓	25.54	✓	24.50	✓	✓	28.88	0810	5
1	2								29.70		25.81		25.22			29.70		
1	2	✓	✓	✓	✓	✓	✓	160.0	28.83	✓	24.63	✓	23.88	✓	✓	28.84		5
1	3																	
1	4																	
1	5																	
1	6																	
1	7																	

Additional Comments: (pH, Turbidity, S.C., etc.)

Sunny 78°F

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No: FW-24B
Sampling Zone No(s): 4,3,2,1

Probe # 4071
Ambient 14.61

Date: 2/2/11
Start Time: 0930
End Time: 1150
Technicians: SB, CC

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time	Tubes
4	1								55.92		52.02		52.02			55.90		
4	1	✓	✓	✓	✓	✓	✓	223.9	54.91	✓	51.62	✓	51.63	✓	✓	54.88	0915	5
4	2								55.73		52.04		52.04			55.70		
4	2	✓	✓	✓	✓	✓	✓	224.0	54.80	✓	51.62	✓	51.62	✓	✓	54.82		5
4	3								55.60		52.02		52.02			55.58		
4	3	✓	✓	✓	✓	✓	✓	224.1	54.71	✓	51.61	✓	51.62	✓	✓	54.68		5
4	4								55.30		52.03		52.03			55.27		
4	4	✓	✓	✓	✓	✓	✓	224.1	54.61	✓	51.61	✓	51.62	✓	✓	54.49		5
4	5																	
4	6																	
4	7								CC									
																	Time	Tubes
3	1								46.55		43.38		43.38			46.54		
3	1	✓	✓	✓	✓	✓	✓	204.2	45.91	✓	42.98	✓	42.98	✓	✓	45.91	1010	5
3	2								46.45		43.39		43.39			46.42		
3	2	✓	✓	✓	✓	✓	✓	204.3	45.87	✓	42.97	✓	42.97	✓	✓	45.87		5
3	3																	
3	4																	
3	5																	
3	6								CC									
3	7																	

Additional Comments: (pH, Turbidity, S.C., etc.)

Light Rain 68°F

Also Collected Dup FW 99C @ 0700 Zone 4

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Probe # 4071
Ambient 14.61

Project: Gainesville, FL
Monitoring Well No: FW-24B
Sampling Zone No(s): 4,3,2,1

Date: 8/2/11
Start Time: 0900
End Time: 1150
Technicians: JB, CC

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out [ ] Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time	Tube
2	1								37.69		34.73		34.73			37.69		
2	1	✓	✓	✓	✓	✓	✓	184.5	37.17	✓	34.33	✓	34.33	✓	✓	37.17	1050	5
2	2								37.65		34.75		34.75			37.65		
2	2	✓	✓	✓	✓	✓	✓	184.4	37.14	✓	34.33	✓	34.33	✓	✓	37.14		5
2	3																	
2	4																	
2	5																	
2	6								CC									
2	7																	
																	Time	Tubes
1	1								28.95		26.10		26.10			28.93		
1	1	✓	✓	✓	✓	✓	✓	164.7	28.44	✓	25.68	✓	25.68	✓	✓	28.43	1125	5
1	2								28.93		26.09		26.10			28.92		
1	2	✓	✓	✓	✓	✓	✓	164.7	28.41	✓	25.67	✓	25.67	✓	✓	28.41		5
1	3																	
1	4																	
1	5																	
1	6																	
1	7								CC									

Additional Comments: (pH, Turbidity, S.C., etc.)

Light Rain 68°F

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Date: 8/2/11
Start Time: 1250
End Time: 1500
Technicians: JB, CC

Project: Gainesville, FL
Monitoring Well No: FW-22B
Sampling Zone No(s): 4,1,2,3

Ambient - 14.6) Probe # 4071

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time	Tubes
4	1								50.74		47.12		47.12			50.73		
4	1	✓	✓	✓	✓	✓	✓	210.0	50.37	✓	46.05	✓	46.07	✓	✓	50.37	1300	4
4	2								50.67		47.13		47.13			50.65		
4	2	✓	✓	✓	✓	✓	✓	210.1	50.35	✓	46.05	✓	46.06	✓	✓	50.35		4
4	3																	
4	4																	
4	5																	
4	6																	
4	7																	
																	Time	Tubes
1	1								27.35		23.36		23.36			27.37		
1	1	✓	✓	✓	✓	✓	✓	155.2	26.44	✓	22.27	✓	22.29	✓	✓	26.43	1330	4
1	2								26.39		23.36		23.37			26.39		
1	2	✓	✓	✓	✓	✓	✓	155.2	26.90	✓	22.28	✓	22.29	✓	✓	26.88		5
1	3																	
1	4																	
1	5																	
1	6																	
1	7																	

Additional Comments: (pH, Turbidity, S.C., etc.) Calm, overcast, 71°F

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No: FW-228
Sampling Zone No(s): 4,1,2,3

Date: 2/2/11
Start Time: 1250
End Time: 1500
Technicians: SB, CC

Ambient 14.61 Probe = 4071

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time	Tubes
2	1								35.41		32.01		32.02			35.41		
2	1	✓	✓	✓	✓	✓	✓	175.2	35.08	✓	30.94	✓	30.94	✓	✓	35.07	1420	4
2	2								35.38		32.01		32.01			35.38		
2	2	✓	✓	✓	✓	✓	✓	175.1	35.55	✓	30.94	✓	30.94	✓	✓	35.55		5
2	3																	
2	4																	
2	5																	
2	6																	
2	7																	
																	Time	Tubes
3	1								43.94		40.65		40.66			43.92		
3	1	✓	✓	✓	✓	✓	✓	195.2	43.72	✓	39.59	✓	39.59	✓	✓	43.72	1455	4
3	2								43.89		40.65		40.65			43.87		
3	2	✓	✓	✓	✓	✓	✓	195.0	43.69	✓	39.60	✓	39.59	✓	✓	43.69		4
3	3																	
3	4																	
3	5																	
3	6																	
3	7																	

Additional Comments: (pH, Turbidity, S.C., etc.)

Calm, overcast, 71°F

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Date: 9/2/11
Start Time: 1550
End Time: 1700
Technicians: SB, CC

Project: Gainesville, FL
Monitoring Well No: FW-16B
Sampling Zone No(s): 2,3,4,1

9/2/11
Ambient 14.60 Probe # 4071

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)							Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time	Tubes
2	1								36.42		35.72		35.72			36.42		
2	1	✓	✓	✓	✓	✓	✓	184.4	36.17	✓	35.27	✓	35.27	✓	✓	36.17	1600	5
2	2								36.39		35.71		35.71			36.39		
2	2	✓	✓	✓	✓	✓	✓	184.5	36.19	✓	35.27	✓	35.26	✓	✓	36.11		5
2	3								36.39		35.72		35.72			36.39		
2	3																	
2	4																	
2	5																	
2	6																	
2	7																	
																	Time	Tubes
3	1								45.01		44.37		44.37			44.98		
3	1	✓	✓	✓	✓	✓	✓	204.4	44.78	✓	43.92	✓	43.92	✓	✓	44.72	1640	5
3	2								44.95		44.37		44.37			44.91		
3	2	✓	✓	✓	✓	✓	✓	204.4	44.68	✓	43.92	✓	43.92	✓	✓	44.68		5
3	3								44.38		44.37		44.37			44.38		
3	3																	
3	4																	
3	5																	
3	6																	
3	7																	

Additional Comments: (pH, Turbidity, S.C., etc.)

Overcast calm 71°F

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No: FW-168
Sampling Zone No(s): 2,3,4,1

2/3/11
Probe #4071 Ambient - 17.69

Date: 2/3/11
Start Time: 0815
End Time: 0930
Technicians: SB, CC

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Lend probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time Tubes
4	1								53.51		53.02		53.03			53.41	
4	1	✓	✓	✓	✓	✓	✓	224.0	53.37	✓	52.60	✓	52.60	✓	✓	53.37	0830 6
4	2								53.35		53.03		53.03			53.25	
4	2	✓	✓	✓	✓	✓	✓	224.4	53.25	✓	52.60	✓	52.60	✓	✓	53.24	5
4	3								52.74		53.02		53.03			52.74	
4	3																
4	4																
4	5																
4	6																
4	7								CC								
																	Time Tubes
1	1								27.13		27.06		27.06			27.13	
1	1	✓	✓	✓	✓	✓	✓	164.9	27.14	✓	26.64	✓	26.65	✓	✓	27.14	0910 5
1	2								27.10		27.06		27.06			27.10	
1	2	✓	✓	✓	✓	✓	✓	164.9	27.10	✓	26.64	✓	26.63	✓	✓	27.12	5
1	3																
1	4																
1	5																
1	6								CC								
1	7																

Additional Comments: (pH, Turbidity, S.C., etc.)

rainy, 52°F

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Date: 8/3/11
Start Time: 1015
End Time: 1355
Technicians: JB, CC, DB

Project: Gainesville, FL
Monitoring Well No: FW-12B
Sampling Zone No(s): 2,1,4,3

Probe # 4071 Ambient - 1471

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time	Tubes
2	1								32.44		30.62		30.61			32.44		
2	1	✓	✓	✓	✓	✓	✓	175.8	31.28	✓	30.14	✓	30.14	✓	✓	31.28	1035	5
2	2								31.43		30.61		30.61			31.43		
2	2	✓	✓	✓	✓	✓	✓	175.8	31.26	✓	30.14	✓	30.14	✓	✓	31.26		5
2	3																	
2	4																	
2	5																	
2	6							CC										
2	7																	
																	Time	Tubes
1	1								22.71		21.96		21.96			22.71		
1	1	✓	✓	✓	✓	✓	✓	155.9	22.54	✓	21.49	✓	21.48	✓	✓	22.54	1110	5
1	2								22.67		21.96		21.96			22.68		
1	2	✓	✓	✓	✓	✓	✓	155.9	22.52	✓	21.48	✓	21.47	✓	✓	22.52		5
1	3																	
1	4																	
1	5																	
1	6																	
1	7								CC									

Additional Comments: (pH, Turbidity, S.C., etc.)

overcast 52°F

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No: FW-12B
Sampling Zone No(s): 2,1,4,3

Date: 2/3/11
Start Time: 10:35
End Time: 15:35
Technicians: FB, CC, DB

Ambient ~ 407 ft Probe ~ 147 ft

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time	Time
4	1								49.66		47.92		47.92			49.58		
4	1	✓	✓	✓	✓	✓	✓	215.7	48.56	✓	47.45	✓	47.48	✓	✓	48.53	1145	5
4	2								49.52		47.92		47.92			49.47		
4	2	✓	✓	✓	✓	✓	✓	215.7	48.51	✓	47.45	✓	47.48	✓	✓	48.51		5
4	3								48.46		47.93		47.92			48.42		
4	3																	
4	4																	
4	5																	
4	6																	
4	7																	
																	Time	Time
3	1								40.65		39.27		39.28			40.60		
3	1	✓	✓	✓	✓	✓	✓	195.7	39.39	✓	38.78	✓	38.78	✓	✓	39.38	1300	5
3	2								40.57		39.27		39.27			40.58		
3	2	✓	✓	✓	✓	✓	✓	195.7	39.75	✓	38.79	✓	38.79	✓	✓	39.76		5
3	3								40.52		39.27		39.27			40.50		
3	3																	
3	4								39.49		39.28		39.28			39.49		
3	4																	
3	5																	
3	6																	
3	7																	

