5th SEMI-ANNUAL PROGRESS REPORT
VOLUNTARY REMEDIATION PROGRAM

32.91-ACRE CSXT PARCEL
HUTCHINSON ISLAND
SAVANNAH, CHATHAM COUNTY, GEORGIA
HSI SITE NO. 10101

Prepared for Submission to:
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August 7, 2015

CSX-RPI Project No. 9415575
Amec Foster Wheeler Project No. 6-4300-5245

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August 7, 2015

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CSX-RPI Project No. 9415575

Subject: **5th VRP Semi-Annual Progress Report**
32.91-ACRE CSXT PARCEL
Hutchinson Island
Savannah, Chatham County, Georgia
HSI Site No. 10101
Amec Foster Wheeler Project No. 6-4300-5245

Dear Mr. Williams:

On behalf of CSX Real Property, Inc. (CSX-RPI), Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) respectfully submits this Semi-Annual Progress Report as required under the Georgia Voluntary Remediation Program to the Georgia Department of Natural Resources Environmental Protection Division (EPD). This report is intended for the use of CSX and for regulatory submittal, subject to the contractual terms agreed to for this project. Use of this report for purposes beyond those reasonably intended by CSX-RPI and Amec Foster Wheeler will be at the sole risk of the user.

If you have any questions and/or comments regarding the material presented in this report, please contact Chuck Ferry or Steve Foley at (404) 873-4761 or by email at chuck.ferry@amecfw.com or steve.foley@amecfw.com. Please send all official correspondence to Mr. Samuel Ross, CSX-RPI, 6737 Southpoint Drive South, Jacksonville, Florida, 32202, with a copy to Amec Foster Wheeler in Atlanta, Georgia

Sincerely,

AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.

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1.0 PROJECT SUMMARY

Activities described herein were conducted as part of the 4th semi-annual monitoring period and constitute the 5th Semi-Annual VRP Progress Report.

1.1 Site Description and Historic Use

The qualifying property (subject property or CSXT parcel) is comprised of a 32.91-acre parcel located on Hutchinson Island in Savannah, Georgia (see Figure 1). The subject property is owned by CSX-Real Property, Inc. (CSX-RPI), occupies Chatham County Tax Parcel 1-0436-01-017 and currently consists of vacant land. The subject property is a former bulk petroleum/chemical storage facility located on the southern side of Hutchinson Island, directly across the Savannah River from downtown Savannah, Georgia. The CSXT parcel is abutted on the north and west sides by a 45-acre property owned by the Savannah Economic Development Authority (SEDA). Hutchinson Island Ventures, LLC and Low Country Land, LLC own parcels along the eastern subject property boundary. Properties along the southern boundary include the Georgia Department of Transportation, and Savannah Marine Services. The Savannah River also borders the subject property on its southeast corner. Spartan Hutchinson Island Investments, LLC owns a parcel adjacent to the west. The subject property is relatively flat with vegetation consisting mostly of tall grasses and scrub brush.

The subject property was previously occupied by a bulk petroleum and chemical storage facility between approximately 1920 and 1992 that included 24 above ground storage tanks (ASTs) ranging in volume from 84,000 to 2.3 million gallons. Property improvements were demolished in the 1990s and the subject property has remained vacant and undeveloped since that time.

1.2 Historic Site Remediation

CSX-RPI has engaged in significant soil and groundwater remediation at the site to address soils impacted with petroleum constituents and metals as described in previous submittals to the Georgia Environmental Protection Division (EPD) and has successfully completed implementation of the EPD-approved Modified Corrective Action Plan (MCAP) for impacted soils on its property. The subject property underwent groundwater remediation which began in 2008 and was terminated in 2011 with the application of the property into the Voluntary Remediation Program (VRP).

1.3 Regulatory History

A number of previous environmental assessments have been conducted at the subject property by Amec Environment & Infrastructure, Inc. (predecessor to Amec Foster Wheeler), Applied Engineering and Science, Inc. (AES), Blasland, Blouck and Lee (BBL), Wapora, Westinghouse and Kemron between 1988 and 2011. Based on the findings of the early assessments, a release notification was submitted to the Hazardous Site Response Program documenting soil and groundwater conditions on the subject property, which resulted in the property's listing on the Hazardous Site Inventory (HSI) in July 1995 (HSI Site No. 10101). An adjacent parcel (Parcel No. 2-0436-01-026) owned by the SEDA is also impacted and was sub-listed as part of the HSI site (the "site") in July 1997.

On June 7, 2012, CSX-RPI submitted an application to the VRP. The subject qualifying property was accepted into the VRP in January 2013.

1.4 Summary of Work Performed Since VRP Acceptance

1.4.1 Groundwater Sampling and Analyses

A Sampling and Analysis Plan (SAP) was submitted to EPD on October 18, 2013 which outlined a program of ongoing groundwater monitoring to be conducted under the VRP. The current water monitoring event described herein is the fourth semi-annual monitoring event to be conducted since the site entered the VRP and included the testing of groundwater from a total of 27 monitoring wells and four surface water sampling locations.

The primary constituent of concern (COC) in groundwater is ammonia, although low levels of benzene, naphthalene, arsenic and lead are present in very localized areas as well.

1.4.2 Ecological Risk Assessment

A Screening-Level Ecological Risk Assessment (SLERA) was prepared for the site and submitted in conjunction with the 2nd Semi-Annual Progress Report. Both freshwater and marine ecological screening values (ESVs) were considered in the SLERA due to the brackish nature of the surface water in the canal.

Based on a comparison to surface water ESVs, no COPCs were identified in surface water. Therefore, surface water in the SEDA-property drainage canal is not anticipated to pose unacceptable ecological risk to aquatic receptors. Similarly, because sediment concentrations

were less than sediment toxicity benchmarks, exposure within the drainage canal is unlikely to pose significant adverse effects for benthic macroinvertebrates or other aquatic life. The results of the SLERA indicated that no additional ecological risk assessment of the drainage canal is necessary for this property.

1.4.3 Fate and Transport Modeling

The results of groundwater fate and transport modeling has indicated that the migration of ammonia in either the northerly or southerly directions will not result in exceedences of the risk reduction standards (RRS) in the foreseeable future at the northern hypothetical point of exposure (POE) located 1,000 feet to the north or at the southern hypothetical POE located at the Savannah River boundary.

1.5 Summary of Adjacent Property Concerns

Based on the groundwater monitoring results obtained to date, the parcel located adjacent to the CSXT parcel to the west has also been impacted with ammonia in groundwater. This property is owned by Spartan Hutchinson Island Investments, LLC (SHII). As summarized in our letter dated January 14, 2015, CSX-RPI has begun discussions with SHII to include the SHII parcel as an additional qualifying property for the subject Voluntary Remediation Program site. Ammonia has not been identified above its media target concentration on other off-site properties.

2.0 ADDITIONAL ASSESSMENT ACTIVITIES

The additional assessment activities completed during this semi-annual period included a groundwater monitoring event using 27 existing wells (13 on-site and 14 off-site) and a surface water monitoring event using four (4) sample locations along the drainage canal. Additional assessment activities were completed in general accordance with the SAP along with the modifications outlined in the 4th Semi-Annual Progress Report. Based on the 3rd annual sampling event conducted in November 2014, the groundwater monitoring plan was modified by reducing the monitoring well network by three (3) wells and reducing the list of parameters for certain wells. In addition, nitrite was added to the list of analytes for the 27 wells and 4 surface water sampling locations at the request of GA-EPD.

2.1 Water Table Measurements

Prior to beginning the well purging and sampling, water levels in existing monitoring wells on site were gauged to measure the depth to water from the top of the well casing. This information is summarized along with well construction data in Table 6 and was used to prepare the potentiometric surface map for the site (Figure 4). Table 7 presents a summary of water table measurements, collected during previous VRP monitoring events conducted following the shutdown of the remediation system. Comparison of previous measurements with those illustrated on Figure 4 indicate minor variations to the potentiometric surface relative to recent events. Groundwater flow in the northern portion of the site appears to be toward the drainage canal. The water table in the southern portion of the site appears relatively level, declining slightly to the east, resulting in a southeasterly flow generally toward the Savannah River in the eastern and southeastern portions of the property.

2.2 Groundwater Sampling

Well purging, groundwater sampling and other field procedures were conducted in accordance with the SAP. A total of 27 wells were sampled during this sampling event, including: MW-1, MW-2, MW-3R, TMW-1, TMW-4R, PDMW-7P, PDMW-8R, PDMW-10R, PDMW-13P, PDMW-19P, PDMW-23R, PDMW-26T, PDMW-29D, PDMW-30R, PDMW-32R, PDMW-33R2, PDMW45R, EW-1, MW-201, PMDW-46, PDMW-47, PDMW-48, PDMW-49, PDMW-50, PDMW-51, PDMW-52 and PDMW-53.

Prior to sampling, each well was purged to remove stagnant water and allow representative formation water to enter the well. The wells were purged using a peristaltic pump and Teflon lined

tubing utilizing the "Tubing in Screened Interval" Method described in the Region 4 US Environmental Protection Agency SESD Groundwater Sampling Operating Procedure, dated March 6, 2013 (SESDPROC-301-R-3). Water quality parameters were measured during well purging and are summarized on the groundwater sampling logs provided in Appendix B. Well purging continued until the water quality parameters stabilized for a minimum of three consecutive readings, indicating representative formation water was being withdrawn. A maximum turbidity of 10 NTU was set as the goal, although in general, significantly lower turbidity values were obtained. In seven instances, the goal of 10 NTU could not be obtained and samples with turbidity greater than 10 NTU were collected. Four of these samples (MW-3R, PDMW-10R, PDMW-13P, and PDMW-47) were analyzed for metals, which could potentially be influenced by suspended sediment. Zinc was detected at a concentration of 0.089 milligrams per liter (mg/L) in the sample collected from monitoring well MW-3R, which is below the RRS of 2 mg/L. Metals were not detected in the samples collected from wells PDMW-10R, PDMW-13P, and PDMW-47. Comparison of ammonia results between recent sampling events from these wells did not show a consistent correlation between turbidity and ammonia concentrations. These results indicate that the elevated turbidity values have not had a significant effect on the data obtained from these wells.

Samples were collected immediately following purging and placed in containers provided by the laboratory, packed on ice and maintained under chain-of-custody control from the time they were collected until they were released to the laboratory. QA/QC samples, including duplicate samples, matrix spike duplicates, field rinse blanks and trip blanks were also collected for laboratory analysis.

2.3 Groundwater Analytical Results

Groundwater samples collected from the 27 wells were analyzed for ammonia using EPA Method 350.1 and nitrate and nitrite using EPA Method 353.2. Analysis of other constituents was conducted on various wells in accordance with the approved Sampling and Analysis Plan, including: benzene, toluene, ethylbenzene and xylenes (BTEX) using EPA Method 8260B, polynuclear aromatic hydrocarbons (PAHs) using EPA Method 8270D and the total arsenic, chromium, lead, nickel and zinc using EPA Method 6010C. The samples collected from the wells installed on the SEDA property in June 2014 were only analyzed for ammonia, nitrate and nitrite, in accordance with the terms of the Access Agreement negotiated between SEDA and CSXT. Analytical results are summarized on Tables 1-3 and Figure 2. Table 1 contains the results of the

current sampling event, Table 2 summarizes data from the last four sampling events, and Table 3 includes all historical groundwater testing data. Laboratory analytical reports are provided in Appendix A. Graphs depicting concentrations and trends for constituents of concern (COCs) over time are included in Appendix D. Isoconcentration contours for ammonia are shown on Figure 3 and for COCs other than ammonia in Appendix E.

Ammonia

Based upon historic data collected at the site, the primary constituent of concern (COC) remaining in the groundwater beneath the property is ammonia, which was detected in each of the wells sampled during the most recent monitoring event. The following observations are provided based upon the most current ammonia concentration data:

1. Ammonia was detected at concentrations above the established site-specific background concentration of 15 mg/L in seven of the 27 wells sampled, including: MW-1, EW-1, TMW-1, PDMW-7P, PDMW-8R, PDMW-26T, and PDMW-47. Ammonia exceeded the background concentration in 12 wells during the previous sampling event.

2. Ammonia was detected at concentrations exceeding the risk reduction standard (RRS) of 30 mg/L in samples collected from monitoring wells EW-1, TMW-1, PDMW-8R, PDMW-26T, and PDMW-47.

3. May 2015 analytical results show a decrease in ammonia concentrations in wells EW-1, PDMW-8R, PDMW-32R, PDMW-47, and PDMW-48 when compared to the results of the November 2014 sampling event.

4. May 2015 ammonia concentrations for wells TMW-1 (4,300 mg/L) and PDMW-26T (550 mg/L) were higher when compared to November 2014 analytical results, but were generally consistent with recent historical data for these wells.

5. Ammonia concentrations for the remaining 20 wells sampled in May 2015 are generally consistent with recent historical data for these wells.

6. The concentrations of ammonia in TMW-1 and EW-1, the wells which have historically exhibited the highest ammonia impacts, remained elevated relative to the rest of the site. The highest ammonia concentration observed during the most recent sampling event was in TMW-1 at 4,300 mg/L. The ammonia concentration at TMW-1 has exhibited the following trends based upon its historic data:

    a. Increased from the previous sampling event in November 2014 (3,900 mg/L) to 4,300 mg/L during the May 2015 sampling event.

    b. Decreased from the maximum concentration (18,000 mg/L) in 2000.

7. Monitoring well EW-1 is located within a separate area from TMW-1 and has historically exhibited ammonia concentrations which are substantially lower than in TMW-1. During the June 2014 monitoring event, EW-1 exhibited its highest concentration of ammonia to date (1,100 mg/L) and the assumption was made at that time that the elevated

concentration was within a normal range of fluctuation. Recent analytical results for EW-1 show a decrease in the ammonia concentration to 540 mg/L in November 2014 and a further decrease to 320 mg/L in May 2015. These lower ammonia concentrations support the previous assumption and are generally consistent with historical results for EW-1.

8. PDMW-26T, located in the vicinity of TMW-1, exhibited an ammonia concentration of 550 mg/L, which is higher than the November 2014 result (490 mg/L), but similar to the results of three prior sampling events (530 mg/L, 550 mg/L and 600 mg/L in December 2011, December 2013, and June 2014, respectively).

9. The ammonia concentration in PDMW-8R decreased from 94 mg/L detected in November 2014 to 64 mg/L detected for the most recent sampling event. This concentration is generally consistent with recent historical results.

10. MW-1 exhibited an ammonia concentration of 21 mg/L, which is generally consistent with recent historical results.

11. MW-2 exhibited an ammonia concentration of 13 mg/L, a decrease from the 23 mg/L detected during the November 2014 sampling event.

12. PDMW-47 (located west of the CSXT parcel) exhibited an ammonia concentration of 39 mg/L, a decrease from the 110 mg/L detected during the November 2014 sampling event.

13. PDMW-53, located in the area west of PDMW-47, exhibited an ammonia concentration of 1.6 mg/L, a decrease from the 5.5 mg/L detected during the November 2014 sampling event.

14. PDMW-48 exhibited an ammonia concentration of 8.5 mg/L, a decrease from 22 mg/L detected in November 2014. The ammonia concentration in PDMW-48 was over two orders of magnitude below the concentrations of TMW-1, located immediately upgradient.

15. The remaining 17 wells that were sampled exhibited ammonia concentrations below the site-specific background concentration of 15 mg/L. Some minor fluctuations were noted among these samples compared with previous data, but the current data were generally consistent with previous results.

An ammonia isoconcentration map for this sampling event is attached as Figure 3 which illustrates current results along with the RRS/delineation standard of 30 mg/L.

Nitrate

Nitrate was detected at concentrations above the laboratory reporting limit in three of the 27 wells sampled (TMW-1, PDMW-26T and EW-1) in May 2015. Of these, only TMW-1, with a nitrate concentration of 290 mg/L, exceeded the maximum contaminant level (MCL) of 10 mg/L for drinking water established by the USEPA. These results are generally consistent with the previous analytical results.

Nitrite

Nitrite was detected at concentrations above the laboratory reporting limit in nine of the 27 wells sampled (MW-2, MW-3R, PDMW-7P, PDMW-8R, PDMW-47, PDMW-48, PDMW-50, PDMW-53, and TMW-4R) in May 2015. None of the detected nitrate concentrations exceeded the maximum contaminant level goal (MCLG) of 1 mg/L for drinking water established by the USEPA. At the request of the Georgia EPD, the active monitoring well network was sampled for nitrite for the first time in May 2015.

PAHs

PAH sampling was limited to one monitoring well (TMW-1) for the May 2015 monitoring event. Naphthalene was detected at a concentration of 44 µg/L in the sample collected from TMW-1, which exceeds the RRS of 20 µg/L. This naphthalene exceedance is the same concentration as the previous sampling event and is consistent with recent historical results for TMW-1. No other

HSRA-regulated PAHs were detected above laboratory reporting limits in the sample collected from TMW-1.

VOCs

VOCs sampling was limited to one monitoring well (TMW-1) for the May 2015 monitoring event. Benzene was detected at a concentration of 48 µg/L in the sample collected from TMW-1, which exceeds the RRS of 31.2 µg/L. In addition, total xylenes were detected at a concentration of 120 µg/L, which is well below the RRS of 10,000 µg/L. The detections of benzene and total xylenes are less than the concentrations detected during the November 2014 sampling event and are generally consistent with recent historical results for TMW-1. No other VOCs were detected above laboratory reporting limits in the sample collected from TMW-1.

Metals

Groundwater samples were collected for total metals analysis from 21 monitoring wells during the May 2015 monitoring event. Total metals were detected in five of the wells, including: EW-1, MW-3R, TMW-1, PDMW-26T and PDMW-32R. The following observations are provided based upon an evaluation of recent and historical analytical results for total metals:

1. Total metals concentrations detected in groundwater samples were typically below site-specific background concentrations and applicable RRS with the exceptions noted below.

2. Total lead was not detected above the laboratory reporting limit in samples collected from the 27 monitoring wells. A review of historical analytical results show that this is the first

time since June 2010 (seven sampling events) that total lead has not been detected in monitoring well PDMW-13P. Lead has been below the detection limit in numerous previous sampling events dating back to 1997. However, recent historical analytical results for PDMW-13P indicate that total lead is typically detected at concentrations exceeding the RRS of 15 µg/L. The maximum concentration of total lead detected in PDMW-13P was 280 µg/L recorded in June 2011 while the previous total lead concentration was 39 µg/L.

3. Total arsenic was detected in monitoring wells TMW-1 (160 µg/L) and PDMW-26T (25 µg/L) at concentrations exceeding the RRS of 18 µg/L. These exceedances are generally consistent with recent historical results for wells TMW-1 and PDMW-26T.

4. Total arsenic is delineated in the northwest portion of the CSXT property and around wells TMW-1 and PDMW-26T, as it was not detected in the nearby surrounding wells MW-3R, PDMW-8R, PDMW-29D, and PDMW-33R2 during the May 2015 sampling event (see Figure E-4 in Appendix E). Historical analytical results for nearby wells PDMW-1T, PDMW-2T, PDMW-35P, and PDMW-48 also indicate that total arsenic exceedences are generally limited to wells TMW-1 and PDMW-26T in the northwest corner of the CSXT property.

5. Total chromium was detected in monitoring well TMW-1 at a concentration of 32 µg/L, which is above the background level of 13 µg/L but below the RRS of 100 µg/L. This detection of total chromium is generally consistent with historical analytical results for well TMW-1. Recent historical analytical results for nearby wells MW-3R, PDMW-1T, PDMW-26T, PDMW-29D, PDMW-35P, and PDMW-48 indicate that total chromium detections above background are generally limited to well TMW-1 in the northwest corner of the CSXT property.

6. Total nickel and zinc were not detected above their background or applicable RRS concentrations in any of the samples.

2.4 Surface Water Sampling and Analytical Results

Surface water samples were collected from four locations within the drainage ditch located on the SEDA property north of the CSXT parcel (see Figure 2 for locations). Sample SW-1 was collected where the drainage ditch crosses the road that borders the western portion of the CSXT parcel. SW-2 and SW-3 were collected in the area north of the CSXT parcel, downgradient of the two major lobes of the ammonia plume in groundwater. SW-4 was collected where the drainage ditch crosses the road that borders the eastern portion of the CSXT parcel.

Two rounds of surface water samples were collected, one at high tide and one at low tide. The samples were collected in laboratory supplied containers using a peristaltic pump and Teflon-lined tubing. Surface water testing was limited to ammonia, nitrate, nitrite, and alkalinity, in accordance with the provisions of the access agreement between SEDA and CSXT. The following observations are provided based upon an evaluation of the analytical results for surface water samples collected during the May 2015 monitoring event:

1. Ammonia concentrations ranged from 0.41 to 0.91 mg/L at high tide and from 0.62 to 1.5 mg/L at low tide. These concentrations are below both the fresh water environmental screening level of 3.206 mg/L and the marine environmental screening level of 1.896 mg/L. May 2015 ammonia concentrations and fluctuations between tidal stages are generally consistent with the results of previous surface water sampling events. Generally, higher ammonia concentrations are observed in surface water samples collected during low tide. After several sampling events, a seasonal pattern to the ammonia concentrations in surface water has become apparent. Ammonia concentrations in summer tend to be significantly higher than those observed in winter. However, even the highest ammonia concentrations remain below applicable ESLs.

2. Nitrate concentrations ranged from 0.25 to 0.29 mg/L at high tide and from 0.17 to 0.28 mg/L at low tide. May 2015 nitrate concentrations and fluctuations between tidal stages are generally consistent with the results of previous surface water sampling events. Generally, nitrate concentrations are higher at high tide, indicating input from the Savannah River.

3. Nitrite concentrations ranged from non-detect (less than 0.05 mg/L) to 0.060 mg/L at high tide and from non-detect to 0.094 mg/L at low tide. At the request of the Georgia EPD, surface water samples were analyzed for nitrite for the first time in May 2015.

4. Alkalinity concentrations ranged from 39 to 100 mg/L at high tide and from 77 to 130 mg/L at low tide. May 2015 alkalinity concentrations are generally consistent with the results of previous surface water sampling events. Generally, higher alkalinity concentrations are observed in surface water samples collected during low tide.

Historical surface water testing data collected between 1997 and 2004 are summarized in Table 4. Recent surface water testing data collected between December 2013 and May 2015 are summarized in Table 5.

2.5 Vertical Delineation

During this VIRP period of groundwater monitoring at the former CSX Hutchinson Island site (HSI 10101), vertical delineation was evaluated to determine the potential for downward migration of COCs to deeper portions of the surficial aquifer. This evaluation considered: historical groundwater sampling data; the chemical nature of the COCs; and hydraulic gradients from monitoring wells installed at the source area. Based upon this evaluation, the following was noted:

1. Three monitoring wells are located in the northwest corner of the site, within what has been considered to be the source area. These include shallow well TMW-1 (screened from 8-13 ft bls) and deeper monitoring wells PDMW-35P (screened from 15-25 ft bls), and PDMW-29D (screened from 44.5-49.5 ft bls).

2. This source area has historically exhibited the highest COC concentrations at the site and TMW-1 has historically (and currently) shown the highest COC concentrations within the source area. While groundwater quality at TMW-1 has significantly improved compared

to historical concentrations, the concentrations of COCs in the shallow groundwater remain above their respective RRS.

3. Data from the most recent sampling event conducted in May 2015 indicated that naphthalene, benzene, arsenic, ammonia, and nitrate were present at concentrations exceeding their respective RRS at monitoring well TMW-1.

4. In contrast, arsenic, ammonia, and nitrate were not detected above their respective background criteria in deep well PDMW-29D (adjacent to TMW-1) during May 2015. Benzene and naphthalene have not been included in recent analyses as these constituents have not historically been detected in PDMW-29D above background concentrations. These results at PDMW-29D are consistent with historical data (since November 1997) which have shown all COC concentrations below background (with the exception of one anomalous ammonia detection in June 2010).

5. In addition, laboratory results from the adjacent intermediate depth monitoring well PDMW-35P (from September 2002 to June 2011) have historically shown COC concentrations below background concentrations for COCs. As a result, this monitoring well is no longer included in the monitoring well network for sampling.

6. Of the COCs detected in TMW-1, ammonia, benzene, and naphthalene are less dense than water and for this reason do not tend to migrate downward. Arsenic (also detected) is denser than water but tends to sorb to organic carbon in the aquifer matrix, which may reduce its tendency to mobilize downward through the strata.

7. Based upon the recent evaluation of the vertical hydraulic gradient in the source area using recent water level data from TMW-1, PDMW-15T and PDMW-29D, a slight upward vertical gradient exists between PDMW-15T and TMW-1, in the uppermost portion of the aquifer and a slight downward vertical gradient exists between PDMW-35P and PDMW-29D, in the deeper portion of the aquifer. Because the downward gradient in the deeper zone only appears to affect the unimpacted portion of the aquifer, it is not currently considered to be significant regarding the potential for downward migration of COCs.

8. Finally, based upon groundwater data collected over the previous eighteen years, it does not appear that any significant vertical migration of COCs has occurred, as evidenced by the lack of impacts to the deeper portions of the surficial aquifer. It cannot be fully determined whether this is attributed to the chemical nature of the COCs , the vertically upward hydraulic gradient that is present in the source area, some combination of the two factors or another, independent reason, but it represents the strongest evidence to support the conclusion that vertical delineation has been achieved at the site.

3.0 CONTAMINANT FATE AND TRANSPORT MODELING

Amec Foster Wheeler updated the BIOCHLOR fate and transport model of the ammonia in groundwater on site.

BIOCHLOR utilizes a combination of site specific data and literature values to determine the various physical properties of the plume and the migration potential of dissolved constituents. The model was developed to predict the migration pattern of a contaminant plume where no engineering controls have been implemented and monitored natural attenuation (MNA) is the groundwater remedial option.

Ammonia (NH3) within the subsurface predominately exists in an ionized (protonated) state of ammonium (NH4+) under the pH and temperature conditions observed at the site (pH typically between 6 and 7 and groundwater temperatures between approximately 18 and 24 degrees C). These conditions are also optimal for oxidation (nitrification) of ammonium, the primary mechanism for ammonium degradation. Ammonium initially oxidizes to nitrite (NO2-) which is catalyzed by Nitrosomonas bacteria. Nitrite is then oxidized by Nitrobacter bacteria resulting in the formation of nitrate (NO3+). Nitrate is generally stable in the subsurface environment under aerobic conditions and can persist for long periods of time if it is not removed via plant uptake or discharged to surface water bodies. The biodegradation of ammonium and nitrite are typically maximized under aerobic conditions and may be halted under anaerobic conditions. However, anaerobic oxidation of ammonium (anammox) and its byproducts can occur under anoxic conditions via biological denitrification. This process is facilitated by the absence of oxygen and the presence of organic carbon, and reduced sulfur or iron (Buss, S.R., Herbert, A. W., Morgan, P. and Thornton, S.F, 2003). At EPD's request, nitrite analysis has been included in suite of testing parameters to provide additional data regarding ammonia degradation.

Review of well purging records indicates variations in the dissolved oxygen (DO) content of the shallow groundwater varies considerably both across the site and seasonally, with the higher DO concentrations observed during the summer sampling events. During the current sampling event, most wells contained low concentrations DO at the time of sampling. There does appear to be some correlation between DO and nitrite concentrations. Typically, nitrite was not detected in samples exhibiting low DO concentrations (<1.0 mg/L) and the highest nitrite concentrations were detected within wells located in tidal marsh areas. The daily influx of surface water may serve to oxygenate the shallow groundwater in the marsh area. Such conditions would enhance the

biodegradation of ammonium within the marsh area. This relationship does not hold in all cases, however, as the highest nitrite concentrations were detected in two wells (PDMW-7P and PDMW-48) which also exhibited low DO. Both of these wells were located in marshy areas which indicates other factors, such as anammox may have locally influenced the formation of nitrite.

Subsurface migration of ammonia can also be heavily influenced by retardation effects from aquifer materials. Specifically, the presence of even small amounts (0.1%) of clay can result in retardation factors of 2-3.5 due to cation exchange or adsorption effects. The retardation effects are most pronounced with mixed layer clays such as montmorillonite, which are not expected in this geologic setting. However, double layer clays such as illite and even single layer clays, such as kaolinite (which would be expected on site) will have a significant retardation effect. As noted in boring logs for site monitoring wells, the aquifer material believed responsible for the bulk of shallow groundwater migration consists primarily of fine to medium grained sand but minor to moderate amounts of clay are also present throughout the site, particularly in the marshy areas; although the precise mineralogy of these clays is not known. The soils within the marshy areas were observed to contain significant amounts of clay generally throughout the depth of the wells in this area. Such conditions would be consistent with reduced migration of the ammonia plume across the marsh as is noted with the sharp drop off in observed ammonia concentrations between the apparent source area and any wells located within the marsh (MW-3R, PDMW-48, PDMW-49, PDMW-50, PDMW-51 and PDMW-52). The conditions within the marsh would effectively form a partial barrier to migration of the ammonia plume. The migration of nitrite and nitrate is much less influenced by the presence of clay minerals in the aquifer material.

The presence of low concentrations of ammonia and nitrate in groundwater and the surface waters of the canal provide evidence that ammonia degradation is occurring on site. We note, however, that some of the nitrate in the surface water may be attributable to influx from the Savannah River as nitrate concentrations in groundwater were generally below detection limits except in those wells with the highest ammonia concentrations. As noted in Section 2.4, significant variations in nitrate concentrations in surface water are noted between low tide and high tide which supports the conclusion that the Savannah River has a substantial impact on nitrate concentrations in the surface water in the canal. Unlike the nitrate results, nitrite in surface water nitrite concentrations were generally higher in the low tide samples, indicating primary input from groundwater rather than surface water.

The initial release of ammonia to groundwater was assumed to have been initiated approximately 40 years ago. This date was selected as a reasonable starting date based on the use of the property for chemical storage (including liquid fertilizer) by Charter International Oil Company (Charter) beginning in 1973. The storage of ammonia likely ceased when Powell Duffryn took over the site in 1982, but definitely ceased by the early 1990s when Powell-Duffryn vacated the site and the on-site storage tanks were removed. As such, the release was modeled as emanating from a decaying source as all ongoing sources have long since been removed and the ammonia will undergo biotransformation to nitrite and then to nitrate.

The ammonia decay constant was calculated by preparing a semi-log plot of ammonia concentration vs. time in TMW-1. The slope of the trend line provides the input value. Note that the value obtained appeared to be very conservative would result in source area concentrations well in excess of what is currently observed. This variation may be partly explained by the previous operation of the remediation system. Therefore, the decay constant was modified somewhat to more closely match observed conditions.

Due to the groundwater flow pattern, it was necessary to prepare two models. One model considers the ammonia fate and transport to the north toward the drainage canal and a second model considers the ammonia fate and transport to the south toward the Savannah River.

The northward trending model illustrates the migration of ammonia from the assumed source area near TMW-1 toward the drainage canal. An ammonia concentration of 18,000 mg/L was established as an original source area concentration to adjust model input parameters and establish a decay rate that reasonably matches current field observations. This value represents the highest concentration of ammonia detected on site to date. We note that the exact location and size of the original source area or areas is not known. In addition, the heterogeneity of the aquifer materials (e.g., the hydraulic conductivity measured on site can vary by up to two orders of magnitude) introduces a component of variability as well. For this reason, an average hydraulic conductivity of 7.8 x 10-4 cm/sec, was calculated from 2005 slug test results from TMW-1, TMW-3T and PDMW-22T in the northern portion of the site.

The highest measured ammonia concentration of 18,000 mg/L was utilized as the initial concentration and the model was run over a 70-year time span. The attached output sheets illustrate that after 40 years (i.e. now) the predicted ammonia concentrations generally correspond to those currently observed in TMW-1 and in the area to the north. The northerly plume is

modeled between the assumed source area around TMW-1, and PDMW-48 and PDMW-49, the point of demonstration wells located immediately south of the canal.

Ammonia concentrations in groundwater predicted by the model were compared to the previously approved risk reduction standard of 30 mg/L. The model output continue to predict that 30 years into the future, ammonia concentrations will remain below the RRS of 30 mg/L at the canal and well below the RRS north of the canal.

The southward trending model run illustrates ammonia migration from the area around EW-1, which is the area of highest observed ammonia concentration located south of the assumed source area around TMW-1. An ammonia concentration of 1,100 mg/L was utilized as a starting concentration as this was the highest ammonia concentration recorded in this portion of the site. An average hydraulic conductivity of 3 x 10-3 cm/sec was utilized for the southern model. This value was calculated from slug test results obtained from PDMW-10T, PDMW-24T and PDMW-15T which are located in the southern portion of the site. The modeled flow path utilized EW-1 as the source area, and included MW-204 and PDMW-30P to the east-southeast, the direction of groundwater flow in this area as depicted on Figure 4, rather than a direct path to the river. We note that the exact flow path is difficult to determine in the area around EW-1 as it is located near the groundwater divide in the central portion of the site and slight variations in the water table configuration can alter the flow direction from EW-1. Based on recent data, the flow path may be to the northwest, generally toward the TMW-1 and the canal. In order to provide a conservative model, a flow path generally toward the river was assumed. The model output continues to predict that the ammonia concentration reaching the river will remain well below the RRS into the foreseeable future.

Sensitivity analysis of the BIOCHLOR model input parameters was performed by increasing and decreasing their baseline values for the calibrated model. The results of the analysis are shown in Table A for monitoring well PMW-49 which is the point of demonstration well for the northern plume which represents the most significantly impacted groundwater at the site. This well is adjacent to the drainage canal and therefore is most representative of potential groundwater impacts on the surface water quality.

The model has several built-in default values which help explain why certain parameters have varying degrees of sensitivity. Table A shows that the model is most sensitive to changes in hydraulic conductivity, hydraulic gradient and the biotransformation rate. Table A demonstrates

that the baseline model input parameters provide the best overall match for the observed conditions in the point of demonstration wells.

Table A - Model Sensitivity Analysis; Calculated for June 2015 at PDMW-49

Hydraulic Conductivity (Baseline = 7.8 x 10^{-4} cm/sec)				
Constituent	Concentrations (mg/L)			
	2x Baseline	Baseline	0.5xBaseline*	Observed
NH_3	287	1.22	0.00	0.63
Hydraulic Gradient (Baseline = 0.005)				
Constituent	Concentrations (mg/L)			
	2x Baseline	Baseline	0.5x Baseline	Observed
NH_3	263	1.22	0.00	0.63
Effective Porosity (Baseline = 0.25)				
Constituent	Concentrations (mg/L)			
	1.2x Baseline	Baseline	0.8x Baseline	Observed
NH_3	0.16	1.22	9.0	0.63
Longitudinal Dispersivity (Baseline = 30 feet)				
Constituent	Concentrations (mg/L)			
	1.5x Baseline	Baseline	0.5x Baseline	Observed
NH_3	3.8	1.22	0.001	0.63
Transverse Dispersivity (Baseline = 0.1 x Longitudinal Dispersivity)				
Constituent	Concentrations (mg/L)			
	2x Baseline	Baseline	0.5x Baseline	Observed
NH_3	1.2	1.22	1.2	0.63
Retardation Factor (Baseline = 1.1)				
Constituent	Concentrations (mg/L)			
	1.5x Baseline	Baseline	0.75x Baseline	Observed
NH_3	0.0	1.22	4.2	0.63
Aquifer Matrix Density (Baseline = 1.7 gm/cm^3)				
Constituent	Concentrations (mg/L)			
	1.2x Baseline	Baseline	0.90x Baseline	Observed
NH_3	1.3	1.22	1.1	0.63
Foc (Baseline = 0.001)				
Constituent	Concentrations (mg/L)			
	1.5x Baseline	Baseline	0.85x Baseline	Observed
NH_3	1.1	1.22	1.4	0.63
Koc (Baseline = 14)				
Constituent	Concentrations (mg/L)			
	1.5x Baseline	Baseline	0.5x Baseline	Observed
NH_3	21.4	1.22	0.03	0.63
Biotransformation Rate Constant (Baseline = 0.035)				
Constituent	Concentrations (mg/L)			
	1.5x Baseline	Baseline	0.85x Baseline	Observed
NH_3	1.1	1.22	3.2	0.63
First Order Decay Constant (Baseline = 0.35)				
Constituent	Concentrations (mg/L)			
	1.5x Baseline	Baseline	0.5x Baseline	Observed
NH_3	0.2	1.22	7.7	0.63
Source Width (Baseline = 300 Ft)				
Constituent	Concentrations (mg/L)			
	1.5x Baseline	Baseline	0.85x Baseline	Observed
NH_3	1.2	1.22	1.2	0.63

Future monitoring data will be used to further to refine, calibrate and verify the model. For modeling purposes, TMW-1 and EW-1 have been assumed to represent the source locations for the northern and southern plume migration, respectively; although, based on the previous testing from EW-1, this may not be the case. In the case of TMW-1, the highest historic concentrations was utilized as the initial ammonia concentration.

The model was developed by inputting a combination of field-measured parameters and literature values into the model which were then adjusted until the constituent distribution curves reasonably matched the groundwater conditions measured at the site. Those same input parameters were then utilized in longer duration models to predict concentrations of ammonia over time. The input parameters and their sources are summarized in the attached Table C.

As illustrated on the attached outputs from the BIOCHLOR model, the model predicts that after approximately 40 years (i.e. now), the ammonia concentrations modeled as emanating from the TMW-1 location is a close match to the conditions currently observed in downgradient wells. Results from the point of demonstration well for the southern plume also provide a relatively close match to the conditions predicted for the southern plume. Modeled concentrations for both nitrate and nitrite, when compared with field conditions indicate that the biotransformation of ammonia to these degradation products is very slow and that the observed downgradient conditions appear to be related to migration with minimal biotransformation. With the exception of the source area well itself, TMW-1, no nitrate concentrations have been observed on site approaching its MCL.

The results of the groundwater fate and transport modeling continue to indicate that the migration of ammonia, nitrate and nitrite in either the northerly or southerly directions will not result in exceedences of the RRS in the foreseeable future at the northern hypothetical point of exposure (POE) located 1,000 feet to the north or at the southern hypothetical POE located at the Savannah River boundary. Upon acquisition of future data, the predictions made regarding future migration will be compared with the groundwater data obtained.

4.0 CONCLUSIONS

The following conclusions are drawn from the results of the recent assessment and monitoring activities. Please reference the appropriate sections in this report for a discussion of the specific data to support these conclusions.

1. The most recent data set continues to support the conclusion that ammonia is the remaining constituent of concern at the subject site. Ammonia has been delineated horizontally and vertically to the established background concentration of 15 mg/L.

2. Based on an evaluation of the data collected during this sampling event compared to previous sampling events, overall groundwater quality at the site appears to be improving. The following was noted:

    a. Concentrations of lead remain below the detection limit in well EW-1 for the second consecutive sampling event; and lead was below the detection limit in PDMW-13P for the first time in three sampling events.

    b. Of the wells tested for ammonia, 26 remained below the RRS.

    c. Of the wells where ammonia exceeded the RRS, concentrations decreased in two (PDMW-8R and PDMW-47R).

3. Groundwater testing for the ammonia breakdown products nitrite and nitrate indicates that nitrite is relatively widespread in the northern plume area, particularly in wells located within or very near the tidal marsh areas. The presence of these two compounds indicates that natural degradation of ammonia is occurring in the subsurface resulting in the continuing groundwater quality improvement.

4. Ammonia concentrations in the location of the area of highest impact (TMW-1) in the source area remain well below historically high levels. A northward trending fate and transport model that has been developed for the project illustrates the migration of ammonia from an assumed source area near TMW-1 toward the drainage canal. The model output predicts that 30 years into the future, ammonia concentrations in groundwater will remain below the RRS of 30 mg/L at the canal and well below the RRS north of the canal.

5. A southward trending fate and transport model that has been developed for the project illustrates ammonia migration from the area around EW-1, which is the area of highest observed ammonia concentration located south of the assumed source area around TMW-1. The model output predicts that the ammonia concentration in groundwater reaching the river will remain well below the RRS for at least the next 30 years.

6. Modeling of nitrite and nitrate indicates that although degradation of ammonia into both nitrate and nitrite is apparent, it appears to occur at a slow rate. However, based on the observed distribution of nitrite and nitrate in the subsurface, the only exceedance of an MCL is observed in the source area well (TMW-1) and there are no indications that either constituent will exceed applicable standards at the point of demonstration wells or will otherwise adversely affect downgradient receptors.

7. Additional HSRA-regulated constituents, including naphthalene, benzene, and total arsenic were detected above the RRS in the “source area well” TMW-1. While these constituents have been persistently detected at these concentrations for the past four consecutive sampling events they have not increased in concentration and have been horizontally and vertically delineated.

8. Analytical results indicated that concentrations of ammonia detected in surface water samples collected from the four sampling locations at high tide and low tide along the drainage canal remain below both the fresh water and marine environmental screening levels. Additionally, laboratory data for ammonia for monitoring wells associated with this drainage canal (PDMW-49 through PDMW-52) indicate the ammonia remains below Background.

5.0 UPDATED MILESTONE SCHEDULE

The table below summarizes VRP progress with respect to the scheduled milestones.

Task Name & Description.	Scheduled	Status
Prepare response to comments letter to address comments in GAEPD's January 31, 2013 letter.	July 31, 2013	Completed
Prepare ground and surface water sampling and analysis plan (SAP) for submission to GAEPD.	September 31, 2013	Completed
Prepare second semi-annual progress report (SAPR) including: sampling selected on-site wells and surface water; perform preliminary ecological risk evaluation; negotiate access agreements with adjacent properties. Demonstrate complete horizontal delineation on the qualifying property.	January 31, 2014	Completed
Prepare third SAPR including: installation of additional wells, establishment of points of exposure, updated groundwater modeling.	July 31, 2014	Completed
Prepare fourth SAPR including: installation of additional well; horizontal groundwater delineation off CSX parcel; updated groundwater modeling. Must demonstrate complete horizontal delineation on all impacted properties.	January 31, 2015	Completed
Prepare fifth SAPR including: updated groundwater modeling. Must demonstrate complete horizontal and vertical delineation, finalize the remediation plan (including proposed site-specific cleanup standards, if necessary), and provide a preliminary cost estimate for implementation of remediation and associated continuing actions.	July 31, 2015	Completed
Prepare sixth SAPR including: updated groundwater modeling.	January 31, 2016	Not started
Prepare Compliance Status Report (CSR) to certify soil compliance and demonstrate risk of exposure for groundwater impacts.	July 31, 2016	Not started
Prepare SAPR including: updated groundwater modeling.	January 31, 2017	Not started
Prepare SAPR including: updated groundwater modeling.	July 31, 2017	Not started
Prepare SAPR including: proposed environmental covenant for the qualifying property, list of abutters with tax parcel numbers, mailing addresses, and title report. GAEPD deadline for submittal of CSR.	January 31, 2018	Not started

6.0 NEXT SUBMITTAL

As required by EPD, semi-annual progress reports must be submitted to EPD every January 31st and July 31st throughout the duration of the project. A report for the sixth semi-annual period will be submitted by January 31, 2016 and will include the following activities:

- A fifth VRP water monitoring event will be performed during the sixth semi-annual period. After review of previous monitoring data, CSXT proposes that the scope of the testing be reduced in a manner consistent with previous practices, prior to the site's entry into the VRP. Specifically, we request monitoring wells MW-1, MW-2, MW-201, PDMW-7P, PDMW-29D, PDMW-30, PDMW-45R, PDMW-51 and PDMW-52 be eliminated from the monitoring program based on the following rationale:
    - Laboratory data collected from MW-1 has not indicated an exceedance of ammonia in last fourteen sampling events since 2003 and has not had an exceedance of naphthalene in the last four consecutive sapling events (Table 3, page 1). MW-1 is not used for horizontal delineation (Figure 3) and MW-1 is not downgradient of the ammonia source area. During the December 2014 meeting with CSXT, EPD agreed SEDA will not be included as a qualifying property for this site.
    - Laboratory data collected from MW-2 has not indicated detections of arsenic in the last ten consecutive sampling events since 2004 and has not indicated an exceedance of ammonia in the last 22 sampling events, since sampling was initiated in 1997 (Table 3, page 2). MW-2 is not used for horizontal delineation (Figure 3), and MW-2 is not downgradient of the ammonia source area. During the December 2014 meeting with CSXT, EPD agreed SEDA will not be included as a qualifying property for this site.
    - Laboratory data collected from MW-201 has not indicated an exceedance of ammonia for last thirteen sampling events since sampling was initiated at this well in 2006. One apparently anomalous lead detection exceeded the RRS 2009, but has been below detection limit for the past six consecutive sampling events (Table 3, page 3). MW-201 is not downgradient of the ammonia source area, and MW-201 is not offsite. Monitoring wells PDMW-13P and MWPD-23R are used for horizontal delineation in this area of the site, not MW-201.
    - Laboratory data collected from PDMW-7P has not indicated an arsenic exceedance in the last five consecutive sampling events since 2011; and has not indicated an ammonia exceedance for the last thirteen consecutive sampling events since 2004 (Table 3, page 10). PDMW-7P is not downgradient of the ammonia source area, and PDMW-7P is not offsite. Monitoring well PDMW-4R is used for horizontal delineation in this area of the site, not PDMW-7P (Figure 3).
    - PDMW-30 is located offsite on the parcel owned by HIV; which EPD agreed does not appear to be a candidate for a qualifying property for this site. Laboratory data collected from PDMW-30 indicated that only two apparently anomalous detections of arsenic have been detected, and arsenic has not been detected above laboratory detection limits for the past five consecutive sampling events in 2008 (Table 3, page 26). Ammonia has not been detected above background for the last fifteen consecutive sampling events since testing began at this well in 1997

(Table 3, Page 26). Monitoring well PDMW-46 can continue to be used for horizontal delineation on the HIV property (Figures 2 and 3).