Additional Comments: (pH, Turbidity, S.C., etc.)

amount 52 ft

Westbay Instruments Inc.
A Schlumberger Company

Page 1 of 2

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No. FW-200
Sampling Zone No(s): 3,4,2,1

2/4/11
Ambient - 14.72

Zone 4,2,1
Probe # 3585

2/3/11
Ambient - 14.67

Zone 3
Probe # 4071

Date:	2/3/11	2/4/11
Start Time:	1340	0735
End Time:	1645	1250
Technicians:	SD, CC	

Zone No.	Run No.	Surface Function Tests (probe in flushing collar): Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Position Sampler: Locate port ( ) Arm out ( ) Land probe ( )	Sampling Collection Checks (probe located at sampling zone in MP casing): Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Comments (volume retrieved): Time	Tubes
3	1								42.74		40.05		40.05			42.73		
3	1	✓	✓	✓	✓	✓	✓	196.8	42.70	✓	39.62	✓	39.62	✓	✓	42.69	1410	6
3	2								42.70		40.05		40.05			42.70		
3	2	✓	✓	✓	✓	✓	✓	196.8	42.65	✓	39.62	✓	39.62	✓	✓	42.68		5
3	3								42.20		40.05		40.05			42.20		
3	3																	
3	4																	
3	5																	
3	6																	
3	7																	
4	1																Time	Tubes
4	1	✓	✓	✓	✓	✓	✓	217.2	51.29	✓	48.69	✓	48.68	✓	✓	51.25	2/3/11	
4	2								50.78		48.26		48.27			50.77	16.00	48
4	2	✓	✓	✓	✓	✓	✓	217.2	51.21	✓	48.69	✓	48.69	✓	✓	51.19	2/4/11	
4	3								51.09		48.36		48.36			51.09		5
4	3								51.16		48.69		48.69			51.14		
4	4																	
4	4								51.11		48.69		48.69			51.07		
4	5																	
4	5								51.00		48.69		48.69			51.02		
4	6																	
4	7																	

Additional Comments (pH, Turbidity, S.C., etc.)

Drained SYPF

Westbay Instruments Inc
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No: FW-208
Sampling Zone No(s). 3,4,2,1

Date: 2/3/11 2/4/11
Start Time: 1340 0735
End Time: 1645 1330
Technicians: [illegible]

Probe # 3555 Ambient - 14.7 psi

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Location psn ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Time / Time
3	1								33.63		31.41		31.41			33.62	
3	1	✓	✓	✓	✓	✓	✓	176.6	33.91	✓	31.08	✓	31.08	✓	✓	33.98	0830 5
3	2								33.60		31.41		31.40			33.64	
3	2	✓	✓	✓	✓	✓	✓	176.6	33.90	✓	31.08	✓	31.08	✓	✓	33.96	5
2	3	✓	✓	✓	✓	✓	✓	176.6	33.88	✓	31.08	✓	31.08	✓	✓	33.98	5
2	4	✓	✓	✓	✓	✓	✓	176.4	33.87	✓	31.08	✓	31.08	✓	✓	33.98	5
2	5																
2	6																
2	7																
																	Time 1105
1	1								24.91		22.77		22.77			24.90	
1	1	✓	✓	✓	✓	✓	✓	156.2	25.15	✓	22.95	✓	22.95	✓	✓	25.15	1102 5
1	2								24.89		22.78		22.77			24.89	
1	2	✓	✓	✓	✓	✓	✓	156.0	25.15	✓	22.95	✓	22.94	✓	✓	25.15	5
1	3																
1	4																
1	5																
1	6																
1	7																

Additional Comments: (pH, Turbidity, S C , etc.)

Down 54'

Continued on Page 2, Page -02 of 02

Ambient 14.71
SN# 3535
40° Overcast light rain

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Date: 2/3/11
Start Time: 1350
End Time: 2000
Technicians: GB, KR

Project: Gainesville, FL
Monitoring Well No: FW-27B
Sampling Zone No(s): 6,1,3,4,5,2

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Tubes	Time
6	1								79.14		76.54		76.55			79.14		
6	1	✓	✓	✓	✓	✓	✓	277.0	78.21	✓	75.58	✓	75.58	✓	✓	78.22	4	1430
6	2								79.09		76.55		76.55			79.07		
6	2	✓	✓	✓	✓	✓	✓	277.3	78.19	✓	75.57	✓	75.57	✓	✓	78.19	4	
6	3	✓	✓	✓	✓	✓	✓	277.2	77.70	✓	75.57	✓	75.57	✓	✓	77.70	3	
6	4																	
6	5																	
6	6																	
6	7			GB 2/3/11														
1	1								24.90		22.46		22.46			24.90		
1	1	✓	✓	✓	✓	✓	✓	152.7	24.03	✓	21.49	✓	21.48	✓	✓	24.03	4	1525
1	2								24.88		22.45		22.46			24.89		
1	2	✓	✓	✓	✓	✓	✓	152.7	24.02	✓	21.50	✓	21.49	✓	✓	24.02	4	
1	3	✓	✓	✓	✓	✓	✓	152.7	23.53	✓	21.50	✓	21.49	✓	✓	23.53	3	
1	4																	
1	5																	
1	6																	
1	7			GB 2/3/11														

Additional Comments: (pH, Turbidity, S.C., etc.)

Ambient 14.69
SN# 3535
40° Overcast light rain

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Date: 2/3/11
Start Time: 1350
End Time: 2000
Technicians: GB/KR

Project: Gainesville, FL
Monitoring Well No: FW-27B
Sampling Zone No(s): 6,1,3,4,5,2

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Fuber	Time
3	1								46.35		44.13		44.13			46.34		
3	1	✓	✓	✓	✓	✓	✓	202.5	46.23	✓	43.15	✓	43.15	✓	✓	46.22	5	1615
3	2								46.22		44.12		44.13			46.22		
3	2	✓	✓	✓	✓	✓	✓	202.5	46.21	✓	43.16	✓	43.14	✓	✓	46.21	5	
3	3																	
3	4																	
3	5																	
3	6			GB	2/3/11													
3	7																	
4	1								57.29		54.94		54.94			57.30		
4	1	✓	✓	✓	✓	✓	✓	227.5 GB 2/3/11	57.03	✓	53.97	✓	53.97	✓	✓	57.04	5	1715
4	2								57.26		54.96		54.94			57.26		
4	2	✓	✓	✓	✓	✓	✓	227.5 GB 2/3/11	57.06	✓	53.98	✓	53.95	✓	✓	57.07	5	
4	3																	
4	4																	
4	5																	
4	6				GB	2/3/11												
4	7																	

Additional Comments: (pH, Turbidity, S.C., etc.)
Collected Filter Blank
Filter Blank-020311 1730 2/3/11

Westbay Instruments Inc.
A Schlumberger Company

Ambient 14.70
SN # 3535
40° Overcast

Groundwater Sampling
Field Data Sheet

Date: 2/3/11
Start Time: 1350
End Time: 2000
Technicians: GB, KR

Project: Gainesville, FL
Monitoring Well No: FW-27B
Sampling Zone No(s): 6,1,3,4,5,2

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Tubes	Time
5	1								67.91		65.76		65.76			67.88		
5	1	✓	✓	✓	✓	✓	✓	252.3	67.91	✓	64.80	~~64.86~~ GB 2 GH	64.80	✓	✓	67.91	5	1810
5	2								67.84		65.76		65.76			67.85		
5	2	✓	✓	✓	✓	✓	✓	252.0	67.90	✓	64.80	✓	64.79	✓	✓	67.85	5	
5	3																	
5	4																	
5	5																	
5	6																	
5	7																	
2	1								35.18		33.3		33.3			35.19		
2	1	✓	✓	✓	✓	✓	✓	178.5	35.26	✓	32.34	✓	32.34	✓	✓	35.26	5	1900
2	2								35.16		33.3		33.3			35.16		
2	2	✓	✓	✓	✓	✓	✓	178.5	35.24	✓	32.34	✓	32.34	✓	✓	35.24	5	
2	3																	
2	4																	
2	5																	
2	6																	
2	7																	

Additional Comments: (pH, Turbidity, S.C., etc.)

Field Technical Services LLC
RCRA Facility Groundwater Monitoring Well Inspection

FTS

Site Name: Gainesville, FL
Site Phone: N/A
Inspector Name: G. Bzonk/KR/M. Fowler
Audit Date: 1/31/11
KII Contact: N/A
KII Phone: N/A
Inspector Signature:

Well Condition

Well ID	Lock	Casing	Cap	Pad/ Drainage	Vegetation/ Accessibility	Potential Hazards	Depth to Water	Total Depth	Depth to Product	Product Thickness	Comments/ Repair Required
FW-25B	GC	GC	GC	GC	GC	None	110.33	229.40	NP	NA	
ITW-12	GC	GC	GC	NRed	GC	Machinery	9.81	20.01	NP	NA	
FW-26C	GC	GC	GC	GC	GC	None	112.48	343.56	NP	NA	
FW-25C	GC	GC	GC	GC	GC	None	110.85	379.48	NP	NA	
*FW-4	GC	GC	GC	GC	GC	None	131.42	159.50	NP	NA	
FW-26B	GC	GC	GC	GC	GC	None	112.60	230.0	NP	NA	
*FW-29C	GC	GC	GC	GC	GC	None	120.76	379.81	NP	NA	
*FW-29B	GC	GC	GC	GC	GC	None	120.41	246.33	NP	NA	
*M-09AR	GC	GC	GC	GC	GC	None	12.58	17.80	NP	NA	
HG-24S	GC	GC	GC	GC	GC	None	16.36	71.76	NP	NA	
HG-27S	GC	GC	GC	GC	GC	None	9.61	59.90	NP	NA	Pelican Station

FM = F Mount * GC = Good Condition * NL = Needs Lock * NR = Needs Replace RP = Replaced Lock * SU = Stick Up

Field Technical Services LLC
RCRA Facility Groundwater Monitoring Well Inspection

FTS

Well Condition

Well ID	Lock	Casing	Cap	Pad/ Drainage	Vegetation/ Accessibility	Potential Hazards	Depth to Water	Total Depth	Depth to Product	Product Thickness	Comments/ Repair Required
HG-25D	GC	GC	GC	GC	GC	Non	52.86	86.10	NP	NA	
HG-22D	GC	GC	GC	Heavily cracked	GC	Non	46.89	82.83	NP	NA	
HG-23D	GC	GC	GC	GC	GC	Non	53.79	89.74	NP	NA	
HG-27D	GC	GC	GC	GC	GC	Non	34.05	96.41	NP	NA	Police station
HG-20D	GC	GC	GC	GC	GC	Non	39.64	84.35	NP	NA	recycling yard
*EW-01	GC	SU	GC	GC	GC	Non	15.78	25.80	ND	NA	
*EW-06	GC	SU	GC	GC	GC	Non	24.70	29.10	ND	NA	
*EW-10	GC	SU	GC	GC	GC	Non	11.02	27.90	27.89	~~0.10~~ 0.01	11/2/11
*EW-02	GC	SU	GC	GC	GC	Non	14.30	26.12	ND	NA	
*ITW-22	*GC	SU	GC	GC	GC	Non	13.11	16.79	NP	NA	Needs hinges repaired
HG-5D	GC	GC	GC	GC	GC	Non	57.49	112.77	NP	NA	
*M-12	GC	SU	GC	GC	GC	Non	13.45	14.35	ND	NA	
*EW-09	GC	SU	GC	GC	GC	Non	10.05	29.80	ND	NA	
FW-3	GC	SU	GC	GC	GC	Non	147.90	154.42	ND	NA	
*EW-08	GC	SU	GC	GC	GC	Non	7.99	~~25.97~~ 25.97	ND	NA	11/2/11

FM = F Mount * GC = Good Condition * NL = Needs Lock * NR = Needs Replace RP = Replaced Lock * SU = Stick Up

Field Technical Services LLC
RCRA Facility Groundwater Monitoring Well Inspection

FTS

Well Condition

Well ID	Lock	Casing	Cap	Pad/ Drainage	Vegetation/ Accessibility	Potential Hazards	Depth to Water	Total Depth	Depth to Product	Product Thickness	Comments/ Repair Required
*EW-05	GC	SU	GC	GC	GC	None	13.30	26.01	ND	NA	
**FW-31BE	GC	SU	GC	GC	GC	None	NA	NA	–	–	pumping well
HG-6S	GC	SU	GC	GC	GC	None	16.32	52.80	ND	NA	
HG-21S	GC	GC	GC	surficial cracks	GC	None	11.60	41.15	NP	NA	
*EW-03	GC	SU	GC	GC	GC	Fire Ants	11.50	23.90	ND	NA	
*M-09BR	GC	SU	GC	GC	GC	None	12.33	28.52	NP	NA	
*M-16A	GC	SU	GC	GC	GC	None	13.10	15.54	NP	NA	
HG-26D	GC	GC	GC	surficial cracks	GC	Fire Ants	42.14	94.09	NP	NA	old bolt rusted in "car" unable to remove
*M-17	GC	SU	GC	GC	GC	None	14.52	15.37	NP	NA	
**FW-21B	GC	SU	GC	GC	GC	None	NA	NA	–	–	pumping well
HG-20S	GC	GC	GC	GC	GC	None	9.21	39.83	NP	NA	recycling yard
*EW-15	GC	SU	GC	GC	GC	None	16.25	27.70	ND	NA	
*EW-17	GC	SU	GC	GC	GC	None	15.60	26.50	ND	NA	
*EW-11	GC	SU	GC	GC	GC	None	12.37	30.30	ND	NA	
*M-33B	GC	SU	GC	GC	GC	None	12.58	27.33	NP	NA	

FM = F Mount * GC = Good Condition * NL = Needs Lock * NR = Needs Replace RP = Replaced Lock * SU = Stick Up

Field Technical Services LLC
RCRA Facility Groundwater Monitoring Well Inspection

FTS

Well Condition

Well ID	Lock	Casing	Cap	Pad/ Drainage	Vegetation/ Accessibility	Potential Hazards	Depth to Water	Total Depth	Depth to Product	Product Thickness	Comments/ Repair Required
HG-2D	GC	SU	GC	GC	GC	Fire Ants	55.51	112.92	ND	NA	
*EW-16	GC	SU	GC	GC	GC	None	NA ~~18.70~~	18.70	ND	NA	
*N LAGOON	NA	SU	NA	GC	GC	None	16.50	17.92	ND	NA	
HG-4D	GC	SU	GC	GC	GC	None	44.88	107.91	ND	NA	
*M-20B	GC	SU	GC	GC	GC	None	13.11	25.54	NP	NA	
*FW-6	GC	SU	GC	GC	GC	None	NA	NA	-	-	pumping well
**M-03BR	GC	SU	GC	GC	GC	None	12.10	26.55	NP	NA	
*EW-13	GC	SU	GC	GC	GC	None	15.02	27.50	ND	NA	
HG-29S	NR	GC	GC	GC	GC	None	14.35	54.83	NP	NA	
**HG-12D	GC	GC	GC	GC	GC	None	47.61	119.01	NP	NA	
HG-26S	GC	GC	GC	GC	GC	None	14.82	44.35	NP	NA	
HG-21D	GC	GC	GC	GC	GC	None	38.19	94.95	NP	NA	
HG-4S	GC	SU	GC	GC	GC	None	14.13	52.50	ND	NA	
*EW-14	GC	SU	GC	GC	GC	Fire Ants	22.35	28.20	ND	NA	
HG-6D	GC	SU	GC	GC	GC	None	43.30	107.85	ND	NA	

FM = Fl[illegible] Mount * GC = Good Condition * NL = Needs Lock * NR = Needs Replaced [illegible]P = Replaced Lock * SU = Stick Up

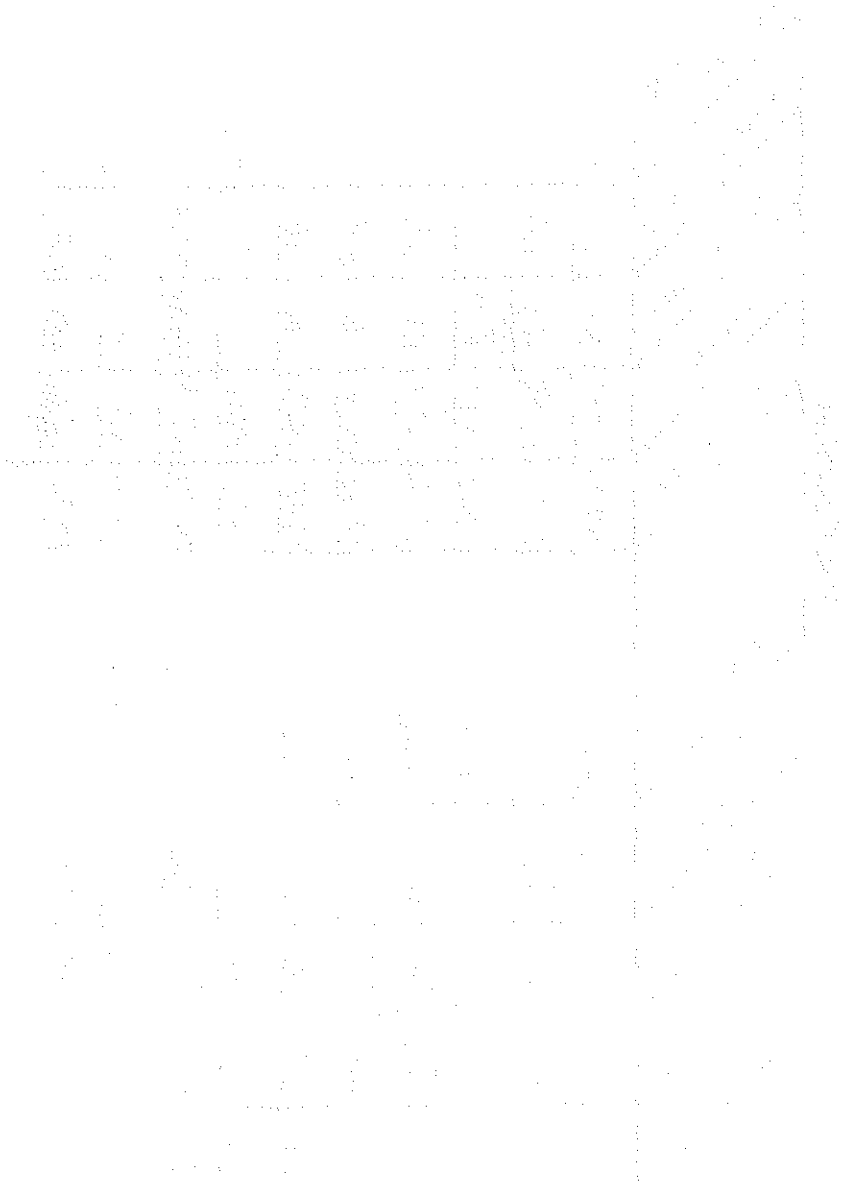
Field Technical Services LLC
RCRA Facility Groundwater Monitoring Well Inspection

FTS

Well Condition

Well ID	Lock	Casing	Cap	Pad/ Drainage	Vegetation/ Accessibility	Potential Hazards	Depth to Water	Total Depth	Depth to Product	Product Thickness	Comments/ Repair Required
**HG-16D	GC	SU	GC	GC	GC	Non	47.99	117.43	NP	NA	Trace on m-d probe
*S LAGOON	NA	SU	NA	GC	GC	Non	11.50	17.91	ND	NA	
*M-23BR	GC	GC	GC	GC	GC	Non	13.58	26.10	GB NP	NA	
*M-16B	GC	SU	GC	GC	GC	Non	12.70	23.35	NP	NA	
*F PROCESS	NA	SU	NA	GC	GC	Non	12.90	18.00	ND	NA	
*M-25B	GC	SU	GC	GC	GC	Non	13.78	25.28	ND	NA	
HG-10D	GC	GC	GC	GC	GC	Non	49.70	114.51	114.51	Trace	Trace on probe tip.
HG-16S	GC	SU	GC	GC	GC	Non	18.72	63.90	63.51	0.39	
HG-29D	GC	GC	GC	GC	GC	Fire Ants	43.02	96.91	NP	NA	One bolt missing
*DRIP TRACK	NA	SU	NA	GC	GC	Non	14.70	18.60	ND	NA	
*M-32B	GC	GC	GC	GC	GC	Non	13.20	25.30	NP	NA	

FM = Fl[illegible]ount * GC = Good Condition * NL = Needs Lock * NR = Needs Replaced P = Replaced Lock * SU = Stick Up



WELL NO.: FW29B

GROUNDWATER SAMPLE COLLECTION RECORD

Project No.: OM045011-091 Date: 6/9/11 Time: Start: 0945 am/pm
Project Name: Gainesville 2nd Qtr. 2011 Sampling Event Finish: 1155 am/pm
Location: Gainesville, Florida
Weather Conditions: Sunny, 85° Collector: (Print) R. Hanover (Sign)

1. WATER LEVEL DATA (measured from top of well casing)

a. Total Casing Length: 246.02 (ft) b. Well Casing Type: Steel
c. Depth to Water: 122.34 (ft) d. Casing Diameter: 4 (in)
e. Length of Water Column: 123.68 (ft) (a-c)
f. Well Volume: 80.8 (gal)

Conversion Factors (cf)
(e x cf = f)

Casing I.D. (in)	Conv. Fact.
1	0.041
2	0.163
3	0.367
(4)	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Redi-flo Pump 2
b. Field Testing Equipment: Oakton PC-10 (417264) LaMotte 2020 (514-530)
c. Number of Well Volumes to Remove: 3
d. Required Total Purge Volume (1f x 2c): 242.4

Vol. Purged (Gallons)	Temp (deg. C) (Constant)	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Turbidity (NTU) (<10 NTU or Stable)	Notes
I (10)	23.7	9.27	0.415	2.2	
1 (80)	23.8	7.93	0.415	0.45	
2 (160)	24.2	7.91	0.401	0.40	
3 (250)	24.4	7.90	0.401	0.47	
					6/9/11

3. SAMPLE COLLECTION INFORMATION

Sampling Method(s): Redi-flo-2 pump w/ dedicated Teflon-lined tubing
Sample Identification (name, time, date): FW29B-060911, 1140, 6/9/11
QC Samples (name, time, date): FW99B-060911, 2000, 6/9/11
Analytical Parameters and Methods: Total & Diss Metals 6020
Comments: WL# 20334 Duplicate collected: FW99B-060911 @ 2000

FTS

LOW-FLOW GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: HG-20D

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer, Inc.