- Laboratory data from monitoring wells along the drainage canal on SEDA property (PDMW-51 and PDMW-52) indicate that both monitoring wells have been sampled three consecutive events with no exceedances. PDMW-48 and MW-3R are used for horizontal delineation in this area of the site, not PDMW-51 or PDMW-52 (Figure 3). During the December 2014 meeting with CSXT, EPD agreed SEDA will not be included as a qualifying property for this site. Additionally, the 2014 SERLA concluded that no adverse ecological affects have been observed or are expected to be observed in the drainage ditch from the ammonia or other COCs.
- As discussed in Section 2.5, long-term monitoring of the deep well PDMW-29D indicates that COCs in this well are below background and that vertical delineation of groundwater impacts has been satisfactorily demonstrated, as described above in Section 2.5.
- CSXT conducted 20 surface water sampling events between 1997 and 2004 and reinstituted the surface water monitoring in 2013 under the VRP. CSXT proposes to discontinue the surface water testing because no exceedances of fresh water ecological screening values for COCs or other adverse ecological effects have been identified since testing under the VRP began in 2013. The 2014 SERLA concluded that no adverse ecological affects have been observed or are expected to be observed in the drainage ditch from the ammonia or other COCs; and no further action for surface water and surface sediments was necessary.

- If acceptable to EPD, the upcoming sampling event will including the following wells and parameters:

Well No.	Ammonia	Nitrate	Nitrite	BTEX	PAHs	Arsenic	Chromium	Lead	Nickel	Zinc
TMW-1	X	X	X	X	X	X	X	X	X	X
EW-1	X	X	X			X	X	X	X	X
MW-3R	X	X	X			X		X	X	X
TMW-4R	X	X	X			X		X		
PDMW-8R	X	X	X			X		X	X	
PDMW-10R	X	X	X			X		X	X	
PDMW-13P	X	X	X			X		X	X	X
PDMW-19P	X	X	X			X		X	X	
PDMW-23R	X	X	X			X		X		
PDMW-26T	X	X	X			X		X		
PDMW-29D	X	X	X			X		X		
PDMW-32R	X	X	X			X		X	X	X
PDMW-33R2	X	X	X			X		X		
PDMW-45R2	X	X	X			X		X	X	
PDMW-46	X	X	X			X		X		
PDMW-47	X	X	X			X		X		
PDMW-48	X	X	X							
PDMW-53	X	X	X							

- Based on the data obtained from the next monitoring event, CSXT would like to meet with EPD to evaluate the potential for site closure ahead of the schedule outlined in the VRP application.

References:

Modified Corrective Action Plan, CSXT-Hutchinson Island, prepared by AMEC, dated June 6, 2009;

Response to Notice of Deficiency and Revised Compliance Status Report – Post Soil Corrective Action Report, prepared by AMEC, dated February 29, 2008;

Buss, S.R., Herbert, A.W., Morgan, P., & Thornton, S.F., Review of Ammonium Attenuation in Soil and Groundwater, National Groundwater and Contaminated Land Centre Report NC/02/49, dated July 2003;

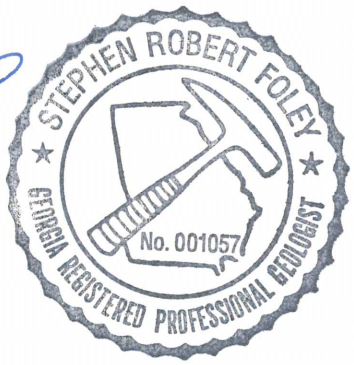
Buss, S.R., Rivett, M.O., Morgan, P., & Bemment, C.D., Attenuation of Nitrate in the Subsurface Environment, Environment Agency Science Report SC030155/SR2, dated November 2005;

Bumb, A.C., McKee, C.R., Way, S.C., Drever, J.I and Halepaska, J.C., Ammonia and Nitrate Migration from the Vadose Zone to the Groundwater System; Containment, Recovery and Natural Restoration.

GROUNDWATER SCIENTIST STATEMENT

I certify that I am a qualified groundwater scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and have sufficient training and experience in groundwater hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that this report was prepared in conjunction with others working my direction.

Mr. Stephen R. Foley, P.G.
Georgia Registration No. 1057



TABLES

Table 1
Summary of Groundwater Analytical Results - May 2015
HSI Site #10101, Hutchinson Island, GA

| | | |

Table 2
Summary of Last Four Rounds of Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

					Location:	EW-1					MW-1					MW-2		MW-3R					MW-201				MW-202	MW-204	PDMW-7P			
					Sample Date:	12/12/2013	6/4/2014	11/4/2014	5/20/2015	5/20/2015	12/11/2013	6/3/2014		11/3/2014	5/20/2015	11/4/2014	5/19/2015	12/13/2013	6/5/2014	11/5/2014		5/19/2015	12/11/2013	6/4/2014	5/20/2015	5/20/2015	11/4/2014	11/5/2014	12/12/2013	6/4/2014	11/4/2014	5/19/2015
					Sample Type:	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Sample ID:	EW-1_12/12/2013	EW-01_06042014	EW-1_11042014	DUP-02_05202015	EW-01_0520201 5	MW-1_12/11/2013	MW-01_06032014	DUP-01_06032014	MW-1_11032014	MW-1_05202015	MW-2_11042014	MW-2_05192015	MW-3R_12/13/201 3	MW-3R_06052014	MW-3R_11052014	DUP-2_11052014	MW-3R_05192015	MW-201_12/11/20 13	MW-201_0604201 4	DUP-03_05202015	MW-201_0520201 5	MW-202_1104201 4	MW-204_1105201 4	PDMW-7P_12/12/201 3	PDMW-07P_0604201 4	PDMW-7P_11042014	PDMW-7P_05192015
Method Group	**Analyte**	**Background**	**Type 3 RRS**	**Type 4 RRS**	**Units**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	9.2 U	10 U	NA	NA	NA	10 U	9.5 U	9.6 U	NA	NA	NA	NA	9.1 U	10 U	NA	NA	NA	10 U	10 U	NA	NA	NA	10 U	9.9 U	9.9 U	NA	NA
	ACENAPHTHYLENE	1.4	1	510	ug/L	9.2 U	10 U	NA	NA	NA	10 U	9.5 U	9.6 U	NA	NA	NA	NA	9.1 U	***10 U****	NA	NA	NA	10 U	10 U	NA	NA	NA	10 U	9.9 U	9.9 U	NA	NA
	ANTHRACENE	0.2	0.2	5100	ug/L	9.2 U	10 U	NA	NA	NA	10 U	9.5 U	9.6 U	NA	NA	NA	NA	9.1 U	10 U	NA	NA	NA	10 U	10 U	NA	NA	NA	10 U	9.9 U	9.9 U	NA	NA
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	9.2 U	10 U	NA	NA	NA	10 U	9.5 U	9.6 U	NA	NA	NA	NA	9.1 U	10 U	NA	NA	NA	10 U	10 U	NA	NA	NA	10 U	9.9 U	9.9 U	NA	NA
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	9.2 U	10 U	NA	NA	NA	10 U	9.5 U	9.6 U	NA	NA	NA	NA	9.1 U	10 U	NA	NA	NA	10 U	10 U	NA	NA	NA	10 U	9.9 U	9.9 U	NA	NA
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	9.2 U	10 U	NA	NA	NA	10 U	9.5 U	9.6 U	NA	NA	NA	NA	9.1 U	10 U	NA	NA	NA	10 U	10 U	NA	NA	NA	10 U	9.9 U	9.9 U	NA	NA
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	9.2 U	10 U	NA	NA	NA	10 U	9.5 U	9.6 U	NA	NA	NA	NA	9.1 U	10 U	NA	NA	NA	10 U	10 U	NA	NA	NA	10 U	9.9 U	9.9 U	NA	NA
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	9.2 U	10 U	NA	NA	NA	10 U	9.5 U	9.6 U	NA	NA	NA	NA	9.1 U	10 U	NA	NA	NA	10 U	10 U	NA	NA	NA	10 U	9.9 U	9.9 U	NA	NA
	CHRYSENE	0.2	0.2	65	ug/L	9.2 U	10 U	NA	NA	NA	10 U	9.5 U	9.6 U	NA	NA	NA	NA	9.1 U	10 U	NA	NA	NA	10 U	10 U	NA	NA	NA	10 U	9.9 U	9.9 U	NA	NA
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	9.2 U	10 U	NA	NA	NA	10 U	9.5 U	9.6 U	NA	NA	NA	NA	9.1 U	10 U	NA	NA	NA	10 U	10 U	NA	NA	NA	10 U	9.9 U	9.9 U	NA	NA
	FLUORANTHENE	0.5	1000	- -	ug/L	9.2 U	10 U	NA	NA	NA	10 U	9.5 U	9.6 U	NA	NA	NA	NA	9.1 U	10 U	NA	NA	NA	10 U	10 U	NA	NA	NA	10 U	9.9 U	9.9 U	NA	NA
	FLUORENE	0.5	1000	- -	ug/L	9.2 U	10 U	NA	NA	NA	10 U	9.5 U	9.6 U	NA	NA	NA	NA	9.1 U	10 U	NA	NA	NA	10 U	10 U	NA	NA	NA	10 U	9.9 U	9.9 U	NA	NA
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	9.2 U	10 U	NA	NA	NA	10 U	9.5 U	9.6 U	NA	NA	NA	NA	9.1 U	10 U	NA	NA	NA	10 U	10 U	NA	NA	NA	10 U	9.9 U	9.9 U	NA	NA
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	9.2 U	10 U	NA	NA	NA	10 U	9.5 U	9.6 U	NA	NA	NA	NA	9.1 U	10 U	NA	NA	NA	10 U	10 U	NA	NA	NA	10 U	9.9 U	9.9 U	NA	NA
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	9.2 U	10 U	NA	NA	NA	10 U	9.5 U	9.6 U	NA	NA	NA	NA	9.1 U	10 U	NA	NA	NA	10 U	10 U	NA	NA	NA	10 U	9.9 U	9.9 U	NA	NA
	NAPHTHALENE	1	20	20	ug/L	9.2 U	10 U	NA	NA	NA	10 U	9.5 U	9.6 U	NA	NA	NA	NA	9.1 U	10 U	NA	NA	NA	10 U	10 U	NA	NA	NA	10 U	9.9 U	9.9 U	NA	NA
	PHENANTHRENE	0.22	0.2	510	ug/L	9.2 U	10 U	NA	NA	NA	10 U	9.5 U	9.6 U	NA	NA	NA	NA	9.1 U	10 U	NA	NA	NA	10 U	10 U	NA	NA	NA	10 U	9.9 U	9.9 U	NA	NA
	PYRENE	0.5	1000	- -	ug/L	9.2 U	10 U	NA	NA	NA	10 U	9.5 U	9.6 U	NA	NA	NA	NA	9.1 U	10 U	NA	NA	NA	10 U	10 U	NA	NA	NA	10 U	9.9 U	9.9 U	NA	NA
	TOTAL PAHs	- -	- -	- -	ug/L	ND	ND	NA	NA	NA	ND	ND	ND	NA	NA	NA	NA	ND	ND	NA	NA	NA	ND	ND	NA	NA	NA	ND	ND	ND	NA	NA
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	NA	NA	NA	1 U	1 U	1 U	NA	NA	NA	NA	1 U	1 U	NA	NA	NA	1 U	1 U	NA	NA	NA	NA	1 U	1 U	NA	NA
	ETHYLBENZENE	1	700	- -	ug/L	1 U	1 U	NA	NA	NA	1 U	1 U	1 U	NA	NA	NA	NA	1 U	1 U	NA	NA	NA	1 U	1 U	NA	NA	NA	NA	1 U	1 U	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	5 U	NA	NA	NA	NA	5 U	NA	NA	NA	NA	NA	NA	5 U	5 U	NA	NA	NA	5 U	NA	NA	NA	NA	NA	5 U	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	1 U	NA	NA	NA	1 U	1 U	1 U	NA	NA	NA	NA	1 U	1 U	NA	NA	NA	1 U	1 U	NA	NA	NA	NA	1 U	1 U	NA	NA
	XYLENES (TOTAL)	2	10000	- -	ug/L	2 U	2 U	NA	NA	NA	2 U	2 U	2 U	NA	NA	NA	NA	2 U	2 U	NA	NA	NA	2 U	2 U	NA	NA	NA	NA	2 U	2 U	NA	NA
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	10 U	NA	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	NA	10 U	NA	NA	NA	NA	NA	10 U	NA	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	ND	ND	NA	NA	NA	ND	ND	ND	NA	NA	NA	NA	ND	ND	NA	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	NA	NA
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.02 U	0.02 U	***0.02***	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0076	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	0.0097	0.02 U	0.02 U	0.02 U
	CHROMIUM	0.013	0.1	- -	mg/L	0.0039	0.012	0.013	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	0.0042	0.01 U	NA	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	0.01 U	0.01 U	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	***0.037***	0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	***0.039***	0.01 U	0.013	0.01 U	0.01 U	0.01 U	0.01 U	NA	0.01 U	0.01 U	0.01 U	0.01 U
	NICKEL	0.13	0.1	2	mg/L	0.04	0.1	0.1	0.044	0.044	0.0026	0.04 U	0.04 U	NA	NA	NA	NA	0.0097	0.04 U	0.04 U	0.04 U	0.04 U	0.0039	0.04 U	0.04 U	0.04 U	0.04 U	NA	0.0053	0.04 U	NA	NA
	ZINC	0.96	2	31	mg/L	0.25	0.55	0.47	0.19	0.19	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA	0.01	0.02 U	0.02 U	0.02 U	0.089	0.033	0.02 U	0.02 U	0.02 U	0.02 U	NA	0.02 U	0.02 U	NA	NA
Metals, Dissolved	LEAD	0.007	0.015	0.015	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	AMMONIA AS N	15	30	30	mg/L	***160***	***1100***	***540***	***260***	***320 F1***	16	25	18	25	21	23	13	2.6	3.9	6.5	2.2	1.9	3.8	15	1.1	1.1	1	***340***	13	12	16	16
	NITRATE (AS N)	- -	10	- -	mg/L	0.044	0.05 U	0.29	0.097	0.063	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.15	0.07	0.05 U	0.05 U	0.05 U	0.05 U	0.095	0.05 U	0.05 U	0.05 U

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drinking Water Regulations.

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, PDMW-39R, PDMW-40R, PDMW-45R, and TMW-4R were installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32P, PDMW-33T, PDMW-39, PDMW-40, PDMW-45, and TMW-4 respectively.

Table 2
Summary of Last Four Rounds of Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

					Location:	PDMW-8R					PDMW-10R					PDMW-13P				PDMW-19P					PDMW-23R			PDMW-23T	PDMW-24T	PDMW-26T				
					Sample Date:	12/12/2013	6/3/2014		11/5/2014	5/20/2015	12/12/2013		6/5/2014	11/5/2014	5/20/2015	12/11/2013	6/5/2014	11/5/2014	5/19/2015	12/13/2013		6/4/2014	11/3/2014	5/20/2015	12/11/2013	11/5/2014	5/19/2015	6/4/2014	11/5/2014	12/11/2013	6/5/2014	11/6/2014		5/21/2015
					Sample Type:	Normal	Normal	Dup	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal
					Sample ID:	PDMW-8R_12/12/2013	PDMW-8R_06032014	DUP-02_06032014	PDMW-8R_11052014	PDMW-8R_05202015	PDMW-10R_12/12/2013	DUP-1_12/12/2013	PDMW-10R_06052014	PDMW-10R_11052014	PDMW-10R_05202015	PDMW-13P_12/11/2013	PDMW-13P_06052014	PDMW-13P_11052014	PDMW-13P_05192015	PDMW-19P_12/13/2013	DUP-3_12/13/2013	PDMW-19P_06042014	PDMW-19P_11032014	PDMW-19P_05202015	PDMW-23R_12/11/2013	PDMW-23R_11052014	PDMW-23R_05192015	PDMW-23R_06042014	PDMW-24T_11052014	PDMW-26T_12/11/2013	PDMW-26T_06052014	PDMW-26T_11062014	DUP-03_11062014	PDMW-26T_05212015
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	9.1 U	9.9 U	9.9 U	NA	NA	9.2 U	9.1 U	9.8 U	NA	NA	9.2 U	9.7 U	NA	NA	9.5 U	9.6 U	9.8 U	NA	NA	9.2 U	NA	NA	10 U	NA	9.1 U	9.8 U	NA	NA	NA
	ACENAPHTHYLENE	1.4	1	510	ug/L	9.1 U	9.9 U	9.9 U	NA	NA	9.2 U	9.1 U	***9.8 U****	NA	NA	9.2 U	***9.7 U****	NA	NA	9.5 U	9.6 U	9.8 U	NA	NA	9.2 U	NA	NA	10 U	NA	9.1 U	***9.8 U****	NA	NA	NA
	ANTHRACENE	0.2	0.2	5100	ug/L	9.1 U	9.9 U	9.9 U	NA	NA	9.2 U	9.1 U	9.8 U	NA	NA	9.2 U	9.7 U	NA	NA	9.5 U	9.6 U	9.8 U	NA	NA	9.2 U	NA	NA	10 U	NA	9.1 U	9.8 U	NA	NA	NA
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	9.1 U	9.9 U	9.9 U	NA	NA	9.2 U	9.1 U	9.8 U	NA	NA	9.2 U	9.7 U	NA	NA	9.5 U	9.6 U	9.8 U	NA	NA	9.2 U	NA	NA	10 U	NA	9.1 U	9.8 U	NA	NA	NA
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	9.1 U	9.9 U	9.9 U	NA	NA	9.2 U	9.1 U	9.8 U	NA	NA	9.2 U	9.7 U	NA	NA	9.5 U	9.6 U	9.8 U	NA	NA	9.2 U	NA	NA	10 U	NA	9.1 U	9.8 U	NA	NA	NA
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	9.1 U	9.9 U	9.9 U	NA	NA	9.2 U	9.1 U	9.8 U	NA	NA	9.2 U	9.7 U	NA	NA	9.5 U	9.6 U	9.8 U	NA	NA	9.2 U	NA	NA	10 U	NA	9.1 U	9.8 U	NA	NA	NA
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	9.1 U	9.9 U	9.9 U	NA	NA	9.2 U	9.1 U	9.8 U	NA	NA	9.2 U	9.7 U	NA	NA	9.5 U	9.6 U	9.8 U	NA	NA	9.2 U	NA	NA	10 U	NA	9.1 U	9.8 U	NA	NA	NA
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	9.1 U	9.9 U	9.9 U	NA	NA	9.2 U	9.1 U	9.8 U	NA	NA	9.2 U	9.7 U	NA	NA	9.5 U	9.6 U	9.8 U	NA	NA	9.2 U	NA	NA	10 U	NA	9.1 U	9.8 U	NA	NA	NA
	CHRYSENE	0.2	0.2	65	ug/L	9.1 U	9.9 U	9.9 U	NA	NA	9.2 U	9.1 U	9.8 U	NA	NA	9.2 U	9.7 U	NA	NA	9.5 U	9.6 U	9.8 U	NA	NA	9.2 U	NA	NA	10 U	NA	9.1 U	9.8 U	NA	NA	NA
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	9.1 U	9.9 U	9.9 U	NA	NA	9.2 U	9.1 U	9.8 U	NA	NA	9.2 U	9.7 U	NA	NA	9.5 U	9.6 U	9.8 U	NA	NA	9.2 U	NA	NA	10 U	NA	9.1 U	9.8 U	NA	NA	NA
	FLUORANTHENE	0.5	1000	- -	ug/L	9.1 U	9.9 U	9.9 U	NA	NA	9.2 U	9.1 U	9.8 U	NA	NA	9.2 U	9.7 U	NA	NA	9.5 U	9.6 U	9.8 U	NA	NA	9.2 U	NA	NA	10 U	NA	9.1 U	9.8 U	NA	NA	NA
	FLUORENE	0.5	1000	- -	ug/L	9.1 U	9.9 U	9.9 U	NA	NA	9.2 U	9.1 U	9.8 U	NA	NA	9.2 U	9.7 U	NA	NA	9.5 U	9.6 U	9.8 U	NA	NA	9.2 U	NA	NA	10 U	NA	9.1 U	9.8 U	NA	NA	NA
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	9.1 U	9.9 U	9.9 U	NA	NA	9.2 U	9.1 U	9.8 U	NA	NA	9.2 U	9.7 U	NA	NA	9.5 U	9.6 U	9.8 U	NA	NA	9.2 U	NA	NA	10 U	NA	9.1 U	9.8 U	NA	NA	NA
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	9.1 U	9.9 U	9.9 U	NA	NA	9.2 U	9.1 U	9.8 U	NA	NA	9.2 U	9.7 U	NA	NA	9.5 U	9.6 U	9.8 U	NA	NA	9.2 U	NA	NA	10 U	NA	9.1 U	9.8 U	NA	NA	NA
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	9.1 U	9.9 U	9.9 U	NA	NA	9.2 U	9.1 U	9.8 U	NA	NA	9.2 U	9.7 U	NA	NA	9.5 U	9.6 U	9.8 U	NA	NA	9.2 U	NA	NA	10 U	NA	9.1 U	9.8 U	NA	NA	NA
	NAPHTHALENE	1	20	20	ug/L	9.1 U	9.9 U	9.9 U	NA	NA	9.2 U	9.1 U	9.8 U	NA	NA	9.2 U	9.7 U	NA	NA	9.5 U	9.6 U	9.8 U	NA	NA	9.2 U	NA	NA	10 U	NA	9.1 U	9.8 U	NA	NA	NA
	PHENANTHRENE	0.22	0.2	510	ug/L	9.1 U	9.9 U	9.9 U	NA	NA	9.2 U	9.1 U	9.8 U	NA	NA	9.2 U	9.7 U	NA	NA	9.5 U	9.6 U	9.8 U	NA	NA	9.2 U	NA	NA	10 U	NA	9.1 U	9.8 U	NA	NA	NA
	PYRENE	0.5	1000	- -	ug/L	9.1 U	9.9 U	9.9 U	NA	NA	9.2 U	9.1 U	9.8 U	NA	NA	9.2 U	9.7 U	NA	NA	9.5 U	9.6 U	9.8 U	NA	NA	9.2 U	NA	NA	10 U	NA	9.1 U	9.8 U	NA	NA	NA
	TOTAL PAHs	- -	- -	- -	ug/L	ND	ND	ND	NA	NA	ND	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	ND	NA	NA	ND	NA	NA	ND	NA	ND	ND	NA	NA	NA
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	1 U	NA	NA	1 U	1 U	1 U	NA	NA	1 U	1 U	NA	NA	1 U	1 U	1 U	NA	NA	1 U	NA	NA	1 U	NA	1 U	1 U	NA	NA	NA
	ETHYLBENZENE	1	700	- -	ug/L	1 U	1 U	1 U	NA	NA	1 U	1 U	1 U	NA	NA	1 U	1 U	NA	NA	1 U	1 U	1 U	NA	NA	1 U	NA	NA	1 U	NA	1 U	1 U	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	5 U	NA	NA	NA	NA	5 U	5 U	5 U	NA	NA	5 U	5 U	NA	NA	5 U	5 U	NA	NA	NA	5 U	NA	NA	NA	NA	5 U	5 U	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	1 U	1 U	NA	NA	1 U	1 U	1 U	NA	NA	1 U	1 U	NA	NA	1 U	1 U	1 U	NA	NA	1 U	NA	NA	1 U	NA	1 U	1 U	NA	NA	NA
	XYLENES (TOTAL)	2	10000	- -	ug/L	2 U	2 U	2 U	NA	NA	2 U	2 U	2 U	NA	NA	2 U	2 U	NA	NA	2 U	2 U	2 U	NA	NA	2 U	NA	NA	2 U	NA	2 U	2 U	NA	NA	NA
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	10 U	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA	10 U	10 U	NA	NA	10 U	10 U	NA	NA	NA	10 U	NA	NA	NA	NA	10 U	10 U	NA	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	ND	ND	ND	NA	NA	ND	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	ND	NA	NA	ND	NA	NA	ND	NA	ND	ND	NA	NA	NA
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.01	***0.029***	***0.028***	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0092	0.02 U	0.02 U	0.02 U	NA	***0.021***	***0.025***	0.02 U	0.02 U	***0.025***
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	0.01 U	0.01 U	NA	NA	0.01 U	0.01 U	0.01 U	NA	NA	0.01 U	0.01 U	NA	NA	0.01 U	0.01 U	0.01 U	NA	NA	0.0019	NA	NA	0.01 U	NA	0.0022	0.01 U	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	***0.031***	***0.021***	***0.033***	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
	NICKEL	0.13	0.1	2	mg/L	0.0036	0.04 U	0.04 U	0.04 U	0.04 U	0.0033	0.0029	0.04 U	0.04 U	0.04 U	0.0063	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	0.04 U	NA	0.0043	0.04 U	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.02 U	0.02 U	0.02 U	NA	NA	0.02 U	0.02 U	0.02 U	NA	NA	0.047	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	0.02 U	NA	NA	0.02 U	NA	0.02 U	0.02 U	NA	NA	NA
Metals, Dissolved	LEAD	0.007	0.015	0.015	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA	NA	NA	NA	NA	NA
Miscellaneous	AMMONIA AS N	15	30	30	mg/L	***39***	***62***	***63***	***94***	***64***	11	11	13	12	7.3	1.7	1.9	2	2.7	4	4	5.6	4.5	4.7	1.1	2.3	1.5	3.6	NA	***530***	***600***	***470***	***490***	***550***
	NITRATE (AS N)	- -	10	- -	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.21	0.21	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.11	NA	0.41	1.1	0.051	0.07	0.26

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and italic text indicates analytical result exceeds background value..

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drinking \

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, PDM\
replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32P, PDMW-33T, P

Table 2
Summary of Last Four Rounds of Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

					Location:	PDMW-29D				PDMW-30P			PDMW-30R	PDMW-32R				PDMW-33R2				PDMW-40R	PDMW-45R			
					Sample Date:	12/11/2013	6/3/2014	11/6/2014	5/21/2015	12/11/2013	11/3/2014	5/20/2015	6/3/2014	12/12/2013	6/4/2014	11/6/2014	5/19/2015	12/11/2013	6/4/2014	11/4/2014	5/20/2015	11/5/2014	12/11/2013	6/3/2014	11/3/2014	5/20/2015
					Sample Type:	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Sample ID:	PDMW-29D_12/11/2013	PDMW-29D_06032014	PDMW-29D_11062014	PDMW-29D_05212015	PDMW-30P_12/11/2013	PDMW-30P_11032014	PDMW-30P_05202015	PDMW-30R_06032014	PDMW-32R_12/12/2013	PDMW-32R_06042014	PDMW-32R_11062014	PDMW-32R_05192015	PDMW-33R2_12/11/2013	PDMW-33R2_06042014	PDMW-33R2_11042014	PDMW-33R2_05202015	PDMW-40R_11052014	PDMW-45R_12/11/2013	PDMW-45R_06032014	PDMW-45R_11032014	PDMW-45R_05202015
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	9.1 U	9.7 U	NA	NA	9.5 U	NA	NA	9.8 U	9.8 U	9.9 U	NA	NA	9.5 U	9.7 U	NA	NA	10 U	10 U	9.4 UH	NA	NA
	ACENAPHTHYLENE	1.4	1	510	ug/L	9.1 U	9.7 U	NA	NA	9.5 U	NA	NA	9.8 U	9.8 U	9.9 U	NA	NA	9.5 U	9.7 U	NA	NA	10 U	10 U	***9.4 UH***	NA	NA
	ANTHRACENE	0.2	0.2	5100	ug/L	9.1 U	9.7 U	NA	NA	9.5 U	NA	NA	9.8 U	9.8 U	9.9 U	NA	NA	9.5 U	9.7 U	NA	NA	10 U	10 U	***9.4 UH***	NA	NA
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	9.1 U	9.7 U	NA	NA	9.5 U	NA	NA	9.8 U	9.8 U	9.9 U	NA	NA	9.5 U	9.7 U	NA	NA	10 U	10 U	***9.4 UH***	NA	NA
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	9.1 U	9.7 U	NA	NA	9.5 U	NA	NA	9.8 U	9.8 U	9.9 U	NA	NA	9.5 U	9.7 U	NA	NA	10 U	10 U	***9.4 UH***	NA	NA
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	9.1 U	9.7 U	NA	NA	9.5 U	NA	NA	9.8 U	9.8 U	9.9 U	NA	NA	9.5 U	9.7 U	NA	NA	10 U	10 U	***9.4 UH***	NA	NA
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	9.1 U	9.7 U	NA	NA	9.5 U	NA	NA	9.8 U	9.8 U	9.9 U	NA	NA	9.5 U	9.7 U	NA	NA	10 U	10 U	9.4 UH	NA	NA
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	9.1 U	9.7 U	NA	NA	9.5 U	NA	NA	9.8 U	9.8 U	9.9 U	NA	NA	9.5 U	9.7 U	NA	NA	10 U	10 U	9.4 UH	NA	NA
	CHRYSENE	0.2	0.2	65	ug/L	9.1 U	9.7 U	NA	NA	9.5 U	NA	NA	9.8 U	9.8 U	9.9 U	NA	NA	9.5 U	9.7 U	NA	NA	10 U	10 U	***9.4 UH***	NA	NA
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	9.1 U	9.7 U	NA	NA	9.5 U	NA	NA	9.8 U	9.8 U	9.9 U	NA	NA	9.5 U	9.7 U	NA	NA	10 U	10 U	9.4 UH	NA	NA
	FLUORANTHENE	0.5	1000	- -	ug/L	9.1 U	9.7 U	NA	NA	9.5 U	NA	NA	9.8 U	9.8 U	9.9 U	NA	NA	9.5 U	9.7 U	NA	NA	10 U	10 U	9.4 UH	NA	NA
	FLUORENE	0.5	1000	- -	ug/L	9.1 U	9.7 U	NA	NA	9.5 U	NA	NA	9.8 U	9.8 U	9.9 U	NA	NA	9.5 U	9.7 U	NA	NA	10 U	10 U	9.4 UH	NA	NA
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	9.1 U	9.7 U	NA	NA	9.5 U	NA	NA	9.8 U	9.8 U	9.9 U	NA	NA	9.5 U	9.7 U	NA	NA	10 U	10 U	9.4 UH	NA	NA
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	9.1 U	9.7 U	NA	NA	9.5 U	NA	NA	9.8 U	9.8 U	9.9 U	NA	NA	9.5 U	9.7 U	NA	NA	10 U	10 U	9.4 UH	NA	NA
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	9.1 U	9.7 U	NA	NA	9.5 U	NA	NA	9.8 U	9.8 U	9.9 U	NA	NA	9.5 U	9.7 U	NA	NA	10 U	10 U	9.4 UH	NA	NA
	NAPHTHALENE	1	20	20	ug/L	9.1 U	9.7 U	NA	NA	9.5 U	NA	NA	9.8 U	9.8 U	9.9 U	NA	NA	9.5 U	9.7 U	NA	NA	10 U	10 U	9.4 UH	NA	NA
	PHENANTHRENE	0.22	0.2	510	ug/L	9.1 U	9.7 U	NA	NA	9.5 U	NA	NA	9.8 U	9.8 U	9.9 U	NA	NA	9.5 U	9.7 U	NA	NA	10 U	10 U	***9.4 UH***	NA	NA
	PYRENE	0.5	1000	- -	ug/L	9.1 U	9.7 U	NA	NA	9.5 U	NA	NA	9.8 U	9.8 U	9.9 U	NA	NA	9.5 U	9.7 U	NA	NA	10 U	10 U	9.4 UH	NA	NA
	TOTAL PAHs	- -	- -	- -	ug/L	ND	ND	NA	NA	ND	NA	NA	ND	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	ND	NA	NA
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	NA	NA	1 U	NA	NA	1 U	1 U	1 U	NA	NA	1 U	1 U	NA	NA	NA	1 U	1 U	NA	NA
	ETHYLBENZENE	1	700	- -	ug/L	1 U	1 U	NA	NA	1 U	NA	NA	1 U	1 U	1 U	NA	NA	1 U	1 U	NA	NA	NA	1 U	1 U	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	5 U	NA	NA	NA	5 U	NA	NA	NA	5 U	NA	NA	NA	5 U	NA	NA	NA	NA	5 U	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	1 U	NA	NA	1 U	NA	NA	1 U	1 U	1 U	NA	NA	1 U	1 U	NA	NA	NA	1 U	1 U	NA	NA
	XYLENES (TOTAL)	2	10000	- -	ug/L	2 U	2 U	NA	NA	2 U	NA	NA	2 U	2 U	2 U	NA	NA	2 U	2 U	NA	NA	NA	2 U	2 U	NA	NA
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	10 U	NA	NA	NA	10 U	NA	NA	NA	10 U	NA	NA	NA	10 U	NA	NA	NA	NA	10 U	NA	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	ND	ND	NA	NA	ND	NA	NA	ND	ND	ND	NA	NA	ND	ND	NA	NA	NA	ND	ND	NA	NA
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0063	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	0.0047	0.02 U	0.02 U	0.02 U
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	0.01 U	NA	NA	0.01 U	NA	NA	0.01 U	0.01 U	0.01 U	NA	NA	0.01 U	0.01 U	NA	NA	NA	0.01 U	0.01 U	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	***0.023***	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	0.01 U	0.01 U	0.01 U	0.01 U
	NICKEL	0.13	0.1	2	mg/L	0.04 U	0.04 U	NA	NA	0.0036	NA	NA	0.04 U	0.044	0.04 U	0.04 U	0.04 U	0.0043	0.04 U	NA	NA	NA	0.0054	0.04 U	0.04 U	0.04 U
	ZINC	0.96	2	31	mg/L	0.01	0.02 U	NA	NA	0.02 U	NA	NA	0.02 U	0.37	0.031	0.21	0.11	0.02 U	0.02 U	NA	NA	NA	0.02 U	0.02 U	NA	NA
Metals, Dissolved	LEAD	0.007	0.015	0.015	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	AMMONIA AS N	15	30	30	mg/L	8.1	11	10	11	1.7	2.2	2	1.6	6.6	11	7	0.7	9.6	16	20	14	***44***	1.2	8.6	4.7	3.6
	NITRATE (AS N)	- -	10	- -	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1.2	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

					Location:	PDMW-46			PDMW-47			PDMW-48		
					Sample Date:	6/4/2014	11/3/2014	5/20/2015	6/4/2014	11/4/2014	5/20/2015	6/4/2014	11/4/2014	5/19/2015
					Sample Type:	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Sample ID:	PDMW-46_06042014	PDMW-46_11032014	PDMW-46_05202015	PDMW-47_06042014	PDMW-47_11042014	PDMW-47_05202015	PDMW-48_06042014	PDMW-48_11042014	PDMW-48_05192015
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	9.6 U	NA	NA	9.6 U	NA	NA	NA	9.8 U	NA
	ACENAPHTHYLENE	1.4	1	510	ug/L	9.6 U	NA	NA	9.6 U	NA	NA	NA	9.8 U	NA
	ANTHRACENE	0.2	0.2	5100	ug/L	9.6 U	NA	NA	9.6 U	NA	NA	NA	9.8 U	NA
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	9.6 U	NA	NA	9.6 U	NA	NA	NA	9.8 U	NA
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	9.6 U	NA	NA	9.6 U	NA	NA	NA	9.8 U	NA
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	9.6 U	NA	NA	9.6 U	NA	NA	NA	9.8 U	NA
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	9.6 U	NA	NA	9.6 U	NA	NA	NA	9.8 U	NA
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	9.6 U	NA	NA	9.6 U	NA	NA	NA	9.8 U	NA
	CHRYSENE	0.2	0.2	65	ug/L	9.6 U	NA	NA	9.6 U	NA	NA	NA	9.8 U	NA
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	9.6 U	NA	NA	9.6 U	NA	NA	NA	9.8 U	NA
	FLUORANTHENE	0.5	1000	- -	ug/L	9.6 U	NA	NA	9.6 U	NA	NA	NA	9.8 U	NA
	FLUORENE	0.5	1000	- -	ug/L	9.6 U	NA	NA	9.6 U	NA	NA	NA	9.8 U	NA
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	9.6 U	NA	NA	9.6 U	NA	NA	NA	9.8 U	NA
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	9.6 U	NA	NA	9.6 U	NA	NA	NA	9.8 U	NA
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	9.6 U	NA	NA	9.6 U	NA	NA	NA	9.8 U	NA
	NAPHTHALENE	1	20	20	ug/L	9.6 U	NA	NA	9.6 U	NA	NA	NA	9.8 U	NA
	PHENANTHRENE	0.22	0.2	510	ug/L	9.6 U	NA	NA	9.6 U	NA	NA	NA	9.8 U	NA
	PYRENE	0.5	1000	- -	ug/L	9.6 U	NA	NA	9.6 U	NA	NA	NA	9.8 U	NA
	TOTAL PAHs	- -	- -	- -	ug/L	ND	NA	NA	ND	NA	NA	NA	ND	NA
VOCs	BENZENE	1	5	31.2	ug/L	1 U	NA	NA	1 U	NA	NA	NA	1 U	NA
	ETHYLBENZENE	1	700	- -	ug/L	1 U	NA	NA	1 U	NA	NA	NA	1 U	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	5 U	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	NA	NA	1 U	NA	NA	NA	1 U	NA
	XYLENES (TOTAL)	2	10000	- -	ug/L	2 U	NA	NA	2 U	NA	NA	NA	2 U	NA
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	10 U	NA	NA	NA	NA	NA	NA	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	ND	NA	NA	ND	NA	NA	NA	ND	NA
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	0.02 U	NA
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	NA	NA	0.01 U	NA	NA	NA	0.01 U	NA
	LEAD	0.007	0.015	0.015	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	0.01 U	NA
	NICKEL	0.13	0.1	2	mg/L	0.04 U	NA	NA	0.04 U	NA	NA	NA	0.04 U	NA
	ZINC	0.96	2	31	mg/L	0.4	NA	NA	0.02 U	NA	NA	NA	0.02 U	NA
Metals, Dissolved	LEAD	0.007	0.015	0.015	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	AMMONIA AS N	15	30	30	mg/L	2.9	2.2	0.6	***72***	***110***	***39***	27	22	8.5
	NITRATE (AS N)	- -	10	- -	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drinking W

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, PDMW replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32P, PDMW-33T, P

Table 2
Summary of Last Four Rounds of Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

						PDMW-49			PDMW-50			PDMW-51			PDMW-52				PDMW-53		TMW-1						TMW-4R					FIELDQC	
					Location:																											
					Sample Date:	6/6/2014	11/4/2014	5/18/2015	6/4/2014	11/6/2014	5/19/2015	6/6/2014	11/6/2014	5/18/2015	6/5/2014		11/6/2014	5/18/2015	11/4/2014	5/19/2015	12/11/2013	6/5/2014	11/5/2014		5/21/2015	5/21/2015	12/12/2013		6/3/2014	11/4/2014	5/19/2015	6/3/2014	11/6/2014
					Sample Type:	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Dup	Dup	Normal		Normal	Normal	Normal	Normal	Normal
					Sample ID:	PDMW-49_06062014	PDMW-49_11042014	PDMW-49_05182015	PDMW-50_06042014	PDMW-50_11062014	PDMW-50_05192015	PDMW-51_06062014	PDMW-51_11062014	PDMW-51_05182015	PDMW-52_06052014	DUP-03_06052014	PDMW-52_11062014	PDMW-52_05182015	PDMW-53_11042014	PDMW-53_05192015	TMW-1_12/11/2013	TMW-01_06052014	TMW-1_11052014	DUP-1_11052014	DUP_01_05212015	TMW_1_05212015	TMW-4R_12/12/2013	DUP-2_12/12/2013	TMW-4R_06032014	TMW-4R_11042014	TMW-4R_05192015	FB-01_06032014	FB-01_11062014
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	10 U	10 U	9.9 U	NA	NA	9.8 U	9.6 U
	ACENAPHTHYLENE	1.4	1	510	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 U	***9.8 U****	9.7 U	9.8 U	9.9 U	9.7 U	10 U	10 U	9.9 U	NA	NA	9.8 U	9.6 U
	ANTHRACENE	0.2	0.2	5100	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	10 U	10 U	9.9 U	NA	NA	9.8 U	9.6 U
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	10 U	10 U	9.9 U	NA	NA	9.8 U	9.6 U
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	10 U	10 U	9.9 U	NA	NA	9.8 U	9.6 U
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	10 U	10 U	9.9 U	NA	NA	9.8 U	9.6 U
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	10 U	10 U	9.9 U	NA	NA	9.8 U	9.6 U
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	10 U	10 U	9.9 U	NA	NA	9.8 U	9.6 U
	CHRYSENE	0.2	0.2	65	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	10 U	10 U	9.9 U	NA	NA	9.8 U	9.6 U
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	10 U	10 U	9.9 U	NA	NA	9.8 U	9.6 U
	FLUORANTHENE	0.5	1000	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	10 U	10 U	9.9 U	NA	NA	9.8 U	9.6 U
	FLUORENE	0.5	1000	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	10 U	10 U	9.9 U	NA	NA	9.8 U	9.6 U
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	10 U	10 U	9.9 U	NA	NA	9.8 U	9.6 U
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12	15	12	12	11	9.7 U	10 U	10 U	9.9 U	NA	NA	9.8 U	9.6 U
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7	15	16	16	11	9.7 U	10 U	10 U	9.9 U	NA	NA	9.8 U	9.6 U
	NAPHTHALENE	1	20	20	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2	***39***	***44***	***40***	***44***	***40***	10 U	10 U	9.9 U	NA	NA	9.8 U	9.6 U
	PHENANTHRENE	0.22	0.2	510	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	10 U	10 U	9.9 U	NA	NA	9.8 U	9.6 U
	PYRENE	0.5	1000	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	10 U	10 U	9.9 U	NA	NA	9.8 U	9.6 U
	TOTAL PAHs	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	31.3	69	72	68	66	40	ND	ND	ND	NA	NA	ND	ND
VOCs	BENZENE	1	5	31.2	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	***58***	***81***	***80***	***77***	***48***	***47***	1 U	1 U	1 U	NA	NA	1 U	1 U
	ETHYLBENZENE	1	700	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	160	2 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	NA	NA	1 U	1 U
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	NA	NA	5 U	5 U	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2	2 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	NA	NA	1 U	1 U
	XYLENES (TOTAL)	2	10000	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5	250	420	420	120	110	2 U	2 U	2 U	NA	NA	2 U	2 U
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20 U	20 U	NA	NA	NA	NA	10 U	10 U	NA	NA	NA	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	222.7	331	500	497	168	157	ND	ND	ND	NA	NA	ND	ND
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	***0.15***	***0.095***	***0.13***	***0.15***	***0.14***	***0.16 F1***	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
	CHROMIUM	0.013	0.1	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.023	0.017	0.026	0.03	0.019	0.032	0.01 U	0.01 U	0.01 U	NA	NA	0.01 U	0.01 U
	LEAD	0.007	0.015	0.015	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
	NICKEL	0.13	0.1	2	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.041	0.04 U	0.041	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	0.04 U	0.04 U
	ZINC	0.96	2	31	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.091	0.072	0.097	0.094	0.072	0.077	0.02 U	0.02 U	0.02 U	NA	NA	0.02 U	0.066
Metals, Dissolved	LEAD	0.007	0.015	0.015	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	AMMONIA AS N	15	30	30	mg/L	0.42	1.7	0.63	7.8	7.7	5.9	7	5.7	3	11	8.8	0.9	0.58	5.5	1.6	***2900***	***2600***	***3800***	***3900***	***3700***	***4300***	1.9	1.6	6.1	7.8	6.8	0.054	0.05 U
	NITRATE (AS N)	- -	10	- -	mg/L	0.05 UH	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UH	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	88	170	120	100	280	290	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.17	0.17

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drinking W

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, PDMW
replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32P, PDMW-33T, P

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

| | | | | | Location: | EW-1 | | | | |

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

| Location: | | | | | MW-2 | | | | |

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

					Location:	MW-4															MW-5																	MW-201													
					Sample Date:	10/16/1997	8/9/1999	11/17/1999	2/23/2000	5/15/2000	8/21/2000	1/9/2001	7/10/2001	9/11/2002	2/3/2003	6/25/2003	1/29/2004	7/23/2004	10/16/1997	8/9/1999	11/18/1999	2/23/2000	5/16/2000	8/22/2000	1/10/2001	7/11/2001	9/10/2002	2/4/2003	6/25/2003	1/27/2004	7/21/2004	3/8/2006	4/1/2008	7/18/2008	10/9/2008	12/3/2009	6/19/2010	12/16/2010	6/14/2011	12/6/2011	12/11/2013	6/4/2014	5/20/2015	5/20/2015
					Sample Type:	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal
					Sample ID:	MW-4_10/16/1997	MW-4_8/9/1999	MW-4_11/17/1999	MW-4_2/23/2000	MW-4_5/15/2000	MW-4_8/21/2000	MW-4_1/9/2001	MW-4_7/10/2001	MW-4_9/11/2002	MW-4_2/3/2003	MW-4_6/25/2003	MW-4_1/29/2004	MW-4_7/23/2004	MW-5_10/16/1997	MW-5_8/9/1999	MW-5_11/18/1999	MW-5_2/23/2000	MW-5_5/16/2000	MW-5_8/22/2000	MW-5_1/10/2001	MW-5_7/11/2001	MW-5_9/10/2002	MW-5_2/4/2003	MW-5_6/25/2003	MW-5_1/27/2004	MW-5_7/21/2004	MW-201_3/8/2006	MW-201_4/1/2008	MW-201_7/18/2008	MW-201_10/9/2008	MW-201_12/3/2009	MW-201_6/19/2010	MW-201_12/16/2010	MW-201-061411	MW-201_120620 11	MW-201_12/11/2013	MW-201_060420 14	DUP-03_05202015	MW-201_052020 15
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	--	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 UJ	NA	NA	NA	10 U	10 U	NA	NA
	ACENAPHTHYLENE	1.4	1	510	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 UJ	NA	NA	NA	10 U	10 U	NA	NA
	ANTHRACENE	0.2	0.2	5100	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 UJ	NA	NA	NA	10 U	10 U	NA	NA
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 UJ	NA	NA	NA	10 U	10 U	NA	NA
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 UJ	NA	NA	NA	10 U	10 U	NA	NA
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 UJ	NA	NA	NA	10 U	10 U	NA	NA
	BENZO(G,H,I)PERYLENE	--	--	--	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 UJ	NA	NA	NA	10 U	10 U	NA	NA
	BENZO(K)FLUORANTHENE	--	--	--	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 UJ	NA	NA	NA	10 U	10 U	NA	NA
	CHRYSENE	0.2	0.2	65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 UJ	NA	NA	NA	10 U	10 U	NA	NA
	DIBENZO(A,H)ANTHRACENE	--	0.3	--	ug/L	1 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 UJ	NA	NA	NA	10 U	10 U	NA	NA
	FLUORANTHENE	0.5	1000	--	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 UJ	NA	NA	NA	10 U	10 U	NA	NA
	FLUORENE	0.5	1000	--	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U*	0.19 UJ	NA	NA	NA	10 U	10 U	NA	NA
	INDENO(1,2,3-CD)PYRENE	--	0.4	--	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 UJ	NA	NA	NA	10 U	10 U	NA	NA
	1-METHYLNAPHTHALENE	--	--	--	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.8 U	0.39 UJ	NA	NA	NA	10 U	10 U	NA	NA
	2-METHYLNAPHTHALENE	--	--	--	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 UJ	NA	NA	NA	10 U	10 U	NA	NA
	NAPHTHALENE	1	20	20	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 UJ	NA	NA	NA	10 U	10 U	NA	NA
	PHENANTHRENE	0.22	0.2	510	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 UJ	NA	NA	NA	10 U	10 U	NA	NA
	PYRENE	0.5	1000	--	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 UJ	NA	NA	NA	10 U	10 U	NA	NA
	TOTAL PAHs	--	--	--	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	NA	NA	NA	1 U	1 U	NA	NA
	ETHYLBENZENE	1	700	--	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	NA	NA	NA	1 U	1 U	NA	NA
	p/m-XYLENE	--	--	--	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	--	--	--	ug/L	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 U	NA	NA	NA
	o-XYLENE	--	--	--	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	NA	NA	NA	1 U	1 U	NA	NA
	XYLENES (TOTAL)	2	10000	--	ug/L	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	NA	NA	NA	2 U	2 U	NA	NA
	METHYL TERT BUTYL ETHER	--	--	--	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA	10 UJ	NA	NA	NA	10 U	NA	NA	NA
	TOTAL BTEX	--	--	--	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.02 U	NA	NA	NA	0.02 U	0.02 U	0.02 U	0.02 U
	BERYLLIUM	--	0.004	--	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BORON	--	--	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	--	0.005	--	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CALCIUM METAL	--	--	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	--	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	0.01 U	0.01 U	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.009	0.01	0.009	***0.026***	0.01 U	0.01 U	0.01 U	0.01 U	0.013	0.01 U	0.01 U	0.01 U
	MAGNESIUM	--	--	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	--	0.002	--	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	0.0039	0.04 U	0.04 U	0.04 U
	POTASSIUM	--	--	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	--	--	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.036	0.039	0.045	0.033	0.044	NA	NA	NA	0.033	0.02 U	0.02 U	0.02 U
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BERYLLIUM	--	0.004	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	--	0.005	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	--	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	NA	NA	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	--	0.002	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	NA	NA	0.02 U	0.02 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	ALKALINITY	--	--	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	--	--	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L	NA	11	10	9	9.3	11	14	14	13	14	10	11	12	NA	6.1	7.9	5.1	5.6	4.8	5.4	6.2	6.1	4.7	2.3	2.7	4.2	25	4.5	3.3	1.2	6	10 J	NA	23	NA	3.8	15	1.1	1.1
	BICARBONATE	--	--	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	--	--	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	--	--	--	umhos/cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	--	10	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.15	0.07	0.05 U	0.05 U
	SULFATE	--	--	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	--	--	--	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drink

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, I installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32 respectively.