Project Name: Gainesville 2nd Qtr. 2011 Project Location: Gainesville, Florida

Weather Conditions: Sunny, Calm, High 80's Sampling Date: 6/9/10

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NA (ft) b Depth to Water: 39.75 (ft)

c. Depth to DNAPL: NA (ft) d Total Well Depth: 84.39 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 44.64 (ft) (a-d)

h. Well Volume: 7.28 (gal)

2. WELL PURGE DATA

a. Purge Method: Bladder Pump (11484) w/Dedicated tube

b. Field Testing Equipment: YSI (06M1536AM) LaMotte (511-5210)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 1.95 gal

e. Begin Purge Time: 0830 End Purge Time: 0912

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (ml/min)	Temp (deg. C) (Constant)	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (<10 NTU or Stable)	Water Level (ft)	Notes
PRE PURGE VALUES										
Int	0830	200	23.79	7.26	.338	-98.3	3.43	4.05	39.75	
PURGING VALUES										
1	0835	200	23.57	7.26	.342	-97.3	2.25	2.69	39.75	
2	0840	200	23.48	7.26	.348	-102.4	1.25	1.76	39.75	
3	0845	200	23.44	7.26	.345	-104.3	.98	1.69	39.75	
4	0850	200	23.46	7.28	.346	-108.4	.86	1.56	39.75	
5	0855	200	23.51	7.27	.347	-107.8	.67	1.26	39.75	
6	0900	200	23.44	7.27	.351	-112.9	.58	1.57	39.75	
7	0903	200	23.40	7.25	.354	-116.5	.55	1.48	39.75	
8	0906	200	23.39	7.25	.360	-117.9	.42	1.55	39.75	
9	0909	200	23.36	7.25	.366	-118.4	.41	1.53	39.75	
10	0912	200	23.35	7.25	.361	-118.8	.40	1.56	39.75	

3. SAMPLE COLLECTION DATA Sampling Personnel: JM, JB

Sampling Method(s) & Equip: Bladder Pump w/ Dedicated tubing

Sample I.D. (Name, Date, Time): HG-20D-060911, 6/9/11, 0912

Sample Analytical Parameters/Method: 8270C, 8260B

Sample Start Time: 0912 End SampleTime: 0930

COMMENTS:

*Truck running a few feet from well KL: 11311

C:\Documents and Settings\rwhitby\My Documents\Gainesville\Field Logs\02 Low Flow gw Sample Collection Record_May 2010

FTS

LOW-FLOW GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: HG-205

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer, Inc.

Project Name: Gainesville 2nd Qtr. 2011 Project Location: Gainesville, Florida

Weather Conditions: Sunny, Calm, 89° Sampling Date: 6/9/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: N/A (ft) b Depth to Water: 9.10 (ft)

c. Depth to DNAPL: NA (ft) d Total Well Depth: 39.80 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 30.7 (ft) (a-d)

h. Well Volume: 5.0 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Peri-pump / ded. Teflon tubing

b. Field Testing Equipment: YSI 556 / 10K 101399, LaMotte 2020 (457-510)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 0.7 gal

e. Begin Purge Time: 1210 End Purge Time: 1240

Read No.	Lapse Time (min.)	Purge Rate (ml/min)	Temp (deg. C) (Constant)	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (<10 NTU or Stable)	Water Level (ft)	Notes
PRE PURGE VALUES										
T	1210	100	27.55	6.50	0.275	-425.2	12.48	1.07	9.10	
PURGING VALUES										
1	1215	100	24.45	5.88	0.226	-324.5	0.42	1.04	10.46	
2	1220	100	24.49	5.88	0.223	-326.1	0.23	1.02	11.11	
3	1225	100	24.41	5.89	0.220	-329.0	0.20	1.05	11.22	
4	1230	100	24.49	5.89	0.216	-314.2	0.16	1.01	11.40	
5	1235	100	24.51	5.90	0.215	-322.6	0.15	1.02	11.43	
6	1240	100	24.53	5.90	0.214	-319.1	0.15	1.03	11.44	
						6/9/11				

3. SAMPLE COLLECTION DATA Sampling Personnel: MT/DB

Sampling Method(s) & Equip: Peri-pump w/ ded. Teflon tubing

Sample I.D. (Name, Date, Time); HG205-060911, 6/9/11, 1245

Sample Analytical Parameters/Method: BTEX, SVOCs

Sample Start Time: 1245 End SampleTime: 1253

COMMENTS: min flow = 100 mL/min

FTS

LOW-FLOW GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: HG-21D

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer, Inc.

Project Name: Gainesville 2nd Qtr. 2011 Project Location: Gainesville, Florida

Weather Conditions: Sunny, calm 90's Sampling Date: 6/9/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b Depth to Water: 38.33 (ft)

c. Depth to DNAPL: NP (ft) d Total Well Depth: 94.97 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 56.64 (ft) (a-d)

h. Well Volume: 9.23 (gal)

2. WELL PURGE DATA

a. Purge Method: Bladder Pump (11484) w/ dedicated Tubing

b. Field Testing Equipment: YSI (GGM15-36AM) / Lamotte (511-5210)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 1.78 (gal)

e. Begin Purge Time: 1110 End Purge Time: 1155

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (ml/min)	Temp (deg. C) (Constant)	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (<10 NTU or Stable)	Water Level (ft)	Notes
PRE PURGE VALUES										
IN	1110	250	25.57	7.20	0.341	41.0	6.99	31.0	38.40	
PURGING VALUES										
1	1115	250	24.89	7.20	0.340	8.9	4.56	44.1	38.40	
2	1120	250	24.61	7.21	0.339	-7.5	3.46	57.2	38.41	
3	1125	100	24.64	7.19	0.339	-8.1	7.57	57.9	38.40	
4	1130	100	24.66	7.17	0.339	-9.0	3.65	51.7	38.40	
5	1135	100	24.81	7.19	0.339	-8.0	3.67	49.2	38.40	
6	1140	100	25.03	7.22	0.340	-6.1	3.66	47.8	38.40	
7	1145	100	25.28	7.22	0.341	-3.0	3.65	29.5	38.40	
8	1150	100	25.31	7.22	0.341	-3.0	3.63	29.4	38.40	
9	1155	100	25.29	7.22	0.341	-3.0	3.61	29.1	38.40	

6/9/11

3. SAMPLE COLLECTION DATA Sampling Personnel: JD, JM

Sampling Method(s) & Equip: Bladder Pump w/ Dedicated Tubing

Sample I.D. (Name, Date, Time): HG-21D-060911 6/9/11 1155

Sample Analytical Parameters/Method: 8270C, 8260B

Sample Start Time: 1155 End SampleTime: 1220

COMMENTS:

WL: 11311 Air bubbles in flow cell

FTS

LOW-FLOW GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: HG-215

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer, Inc.

Project Name: Gainesville 2nd Qtr. 2011 Project Location: Gainesville, Florida

Weather Conditions: clear, calm, 82° Sampling Date: 6/9/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b Depth to Water: 11.69 (ft)

c. Depth to DNAPL: NP (ft) d Total Well Depth: 41.15 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 29.46 (ft) (a-d)

h. Well Volume: 4.80 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Peri-pump (FT 001261), dedicated tubing

b. Field Testing Equipment: YSI 556 (10K101399) / Lamotte 2020 (457-5010)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 1.1 gal

e. Begin Purge Time: 0925 End Purge Time: 1005

Read No.	Lapse Time (min.)	Purge Rate (ml/min)	Temp (deg. C) (Constant)	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (<10 NTU or Stable)	Water Level (ft)	Notes
PRE PURGE VALUES										
Init	0925	125	23.18	7.36	0.276	-383.1	1.16	1.01	11.69	
PURGING VALUES										
1	0930	125	22.97	7.36	0.277	-346.3	0.41	0.77	14.01	
2	0935	125	23.09	7.37	0.276	-323.5	0.33	0.63	14.78	
3	0940	100	23.46	7.38	0.274	-311.9	0.36	0.74	15.00	
4	0945	100	23.45	7.40	0.271	-316.8	0.32	0.75	15.31	
5	0950	100	23.50	7.41	0.270	-317.2	0.30	0.74	15.39	
6	0955	100	23.49	7.41	0.269	-313.5	0.29	0.72	15.41	
7	1000	100	23.51	7.42	0.269	-319.2	0.30	0.70	15.41	
8	1005	100	23.47	7.43	0.267	-320.5	0.28	0.67	15.42	

6/9/11

3. SAMPLE COLLECTION DATA Sampling Personnel: MT / DB

Sampling Method(s) & Equip: Peri-Pump w/ ded. tef. tubing

Sample I.D. (Name, Date, Time): HG-215-060911, 6/9/11, 1005

Sample Analytical Parameters/Method: BTEX, SVOCs

Sample Start Time: 1005 End SampleTime: 1015

COMMENTS:

FTS

LOW-FLOW GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: HG-22D

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer, Inc.