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

						Location:	MW-202							MW-203							MW-204											
						Sample Date:	3/8/2006	4/1/2008	7/19/2008	10/9/2008	12/1/2009	6/18/2010	11/4/2014	3/8/2006	4/2/2008		7/19/2008	10/8/2008	12/1/2009	6/18/2010		4/3/2008	7/20/2008	10/7/2008		12/1/2009	3/23/2010	6/16/2010		9/14/2010	12/15/2010	6/15/2011	12/6/2011	11/5/2014
						Sample Type:	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Normal
						Sample ID:	MW-202_3/8/2006	MW-202_4/1/2008	MW-202_7/19/2008	MW-202_10/9/2008	MW-202_12/1/2009	MW-202_6/18/2010	MW-202_110420 14	MW-203_3/8/2006	MW-203_4/2/2008	MW-203 DUP_4/2/2008	MW-203_7/19/2008	MW-203_10/8/2008	MW-203_12/1/2009	MW-203_6/18/2010	MW-203DUP_6/18/2010	MW-204_4/3/2008	MW-204_7/20/2008	MW-204_10/7/2008	MW-204-DUP_10/7/2008	MW-204_12/1/2009	MW-204_3/23/2010	MW-204_6/16/2010	MW-204 DUP_6/16/2010	MW-204_9/14/2010	MW-204_12/15/2010	MW-204_061511	MW-204_120620 11	MW-204_110520 14
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 UJ	0.2 UJ	0.32	0.27	19 U	19 U	0.3	0.42 J	0.24	0.22	0.19 U	0.19	0.2 U	0.24	10 U
	ACENAPHTHYLENE	1.4	1	510	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	0.24	19 U	19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	10 U
	ANTHRACENE	0.2	0.2	5100	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	***0.27***	19 U	19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	10 U
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	***0.29***	19 U	19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	10 U
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	19 U	19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	10 U
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	***0.3***	19 U	19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	10 U
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	0.19 U	0.19 U	0.19 UJ	0.19 U	0.19 U	0.19 U	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	19 U	19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 UJ	0.19 U	10 U
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	19 U	19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	10 U
	CHRYSENE	0.2	0.2	65	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	***0.29***	19 U	19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	10 U
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	0.19 U	0.19 U	0.19 UJ	0.19 U	0.19 U	0.19 U	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	19 U	19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 UJ	0.19 U	10 U
	FLUORANTHENE	0.5	1000	- -	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	0.53	19 U	19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	10 U
	FLUORENE	0.5	1000	- -	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	0.42	19 U	19 U	0.19 U	0.42 J	0.28	0.34	0.19 U	0.19 U	0.2 U	0.19 U	10 U
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	19 U	19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	10 U
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.78 U	0.38 UJ	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.78 U	0.4 UJ	0.38 UJ	7.1	1.1	19 U	19 U	1.3	1.6 J	0.67	0.57	0.38 U	0.38 U	0.39 U	0.38 U	10 U
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 UJ	0.19 UJ	0.39	0.19 U	23	20	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	10 U
	NAPHTHALENE	1	20	20	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	0.34	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 UJ	0.19 UJ	0.2 U	0.37	***100***	***76***	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	10 U
	PHENANTHRENE	0.22	0.2	510	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	***0.77***	***32***	***34***	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	10 U
	PYRENE	0.5	1000	- -	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	0.2 U	0.69	19 U	19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	10 U
	TOTAL PAHs	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	NA	0.34	ND	ND	ND	ND	ND	ND	ND	8.18	5.54	155	130	1.6	2.44	1.19	1.13	ND	0.19	ND	0.24	ND
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***32***	***28***	***9.5***	***8.9***	***16***	NA	***12***	***14***	NA	1 U	1 U	NA	NA
	ETHYLBENZENE	1	700	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	NA	1 U	1 U	NA	NA
	p/m-XYLENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	o-XYLENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	NA	1 U	1 U	NA	NA
	XYLENES (TOTAL)	*2*	10000	- -	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	2 U	2 U	NA	2 U	2 U	NA	NA
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	10 U	10 U	10 U	NA	NA	10 U	NA	10 U	10 U	10 U	10 U	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA	NA	10 U	10 U	NA	NA	NA	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	32	28	9.5	9.9	16	NA	12	14	NA	ND	ND	NA	NA
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.02 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	NA	0.02 U	0.02 U	NA	NA	NA	NA	NA
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BORON	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CALCIUM METAL	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA
	MAGNESIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA
	POTASSIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.02 U	0.021	0.036	0.064	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.033	0.046	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	0.02 U	0.02 U	NA	NA	NA	NA	NA
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.02 U	NA	NA	NA	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA	NA	NA	NA
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04 U	NA	NA	NA	NA	NA	NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.02 U	NA	NA	NA	NA	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA	NA	NA	NA
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L	0.64	0.28 U	0.79	0.51	0.59	0.74	1	1.3	1.2	1.1	0.53	3	0.95	1 J	0.96	***520***	***520***	***430***	***440***	***340***	NA	***290***	***300***	NA	***300***	***290***	***370***	***340***
	BICARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	- -	- -	- -	umhos/cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	- -	10	- -	mg/L	NA	NA	NA	NA	NA	NA	0.05 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05 U
	SULFATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drink

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, F installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32 respectively.

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

		Location:				PDMW-1T																										PDMW-2T																													
		Sample Date:				10/30/1997	8/10/1999	11/16/1999	2/23/2000	5/16/2000	8/22/2000	1/10/2001	7/16/2001	2/6/2002	9/12/2002	2/6/2003	6/25/2003	1/29/2004	7/20/2004	3/8/2006	4/3/2008	7/21/2008	10/7/2008	12/5/2009	6/17/2010	6/13/2011	10/29/1997	8/9/1999	11/16/1999	2/24/2000	5/16/2000	8/22/2000	1/10/2001	7/16/2001	9/10/2002	2/6/2003	6/26/2003	1/27/2004	7/21/2004	3/6/2006	4/2/2008	7/19/2008	10/5/2008	12/1/2009	6/18/2010	6/15/2011	12/21/2011
		Sample Type:				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
		Sample ID:				PDMW-1T_10/30/1997	PDMW-1T_8/10/1999	PDMW-1T_11/16/1999	PDMW-1T_2/23/2000	PDMW-1T_5/16/2000	PDMW-1T_8/22/2000	PDMW-1T_1/10/2001	PDMW-1T_7/16/2001	PDMW-1T_2/6/2002	PDMW-1T_9/12/2002	PDMW-1T_2/6/2003	PDMW-1T_6/25/2003	PDMW-1T_1/29/2004	PDMW-1T_7/20/2004	PDMW-1T_3/8/2006	PDMW-1T_4/3/2008	PDMW-1T_7/21/2008	PDMW-1T_10/7/2008	PDMW-1T_12/5/2009	PDMW-1T_6/17/2010	PDMW-1T-061311	PDMW-2T_10/29/1997	PDMW-2T_8/9/1999	PDMW-2T_11/16/1999	PDMW-2T_2/24/2000	PDMW-2T_5/16/2000	PDMW-2T_8/22/2000	PDMW-2T_1/10/2001	PDMW-2T_7/16/2001	PDMW-2T_9/10/2002	PDMW-2T_2/6/2003	PDMW-2T_6/26/2003	PDMW-2T_1/27/2004	PDMW-2T_7/21/2004	PDMW-2T_3/6/2006	PDMW-2T_4/2/2008	PDMW-2T_7/19/2008	PDMW-2T_10/5/2008	PDMW-2T_12/1/2009	PDMW-2T_6/18/2010	PDMW-2T-061511	PDMW-2T_12/21/2011
Method Group	**Analyte**	**Background**	**Type 3 RRS**	**Type 4 RRS**	**Units**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA
	ACENAPHTHYLENE	1.4	1	510	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA
	ANTHRACENE	0.2	0.2	5100	ug/L	***0.32***	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	***0.31***	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	***0.26***	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	***0.26***	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	0.5 U	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	0.5 U	NA	0.2 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA
	CHRYSENE	0.2	0.2	65	ug/L	***0.44***	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	1 U	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	1 U	NA	0.2 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA
	FLUORANTHENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA
	FLUORENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	0.5 U	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	0.5 U	NA	0.2 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	1 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	7.5 U	0.38 U	NA	NA	NA	1 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.76 U	0.38 UJ	NA	NA
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	1 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	NA	NA	1 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA
	NAPHTHALENE	1	20	20	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA
	PHENANTHRENE	0.22	0.2	510	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA
	PYRENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA
	TOTAL PAHs	- -	- -	- -	ug/L	1.59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
	ETHYLBENZENE	1	700	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
	p/m-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	1 U	NA	NA	NA	NA	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	o-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
	XYLENES (TOTAL)	2	10000	- -	ug/L	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	NA
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA	10 U	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.01 U	0.012	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.011	0.01 U	0.01	0.011	0.01 U	0.01 U	0.01 U	0.015	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.02 U	NA	***0.0193***	***0.023***	0.01 U	0.01 U	0.01 U	0.011	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.02 U	NA	0.018 U
	BERYLLIUM	- -	0.004	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BORON	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CALCIUM METAL	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	NA	NA
	MAGNESIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA
	POTASSIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.02 U	0.02 U	0.063	0.02 U	0.027	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.023	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.023	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	0.01 U	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	NA	NA	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	NA	NA	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA	0.02 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L	2	5	8.2	13	17	22	16	24	18	19	18	12	1.9	0.038	25	17	14	15	9.6	12	***34***	29	19	27	26	24	22	25	18	***37***	***45***	18	0.59	27	3.2	2.8	0.85	2.6	7.7	15	***120***	NA
	BICARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	- -	- -	- -	umhos/cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	- -	10	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SULFATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and italic text - indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drinl

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, I installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDM

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

					Location:	PDMW-3T																										
					Sample Date:	10/29/1997	8/11/1999	11/16/1999	2/23/2000	2/24/2000	5/16/2000	8/21/2000	1/9/2001	7/11/2001	2/4/2002	9/10/2002	2/6/2003	6/26/2003	1/27/2004	7/21/2004	3/6/2006		4/2/2008	7/19/2008	10/4/2008	12/1/2009	6/16/2010	12/15/2010	6/15/2011		12/8/2011
					Sample Type:	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal
					Sample ID:	PDMW-3T_10/29/1997	PDMW-3T_8/11/1999	PDMW-3T_11/16/1999	PDMW-3T_2/23/2000	PDMW-3T_2/24/2000	PDMW-3T_5/16/2000	PDMW-3T_8/21/2000	PDMW-3T_1/9/2001	PDMW-3T_7/11/2001	PDMW-3T_2/4/2002	PDMW-3T_9/10/2002	PDMW-3T_2/6/2003	PDMW-3T_6/26/2003	PDMW-3T_1/27/2004	PDMW-3T_7/21/2004	MW-3T Unfiltered_3/6/2006	PDMW-3T Filtered_3/6/2006	PDMW-3T_4/2/2008	PDMW-3T_7/19/2008	PDMW-3T_10/4/2008	PDMW-3T_12/1/2009	PDMW-3T_6/16/2010	PDMW-3T_12/15/2010	PDMW-3T_061511	PDMW-3T_061511FF	PDMW-3T_12082011
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	NA	NA	NA	NA
	ACENAPHTHYLENE	1.4	1	510	ug/L	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	NA	NA	NA	NA
	ANTHRACENE	0.2	0.2	5100	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	NA	NA	NA	NA
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	NA	NA	NA	NA
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	NA	NA	NA	NA
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	NA	NA	NA	NA
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	NA	NA	NA	NA
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	0.5 U	NA	0.2 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	NA	NA	NA	NA
	CHRYSENE	0.2	0.2	65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	NA	NA	NA	NA
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	1 U	NA	0.2 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	NA	NA	NA	NA
	FLUORANTHENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	NA	NA	NA	NA
	FLUORENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	NA	NA	NA	NA
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	0.5 U	NA	0.2 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	NA	NA	NA	NA
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	1 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.8 U	0.39 U	NA	NA	NA	NA
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	1 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	NA	NA	NA	NA
	NAPHTHALENE	1	20	20	ug/L	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	NA	NA	NA	NA
	PHENANTHRENE	0.22	0.2	510	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	NA	NA	NA	NA
	PYRENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.19 U	NA	NA	NA	NA
	TOTAL PAHs	- -	- -	- -	ug/L	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA
	ETHYLBENZENE	1	700	- -	ug/L	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA
	p/m-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	o-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA
	XYLENES (TOTAL)	2	10000	- -	ug/L	3.3	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	2 U	2 U	2 U	2 U	2 U	NA	NA	NA	NA
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	NA	10 U	10 U	NA	NA	10 U	NA	NA	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	3.3	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.01 U	0.01 U	0.01 U	NA	0.017	***0.049***	***0.050***	0.01 U	***0.043***	***0.02***	0.012	***0.031***	***0.029***	0.01 U	***0.034***	***0.02***	***0.021***	***0.035***	***0.036***	***0.046***	0.02 U	0.02 U	0.018	***0.035***	NA	0.018 U
	BERYLLIUM	- -	0.004	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BORON	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CALCIUM METAL	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	0.01 U	0.01 U	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.03	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	0.0082	***0.016***	***0.02***	NA	***0.036***	***0.025***	0.005 U	0.014	0.0092	0.005 U	0.005 U	0.01	0.015	0.0057	***0.02***	0.0094	0.005 U	***0.028***	***0.17***	0.013	0.01 U	0.01 U	0.01	0.014	NA	0.01 U
	MAGNESIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	0.04 U	0.04 U	0.04 U	NA	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	NA
	POTASSIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.02 U	0.1	0.056	NA	0.074	0.046	0.02 U	0.062	0.037	0.42	0.12	0.042	0.02 U	0.089	0.029	0.037	0.02	0.031	0.18	0.026	0.02 U	0.059	NA	NA	NA	NA
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	0.01 U	NA	0.01 U	NA	0.01 U	0.013	0.01 U	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	***0.021***	***0.03***	0.01 U	NA	NA	NA	0.02 U	NA	***0.032***	0.018 U	
	BERYLLIUM	- -	0.004	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	NA	0.01 U	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	0.01 U	0.01 U	NA	NA	0.01 U	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	0.005 U	NA	***0.016***	NA	***0.016***	0.0069	NA	0.0074	0.005 U	NA	NA	NA	NA	NA	NA	NA	0.005 U	0.005 U	0.005 U	NA	NA	0.01 U	NA	NA	0.01 U	0.0015 U
	MERCURY	- -	0.002	- -	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	0.04 U	NA	0.04 U	NA	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04 U	0.04 U	0.04 U	NA	NA	0.04 U	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.02 U	NA	0.042	NA	0.049	0.03	NA	0.047	0.075	0.44	NA	NA	NA	NA	NA	NA	0.02	0.02 U	0.039	NA	NA	0.02 U	NA	NA	NA	NA
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L	1.4	***6600***	0.84	0.81	NA	1.8	2.9	0.54	3.2	2	1.2	0.75	1.6	0.31	4.3	0.67	NA	2.5	0.72	4.3	0.62	2.5	NA	2.7	NA	1.3
	BICARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	- -	- -	- -	umhos/cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	- -	10	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SULFATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drinking Water Regulations.

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, I installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32 respectively.

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

						Location:	PDMW-4T																							
						Sample Date:	10/23/1997	8/9/1999	11/17/1999	2/24/2000	5/16/2000	8/22/2000	1/10/2001	7/12/2001	2/5/2002	9/11/2002	2/7/2003	6/25/2003	1/29/2004	7/23/2004	3/6/2006	4/3/2008	7/20/2008	10/6/2008	12/4/2009		6/19/2010	12/15/2010	6/16/2011	12/7/2011
						Sample Type:	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
						Sample ID:	PDMW-4T_10/23/1997	PDMW-4T_8/9/1999	PDMW-4T_11/17/1999	PDMW-4T_2/24/2000	PDMW-4T_5/16/2000	PDMW-4T_8/22/2000	PDMW-4T_1/10/2001	PDMW-4T_7/12/2001	PDMW-4T_2/5/2002	PDMW-4T_9/11/2002	PDMW-4T_2/7/2003	PDMW-4T_6/25/2003	PDMW-4T_1/29/2004	PDMW-4T_7/23/2004	PDMW-4T_3/6/2006	PDMW-4T_4/3/2008	PDMW-4T_7/20/2008	PDMW-4T_10/6/2008	PDMW-4T_12/4/2009	PDMW-4T-DUP_12/4/2009	PDMW-4T_6/19/2010	PDMW-4T_12/15/2010	PDMW-4T_061611	PDMW-4T_12072011
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.97 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	ACENAPHTHYLENE	1.4	1	510	ug/L		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.97 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	ANTHRACENE	0.2	0.2	5100	ug/L		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.97 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.97 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.97 U	0.19 U	0.19 UJ	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.97 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L		0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.97 U	0.19 U	0.19 UJ	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L		0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.97 U	0.19 U	0.19 UJ	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	CHRYSENE	0.2	0.2	65	ug/L		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.97 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L		1 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.97 U	0.19 U	0.19 UJ	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	FLUORANTHENE	0.5	1000	- -	ug/L		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.97 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	FLUORENE	0.5	1000	- -	ug/L		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.97 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L		0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.97 U	0.19 U	0.19 UJ	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.97 U	0.19 U	0.19 U	0.19 U	0.76 U	0.76 U	0.38 UJ	NA	NA	NA
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.97 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	NAPHTHALENE	1	20	20	ug/L		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.97 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	PHENANTHRENE	0.22	0.2	510	ug/L		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.97 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	PYRENE	0.5	1000	- -	ug/L		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.97 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	TOTAL PAHs	- -	- -	- -	ug/L		ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
VOCs	BENZENE	1	5	31.2	ug/L		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	NA	NA	NA
	ETHYLBENZENE	1	700	- -	ug/L		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	NA	NA	NA
	p/m-XYLENE	- -	- -	- -	ug/L		NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L		NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	o-XYLENE	- -	- -	- -	ug/L		NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	NA	NA	NA
	XYLENES (TOTAL)	2	10000	- -	ug/L		2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	NA	NA	NA
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA	NA	10 UJ	NA	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L		ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L		0.01 U	0.017	0.01 U	0.01 U	0.01 U	***0.023***	0.01 U	0.018	NA	0.01 U	0.01 U	0.014	0.011	***0.02***	***0.022***	***0.036***	***0.02***	***0.033***	0.02 U	0.02 U	***0.039***	***0.019***	***0.027***	0.018 U
	BERYLLIUM	- -	0.004	- -	mg/L		0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BORON	- -	- -	- -	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L		0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CALCIUM METAL	- -	- -	- -	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L		0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	NA	NA	NA
	MAGNESIUM	- -	- -	- -	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L		0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L		0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA
	POTASSIUM	- -	- -	- -	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	- -	- -	- -	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L		0.102	0.14	0.056	0.17	0.11	0.02 U	0.26	0.19	NA	0.24	0.12	0.039	0.096	0.051	0.08	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L		NA	NA	0.01 U	0.01 U	NA	0.01 U	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BERYLLIUM	- -	0.004	- -	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L		NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L		NA	NA	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L		NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L		NA	NA	0.057	0.16	0.087	NA	0.24	0.14	0.11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L		***90***	***410***	***220***	***200***	***300***	***1000***	***100***	***370***	NA	***280***	***46***	***280***	***440***	***530***	***410***	***810***	***200***	***550***	***140***	***140***	***330 J***	***220***	***150***	***120***
	BICARBONATE	- -	- -	- -	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	- -	- -	- -	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	- -	- -	- -	umhos/cm		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	- -	10	- -	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SULFATE	- -	- -	- -	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and Italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drink

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, I installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32 respectively.

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

					Location:	PDMW-5T																								
					Sample Date:	10/30/1997	8/9/1999	11/17/1999	2/24/2000	5/16/2000	8/22/2000	1/10/2001	7/12/2001	9/12/2002		2/6/2003	6/27/2003	1/29/2004	7/23/2004	3/6/2006	4/4/2008	7/21/2008	10/6/2008	12/5/2009	6/17/2010	12/16/2010		6/16/2011		12/7/2011
					Sample Type:	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal		Normal
					Sample ID:	PDMW-5T_10/30/1997	PDMW-5T_8/9/1999	PDMW-5T_11/17/1999	PDMW-5T_2/24/2000	PDMW-5T_5/16/2000	PDMW-5T_8/22/2000	PDMW-5T_1/10/2001	PDMW-5T_7/12/2001	PDMW-5T_9/12/2002	PDMW-5T (DUP)_9/12/2002	PDMW-5T_2/6/2003	PDMW-5T_6/27/2003	PDMW-5T_1/29/2004	PDMW-5T_7/23/2004	PDMW-5T_3/6/2006	PDMW-5T_4/4/2008	PDMW-5T_7/21/2008	PDMW-5T_10/6/2008	PDMW-5T_12/5/2009	PDMW-5T_6/17/2010	PDMW-5T_12/16/2010	PDMW-5TDUP3_12/16/2010	PDMW-5T-061611	PDMW-5T-061611FF	PDMW-5T_12072011
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	ACENAPHTHYLENE	1.4	1	510	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	ANTHRACENE	0.2	0.2	5100	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	CHRYSENE	0.2	0.2	65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	1 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	FLUORANTHENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	FLUORENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.78 U	0.38 U	NA	NA	NA	NA	NA
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	NAPHTHALENE	1	20	20	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	PHENANTHRENE	0.22	0.2	510	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	PYRENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	TOTAL PAHs	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA
	ETHYLBENZENE	1	700	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA
	p/m-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	o-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA
	XYLENES (TOTAL)	2	10000	- -	ug/L	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	NA	NA	NA	NA
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA	10 U	NA	NA	NA	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.01 U	***0.098***	***0.066***	0.01 U	***0.049***	***0.082***	0.01 U	***0.069***	***0.034***	***0.028***	0.01 U	***0.035***	0.01 U	***0.074***	0.01 U	0.01 U	0.01 U	***0.019***	0.02 U	0.02 U	0.018 U	0.018 U	0.018 U	NA	0.018 U
	BERYLLIUM	- -	0.004	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BORON	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CALCIUM METAL	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0053	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	NA	NA	NA	NA	NA
	MAGNESIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	NA	NA
	POTASSIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.035	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA	NA
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	NA	NA	0.01	0.01 U	0.01 U	0.01 U	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.018 U	NA
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	NA	NA	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	NA	NA	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L	2.6	6.1	14	4	5	6.7	4	6.6	4.5	4.6	3.8	4.6	0.03 U	5.4	1.3	1.4	1.2	1.3	1	3.1	NA	NA	1.1	NA	NA
	BICARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	- -	- -	- -	umhos/cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	- -	10	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SULFATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drink

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, f installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32 respectively.

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

						PDMW-6P																							
					Sample Date:	10/30/1997	8/11/1999	11/16/1999	2/23/2000	5/15/2000	8/21/2000	1/9/2001	7/12/2001	2/5/2002	9/12/2002	2/7/2003	6/25/2003	1/29/2004	7/23/2004		3/6/2006	4/3/2008	7/20/2008	10/6/2008	12/3/2009	6/17/2010	12/15/2010	6/16/2011	12/7/2011
					Sample Type:	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Sample ID:	PDMW-6P_10/30/1997	PDMW-6P_8/11/1999	PDMW-6P_11/16/1999	PDMW-6P_2/23/2000	PDMW-6P_5/15/2000	PDMW-6P_8/21/2000	PDMW-6P_1/9/2001	PDMW-6P_7/12/2001	PDMW-6P_2/5/2002	PDMW-6P_9/12/2002	PDMW-6P_2/7/2003	PDMW-6P_6/25/2003	PDMW-6P_1/29/2004	PDMW-6P_7/23/2004	PDMW-6P (DUP)_7/23/2004	PDMW-6P_3/6/2006	PDMW-6P_4/3/2008	PDMW-6P_7/20/2008	PDMW-6P_10/6/2008	PDMW-6P_12/3/2009	PDMW-6P_6/17/2010	PDMW-6P_12/15/2010	PDMW-6P_061611	PDMW-6P_120720111
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.76	NA	NA	NA
	ACENAPHTHYLENE	1.4	1	510	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	NA	NA	NA
	ANTHRACENE	0.2	0.2	5100	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	NA	NA	NA
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	NA	NA	NA
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	NA	NA	NA
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	NA	NA	NA
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 UJ	NA	NA	NA
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	0.5 U	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	NA	NA	NA
	CHRYSENE	0.2	0.2	65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	NA	NA	NA
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	1 U	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 UJ	NA	NA	NA
	FLUORANTHENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	NA	NA	NA
	FLUORENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.47	NA	NA	NA
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	0.5 U	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 UJ	NA	NA	NA
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	1 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.76 U	0.4 U	NA	NA	NA
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	1 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	NA	NA	NA
	NAPHTHALENE	1	20	20	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.23	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	NA	NA	NA
	PHENANTHRENE	0.22	0.2	510	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	NA	NA	NA
	PYRENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	NA	NA	NA
	TOTAL PAHs	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	0.23	ND	ND	ND	ND	ND	1.23	NA	NA	NA
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA
	ETHYLBENZENE	1	700	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA
	p/m-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	o-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA
	XYLENES (TOTAL)	2	10000	- -	ug/L	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	NA	NA
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA	10 U	NA	NA	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	1.1	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.016	NA	0.017	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.014	***0.037***	0.02 U	***0.024***	***0.043***	0.018 U	0.018 U	
	BERYLLIUM	- -	0.004	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BORON	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CALCIUM METAL	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	NA	NA	NA
	MAGNESIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA
	POTASSIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.02 U	0.037	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	0.023	0.034	0.02 U	0.036	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.018	NA	NA	NA	NA	NA	NA	NA
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	NA	NA	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04 U	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	NA	NA	0.02 U	0.02 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.039	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L	10	12	8.4	7.2	22	9	7.7	10	NA	6.3	5.8	2.3	0.043	5.9	6.9	5.8	25	***38***	18	***38***	***95***	***31***	***38***	***39***		
	BICARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	- -	- -	- -	umhos/cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	- -	10	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SULFATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and Italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drink

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, I installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32 respectively.

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

Location:					PDMW-7P																											PDMW-8R														
Sample Date:					10/30/1997	8/10/1999	11/17/1999	2/25/2000	5/15/2000	8/21/2000	1/9/2001	7/11/2001	2/4/2002	9/11/2002	2/7/2003	6/27/2003	1/30/2004	7/22/2004	3/9/2006	4/2/2008	7/21/2008	10/8/2008	12/4/2009	6/16/2010	12/14/2010	6/16/2011	12/7/2011	12/12/2013	6/4/2014	11/4/2014	5/19/2015	4/3/2008	7/21/2008	10/5/2008	12/4/2009	6/17/2010	12/15/2010	6/15/2011	12/5/2011	12/12/2013	6/3/2014			11/5/2014	5/20/2015
Sample Type:					Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Normal
Sample ID:					PDMW-7P_10/30/1997	PDMW-7P_8/10/1999	PDMW-7P_11/17/1999	PDMW-7P_2/25/2000	PDMW-7P_5/15/2000	PDMW-7P_8/21/2000	PDMW-7P_1/9/2001	PDMW-7P_7/11/2001	PDMW-7P_2/4/2002	PDMW-7P_9/11/2002	PDMW-7P_2/7/2003	PDMW-7P_6/27/2003	PDMW-7P_1/30/2004	PDMW-7P_7/22/2004	PDMW-7P_3/9/2006	PDMW-7P_4/2/2008	PDMW-7P_7/21/2008	PDMW-7P_10/8/2008	PDMW-7P_12/4/2009	PDMW-7P_6/16/2010	PDMW-7P_12/14/2010	PDMW-7P-061611	PDMW-7P_12072011	PDMW-7P_12/12/2013	PDMW-07P_060420 14	PDMW-7P_11042014	PDMW-7P_05192015	PDMW-8R_4/3/2008	PDMW-8R_7/21/2008	PDMW-8R_10/5/2008	PDMW-8R_12/4/2009	PDMW-8R_6/17/2010	PDMW-8R_12/15/20 10	PDMW-8R_061511	PDMW-8R-12052011	PDMW-8R_12/12/20 13	PDMW-8R_0603201 4	DUP-02_0603201 4	PDMW-8R_1105201 4	PDMW-8R_0520201 5
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.9 U	9.9 U	NA	NA	0.2 U	0.19 U	0.23	0.19 U	0.2 U	NA	NA	NA	9.1 U	9.9 U	9.9 U	NA	NA
	ACENAPHTHYLENE	1.4	1	510	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.9 U	9.9 U	NA	NA	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.9 U	9.9 U	NA	NA
	ANTHRACENE	0.2	0.2	5100	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.9 U	9.9 U	NA	NA	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.9 U	9.9 U	NA	NA
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.9 U	9.9 U	NA	NA	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.9 U	9.9 U	NA	NA
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.9 U	9.9 U	NA	NA	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.9 U	9.9 U	NA	NA
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.9 U	9.9 U	NA	NA	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.9 U	9.9 U	NA	NA
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.9 U	9.9 U	NA	NA	0.2 U	0.19 UJ	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.9 U	9.9 U	NA	NA
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.9 U	9.9 U	NA	NA	0.2 U	0.19 UJ	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.9 U	9.9 U	NA	NA
	CHRYSENE	0.2	0.2	65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.9 U	9.9 U	NA	NA	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.9 U	9.9 U	NA	NA
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	1 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.9 U	9.9 U	NA	NA	0.2 U	0.19 UJ	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.9 U	9.9 U	NA	NA
	FLUORANTHENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.9 U	9.9 U	NA	NA	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.9 U	9.9 U	NA	NA
	FLUORENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.9 U	9.9 U	NA	NA	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.9 U	9.9 U	NA	NA
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.9 U	9.9 U	NA	NA	0.2 U	0.19 UJ	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.9 U	9.9 U	NA	NA
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.75 U	0.19 U	NA	NA	NA	9.9 U	9.9 U	NA	NA	0.2 U	0.19 U	0.19 U	0.75 U	0.38 U	NA	NA	NA	9.1 U	9.9 U	9.9 U	NA	NA
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.9 U	9.9 U	NA	NA	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.9 U	9.9 U	NA	NA
	NAPHTHALENE	1	20	20	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.9 U	9.9 U	NA	NA	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.9 U	9.9 U	NA	NA
	PHENANTHRENE	0.22	0.2	510	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.9 U	9.9 U	NA	NA	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.9 U	9.9 U	NA	NA
	PYRENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.9 U	9.9 U	NA	NA	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.9 U	9.9 U	NA	NA
	TOTAL PAHs	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	0.23	ND	ND	NA	NA	NA	NA	NA	ND	ND	ND	NA	NA
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	1 U	1 U	1 U	NA	NA
	ETHYLBENZENE	1	700	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	1 U	1 U	NA	NA	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	1 U	1 U	1 U	NA	NA
	p/m-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 U	NA	NA	NA	NA	NA
	o-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	1 U	1 U	1 U	NA	NA
	XYLENES (TOTAL)	2	10000	- -	ug/L	2 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	NA	NA	2 U	2 U	2 U	2 U	2 U	NA	NA	NA	2 U	2 U	2 U	NA	NA
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA	10 U	NA	NA	NA	NA	10 U	NA	NA	NA	10 U	10 U	NA	NA	10 U	NA	NA	NA	10 U	NA	NA	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	ND	ND	ND	NA	NA
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	***0.0261***	0.01 U	0.01 U	0.01 U	0.011	***0.022***	***0.02***	***0.023***	***0.024***	0.01 U	***0.047***	0.01 U	0.015	0.018	0.01 U	0.01 U	***0.023***	***0.043***	***0.091***	***0.026***	***0.023***	***0.038***	0.018 U	0.0097	0.02 U	0.02 U	0.02 U	***0.053***	***0.08***	***0.092***	0.02 U	***0.08***	0.036 U	***0.04***	0.018 U	0.01	***0.029***	***0.028***	0.02 U	0.02 U
	BERYLLIUM	- -	0.004	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BORON	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CALCIUM METAL	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	0.01 U	0.01 U	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	0.01 U	0.01 U	0.01 U	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	NA	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
	MAGNESIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0053	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	0.0036	0.04 U	0.04 U	0.04 U	0.04 U
	POTASSIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA	NA	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	NA	NA	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	NA	NA	0.02 U	0.02 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L	***54***	***35***	30	***35***	***43***	16	27	26	20	***36***	23	***36***	0.14	23	15	12	15	9.2	7.8	6.4	NA	12	NA	13	12	16	16	***31***	***35***	***55***	***41***	***63***	***82***	***60***	***68***	***39***	***62***	***63***	***94***	***64***
	BICARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	- -	- -	- -	umhos/ cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	- -	10	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.095	0.05 U	0.05 U	0.05 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
	SULFATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drink

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, I installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32 respectively.

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

Location:						PDMW-8T														PDMW-9T																					
	Sample Date:					10/29/1997	8/10/1999	11/17/1999	2/25/2000	5/16/2000	8/21/2000	1/10/2001	7/11/2001	2/6/2002	9/12/2002	2/6/2003	6/25/2003	1/29/2004	7/20/2004	3/6/2006	10/30/1997	8/9/1999	11/16/1999	2/24/2000	5/16/2000	8/21/2000	1/10/2001	7/12/2001	2/6/2002	9/11/2002	2/3/2003	6/25/2003	1/29/2004	7/22/2004	3/8/2006		4/3/2008	7/21/2008	10/5/2008	12/3/2009	6/17/2010	12/14/2010	6/15/2011	12/5/2011	12/21/2011
	Sample Type:					Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
	Sample ID:					PDMW-8T_10/29/1997	PDMW-8T_8/10/1999	PDMW-8T_11/17/1999	PDMW-8T_2/25/2000	PDMW-8T_5/16/2000	PDMW-8T_8/21/2000	PDMW-8T_1/10/2001	PDMW-8T_7/11/2001	PDMW-8T_2/6/2002	PDMW-8T_9/12/2002	PDMW-8T_2/6/2003	PDMW-8T_6/25/2003	PDMW-8T_1/29/2004	PDMW-8T_7/20/2004	PDMW-8T_3/6/2006	PDMW-9T_10/30/1997	PDMW-9T_8/9/1999	PDMW-9T_11/16/1999	PDMW-9T_2/24/2000	PDMW-9T_5/16/2000	PDMW-9T_8/21/2000	PDMW-9T_1/10/2001	PDMW-9T_7/12/2001	PDMW-9T_2/6/2002	PDMW-9T_9/11/2002	PDMW-9T_2/3/2003	PDMW-9T_6/25/2003	PDMW-9T_1/29/2004	PDMW-9T_7/22/2004	PDMW-9T Filtered_3/8/2006	PDMW-9T Unfiltered_3/8/2006	PDMW-9T_4/3/2008	PDMW-9T_7/21/2008	PDMW-9T_10/5/2008	PDMW-9T_12/3/2009	PDMW-9T_6/17/2010	PDMW-9T_12/14/2010	PDMW-9T-061511	PDMW-9T-12052011	PDMW-9T_12212011
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2	0.19 U	0.23	0.23	0.47	0.37	0.43	0.51	NA	NA	NA	NA
	ACENAPHTHYLENE	1.4	1	510	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***1.6***	0.22	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA
	ANTHRACENE	0.2	0.2	5100	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.5 U	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA
	CHRYSENE	0.2	0.2	65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	1 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	1 U	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA
	FLUORANTHENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA
	FLUORENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19	NA	NA	NA	NA
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.5 U	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	NA	NA	1 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.21	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.4	0.19 U	0.75 U	0.38 U	NA	NA	NA	NA
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	NA	NA	1 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA
	NAPHTHALENE	1	20	20	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA
	PHENANTHRENE	0.22	0.2	510	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA
	PYRENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA
	TOTAL PAHs	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	0.22	ND	0.21	ND	0.2	ND	0.23	0.23	0.87	0.37	0.43	0.7	NA	NA	NA	NA
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA
	ETHYLBENZENE	1	700	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA
	p/m-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	o-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA
	XYLENES (TOTAL)	2	10000	- -	ug/L	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	2 U	2 U	2 U	2 U	2 U	2 U	NA	NA	NA	NA
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA	10 U	NA	NA	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.011	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0134	***0.067***	***0.04***	0.016	***0.035***	***0.048***	0.012	***0.037***	***0.024***	***0.062***	***0.024***	***0.061***	***0.037***	***0.072***	***0.019***	0.018	***0.019***	***0.02***	0.017	0.02 U	0.02 U	0.018 U	0.018 U	NA	0.018 U
	BERYLLIUM	- -	0.004	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BORON	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CALCIUM METAL	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0078	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA
	MAGNESIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	NA
	POTASSIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.02 U	0.02 U	0.02 U	NA	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	NA	NA	0.01 U	0.01 U	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	0.01 U	0.01 U	NA	NA	0.01 U	NA	NA	NA	NA	NA	NA	***0.019***	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	NA	NA	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	NA	NA	0.02 U	0.02 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.02 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L	***60***	***52***	***73***	***96***	***65***	***47***	***55***	***65***	***83***	***110***	***94***	***62***	***47***	***64***	***34***	***190***	***200***	***170***	***140***	***160***	***150***	***98***	***120***	***100***	***200***	***130***	***44***	***170***	***180***	NA	***120***	***170***	***170***	***120***	16	***83***	***180***	***170***	***140***	NA
	BICARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	- -	- -	- -	umhos/cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	- -	10	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SULFATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drink

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, I installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32 respectively.

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

| Location: | | | | | PDMW-10R | | | | | | | | | | | PDMW-10T | | | | | | | | | | | | | | | | | | | | PDMW-11P | PDMW-11R | | | | | | | | | | | | | | | | | | |

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

					Location:	PDMW-12P																				
					Sample Date:	10/28/1997	8/9/1999	11/17/1999	2/23/2000	5/15/2000	8/22/2000	1/9/2001	7/12/2001	2/5/2002	9/12/2002	2/5/2003	6/27/2003	1/29/2004	7/23/2004	3/7/2006	4/1/2008	7/19/2008	10/9/2008	12/3/2009	6/18/2010	6/16/2011
					Sample Type:	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Sample ID:	PDMW-12P_10/28/1997	PDMW-12P_8/9/1999	PDMW-12P_11/17/1999	PDMW-12P_2/23/2000	PDMW-12P_5/15/2000	PDMW-12P_8/22/2000	PDMW-12P_1/9/2001	PDMW-12P_7/12/2001	PDMW-12P_2/5/2002	PDMW-12P_9/12/2002	PDMW-12P_2/5/2003	PDMW-12P_6/27/2003	PDMW-12P_1/29/2004	PDMW-12P_7/23/2004	PDMW-12P_3/7/2006	PDMW-12P_4/1/2008	PDMW-12P_7/19/2008	PDMW-12P_10/9/2008	PDMW-12P_12/3/2009	PDMW-12P_6/18/2010	PDMW-12P_061611
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	3.9 U	0.19 U	0.19 U	NA
	ACENAPHTHYLENE	1.4	1	510	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***1.4***	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	3.9 U	0.19 U	0.19 U	NA
	ANTHRACENE	0.2	0.2	5100	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	3.9 U	0.19 U	0.19 U	NA
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	3.9 U	0.19 U	0.19 U	NA
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	3.9 U	0.19 U	0.19 U	NA
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	3.9 U	0.19 U	0.19 U	NA
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	3.9 U	0.19 U	0.19 U	NA
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	3.9 U	0.19 U	0.19 U	NA
	CHRYSENE	0.2	0.2	65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	3.9 U	0.19 U	0.19 U	NA
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	1 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	3.9 U	0.19 U	0.19 U	NA
	FLUORANTHENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	3.9 U	0.19 U	0.19 U	NA
	FLUORENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	3.9 U	0.19 U*	0.19 U	NA
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	3.9 U	0.19 U	0.19 U	NA
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	3.9 U	0.76 U	0.38 U	NA
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	3.9 U	0.19 U	0.19 U	NA
	NAPHTHALENE	1	20	20	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	0.2 U	0.2 U	0.2 U	0.24	0.2 U	0.19 U	0.19 U	0.19 U	3.9 U	0.19 U	0.19 U	NA
	PHENANTHRENE	0.22	0.2	510	ug/L	***0.22***	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	3.9 U	0.19 U	0.19 U	NA
	PYRENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	3.9 U	0.19 U	0.19 U	NA
	TOTAL PAHs	- -	- -	- -	ug/L	0.22	ND	ND	ND	ND	ND	ND	1.4	NA	ND	ND	ND	0.24	ND	ND	ND	ND	ND	ND	ND	NA
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA
	ETHYLBENZENE	1	700	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA
	p/m-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	o-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA
	XYLENES (TOTAL)	2	10000	- -	ug/L	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA	10 U	NA
	TOTAL BTEX	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	0.01 U	0.01 U	0.01 U	0.018	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.02 U	NA
	BERYLLIUM	- -	0.004	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BORON	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CALCIUM METAL	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA
	LEAD	0.007	0.015	0.015	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U	0.005 U	***0.016***	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U
	MAGNESIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA
	POTASSIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.059	0.02 U	NA	0.02 U	0.02 U	0.02 U	0.11	0.053	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	NA	NA	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	NA	NA	0.02 U	0.02 U	NA	NA	0.065	NA	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L	NA	3.2	3.6	0.66	2.1	8.6	0.15	1.7	NA	3.3	0.83	3.3	0.5	2.4	0.23	0.22	0.7	0.69	0.14	1.1	NA
	BICARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	- -	- -	- -	umhos/cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	- -	10	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SULFATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and Italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drink

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, f
installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32
respectively.