Project Name: Gainesville 2nd Qtr. 2011 Project Location: Gainesville, Florida

Weather Conditions: Sunny, Calm, 90's Sampling Date: 6/8/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NA (ft) b Depth to Water: 45.15 (ft)

c. Depth to DNAPL: NA (ft) d Total Well Depth: 82.68 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 37.53 (ft) (a-d)

h. Well Volume: 6.12 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Bladder Pump (11484) w/dedicated tubing

b. Field Testing Equipment: YSI (06M1536AM) LaMotte (5911-5210)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 18.3 gal

e. Begin Purge Time: 1350 End Purge Time: 1420

Read No.	Lapse Time (min.)	Purge Rate (ml/min)	Temp (deg. C) (Constant)	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (<10 NTU or Stable)	Water Level (ft)	Notes
PRE PURGE VALUES										
Int	1330	100	25.73	7.54	.327	-86.9	6.01	19.3	45.15	
PURGING VALUES										
1	1335	100	24.23	7.52	.316	-77.2	5.30	19.1	45.15	
2	1340	100	24.01	7.54	.313	-62.0	5.71	17.6	45.15	
3	1345	100	23.95	7.56	.312	-42.0	6.35	15.5	45.15	
4	1348	100	24.09	7.56	.311	-31.4 -26.4	6.23	15.0	45.15	
5	1351	100	24.09	7.56	.311	-33.2	6.10	13.3	45.15	
6	1354	100	24.09	7.55	.316	-39.6	6.37	9.00 11.6 JM 6/8	45.15	
					JM 6/8/11					

3. SAMPLE COLLECTION DATA

Sampling Personnel: JM, JB

Sampling Method(s) & Equip: Bladder Pump w/dedicated tubing

Sample I.D. (Name, Date, Time): HG-22D-060811 6/8/11, 1354

Sample Analytical Parameters/Method: 8270C, 8260B

Sample Start Time: 1354 End SampleTime: 1420

COMMENTS: *EB-060811 collected at 1425

INL: 1331 * Significantly High DO (consistent w/previous top report)

FTS

LOW-FLOW GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: HG-23D

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer, Inc.

Project Name: Gainesville 2nd Qtr. 2011 Project Location: Gainesville, Florida

Weather Conditions: Sunny, Calm, 90's Sampling Date: 6/8/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NA (ft) b Depth to Water: 53.86 (ft)

c. Depth to DNAPL: NA (ft) d Total Well Depth: 89.58 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 35.72 (ft) (a-d)

h. Well Volume: 5.81 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Bladder Pump (11487) w/ dedicated tubing

b. Field Testing Equipment: YSI (06M1536AM) LaMotte (511-5210)

c. Required Total Purge Volume (If x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 1.16 gal

e. Begin Purge Time: 1700 End Purge Time: 1727

Read No.	Lapse Time (min.)	Purge Rate (ml/min)	Temp (deg. C) (Constant)	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (<10 NTU or Stable)	Water Level (ft)	Notes
PRE PURGE VALUES										
Init	1700	200	26.04	7.68	.286	-30.6	3.83	1.78	53.86	
PURGING VALUES										
1	1705	200	24.68	7.43	.276	-34.0	1.62	1.98	53.86	
2	1710	200	24.48	7.38	.274	-37.2	1.25	1.31	53.86	
3	1715	200	24.13	7.36	.272	-44.5	0.60	1.35	53.86	
4	1718	200	23.89	7.35	.276	-61.0	0.55	1.27	53.86	
5	1721	200	23.94	7.37	.277	-98.7	0.49	1.73	53.86	
6	1724	200	23.93	7.37	.277	-106.5	0.49	2.03	53.86	
7	1727	200	23.94	7.36	.276	-107.9	0.48	1.98	53.86	

6/8/11

3. SAMPLE COLLECTION DATA Sampling Personnel: JM, BS

Sampling Method(s) & Equip: Bladder Pump w/ Dedicated tubing

Sample I.D. (Name, Date, Time): HG-23D-060811, 6/8/11, 1727

Sample Analytical Parameters/Method:

Sample Start Time: 1727 End SampleTime: 1745

COMMENTS:

WL: 11311

FTS

LOW-FLOW GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: HG - 245

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer, Inc.

Project Name: Gainesville 2nd Qtr. 2011 Project Location: Gainesville, Florida

Weather Conditions: Sunny, calm, 90's Sampling Date: 6/8/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b Depth to Water: 16.42 (ft)

c. Depth to DNAPL: NP (ft) d Total Well Depth: 71.68 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 55.26 (ft) (a-d)

h. Well Volume: 9.00 (gal)

2. WELL PURGE DATA

a. Purge Method: Peristaltic (1088) w/ Dedicated Teflon Lined Tubing

b. Field Testing Equipment: YSI/06M1536AA/Lamotte (511-5210)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 1.25 (gal)

e. Begin Purge Time: 0825 End Purge Time: 0846

Conversion Factors (a x cf = b)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (ml/min)	Temp (deg. C) (Constant)	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (<10 NTU or Stable)	Water Level (ft)	Notes
PRE PURGE VALUES										
Int	0825	225 ml/min	22.45	7.74	.212	8.5	2.85	4.29	16.42	
PURGING VALUES										
1	0830	225 ml/min	22.67	~~8.86~~ 7.66	.200	-40.4	1.56	3.12	16.49	
2	0835	225 ml/min	22.52	7.44	.200	-63.1	.76	2.66	16.49	
3	0840	225	22.52	7.30	.200	-61.8	.56	2.25	16.49	
4	0843	225	22.49	7.21	.200	-52.6	.54	2.21	16.49	
5	0846	225	22.51	7.20	.200	~~-44.7~~ -54.4	.53 ~~.48~~	2.21	16.49	

6/8/11

3. SAMPLE COLLECTION DATA Sampling Personnel: JB, JM

Sampling Method(s) & Equip: Peristaltic w/ Dedicated Tubing

Sample I.D. (Name, Date, Time): HG-245-060811, 6/8/11 0846

Sample Analytical Parameters/Method: 8270C / 8260B

Sample Start Time: 0846 End SampleTime: 0900

COMMENTS:

KL: 11311

FTS

LOW-FLOW GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: HG-25D

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer, Inc.

Project Name: Gainesville 2nd Qtr. 2011 Project Location: Gainesville, Florida

Weather Conditions: Sunny Calm, 90's Sampling Date: 6/8/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NA (ft) b Depth to Water: 52.95 (ft)

c. Depth to DNAPL: NA (ft) d Total Well Depth: 86.04 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 33.09 (ft) (a-d)

h. Well Volume: 5.39 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Bladder pump (11484) w/ Dedicated Tubing

b. Field Testing Equipment: YSI 706M1536AM) LaMotte (5A-5210)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: .99 gal

e. Begin Purge Time: 1110 End Purge Time: 1140

Read No.	Lapse Time (min.)	Purge Rate (ml/min)	Temp (deg. C) (Constant)	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (<10 NTU or Stable)	Water Level (ft)	Notes
PRE PURGE VALUES										
Int	1110	100	24.95	9.26	.279	-25.8	4.95	4.8	52.95	
PURGING VALUES										
1	1115	100	25.50	9.22	.283	-12.6	~~6.50~~ 4.50 JM/JR	4.8	53.51	
2	1120	100	24.73	9.18	.273	-10.8	4.45	4.6	53.55	
3	1125	150	24.31	9.01	.267	-10.2	4.16	4.5	53.55	
4	1128	150	24.27	8.97	.266	-10.8	3.05	4.2	53.55	
5	1131	150	24.26	8.90	.264	-18.5	1.35	4.2	53.55	
6	1134	150	24.25	8.79	.265	-16.1	1.22	4.1	53.55	
7	1137	150	24.21	8.86	.269	-21.7	1.15	4.1	53.55	
8	1140	150	24.23	8.83	.269	-22.8	1.14	4.1	53.55	

3. SAMPLE COLLECTION DATA Sampling Personnel: JM, JR

Sampling Method(s) & Equip: Bladder Pump w/dedicated tubing

Sample I.D. (Name, Date, Time): HG-25D-060811 , 6/8/11 , 1140

Sample Analytical Parameters/Method: 8270C , 8260B

Sample Start Time: 1110 End SampleTime: 1230

COMMENTS:

WL: 11311 * Duplicate ~~HG-25D~~ JM/JR HG-99B @ 1000

FTS

LOW-FLOW GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MG-26D

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer, Inc.

Project Name: Gainesville 2nd Qtr. 2011 Project Location: Gainesville, Florida

Weather Conditions: Sunny, calm, mid 80's Sampling Date: 6/9/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NA (ft) b Depth to Water: 42.12 (ft)

c. Depth to DNAPL: NA (ft) d Total Well Depth: 94.06 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 51.94 (ft) (a-d)

h. Well Volume: 8.47 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Bladder Pump (11484) w/ Dedicated Tubing

b. Field Testing Equipment: YSI (556MPS/AM) LaMotte (511-5216)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 1.90 (gal)

e. Begin Purge Time: 0955 End Purge Time: 1019

Read No.	Lapse Time (min.)	Purge Rate (ml/min)	Temp (deg. C) (Constant)	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (<10 NTU or Stable)	Water Level (ft)	Notes
PRE PURGE VALUES										
Int	955	300	24.96	7.45	.278	-97.6	3.02	1.61	42.12	
PURGING VALUES										
1	1000	300	24.76	7.38	.276	-109.0	2.85	1.46	42.12	
2	1005	300	24.47	7.34	.274	-121.2	1.08	1.12	42.12	
3	1010	300	24.38	7.31	.273	-131.5	0.51	1.09	42.12	
4	1013	300	24.29	7.32	0.273	-134.6	0.44	1.09	42.13	
5	1016	300	24.29	7.32	0.273	-135.5	0.42	1.06	42.13	
6	1019	300	24.30	7.32	0.273	-136.7	0.41	1.07	42.13	

3. SAMPLE COLLECTION DATA Sampling Personnel: JM, JB

Sampling Method(s) & Equip: Bladder Pump w/ Dedicated Tubing

Sample I.D. (Name, Date, Time): MG-26D-060911, 6/9/11, 1019

Sample Analytical Parameters/Method: 8270C, 8260B

Sample Start Time: 1019 End SampleTime: 1040

COMMENTS:

WL: 1021 * Also collected Duplicate: MG-99C @ 2000

FTS

LOW-FLOW GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MG-26S

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer, Inc.

Project Name: Gainesville 2nd Qtr. 2011 Project Location: Gainesville, Florida

Weather Conditions: p. cloudy, 91°, smoky Sampling Date: 6/09/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b Depth to Water: 14.67 (ft)

c. Depth to DNAPL: NP (ft) d Total Well Depth: 44.32 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 29.65 (ft) (a-d)

h. Well Volume: 4.83 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
3	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: peri-pump (10K101399), LaMotte (457-5010)

b. Field Testing Equipment: YSI 556, ded. tef. tubing

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 0.7 gal

e. Begin Purge Time: 1600 End Purge Time: 1630

Read No.	Lapse Time (min.)	Purge Rate (ml/min)	Temp (deg. C) (Constant)	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (<10 NTU or Stable)	Water Level (ft)	Notes
PRE PURGE VALUES										
Init	1600	100	26.33	6.31	0.521	-303.9	2.26	2.98	14.67	
PURGING VALUES										
1	1605	100	25.37	6.27	0.514	-293.6	0.61	2.21	15.97	
2	1610	100	26.01	6.27	0.513	-292.6	0.50	2.14	15.97	
3	1615	100	25.93	6.25	0.513	-286.3	0.47	1.97	15.97	
4	1620	100	25.81	6.27	0.512	-285.1	0.37	1.91	15.97	
5	1625	100	25.79	6.28	0.512	-279.6	0.36	2.12	15.96	
6	1630	100	25.80	6.30	0.513	-282.4	0.32	1.86	15.96	

6/9/11

3. SAMPLE COLLECTION DATA Sampling Personnel: MT / DB

Sampling Method(s) & Equip: Peri-pump w/ dedicated tef. tubing

Sample I.D. (Name, Date, Time): MG-26S-060911, 6/9/11, 1635

Sample Analytical Parameters/Method: BTEX, SVOCs

Sample Start Time: 1635 End SampleTime: 1647

COMMENTS: 1700 Collect FB-060911

FTS

LOW-FLOW GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: HG-27D

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer, Inc.