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

| Location: | | | | | | PDMW-13P | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | PDMW-14T | | | | | | | | | | | | | | | | | | |

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

| | Location: | | | | PDMW-14TR | | | |

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

| | | | | | Location: | PDMW-16T | | | | | | | | | | | | | | | PDMW-17T | | | | | | | | | | | | | | |

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

| Location: | | | | | | PDMW-18T | | | | | |

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

						Location:	PDMW-20T																							
						Sample Date:	10/29/1997	8/10/1999	11/17/1999	2/23/2000	5/16/2000	8/22/2000	1/10/2001	7/16/2001	2/7/2002	9/10/2002	2/6/2003	6/26/2003	1/27/2004	7/21/2004	3/7/2006	4/1/2008	7/18/2008	10/8/2008		12/7/2009	6/19/2010	12/16/2010	6/16/2011	12/8/2011
						Sample Type:	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Normal
						Sample ID:	PDMW-20T_10/29/1997	PDMW-20T_8/10/1999	PDMW-20T_11/17/1999	PDMW-20T_2/23/2000	PDMW-20T_5/16/2000	PDMW-20T_8/22/2000	PDMW-20T_1/10/2001	PDMW-20T_7/16/2001	PDMW-20T_2/7/2002	PDMW-20T_9/10/2002	PDMW-20T_2/6/2003	PDMW-20T_6/26/2003	PDMW-20T_1/27/2004	PDMW-20T_7/21/2004	PDMW-20T_3/7/2006	PDMW-20T_4/1/2008	PDMW-20T_7/18/2008	PDMW-20T_10/8/2008	PDWM-20T-DUP_10/8/2008	PDMW-20T_12/7/2009	PDMW-20T_6/19/2010	PDMW-20T_12/16/2010	PDMW-20T-061611	PDMW-20T_120820 11
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	--	ug/L		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	ACENAPHTHYLENE	1.4	1	510	ug/L		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA
	ANTHRACENE	0.2	0.2	5100	ug/L		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA
	BENZO(G,H,I)PERYLENE	--	--	--	ug/L		0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA
	BENZO(K)FLUORANTHENE	--	--	--	ug/L		0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA
	CHRYSENE	0.2	0.2	65	ug/L		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA
	DIBENZO(A,H)ANTHRACENE	--	0.3	--	ug/L		1 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA
	FLUORANTHENE	0.5	1000	--	ug/L		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA
	FLUORENE	0.5	1000	--	ug/L		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA
	INDENO(1,2,3-CD)PYRENE	--	0.4	--	ug/L		0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA
	1-METHYLNAPHTHALENE	--	--	--	ug/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.76 U	0.38 UJ	NA	NA	NA
	2-METHYLNAPHTHALENE	--	--	--	ug/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	NAPHTHALENE	1	20	20	ug/L		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA
	PHENANTHRENE	0.22	0.2	510	ug/L		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA
	PYRENE	0.5	1000	--	ug/L		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA
	TOTAL PAHs	--	--	--	ug/L		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
VOCs	BENZENE	1	5	31.2	ug/L		***8.7***	1 U	4	1.1	1 U	1.3	1 U	1 U	1.2	1 U	1 U	1 U	1 U	1 U	3.2	2.3	1 U	1 U	1 U	1 U	1 U	NA	NA	NA
	ETHYLBENZENE	1	700	--	ug/L		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA
	p/m-XYLENE	--	--	--	ug/L		NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	--	--	--	ug/L		NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	o-XYLENE	--	--	--	ug/L		NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA
	XYLENES (TOTAL)	2	10000	--	ug/L		2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	NA	NA
	METHYL TERT BUTYL ETHER	--	--	--	ug/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA	NA	10 U	NA	NA	NA
	TOTAL BTEX	--	--	--	ug/L		8.7	ND	4	1.1	ND	1.3	ND	ND	1.2	ND	ND	ND	ND	ND	3.2	2.3	ND	ND	ND	ND	ND	NA	NA	NA
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L		0.0102	***0.024***	0.01 U	0.013 U	0.015	0.013	0.016	***0.026***	0.018	***0.028***	***0.022***	***0.03***	***0.028***	0.01 U	0.013	0.014	0.018	***0.025***	***0.024***	0.02 U	***0.02***	***0.019***	***0.028***	***0.026***
	BERYLLIUM	--	0.004	--	mg/L		0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BORON	--	--	--	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	--	0.005	--	mg/L		0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CALCIUM METAL	--	--	--	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	--	mg/L		0.01 U	0.01 U	0.01 U	0.01 U	0.011	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	NA	NA	NA
	MAGNESIUM	--	--	--	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	--	0.002	--	mg/L		0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L		0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	***0.2***	0.078	0.073	***0.12***	0.04 U	NA	NA	NA
	POTASSIUM	--	--	--	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	--	--	--	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L		0.0566	0.18	0.036	0.099	0.032	0.034	0.11	0.14	0.084	0.13	0.36	0.23	0.13	0.24	0.12	0.21	***2.8***	0.66	0.62	1.4	0.16	NA	NA	NA
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L		NA	NA	0.01 U	0.01 U	0.01	0.01 U	0.01 U	0.018	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.018	NA	NA
	BERYLLIUM	--	0.004	--	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	--	0.005	--	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	--	mg/L		NA	NA	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L		NA	NA	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	--	0.002	--	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L		NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L		NA	NA	0.02 U	0.047	0.02 U	0.02 U	0.035	0.12	0.039	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	ALKALINITY	--	--	--	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	--	--	--	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L		***1100***	***370***	***340***	***330***	***430***	***400***	6.9	***440***	1.3	3.1	***340***	***260***	***250***	***360***	***760***	***550***	***220***	***310***	***310***	***39***	***230***	***180***	***260***	***280***
	BICARBONATE	--	--	--	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	--	--	--	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	--	--	--	umhos/cm		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	--	10	--	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SULFATE	--	--	--	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	--	--	--	mg/L		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and Italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drink

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, I installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32 respectively.

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

						Location:	PDMW-21T																									
						Sample Date:	10/29/1997	8/9/1999	11/17/1999	2/24/2000	5/16/2000	8/21/2000	1/9/2001	7/10/2001	2/4/2002	9/11/2002	2/6/2003	6/25/2003	1/27/2004	7/21/2004	3/6/2006	4/1/2008	7/18/2008	10/6/2008	12/4/2009	6/19/2010		12/16/2010	6/16/2011		12/5/2011
						Sample Type:	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Dup	Normal
						Sample ID:	PDMW-21T_10/29/1997	PDMW-21T_8/9/1999	PDMW-21T_11/17/1999	PDMW-21T_2/24/2000	PDMW-21T_5/16/2000	PDMW-21T_8/21/2000	PDMW-21T_1/9/2001	PDMW-21T_7/10/2001	PDMW-21T_2/4/2002	PDMW-21T_9/11/2002	PDMW-21T_2/6/2003	PDMW-21T_6/25/2003	PDMW-21T_1/27/2004	PDMW-21T_7/21/2004	PDMW-21T_3/6/2006	PDMW-21T_4/1/2008	PDMW-21T_7/18/2008	PDMW-21T_10/6/2008	PDMW-21T_12/4/2009	PDMW-21T_6/19/2010	PDMW-21TDUP_6/19/2010	PDMW-21T_12/16/2010	PDMW-21T-061611	DUP-2-061611	PDMW-21T-12052011
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA	NA
	ACENAPHTHYLENE	1.4	1	510	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	0.19 UJ	NA	NA	NA	NA
	ANTHRACENE	0.2	0.2	5100	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	0.19 UJ	NA	NA	NA	NA
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	0.19 UJ	NA	NA	NA	NA
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	0.19 UJ	NA	NA	NA	NA
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	0.19 UJ	NA	NA	NA	NA
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA	NA
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA	NA
	CHRYSENE	0.2	0.2	65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	0.19 UJ	NA	NA	NA	NA
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA	NA
	FLUORANTHENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	0.19 UJ	NA	NA	NA	NA
	FLUORENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	0.19 UJ	NA	NA	NA	NA
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA	NA
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.19 U	0.2 U	0.19 U	0.76 U	0.19 UJ	0.38 UJ	NA	NA	NA	NA
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	0.19 UJ	NA	NA	NA	NA
	NAPHTHALENE	1	20	20	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	0.19 UJ	NA	NA	NA	NA
	PHENANTHRENE	0.22	0.2	510	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	0.19 UJ	NA	NA	NA	NA
	PYRENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.96 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	0.19 UJ	NA	NA	NA	NA
	TOTAL PAHs	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA
	ETHYLBENZENE	1	700	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA
	p/m-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	o-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA
	XYLENES (TOTAL)	2	10000	- -	ug/L	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	NA	NA	NA
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA	10 U	10 U	NA	NA	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA
	BERYLLIUM	- -	0.004	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BORON	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	0.025 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CALCIUM METAL	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.0075	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA
	MAGNESIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	NA
	POTASSIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.046	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.022	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.02 U	NA	NA	NA	NA	NA
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	NA	NA	0.005 U	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04 U	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	NA	NA	0.02 U	0.02 U	NA	NA	NA	NA	0.039	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.02 U	NA	NA	NA	NA	NA
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L	***570***	***270***	***240***	***280***	***280***	***270***	***180***	***220***	***160***	***220***	***38***	***160***	***92***	4.6	***170***	***130***	***140***	***150***	***130***	***110***	***110***	***120***	***150***	***150***	***85***
	BICARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	- -	- -	- -	umhos/cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	- -	10	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SULFATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drink

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, I installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32 respectively.

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

Location:						PDMW-22T																								PDMW-23R												
Sample Date:						10/23/1997	8/10/1999	11/17/1999	2/24/2000	5/16/2000	8/22/2000	1/9/2001	7/16/2001	9/13/2002	2/5/2003	6/25/2003	1/27/2004	7/21/2004	3/5/2006	4/1/2008	7/18/2008	10/6/2008	12/2/2009	6/19/2010	12/16/2010	6/14/2011	12/5/2011	4/1/2008	7/19/2008	10/8/2008	12/2/2009		6/19/2010	12/15/2010	6/14/2011	12/7/2011	12/11/2013	11/5/2014	5/19/2015
Sample Type:						Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Normal	Normal	Normal
Sample ID:						PDMW-22T_10/23/1997	PDMW-22T_8/10/1999	PDMW-22T_11/17/1999	PDMW-22T_2/24/2000	PDMW-22T_5/16/2000	PDMW-22T_8/22/2000	PDMW-22T_1/9/2001	PDMW-22T_7/16/2001	PDMW-22T_9/13/2002	PDMW-22T_2/5/2003	PDMW-22T_6/25/2003	PDMW-22T_1/27/2004	PDMW-22T_7/21/2004	PDMW-22T_3/5/2006	PDMW-22T_4/1/2008	PDMW-22T_7/18/2008	PDMW-22T_10/6/2008	PDMW-22T_12/2/2009	PDMW-22T_6/19/2010	PDMW-22T_12/16/2010	PDMW-22T-061411	PDMW-22T-12052011	PDMW-23R_4/1/2008	PDMW-23R_7/19/2008	PDMW-23R_10/8/2008	PDMW-23R_12/2/2009	DUP_12/2/2009	PDMW-23R_6/19/2010	PDMW-23R_12/15/2010	PDMW-23R-061411	PDMW-23R_12072011	PDMW-23R_12/11/2013	PDMW-23R_11052014	PDMW-23R_05192015
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	0.2 U	2 U	1 U	0.98 U	1.9 U	19 U	19 U	0.19 U	1.9 UJ	NA	NA	NA	1.9 U	1.9 U	19 U	0.19 U	0.19 U	1.9 UJ	1.9 U	0.2 U	0.19 U	9.2 U	NA	NA
	ACENAPHTHYLENE	1.4	1	510	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	0.2 U	2 U	1 U	0.98 U	1.9 U	19 U	19 U	0.19 U	1.9 UJ	NA	NA	NA	1.9 U	1.9 U	19 U	0.19 U	0.19 U	1.9 UJ	1.9 U	0.2 U	0.19 U	9.2 U	NA	NA
	ANTHRACENE	0.2	0.2	5100	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	2 U	1 U	0.98 U	1.9 U	19 U	19 U	0.19 U	1.9 UJ	NA	NA	NA	1.9 U	1.9 U	19 U	0.19 U	0.19 U	1.9 UJ	1.9 U	0.2 U	0.19 U	9.2 U	NA	NA
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	2 U	1 U	0.98 U	1.9 U	19 U	19 U	0.19 U	1.9 UJ	NA	NA	NA	1.9 U	1.9 U	19 U	0.19 U	0.19 U	1.9 UJ	1.9 U	0.2 U	0.19 U	9.2 U	NA	NA
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	2 U	1 U	0.98 U	1.9 U	19 U	19 U	0.19 U	1.9 UJ	NA	NA	NA	1.9 U	1.9 U	19 U	0.19 U	0.19 U	1.9 UJ	1.9 U	0.2 U	0.19 U	9.2 U	NA	NA
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	2 U	1 U	0.98 U	1.9 U	19 U	19 U	0.19 U	1.9 UJ	NA	NA	NA	1.9 U	1.9 U	19 U	0.19 U	0.19 U	1.9 UJ	1.9 U	0.2 U	0.19 U	9.2 U	NA	NA
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	1 U	0.2 U	2 U	1 U	0.98 U	1.9 U	19 U	19 U	0.19 U	1.9 UJ	NA	NA	NA	1.9 U	1.9 U	19 U	0.19 U	0.19 U	1.9 UJ	1.9 U	0.2 U	0.19 U	9.2 U	NA	NA
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	1 U	0.2 U	2 U	1 U	0.98 U	1.9 U	19 U	19 U	0.19 U	1.9 UJ	NA	NA	NA	1.9 U	1.9 U	19 U	0.19 U	0.19 U	1.9 UJ	1.9 U	0.2 U	0.19 U	9.2 U	NA	NA
	CHRYSENE	0.2	0.2	65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	2 U	1 U	0.98 U	1.9 U	19 U	19 U	0.19 U	1.9 UJ	NA	NA	NA	1.9 U	1.9 U	19 U	0.19 U	0.19 U	1.9 UJ	1.9 U	0.2 U	0.19 U	9.2 U	NA	NA
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	1 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	1 U	0.2 U	2 U	1 U	0.98 U	1.9 U	19 U	19 U	0.19 U	1.9 UJ	NA	NA	NA	1.9 U	1.9 U	19 U	0.19 U	0.19 U	1.9 UJ	1.9 U	0.2 U	0.19 U	9.2 U	NA	NA
	FLUORANTHENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	2 U	1 U	0.98 U	1.9 U	19 U	19 U	19 U	0.19 U	1.9 UJ	NA	NA	NA	1.9 U	1.9 U	19 U	0.19 U	0.19 U	1.9 UJ	1.9 U	0.2 U	0.19 U	9.2 U	NA	NA
	FLUORENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	2 U	1 U	0.98 U	1.9 U	19 U	19 U	19 U	0.19 U	1.9 UJ	NA	NA	NA	1.9 U	1.9 U	19 U	0.19 U	0.19 U	1.9 UJ	1.9 U	0.2 U	0.19 U	9.2 U	NA	NA
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	1 U	0.2 U	2 U	1 U	0.98 U	1.9 U	19 U	19 U	0.19 U	1.9 UJ	NA	NA	NA	1.9 U	1.9 U	19 U	0.19 U	0.19 U	1.9 UJ	1.9 U	0.2 U	0.19 U	9.2 U	NA	NA
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	0.8	17	2	27	6.9	16	11	94	37	16	3.8 UJ	NA	NA	NA	1.9 U	1.9 U	19 U	0.76 U	0.76 U	3.8 UJ	3.8 U	0.4 U	0.38 U	9.2 U	NA	NA
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	1 U	0.2 U	2 U	1 U	0.98 U	1.9 U	19 U	19 U	0.19 U	1.9 UJ	NA	NA	NA	1.9 U	1.9 U	19 U	0.19 U	0.19 U	1.9 UJ	1.9 U	0.2 U	0.19 U	9.2 U	NA	NA
	NAPHTHALENE	1	20	20	ug/L	17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	1 U	0.2 U	2 U	1 U	0.98 U	1.9 U	19 U	19 U	0.19 U	1.9 UJ	NA	NA	NA	1.9 U	1.9 U	***30***	0.19 U	0.19 U	1.9 UJ	1.9 U	0.2 U	0.19 U	9.2 U	NA	NA
	PHENANTHRENE	0.22	0.2	510	ug/L	***0.23***	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	2 U	1 U	0.98 U	1.9 U	19 U	19 U	0.19 U	1.9 UJ	NA	NA	NA	1.9 U	1.9 U	19 U	0.19 U	0.19 U	1.9 UJ	1.9 U	0.2 U	0.19 U	9.2 U	NA	NA
	PYRENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	2 U	1 U	0.98 U	1.9 U	19 U	19 U	0.19 U	1.9 UJ	NA	NA	NA	1.9 U	1.9 U	19 U	0.19 U	0.19 U	1.9 UJ	1.9 U	0.2 U	0.19 U	9.2 U	NA	NA
	TOTAL PAHs	- -	- -	- -	ug/L	17.23	ND	ND	ND	ND	ND	ND	ND	0.8	17	2	27	6.9	16	11	94	37	16	ND	NA	NA	NA	ND	ND	30	ND	ND	ND	ND	ND	ND	NA	NA
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 UJ	NA	NA	NA	1 U	NA	NA
	ETHYLBENZENE	1	700	- -	ug/L	1.7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 UJ	NA	NA	NA	1 U	NA	NA
	p/m-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 U	NA	NA
	o-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 UJ	NA	NA	NA	1 U	NA	NA
	XYLENES (TOTAL)	2	10000	- -	ug/L	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	NA	NA	NA	2 U	2 U	2 U	2 U	2 U	2 UJ	NA	NA	NA	2 U	NA	NA
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA	10 UJ	NA	NA	NA	10 U	10 U	NA	NA	NA	10 UJ	NA	NA	NA	10 U	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	6.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	NA	NA
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.02 U	NA	NA	NA	0.018	***0.03***	***0.038***	***0.034***	***0.03***	***0.042***	***0.025***	***0.03***	***0.02***	0.0092	0.02 U	0.02 U
	BERYLLIUM	- -	0.004	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BORON	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CALCIUM METAL	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	0.012	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	0.0019	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	NA	NA	NA	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	0.01 U	0.01 U	0.01 U
	MAGNESIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	0.04 U	NA	NA
	POTASSIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	0.041	0.075	0.037	0.025	0.02 U	0.02 U	NA	NA	NA	0.02 U	NA	NA
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	***0.02***	NA	NA	NA
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	NA	NA	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	NA	NA	0.02 U	0.02 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L	NA	***46***	***48***	25	***36***	***32***	15	***39***	29	17	***31***	13	***39***	***34***	30	13	21	28	29 J	***31***	***32***	18	0.96	0.65	0.53	2.2	2.2	2.2 J	NA	1.5	NA	1.1	2.3	1.5
	BICARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	- -	- -	- -	umhos/cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	- -	10	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05 U	0.05 U	0.05 U
	SULFATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drinki

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, I installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32 respectively,

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

| | | | | | Location: | PDMW-23T | | | | |

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

					Location:	PDMW-2ST																					
					Sample Date:	10/23/1997	8/8/1999	11/17/1999	2/24/2000	5/15/2000	8/21/2000	1/9/2001	7/12/2001	9/12/2002	2/5/2003	6/26/2003	1/29/2004	7/22/2004		3/7/2006	4/4/2008	7/19/2008	10/9/2008	12/5/2009
					Sample Type:	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Normal
					Sample ID:	PDMW-2ST_10/23/1997	PDMW-2ST_8/8/1999	PDMW-2ST_11/17/1999	PDMW-2ST_2/24/2000	PDMW-2ST_5/15/2000	PDMW-2ST_8/21/2000	PDMW-2ST_1/9/2001	PDMW-2ST_7/12/2001	PDMW-2ST_9/12/2002	PDMW-2ST_2/5/2003	PDMW-2ST_6/26/2003	PDMW-2ST_1/29/2004	PDMW-2ST_7/22/2004	PDMW-2ST (DUP)_7/22/2004	PDMW-2ST_3/7/2006	PDMW-2ST_4/4/2008	PDMW-2ST_7/19/2008	PDMW-2ST_10/9/2008	PDMW-2ST_12/5/2009
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	ACENAPHTHYLENE	1.4	1	510	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	ANTHRACENE	0.2	0.2	5100	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	CHRYSENE	0.2	0.2	65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	1 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	FLUORANTHENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	FLUORENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.76 U
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	NAPHTHALENE	1	20	20	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	PHENANTHRENE	0.22	0.2	510	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	PYRENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
	TOTAL PAHs	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	ETHYLBENZENE	1	700	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	p/m-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	o-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	XYLENES (TOTAL)	2	10000	- -	ug/L	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U
	BERYLLIUM	- -	0.004	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BORON	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CALCIUM METAL	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
	LEAD	0.007	0.015	0.015	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U
	MAGNESIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
	POTASSIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.02 U	0.02 U	0.02 U	0.035	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	NA	NA	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	NA	NA	0.02 U	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L	NA	3.2	14	3.2	1.8	4	0.66	3.3	2.8	5.6	2.6	0.035	3.7	3.6	1.6	3.5	3.6	5.4	6.1
	BICARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	- -	- -	- -	umhos/cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	- -	10	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SULFATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drink

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, F installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32 respectively.

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

Location:						PDMW-26T																													
Sample Date:						10/30/1997	8/9/1999	11/18/1999	2/25/2000	5/17/2000	8/22/2000	1/10/2001	7/16/2001	2/5/2002	9/10/2002	2/5/2003	6/26/2003		1/27/2004	7/20/2004	3/8/2006	4/2/2008	7/18/2008	10/5/2008	12/5/2009	6/18/2010		12/16/2010	6/16/2011	12/8/2011	12/11/2013	6/5/2014	11/6/2014		5/21/2015
Sample Type:						Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Normal	Dup	Normal
Sample ID:						PDMW-26T_10/30/1997	PDMW-26T_8/9/1999	PDMW-26T_11/18/1999	PDMW-26T_2/25/2000	PDMW-26T_5/17/2000	PDMW-26T_8/22/2000	PDMW-26T_1/10/2001	PDMW-26T_7/16/2001	PDMW-26T_2/5/2002	PDMW-26T_9/10/2002	PDMW-26T_2/5/2003	PDMW-26T_6/26/2003	PDMW-26T (DUP)_6/26/2003	PDMW-26T_1/27/2004	PDMW-26T_7/20/2004	PDMW-26T_3/8/2006	PDMW-26T_4/2/2008	PDMW-26T_7/18/2008	PDMW-26T_10/5/2008	PDMW-26T_12/5/2009	PDMW-26T_6/18/2010	PDMW-26TDUP_6/18/2010	PDMW-26T_12/16/2010	PDMW-26T-061611	PDMW-26T_12082011	PDMW-26T_12112013	PDMW-26T_06052014	PDMW-26T_11062014	DUP-03_11062014	PDMW-26T_05212015
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	1.9 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.8 U	NA	NA	NA
	ACENAPHTHYLENE	1.4	1	516	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	1.9 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	***9.8 U****	NA	NA	NA
	ANTHRACENE	0.2	0.2	5100	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	1.9 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.8 U	NA	NA	NA
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	1.9 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.8 U	NA	NA	NA
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	1.9 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.8 U	NA	NA	NA
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	1.9 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.8 U	NA	NA	NA
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	1.9 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.8 U	NA	NA	NA
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	1.9 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.8 U	NA	NA	NA
	CHRYSENE	0.2	0.2	65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	1.9 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.8 U	NA	NA	NA
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	1 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	1.9 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.8 U	NA	NA	NA
	FLUORANTHENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	1.9 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.8 U	NA	NA	NA
	FLUORENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	1.9 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.8 U	NA	NA	NA
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	1.9 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.8 U	NA	NA	NA
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	1.9 U	0.8 U	0.38 U	0.38 U	NA	NA	NA	9.1 U	9.8 U	NA	NA	NA
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	1.9 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.8 U	NA	NA	NA
	NAPHTHALENE	1	20	20	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	1.9 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.8 U	NA	NA	NA
	PHENANTHRENE	0.22	0.2	516	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	1.9 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.8 U	NA	NA	NA
	PYRENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	1.9 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	9.1 U	9.8 U	NA	NA	NA
	TOTAL PAHs	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	NA
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1.2	3	1.5	1 U	1.7	2.3	2.3	NA	NA	NA	1 U	1 U	NA	NA	NA
	ETHYLBENZENE	1	700	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	1 U	1 U	NA	NA	NA
	p/m-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 U	5 U	NA	NA	NA
	o-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	1 U	1 U	NA	NA	NA
	XYLENES (TOTAL)	2	10000	- -	ug/L	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	NA	NA	2 U	2 U	NA	NA	NA
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA	10 U	10 U	NA	NA	NA	10 U	10 U	NA	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	1.2	3	1.5	ND	1.7	2.3	2.3	NA	NA	NA	ND	ND	NA	NA	NA
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.01 U	0.016	0.016	0.013	***0.02***	***0.022***	***0.026***	0.017	NA	0.017	***0.019***	***0.021***	***0.019***	0.017	0.018	***0.02***	***0.029***	***0.027***	***0.024***	***0.034***	***0.045***	***0.047***	***0.025***	***0.034***	***0.025***	***0.021***	***0.025***	0.02 U	0.02 U	***0.025***
	BERYLLIUM	- -	0.004	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BORON	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CALCIUM METAL	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	0.0022	0.01 U	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
	MAGNESIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	0.0043	0.04 U	NA	NA	NA
	POTASSIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.1	0.02 U	0.02 U	0.02 U	NA	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	0.02 U	0.02 U	NA	NA	NA
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	***0.025***	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	NA	NA	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	NA	NA	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.02 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L	***380***	***350***	***440***	***34***	***550***	***740***	***900***	***490***	NA	***540***	***580***	***510***	***320***	***610***	***600***	***710***	***570***	***580***	***560***	***570***	***500***	***500***	***520***	***570***	***550***	***530***	***600***	***470***	***490***	***550***
	BICARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	- -	- -	- -	umhos/cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	- -	10	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.41	1.1	0.051	0.07	0.26
	SULFATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and Italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drink

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, I installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32 respectively.