Project Name: Gainesville 2nd Qtr. 2011 Project Location: Gainesville, Florida

Weather Conditions: Sunny, Calm, 90's Sampling Date: 6/8/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NA (ft) b Depth to Water: 34.12 (ft)

c. Depth to DNAPL: NA (ft) d Total Well Depth: 96.39 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 62.27 (ft) (a-d)

h. Well Volume: 10.15 (gal)

2. WELL PURGE DATA

a. Purge Method: Bladder Pump (11484) w/dedicated tube

b. Field Testing Equipment: YSI (06M15.36AM) LaMotte (511-5210)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 1.65 gal

e. Begin Purge Time: 1515 End Purge Time: 1540

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (ml/min)	Temp (deg. C) (Constant)	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (<10 NTU or Stable)	Water Level (ft)	Notes
PRE PURGE VALUES										
Init.	1515	250	26.38	7.84	.282	-239.4	1.9	3.15	34.12	
PURGING VALUES										
1	1520	250	25.84	7.79	.278	-268.5	.56	2.96	34.12	
2	1525	250	25.51	7.78	.276	-267.0	.39	2.71	34.12	
3	1528	250	25.57	7.77	.276	-262.4	.32	2.56	34.12	
4	1531	250	25.53	7.72	.276	-264.4	.29	2.48	34.12	
5	1534	250	25.48	7.75	.275	-269.0	~~.24~~ .22	2.32	34.12	
6	1537	250	25.56	7.69	.275	-267.0	.20	2.30	34.12	
7	1540	250	25.55	7.68	.277	-265.9	.20	2.27	34.12	

JM 6/8/11

3. SAMPLE COLLECTION DATA Sampling Personnel: JM, JB

Sampling Method(s) & Equip: Bladder Pump w/dedicated tubing

Sample I.D. (Name, Date, Time): HG-27D-060811, 6/8/11, 1540

Sample Analytical Parameters/Method: 8270C, 8260B

Sample Start Time: 1540 End SampleTime: 1615

COMMENTS:

WL: 11311 * Collected MS/MSD samples

FTS

LOW-FLOW GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: HG-27S

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer, Inc.

Project Name: Gainesville 2nd Qtr. 2011 Project Location: Gainesville, Florida

Weather Conditions: Sunny, Calm, 90's Sampling Date: 6/8/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NA (ft) b Depth to Water: 9.41 (ft)

c. Depth to DNAPL: NA (ft) d Total Well Depth: 59.95 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 50.54 (ft) (a-d)

h. Well Volume: 8.24 (gal)

2. WELL PURGE DATA

a. Purge Method: Peristaltic (1088) w/Dedicated teflon lined tubing

b. Field Testing Equipment: YSI (06M1530AM) LaMotte (2011-5200)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: .58 gal

e. Begin Purge Time: 0940 End Purge Time: 1009

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (ml/min)	Temp (deg. C) (Constant)	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (<10 NTU or Stable)	Water Level (ft)	Notes
PRE PURGE VALUES										
Int	940	100	24.99	8.02	.234	-144.3	2.82	1.74	9.41	
PURGING VALUES									9.40 JM 6/8	
1	945	100	25.73	8.42	.236	-192.2	1.06	1.71	~~9.68~~	
2	950	100	25.69	8.42	.237	-193.5	.72	1.71	9.50	
3	955	100	25.50	8.47	.237	-209.0	.58	1.73	9.54	
4	1000	100	25.36	8.48	.237	-218.4	.43	1.74	9.58	
5	1003	100	25.42	8.46	.237	-218.9	.43	1.72	9.62	
6	1006	100	25.41	8.45	.238	-219.5	.40	1.72	9.63	
7	1009	100	25.38	8.45	0.240	-220.6	.40	1.70	9.69	

JDM 6/8/11

3. SAMPLE COLLECTION DATA Sampling Personnel: JB, JM

Sampling Method(s) & Equip: Peristaltic w/Dedicated Tubing JM 6/8

Sample I.D. (Name, Date, Time): HG-27S-060811, 6/8/11, ~~0940~~ 1009

Sample Analytical Parameters/Method: 8270C, 8260B

Sample Start Time: 1009 End SampleTime: 1035

COMMENTS:

WL: 11311 * Slow as possible purge

FTS

LOW-FLOW GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: MG-29D-

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer, Inc.

Project Name: Gainesville 2nd Qtr. 2011 Project Location: Gainesville, Florida

Weather Conditions: Sunny, Calm, 90's Sampling Date: 6/9/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NA (ft) b Depth to Water: 42.85 (ft)

c. Depth to DNAPL: NA (ft) d Total Well Depth: 96.87 (ft)

e. LNAPL Thickness: (a-b) NA (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 54.02 (ft) (a-d)

h. Well Volume: 8.81 (gal)

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
(2)	0.163
4	0.653
6	1.470

2. WELL PURGE DATA

a. Purge Method: Bladder Pump (11484) w/dedicated tubing

b. Field Testing Equipment: YSI 106 M1536MM) LaMotte (511-5210)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 1.11 (gal)

e. Begin Purge Time: 1645 End Purge Time: 1706

Read No.	Lapse Time (min.)	Purge Rate (ml/min)	Temp (deg. C) (Constant)	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (<10 NTU or Stable)	Water Level (ft)	Notes
PRE PURGE VALUES										
Init	1645	200	26.36	6.24	3.956	-1.8	6.21	1.30	42.88	
PURGING VALUES										
1	1650	200	25.17	6.16	3.874	-44.8	2.23	1.28	42.89	
2	1655	200	25.03	6.14	3.874	-56.7	1.04	1.24	42.90	
3	1700	200	24.98	6.12	3.881	-80.6	0.96	1.21	42.90	
4	1703	200	24.99	6.12	3.882	-83.4	0.94	1.18	42.90	
5	1706	200	24.98	6.11	3.883	-89.2	0.93	1.17	42.90	

6/9/11

3. SAMPLE COLLECTION DATA Sampling Personnel: JB, JM

Sampling Method(s) & Equip: Bladder Pump w/ Dedicated Tubing

Sample I.D. (Name, Date, Time): MG-29D-060911 6/9/11 1706

Sample Analytical Parameters/Method: 8270C, 8260B

Sample Start Time: 1706 End SampleTime: 1720

COMMENTS: WL: 11511

FTS

LOW-FLOW GROUNDWATER SAMPLE COLLECTION RECORD

WELL NO.: HG-29S

PERMIT NO.:

Project No.: OM045011-091 Client: Beazer, Inc.

Project Name: Gainesville 2nd Qtr. 2011 Project Location: Gainesville, Florida

Weather Conditions: clear, calm, 91°, smoky Sampling Date: 6/09/11

1. WATER LEVEL DATA (measured from top of inner well casing)

a. Depth to LNAPL: NP (ft) b Depth to Water: 13.97 (ft)

c. Depth to DNAPL: NP (ft) d Total Well Depth: 54.82 (ft)

e. LNAPL Thickness: (a-b) NP (ft) f. DNAPL Thickness: (c-d) NA (ft)

g. Length of Water Column: 40.85 (ft) (a-d)

h. Well Volume: 6.65 (gal)

2. WELL PURGE DATA

a. Purge Method: peri-pump, ded. tef. tubing

b. Field Testing Equipment: TSI 556 (10K 61389) Lamotte 2020 (457-500)

c. Required Total Purge Volume (1f x 2c) (gals.): NA

d. Total Volume and Number of Well Volumes Removed: 0.7

e. Begin Purge Time: 1430 End Purge Time: 1515

Conversion Factors (a x cf = h)	
Well I.D.	Conv. Fact. (cf)
1	0.041
2	0.163
4	0.653
6	1.470

Read No.	Lapse Time (min.)	Purge Rate (ml/min)	Temp (deg. C) (Constant)	pH (s.u.) (±0.2)	Spec. Cond. (ms/cm) (±3%)	Eh/ORP (mV) (±10mV)	Diss O2 (mg/L) (±10%)	TURB (NTU) (<10 NTU or Stable)	Water Level (ft)	Notes
PRE PURGE VALUES										
Init	1430	90	24.71	6.34	0.354	-316.4	0.47	2.55	13.97	
PURGING VALUES										
1	1435	90	25.25	6.32	0.317	-306.7	0.44	2.55	16.28	
2	1440	80	25.37	6.30	0.308	-298.4	0.27	2.40	16.85	
3	1445	80	25.21	6.26	0.315	-300.6	0.20	2.77	17.98	
4	1450	80	25.11	6.21	0.339	-296.4	0.25	2.81	19.09	
5	1455	80	25.14	6.19	0.351	-291.3	0.22	2.84	19.93	
6	1500	80	25.20	6.16	0.463	-294.1	0.20	2.64	20.57	
7	1505	80	25.29	5.99	0.470	-286.5	0.17	2.61	21.10	
8	1510	80	25.32	5.94	0.481	-285.2	0.15	2.65	21.36	
9	1515	80	25.34	5.94	0.482	-284.8	0.15	2.69	21.50	

6/09/11

3. SAMPLE COLLECTION DATA Sampling Personnel: MT / DB

Sampling Method(s) & Equip: peri-pump w/ dedicated tef. tubing

Sample I.D. (Name, Date, Time): HG-29S-060911, 6/9/11, 1515

Sample Analytical Parameters/Method: SVOC, BTEX

Sample Start Time: 1515 End SampleTime: 1534

COMMENTS: Lowest poss. flow - could not stabilize water level, pump maxed

Westbay Instruments Inc.
A Schlumberger Company

Ambient: 1453
Mag: 4129
Probe: 4071

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No: FW-24B
Sampling Zone No(s): 4,3,2,1

Date: 6/7/11
Start Time: 1345
End Time: 1650
Technicians: JB, JM

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	
4	1								54.91		51.62		51.63			54.88	
4	1	✓	✓	✓	✓	✓	✓	2235	54.34	✓	50.83	✓	50.86	✓	✓	54.32	5 1400
4	2								54.8		51.62		51.62			54.82	
4	2	✓	✓	✓	✓	✓	✓	2234	54.24	✓	50.84	✓	50.86	✓	✓	53.69	5 — had to reset probe slow
4	3								54.71		51.61		51.62			54.68	
4	3	✓	✓	✓	✓	✓	✓	2237	53.55	✓	50.85	✓	50.88	✓	✓	53.45	5
4	4								54.61		51.61		51.62			54.49	
4	4	✓	✓	✓	✓	✓	✓	2237	53.37	✓	50.87	✓	50.87	✓	✓	53.22	5
4	5																
4	6																
4	7																
3	1								45.91		42.98		42.98			45.91	
3	1	✓	✓	✓	✓	✓	✓	2036	44.55	✓	42.20	✓	42.21	✓	✓	44.49	5 1520
3	2								45.87		42.97		42.97			45.87	
3	2	✓	✓	✓	✓	✓	✓	2035	44.48	✓	42.20	✓	42.22	✓	✓	44.47	5
3	3																
3	4																
3	5																
3	6																
3	7																

Additional Comments: (pH, Turbidity, S.C., etc.)

Zone 4 Duplicate FW-99A @ 2000

Sunny, Calm, 90's

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

magi : 4129
Probe 4071
Ambient = 14.53

Project: Gainesville, FL
Monitoring Well No: FW-24B
Sampling Zone No(s): 4,3,2,1

Date: 6/7/11
Start Time: 1345
End Time: 1645
Technicians: JB, JM, RH

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	
2	1								37.17		34.33		34.33			37.17	
2	1	✓	✓	✓	✓	✓	✓	183.4	35.77	✓	33.60	✓	33.58	✓	✓	35.77	5" 1350
2	2								37.14		34.33		34.33			37.14	
2	2	✓	✓	✓	✓	✓	✓	183.4	35.74	✓	33.60	✓	33.57	✓	✓	35.74	5
2	3																
2	4																
2	5																
2	6																
2	7																
1	1								28.44		25.68		25.68			28.43	
1	1	✓	✓	✓	✓	✓	✓	163.9	27.04	✓	24.93	✓	24.93	✓	✓	27.04	5" 1620
1	2								28.41		25.67		25.67			28.41	
1	2	✓	✓	✓	✓	✓	✓	163.8	27.00	✓	24.93	✓	24.93	✓	✓	27.03	5
1	3																
1	4																
1	5																
1	6																
1	7																

Additional Comments: (pH, Turbidity, S.C., etc.)

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Probe #3535
Mag i #2743

Date: 6/6/11
Start Time: 1310
End Time: 1500
Technicians: RH, DB

Project: Gainesville, FL
Monitoring Well No: FW-23B
Sampling Zone No(s): 1,2,3,4

Ambient : 14.59

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Tubes	Time
1	1								31.23		24.95		24.95			31.23		
1	1	✓	✓	✓	✓	✓	✓	151.9'	30.91	✓	24.02	✓	24.02	✓	✓	30.93	5	1340
1	2								30.72		25.00		24.97			30.72		
1	2	✓	✓	✓	✓	✓	✓	152.0'	30.42	✓	24.02	✓	24.02	✓	✓	30.42	4	
1	3																	
1	4																	
1	5																	
1	6																	
1	7																	
2	1								39.41		33.64		33.64			39.41		
2	1	✓	✓	✓	✓	✓	✓	172.0'	39.09	✓	32.68	✓	32.70	✓	✓	39.10	4	1440
2	2								39.40		33.68		33.65			39.40		
2	2	✓	✓	✓	✓	✓	✓	172.0'	39.07	✓	32.69	✓	32.69	✓	✓	39.07	4	
2	3																	
2	4																	
2	5																	
2	6																	
2	7																	

6/6/11

Additional Comments: (pH, Turbidity, S.C., etc.)

overcast 95°, Smokey, T-Storms

FB-060611 collected @ 1630
EB-060611 collected @ 1700

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Probe # 3535
mag # 2743

Ambient: 14.59

Project: Gainesville, FL
Monitoring Well No: FW-23B
Sampling Zone No(s): 1,2,3,4

Date: 6/7/11
Start Time: 0850
End Time: 1015
Technicians: CC, DB

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Tubes	Time
3	1								48.08		42.33		42.31			48.08		
3	1	✓	✓	✓	✓	✓	✓	192.0	47.81	✓	41.40	✓	41.40	✓	✓	47.87	4	0905
3	2								48.05		42.30		42.30			48.05		
3	2	✓	✓	✓	✓	✓	✓	191.9	47.76	✓	41.40	✓	41.42	✓	✓*	47.84	4	
3	3																	
3	4																	
3	5																	
3	6								6/7/11									
3	7																	
																	Tubes	Time
4	1								56.73		50.95		50.95			56.73		
4	1	✓	✓	✓	✓	✓	✓	211.9	54.96	✓	50.00	✓	50.08	✓	✓	54.96	4	1000
4	2								56.61		50.87		50.87			56.61		
4	2	✓	✓	✓	✓	✓	✓	211.2	54.94	✓	50.08	✓	50.08	✓	✓	54.94	4	
4	3																	
4	3																	
4	4																	
4	5																	
4	6								6/7/11									
4	7																	

Additional Comments: (pH, Turbidity, S.C., etc.)

Sunny, 90°, Calm

* On 2nd drop on zone 3 had to reset shoe, zone pressure would not increase until reset.

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Probe # 3535
Mag # 2743

Date: 6/2/11
Start Time: 1430
End Time: 1800
Technicians: CC, RM, AS

Project: Gainesville, FL
Monitoring Well No: FW-16B
Sampling Zone No(s): 2,3,4,1

Ambient = 14.65

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) (and probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Tubes	Time
4	1								53.37		52.60		52.60			53.37		
4	1	✓	✓	✓	✓	✓	✓	224.1'	~~52.71~~ 53.43	✓	51.86	✓	51.86	✓	✓	52.73	4	1640
4	2								53.25		52.60		52.60			53.24		
4	2	✓	✓	✓	✓	✓	✓	224.2'	52.69	✓	51.85	✓	52.02	✓	✓	52.69	4	
4	3	✓	✓	✓	✓	✓	✓	224.2'	51.70	✓	51.86	✓	51.86	✓	✓	51.71	2	
4	4																	
4	5																	
4	6																	
4	7							6/3/11										
1	1								27.14		26.64		26.64			27.14		
1	1	✓	✓	✓	✓	✓	✓	164.3'	27.06	✓	25.89	✓	25.88	✓	✓	27.06	5	1730
1	2								27.12		26.64		26.63			27.12		
1	2	✓	✓	✓	✓	✓	✓	164.2'	27.04	✓	25.89	✓	25.88	✓	✓	27.04	5	
1	3																	
1	4																	
1	5																	
1	6																	
1	7							6/3/11										

Additional Comments: (pH, Turbidity, S.C., etc.)

Overcast, breezy, 90°

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Probe: 4071
Maj: 4129
Ambient: 14.59

Project: Gainesville, FL
Monitoring Well No: FW-208
Sampling Zone No(s): 4,3,2,1

Date: 6/8/11
Start Time: 0830
End Time: 1210
Technicians: CE, RA, DB

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Samplers	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Tubes / Time
2	1								33.91		31.08		31.08			33.92	
2	1	✓	✓	✓	✓	✓	✓	176.8	33.52	✓	30.18	✓	30.17	✓	✓	33.52	5 / 1010
2	2								33.90		31.08		31.08			33.90	
2	2	✓	✓	✓	✓	✓	✓	176.8	33.50	✓	30.17	✓	30.19	✓	✓	33.50	5 - corrected misread
2	3								33.88		31.08		31.08			33.88	
2	3	✓	✓	✓	✓	✓	✓	176.7	33.44	✓	30.18	✓	30.18	✓	✓	33.44	5
2	4								33.87		31.08		31.08			33.87	
2	4	✓	✓	✓	✓	✓	✓	176.6	33.35	✓	30.17	✓	30.19	✓	✓	33.35	5
2	5	✓	✓	✓	✓	✓	✓	176.8	33.53	✓	30.19	✓	30.19	✓	✓	33.52	5
2	6																
2	7								6/8/11								
																	Tubes / Time
1	1								25.18		22.45		22.45			25.18	
1	1	✓	✓	✓	✓	✓	✓	156.8	24.63	✓	21.53	✓	21.53	✓	✓	24.64	5 / 1140
1	2								25.15		22.45		22.44			25.15	
1	2	✓	✓	✓	✓	✓	✓	156.7	24.63	✓	21.54	✓	21.58	✓	✓	24.64	5
1	3																
1	4																
1	5																
1	6								6/9/11								
1	7																

Additional Comments: (pH, Turbidity, S.C., etc.)

Sunny, Breezy, Sunny, 80°

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No: FW-12B
Sampling Zone No(s): 2,1,4,3

Prob.: 4071
Mgr.: 4129
Ambient 14.59

Date: 6/8/11
Start Time: 1235
End Time: 1540
Technicians: CC, RH, DB

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Tubes	Time
2	1								31.28		30.14		30.14			31.28		
2	1	✓	✓	✓	✓	✓	✓	175.8	30.95	✓	29.36	✓	29.35	✓	✓	30.94	5	1250
2	2								31.26		30.14		30.14			31.26		
2	2	✓	✓	✓	✓	✓	✓	175.8	30.91	✓	29.36	✓	29.36	✓	✓	30.91	5	
2	3																	
2	4																	
2	5																	
2	6																	
2	7																	
																	Tubes	Time
1	1								22.54		21.49		21.48			22.54		
1	1	✓	✓	✓	✓	✓	✓	155.8	22.18	✓	20.74	✓	20.72	✓	✓	22.18	5	1335
1	2								22.52		21.48		21.47			22.52		
1	2	✓	✓	✓	✓	✓	✓	155.9	22.14	✓	20.71	✓	20.70	✓	✓	22.14	5	
1	3																	
1	4																	
1	5																	
1	6																	
1	7																	

Additional Comments: (pH, Turbidity, S.C., etc.)

windy, sunny, 95°

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Probe : 4071
Mag : 4129

Ambient : 14.59

Project: Gainesville, FL
Monitoring Well No: FW-128
Sampling Zone No(s): 2,1,4,3

Date: 6/8/11
Start Time: 1235
End Time: 1540
Technicians: CC, RH, DS

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Tubes	Time
4	1								48.56		47.45		47.45			48.53		
4	1	✓	✓	✓	✓	✓	✓	215.6	48.17	✓	46.67	✓	46.66	✓	✓	48.17	5	1425
4	2								48.51		47.45		47.45			48.51		
4	2	✓	✓	✓	✓	✓	✓	215.6	48.14	✓	46.67	✓	46.66	✓	✓	48.10	5	
4	3	✓	✓	✓	✓	✓	✓										2	
4	4																	
4	5																	
4	6																	
4	7																	
																	Tubes	Time
3	1								39.79		39.78		39.78			39.79		
3	1	✓	✓	✓	✓	✓	✓	195.7	39.38	✓	38.02	✓	38.01	✓	✓	39.37	5	1515
3	2								39.75		38.79		38.79			39.76		
3	2	✓	✓	✓	✓	✓	✓	195.6	39.31	✓	38.02	✓	38.00	✓	✓	39.29	5	
3	3																	
3	4																	
3	5																	
3	6																	
3	7																	

Additional Comments: (pH, Turbidity, S.C., etc.)

windy, Sunny 95°

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Project: Gainesville, FL
Monitoring Well No: FW-22B
Sampling Zone No(s): 4,1,3,2

Date: 6/13/11
Start Time: 1020
End Time: 1300
Technicians: RH, CC

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)	
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Tubes	Time
3	1								43.72		39.59		39.59			43.72		
3	1	✓	✓	✓		✓	✓	194.4	42.23	✓	38.79	✓	38.79	✓	✓	42.23	4	1150
3	2								43.69		39.60		39.59			43.69		
3	2	✓	✓	✓	✓	✓	✓	194.6	42.21	✓	38.79	✓	38.79	✓	✓	42.21	4	
3	3																	
3	4																	
3	5																	
3	6																	
3	7																	
2	1								35.08		30.94		30.94			35.07		
2	1	✓	✓	✓	✓	✓	✓	174.8	33.49	✓	30.14	✓	30.14	✓	✓	33.49	4	1230
2	2								35.55		30.94		30.94			35.55		
2	2	✓	✓	✓	✓	✓	✓	174.7	33.47	✓	30.15	✓	30.15	✓	✓	33.47	4	
2	3																	
2	4																	
2	5																	
2	6																	
2	7																	

6/13/11

6/17/11

Additional Comments: (pH, Turbidity, S.C., etc.)

Collected FB @ 1250

Westbay Instruments Inc.
A Schlumberger Company

Groundwater Sampling
Field Data Sheet

Probe # 4071

Ambient : 14.55

Project: Gainesville, FL
Monitoring Well No: FW-22B
Sampling Zone No(s): 4,1,3,2

Date: 6/13/11
Start Time: 1020
End Time: 1300
Technicians: RH, CC

Zone No.	Run No.	Surface Function Tests (probe in flushing collar)						Position Sampler	Sampling Collection Checks (probe located at sampling zone in MP casing)								Comments (volume retrieved)
		Shoe Out	Close Valve	Check Vacuum	Open Valve	Evacuate Container	Close Valve	Locate port ( ) Arm out ( ) Land probe ( )	Pressure in MP ( )	Shoe Out	Zone Pressure ( )	Open Valve	Zone Pressure ( )	Close Valve	Shoe In	Pressure in MP ( )	Tubes Time
4	1								50.37		46.05		46.07			50.37	
4	1	✓	✓	✓	✓	✓	✓	209.5'	48.79	✓	45.26	✓	45.26	✓	✓	48.79	4 1050
4	2								50.35		46.05		46.06			50.35	
4	2	✓	✓	✓	✓	✓	✓	209.8'	48.79	✓	45.26	✓	45.26	✓	✓	48.79	4
4	3																
4	4																
4	5																
4	6																
4	7																
1	1								26.94		22.27		22.29			26.93	
1	1	✓	✓	✓	✓	✓	✓	154.9'	24.87	✓	21.50	✓	21.50	✓	✓	24.87	4 1120
1	2								26.90		22.28		22.29			26.85	
1	2	✓	✓	✓	✓	✓	✓	154.9	24.87	✓	21.50	✓	21.50	✓	✓	24.86	4
1	3																
1	4																
1	5																
1	6																
1	7																

6/13/11

6/13/11

Additional Comments: (pH, Turbidity, S.C., etc.)

Sunny. 85°

Collected EB @ 1140

Field & Technical Services, LLC
RCRA Facility Groundwater Monitoring Well Inspection Form

FTS

Site Name: Gainesville, FL
Site Phone: 412-715-4109
Inspector Name: J. Bzorek
Audit Date: [illegible]
KI Contact: NA
KI Phone: NA
Inspector Signature: [illegible]

Well ID	Well Condition						
	Lock	Casing	Cap	Pad/Drainage	Vegetation/Accessibility	Potential Hazards	Comments
FW-25B	GC	GC	GC	GC	GC	None	
ITW-12	GC	GC	GC	No Pad	GC	Wasps	
FW-26C	GC	GC	GC	GC	GC	None	
FW-25C	GC	GC	GC	GC	GC	None	
ITW-22	GC	GC	GC	GC	GC	None	
FW-4	GC	GC	GC	GC	GC	None	
FW-26B	GC	GC	GC	GC	GC	None	
FW-29C	GC	GC	GC	GC	GC	Traffic	
FW-7	GC	GC	GC	GC	GC	None	
FW-8	GC	GC	GC	GC	GC	None	
M-12	GC	GC	GC	GC	GC	None	

Field & Technical Services, LLC
RCRA Facility Groundwater Monitoring Well Inspection Form

FTS

Site Name: Gainesville, FL

Well ID	Well Condition						
	Lock	Casing	Cap	Pad/Drainage	Vegetation/Accessibility	Potential Hazards	Comments
M-09AR	GC	GC	GC	GC	GC	none	
FK-01	GC	GC	GC	GC	GC	none	
FK-298	GC	GC	GC	GC	GC	Traffic	
FK-9	GC	GC	GC	GC	GC	Traffic	
FK-5	GC	GC	GC	GC	GC	none	
HC-245	GC	GC	GC	GC	GC	Traffic	
HC-275	GC	GC	GC	GC	GC	none	
HC-25D	GC	GC	GC	GC	GC	Traffic	
HC-27D	GC	GC	GC	GC	GC	Traffic	
HC-230	GC	GC	GC	GC	GC	Traffic	
HC-220	GC	GC	GC	GC	GC	none	
HC-200	GC	GC	GC	GC	GC	none	
EK-02	GC	GC	GC	GC	GC	none	

Field & Technical Services, LLC
RCRA Facility Groundwater Monitoring Well Inspection Form

FTS

Site Name: Gainesville, FL

Well ID	Well Condition						
	Lock	Casing	Cap	Pad/Drainage	Vegetation/Accessibility	Potential Hazards	Comments
A-05B	G	G	G	G	G	None	
HC-5D	G	G	G	G	G	None	
FW-11	G	G	G	G	G	None	
FW-2	G	G	G	G	G	None	
FW-09	G	G	G	G	G	None	
FW-310E	G	G	G	G	G	None	
FW-3	G	G	G	G	G	None	
FW-08	G	G	G	G	G	None	
FW-05	G	G	G	G	G	None	

Notes:

Summary:

Field & Technical Services, LLC
RCRA Facility Groundwater Monitoring Well Inspection Form

Site Name:_____ Site Phone:_____

Inspector Name:_____ Audit Date: _____

KI Contact: _____ KI Phone:_____ Inspector Signature: _____

Well ID	Well Condition						
	Lock	Casing	Cap	Pad/Drainage	Vegetation/Accessibility	Potential Hazards	Comments
FM-06	GC	GC	GC	GC	GC	None	
MC-65	GC	GC	GC	GC	GC	None	
MC-715	GC	GC	GC	GC	GC	Traffic	
FL-210	GC	GC	GC	GC	GC	None	
M-09BR	GC	GC	GC	GC	GC	None	
M-104	GC	GC	GC	GC	GC	None	
M-320	GC	GC	GC	GC	GC	None	
MC-260	GC	GC	GC	GC	GC	None	
MC-705	GC	GC	GC	GC	GC	None	
FM-14	GC	GC	GC	GC	GC	None	
FL-09	GC	GC	GC	GC	GC	None	

Field & Technical Services, LLC
RCRA Facility Groundwater Monitoring Well Inspection Form

FTS

Site Name:_____

Well ID	Well Condition						
	Lock	Casing	Cap	Pad/Drainage	Vegetation/Accessibility	Potential Hazards	Comments
A-17	G-C	G-C	G-C	G-C	G-C	none	
HG-20	G-C	G-C	G-C	G-C	G-C	none	
EW-16	G-C	G-C	G-C	G-C	G-C	none	
HG-40	G-C	G-C	G-C	G-C	G-C	none	
EW-15	G-C	G-C	G-C	G-C	G-C	none	
MW-20B	G-C	G-C	G-C	G-C	G-C	none	

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Field & Technical Services, LLC
RCRA Facility Groundwater Monitoring Well Inspection Form

FTS

Site Name: Gainesville, FL

Well ID	Well Condition						
	Lock	Casing	Cap	Pad/Drainage	Vegetation/Accessibility	Potential Hazards	Comments
ITW-23	GC	GC	GC	GC	GC	Fire ants	
PZ-9B	GC	GC	GC	GC	GC	Fire ants	
PZ-9A	GC	GC	GC	GC	GC	Fire ants	
PZ-9B	GC	GC	GC	GC	GC	Fire ants	
PZ-10A	GC	GC	GC	GC	GC	Fire ants	
PZ-11A	GC	GC	GC	GC	GC	Fire ants	
PZ-11B	GC	GC	GC	GC	GC	Fire ants	
PZ-13B	GC	GC	GC	GC	GC	Fire ants	
PZ-13A	GC	GC	GC	GC	GC	Fire ants	
PZ-14A	GC	GC	GC	GC	GC	Fire Ants	
PZ-14B	GC	GC	GC	GC	GC	Fire ants	
PZ-15B	GC	GC	GC	GC	GC	Fire ants	
PZ-15A	GC	GC	GC	GC	GC	Fire Ants	

Field & Technical Services, LLC
RCRA Facility Groundwater Monitoring Well Inspection Form

FTS

Site Name: Gainesville, FL

Well ID	Well Condition						
	Lock	Casing	Cap	Pad/Drainage	Vegetation/Accessibility	Potential Hazards	Comments
PZ-17A	GC	GC	GC	GC	GC	Fire Ants	
OW-1	GC	GC	GC	GC	GC	Fire Ants	
OW-2	GC	GC	GC	GC	GC	Fire Ants	
PZ-01B	GC	GC	GC	GC	GC	Traffic	
PZ-01A	GC	GC	GC	GC	GC	Traffic	
PZ-02B	GC	GC	GC	GC	GC	Fire ants	
PZ-02A	GC	GC	GC	GC	GC	Fire ants	
PZ-03A	GC	GC	GC	GC	GC	Fire ants	
PZ-05A	GC	GC	GC	GC	GC	Fire ants	
PZ-05B	GC	GC	GC	GC	GC	Fire ants	
PZ-06B	GC	GC	GC	GC	GC	Fire ants	
PZ-06A	GC	GC	GC	GC	GC	Fire ants	
PZ-08B	GC	GC	GC	GC	GC	Fire ants	

Field & Technical Services, LLC
RCRA Facility Groundwater Monitoring Well Inspection Form

FTS

Site Name: Gainesville, FL

Well ID	Well Condition						
	Lock	Casing	Cap	Pad/Drainage	Vegetation/Accessibility	Potential Hazards	Comments
PZ-08A	GC	GC	GC	GC	GC	Fire ants	
EW-10	GC	GC	GC	GC	GC	~~Traffic~~ Fire ants	
HG-10D	GC	GC	GC	GC	GC	Fire ants	
HG-16S	GC	GC	GC	GC	GC	Fire ants	
M-22B	GC	GC	GC	GC	GC	~~Traffic~~ Fire ants	
PW-1	GC	GC	GC	GC	GC	~~Traffic~~ Fire ants	

APPENDIX B

ANALYTICAL LABORATORY REPORTS

APPENDIX C

ELECTRONIC DATA SUBMITTALS

(Provided to U.S. Environmental Protection Agency, Region IV)