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

					Location:	PDMW-27P																PDMW-27R									
					Sample Date:	11/4/1997	8/11/1999	11/16/1999	2/23/2000	5/16/2000	8/22/2000	1/10/2001	7/16/2001	2/6/2002	9/12/2002	2/4/2003	6/26/2003	1/29/2004	7/20/2004	3/6/2006		4/3/2008	7/20/2008	10/6/2008	12/4/2009	6/18/2010	12/16/2010	6/15/2011		12/8/2011	
					Sample Type:	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Dup
					Sample ID:	PDMW-27P_11/4/1997	PDMW-27P_8/11/1999	PDMW-27P_11/16/1999	PDMW-27P_2/23/2000	PDMW-27P_5/16/2000	PDMW-27P_8/22/2000	PDMW-27P_1/10/2001	PDMW-27P_7/16/2001	PDMW-27P_2/6/2002	PDMW-27P_9/12/2002	PDMW-27P_2/4/2003	PDMW-27P_6/26/2003	PDMW-27P_1/29/2004	PDMW-27P_7/20/2004	PDMW-27P Filtered_3/6/2006	PDMW-27P Unfiltered_3/6/2006	PDMW-27R_4/3/2008	PDMW-27R_7/20/2008	PDMW-27R_10/6/2008	PDMW-27R_12/4/2009	PDMW-27R_6/18/2010	PDMW-27R_12/16/2010	PDMW-27R_061511	DUP-3_061511	PDMW-27R_120820 11	DUP-03_120820 11
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	1 U	1.4	1 U	1.2 J	1.9	1.5	1 U	1 U	1 U	1.1	0.83	0.54	0.52	0.2 U	0.19 U	0.53	0.74	0.67	0.84	0.72	0.64 J	NA	NA	NA	NA	NA
	ACENAPHTHYLENE	1.4	1	510	ug/L	1 U	***5.5***	***3.9***	***4.6***	1 U	***2.1***	***5***	***1.7***	***2.6***	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.28	0.19 U	0.19 U	NA	NA	NA	NA	NA
	ANTHRACENE	0.2	0.2	5100	ug/L	0.2 U	0.2 U	0.2 U	***0.34***	0.2 U	***0.37***	0.2 U	0.2 U	***0.38***	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	0.5 U	NA	0.5 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	0.5 U	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	CHRYSENE	0.2	0.2	65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	1 U	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	FLUORANTHENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	FLUORENE	0.5	1000	- -	ug/L	1.6	1.3	0.85	0.58 J	0.5 U	0.59	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.41	0.42	0.5	0.37	0.46	NA	NA	NA	NA	NA
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	0.5 U	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	1.8 J	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.76 U	0.38 UJ	NA	NA	NA	NA	NA
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	1 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 UJ	NA	NA	NA	NA	NA
	NAPHTHALENE	1	20	20	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.54	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.22	0.19 U	0.19 UJ	NA	NA	NA	NA	NA
	PHENANTHRENE	0.22	0.2	510	ug/L	***0.78***	0.2 U	0.2 U	***0.28 J***	0.2 U	***0.31***	0.2 U	0.2 U	***0.22 J***	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	PYRENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA
	TOTAL PAHs	- -	- -	- -	ug/L	2.38	8.2	6.55	7	1.9	4.87	5	1.7	3.2	1.1	1.37	0.54	0.52	ND	ND	0.53	1.15	1.09	1.84	1.09	1.1	NA	NA	NA	NA	NA
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	1 U	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	***6.7***	NA	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA
	ETHYLBENZENE	1	700	- -	ug/L	1 U	1 U	1 U	1.2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA
	p/m-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	o-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	1.5	1 U	1 U	1.2	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	1 U	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2	NA	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA
	XYLENES (TOTAL)	2	10000	- -	ug/L	4	1 U	1 U	1.5	1 U	1 U	1.2	1 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	2 U	2 U	2 U	2 U	2 U	2 U	NA	NA	NA	NA	NA
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA	10 U	NA	NA	NA	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	4	ND	1.1	3.8	ND	ND	1.2	ND	ND	ND	ND	ND	ND	7.9	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.01	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.013	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	***0.024***	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U
	BERYLLIUM	- -	0.004	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BORON	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CALCIUM METAL	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	0.005 U	***0.031***	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	NA	0.01 U	0.01 U	NA	NA
	MAGNESIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	NA	NA
	POTASSIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.02 U	0.02 U	0.022 U	0.02 U	0.02 U	0.02 U	0.06	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.047	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA	NA
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	NA	NA	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	NA	NA	0.02 U	0.02 U	NA	NA	0.02 U	NA	NA	NA	NA	NA	NA	NA	0.02 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L	***91***	14	***89***	***73***	***98***	***110***	***56***	***89***	***67***	***92***	26	21	0.03 U	***400***	NA	28	***170***	***160***	***140***	***150***	***96***	***98***	***170***	***160***	***150***	***140***
	BICARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	- -	- -	- -	umhos/cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	- -	10	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SULFATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drinking Water Regulations.

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, PDMW-34R were installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32P, PDMW-33P, and PDMW-34P respectively.

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

| Location: | | | | | PDMW-29D | | | | |

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

					Location:	PDMW-30P																		PDMW-30R						PDMW-31P			PDMW-31R																
					Sample Date:	11/5/1997	5/16/2000	1/10/2001	9/12/2002	2/6/2003	6/26/2003	1/30/2004	3/8/2006	4/4/2008	7/22/2008	10/9/2008	12/3/2009	12/11/2013	11/3/2014	5/20/2015	6/15/2010	12/14/2010	6/14/2011	12/21/2011		6/3/2014	11/6/1997	8/10/1999	11/18/1999	2/23/2000	5/16/2000	8/22/2000	1/10/2001	7/16/2001	2/6/2002	9/12/2002	2/7/2003	6/26/2003	1/29/2004	7/22/2004	3/8/2006								
					Sample Type:	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal								
					Sample ID:	PDMW-30P_11/5/1997	PDMW-30P_5/16/2000	PDMW-30P_1/10/2001	PDMW-30P_9/12/2002	PDMW-30P_2/6/2003	PDMW-30P_6/26/2003	PDMW-30P_1/30/2004	PDMW-30P_3/8/2006	PDMW-30P_4/4/2008	PDMW-30P_7/22/2008	PDMW-30P_10/9/2008	PDMW-30P_12/3/2009	PDMW-30P_12/11/2013	PDMW-30P_11032014	PDMW-30P_052020 15	PDMW-30R_6/15/2010	PDMW-30R_12/14/2010	PDMW-30R-061411	PDMW-30R_122120 11	DUP-04_122120 11	PDMW-30R_060320 14	PDMW-31P_11/6/1997	PDMW-31P_8/10/1999	PDMW-31P_11/18/1999	PDMW-31R_2/23/2000	PDMW-31R_5/16/2000	PDMW-31R_8/22/2000	PDMW-31R_1/10/2001	PDMW-31R_7/16/2001	PDMW-31R_2/6/2002	PDMW-31R_9/12/2002	PDMW-31R_2/7/2003	PDMW-31R_6/26/2003	PDMW-31R_1/29/2004	PDMW-31R_7/22/2004	PDMW-31R Filtered_3/8/2006	PDMW-31R Unfiltered_3/8/2006							
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result								
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U	9.5 U	NA	NA	0.19 U	NA	NA	NA	NA	9.8 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U							
	ACENAPHTHYLENE	1.4	1	510	ug/L	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U	9.5 U	NA	NA	0.19 U	NA	NA	NA	NA	9.8 U	1 U	1 U	***5***	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U							
	ANTHRACENE	0.2	0.2	5100	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U	9.5 U	NA	NA	0.19 U	NA	NA	NA	NA	9.8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U							
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U	9.5 U	NA	NA	0.19 U	NA	NA	NA	NA	9.8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U							
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U	9.5 U	NA	NA	0.19 U	NA	NA	NA	NA	9.8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U							
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U	9.5 U	NA	NA	0.19 U	NA	NA	NA	NA	9.8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U							
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	0.5 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 UJ	0.2 U	0.19 U	9.5 U	NA	NA	0.19 U	NA	NA	NA	NA	9.8 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U							
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	0.5 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U	9.5 U	NA	NA	0.19 U	NA	NA	NA	NA	9.8 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U							
	CHRYSENE	0.2	0.2	65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U	9.5 U	NA	NA	0.19 U	NA	NA	NA	NA	9.8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U							
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	1 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U	9.5 U	NA	NA	0.19 U	NA	NA	NA	NA	9.8 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U							
	FLUORANTHENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U	9.5 U	NA	NA	0.19 U	NA	NA	NA	NA	9.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U							
	FLUORENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U*	9.5 U	NA	NA	0.19 U	NA	NA	NA	NA	9.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U							
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	0.5 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U	9.5 U	NA	NA	0.19 U	NA	NA	NA	NA	9.8 U	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U							
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.75 U	9.5 U	NA	NA	0.38 U	NA	NA	NA	NA	9.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U							
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U	9.5 U	NA	NA	0.19 U	NA	NA	NA	NA	9.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U							
	NAPHTHALENE	1	20	20	ug/L	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U	9.5 U	NA	NA	0.19 U	NA	NA	NA	NA	9.8 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U							
	PHENANTHRENE	0.22	0.2	510	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U	9.5 U	NA	NA	0.19 U	NA	NA	NA	NA	9.8 U	0.2 U	0.2 U	***0.69***	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U							
	PYRENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U	9.5 U	NA	NA	0.19 U	NA	NA	NA	NA	9.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U							
	TOTAL PAHs	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	5.69	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND							
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	1 U	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U							
	ETHYLBENZENE	1	700	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	1 U	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U							
	p/m-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	o-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	TOLUENE	1	1000	1900	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	1 U	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U							
	XYLENES (TOTAL)	2	10000	- -	ug/L	2 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	NA	2 U	NA	NA	NA	NA	2 U	2 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	2 U							
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA	10 U	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U							
	TOTAL BTEX	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND							
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.0131	0.018	0.01 U	0.014	0.011	***0.11***	0.012	0.01 U	0.01	***0.035***	0.01 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.02 U	***0.111***	***0.11***	***0.16***	***0.15***	***0.18***	***0.25***	***0.14***	***0.23***	***0.12***	***0.17***	***0.19***	***0.2***	***0.081***	***0.12***	***0.072***	***0.072***							
	BERYLLIUM	- -	0.004	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	BORON	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	CADMIUM	- -	0.005	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	CALCIUM METAL	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	0.01 U	NA	NA	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U							
	LEAD	0.007	0.015	0.015	mg/L	0.005 U	0.007	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	0.01 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U							
	MAGNESIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	MERCURY	- -	0.002	- -	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	NICKEL	0.13	0.1	2	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.0036	NA	NA	0.04 U	NA	NA	NA	NA	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U							
	POTASSIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	SODIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	ZINC	0.96	2	31	mg/L	0.0744	0.049	0.15	0.023	0.02 U	0.02 U	0.02 U	0.02 U	0.12	0.042	0.087	0.036	0.02 U	NA	NA	0.02 U	NA	NA	NA	NA	0.02 U	0.0576	0.065	0.18	0.077	0.062	0.096	0.09	0.11	0.088	0.072	0.055	0.058	0.081	0.034	0.023	0.023							
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	0.01 U	0.01 U	0.02 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	0.018	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	NA	***0.072***	NA							
	BERYLLIUM	- -	0.004	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	CADMIUM	- -	0.005	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA							
	LEAD	0.007	0.015	0.015	mg/L	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	0.005 U	0.005 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA							
	MERCURY	- -	0.002	- -	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	NICKEL	0.13	0.1	2	mg/L	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	0.04 U	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	ZINC	0.96	2	31	mg/L	0.0522	0.02 U	0.14	NA	NA	NA	NA	NA	NA	0.02 U	0.089	0.02 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.09	0.069	0.045	0.086	0.077	0.083	0.076	NA	NA	NA	NA	NA	0.023	NA							
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	AMMONIA AS N	15	30	30	mg/L	0.037	2.4	0.29	0.27	0.045	0.63	0.11	0.35	0.49	0.54	0.31	0.31	1.7	2.2	2	0.69	NA	1.5	NA	NA	1.6	6.8	30	7.9	3.3	4.3	6.4	4	6.7	11	13	7.6	5.4	3	9.5	NA	***32***							
	BICARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	CARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	CONDUCTIVITY	- -	- -	- -	umhos/cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	NITRATE (AS N)	- -	10	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05 U	0.05 U	0.05 U	NA	NA	NA	NA	NA	0.05 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	SULFATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA							

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drink

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, F installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32 respectively.

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

					Location:	PDMW-31R2									PDMW-32P			PDMW-32R																								PDMW-33R						
					Sample Date:	4/2/2008	7/21/2008		10/8/2008	12/4/2009	6/16/2010	12/15/2010	6/15/2011	12/7/2011	11/5/1997	8/9/1999	11/18/1999	2/23/2000	5/16/2000	8/22/2000	1/9/2001	7/16/2001	2/5/2002	9/12/2002	2/6/2003	6/26/2003	1/30/2004	7/22/2004	3/8/2006	4/4/2008	7/22/2008	10/9/2008	12/7/2009	6/19/2010	6/16/2011	12/12/2013	6/4/2014	11/6/2014	5/19/2015	9/10/2002	2/4/2003	6/25/2003	1/29/2004	7/22/2004	3/8/2006
					Sample Type:	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Sample ID:	PDMW-31R2_4/2/2008	PDMW-31R2_7/21/2008	PDMW-31R2 DUP_7/21/2008	PDMW-31R2_10/8/2008	PDMW-31R2_12/4/2009	PDMW-31R2_6/16/2010	PDMW-31R2_12/15/2010	PDMW-31R2_6/15/2011	PDMW-31R2_12072011	PDMW-32P_11/5/1997	PDMW-32P_8/9/1999	PDMW-32P_11/18/1999	PDMW-32R_2/23/2000	PDMW-32R_5/16/2000	PDMW-32R_8/22/2000	PDMW-32R_1/9/2001	PDMW-32R_7/16/2001	PDMW-32R_2/5/2002	PDMW-32R_9/12/2002	PDMW-32R_2/6/2003	PDMW-32R_6/26/2003	PDMW-32R_1/30/2004	PDMW-32R_7/22/2004	PDMW-32R_3/8/2006	PDMW-32R_4/4/2008	PDMW-32R_7/22/2008	PDMW-32R_10/9/2008	PDMW-32R_12/7/2009	PDMW-32R_6/19/2010	PDMW-32R-061611	PDMW-32R_12/12/2013	PDMW-32R_060420 14	PDMW-32R_110620 14	PDMW-32R_051920 15	PDMW-33R_9/10/2002	PDMW-33R_2/4/2003	PDMW-33R_6/25/2003	PDMW-33R_1/29/2004	PDMW-33R_7/22/2004	PDMW-33R_3/8/2006
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	NA	9.8 U	9.9 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.28	0.2 U
	ACENAPHTHYLENE	1.4	1	510	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	NA	9.8 U	9.9 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	ANTHRACENE	0.2	0.2	5100	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	NA	9.8 U	9.9 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	NA	9.8 U	9.9 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	NA	9.8 U	9.9 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	NA	9.8 U	9.9 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 UJ	0.19 U	0.19 U	0.19 U	NA	9.8 U	9.9 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	NA	9.8 U	9.9 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	CHRYSENE	0.2	0.2	65	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	NA	9.8 U	9.9 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	1 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	NA	9.8 U	9.9 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	FLUORANTHENE	0.5	1000	- -	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	NA	9.8 U	9.9 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	FLUORENE	0.5	1000	- -	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	NA	9.8 U	9.9 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	NA	9.8 U	9.9 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.75 U	0.38 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.76 U	0.38 UJ	NA	9.8 U	9.9 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	NA	9.8 U	9.9 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	NAPHTHALENE	1	20	20	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 UJ	NA	9.8 U	9.9 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	PHENANTHRENE	0.22	0.2	510	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	NA	9.8 U	9.9 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	PYRENE	0.5	1000	- -	ug/L	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	NA	9.8 U	9.9 U	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
	TOTAL PAHs	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	NA	ND	ND	ND	ND	0.28	ND
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U
	ETHYLBENZENE	1	700	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U
	p/m-XYLENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
	o-XYLENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U
	XYLENES (TOTAL)	2	10000	- -	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	NA	NA	NA	2 U	1 U	1 U	1 U	1 U	1 U	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	2 U	2 U	NA	NA	2 U	2 U	2 U	2 U	2 U	2 U
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	10 U	10 U	10 U	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA	10 U	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	10 U
	TOTAL BTEX	- -	- -	- -	ug/L	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.012	***0.019***	***0.019***	0.01 U	0.02 U	0.02 U	0.036 U	0.018 U	0.018 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	NA	0.0063	0.02 U	0.02 U	0.02 U	0.02 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BORON	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CALCIUM METAL	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.039	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	0.01 U	0.01 U	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
	LEAD	0.007	0.015	0.015	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	NA	NA	NA	0.005 U	0.005 U	0.0067 U	0.005 U	0.005 U	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	***0.13***	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	NA	***0.023***	0.01 U	0.01 U	0.01 U	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
	MAGNESIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	0.0472	0.04 U	0.049	***0.12***	0.092	0.04 U	***0.13***	0.04 U	NA	***0.17***	0.09	0.059	0.048	0.04 U	0.057	0.057	0.04 U	0.04 U	0.041	0.04 U	NA	0.044	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
	POTASSIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	0.342	0.17	0.35	0.74	0.61	0.027	0.96	0.16	NA	***2.1***	0.63	0.47	0.63	0.39	0.45	0.7	0.2	0.23	0.49	0.02 U	NA	0.37	0.031	0.21	0.11	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.048	***0.13***	0.087	NA	***0.13***	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.34	0.79	0.58	0.025	0.87	0.19	0.59	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L	12	14	14	15	8.5	16	18	18	13	1.4	4.4	8	0.31	6.1	13	1.2	***42***	NA	0.64	1.5	1.3	0.83	6.5	0.12	0.23 U	0.73	3.6	0.23	0.05	2.2	6.6	11	7	0.7	11	8.7	8.2	5.2	14	1.9
	BICARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	- -	- -	- -	umhos/cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	- -	10	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2	0.05 U	0.05 U	0.05 U	NA	NA	NA	NA	NA	NA
	SULFATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drink

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, I installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32 respectively.

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

| | | | | | | PDMW-33R2 | | | | | | | | | | | PDMW-33T | PDMW-34T | | | | | | | | | | | | | | | | | | | | PDMW-35P | | | | | | | | | | | | | | | | | | |

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

Location:					PDMW-36P																PDMW-37P																PDMW-38P										
Sample Date:					9/12/2002	10/9/2002	2/5/2003	6/24/2003	1/27/2004	7/21/2004	3/8/2006	4/2/2008	7/22/2008	10/7/2008		12/3/2009	6/15/2010	12/14/2010	6/14/2011		12/8/2011	9/13/2002	10/9/2002	2/5/2003	6/26/2003	1/29/2004	7/22/2004	3/8/2006	4/2/2008	7/22/2008		10/7/2008	12/2/2009	6/16/2010	6/14/2011	9/12/2002	2/5/2003	6/24/2003	1/27/2004	7/21/2004	3/8/2006	4/4/2008	7/22/2008	10/7/2008	12/2/2009
Sample Type:					Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
Sample ID:					PDMW-36P_9/12/2002	PDMW-36P_10/9/2002	PDMW-36P_2/5/2003	PDMW-36P_6/24/2003	PDMW-36P_1/27/2004	PDMW-36P_7/21/2004	PDMW-36P_3/8/2006	PDMW-36P_4/2/2008	PDMW-36P_7/22/2008	PDMW-36P_10/7/2008	PDMW-36P-DUP_10/7/2008	PDMW-36_12/3/2009	PDMW-36P_6/15/2010	PDMW-36P_12/14/2010	PDMW-36P-061411	PDMW-36R-061411FF	PDMW-36P_12082011	PDMW-37P_9/13/2002	PDMW-37P_10/9/2002	PDMW-37P_2/5/2003	PDMW-37P_6/26/2003	PDMW-37P_1/29/2004	PDMW-37P_7/22/2004	PDMW-37P_3/8/2006	PDMW-37P_4/2/2008	PDMW-37P_7/22/2008	PDMW-37P DUP_7/22/2008	PDMW-37P_10/7/2008	PDMW-37P_12/2/2009	PDMW-37P_6/16/2010	PDMW-37P-061411	PDMW-38P_9/12/2002	PDMW-38P_2/5/2003	PDMW-38P_6/24/2003	PDMW-38P_1/27/2004	PDMW-38P_7/21/2004	PDMW-38P_3/8/2006	PDMW-38P_4/4/2008	PDMW-38P_7/22/2008	PDMW-38P_10/7/2008	PDMW-38P_12/2/2009
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	NA	0.25	0.2	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.19 U
	ACENAPHTHYLENE	1.4	1	510	ug/L	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.19 U
	ANTHRACENE	0.2	0.2	5100	ug/L	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.19 U
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.19 U
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 UJ	0.2 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.19 U
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.19 U
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 UJ	0.2 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 UJ	0.19 U	0.2 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 UJ	0.2 U	0.19 U
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 UJ	0.2 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.19 U
	CHRYSENE	0.2	0.2	65	ug/L	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.19 U
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 UJ	0.2 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.19 U
	FLUORANTHENE	0.5	1000	- -	ug/L	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.19 U
	FLUORENE	0.5	1000	- -	ug/L	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U*	0.19 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.19 U
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 UJ	0.2 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.19 U
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 UJ	0.2 U	0.2 U	0.75 U	0.38 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.75 U	0.38 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.75 U
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 UJ	0.2 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.19 U
	NAPHTHALENE	1	20	20	ug/L	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 UJ	0.2 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.19 U
	PHENANTHRENE	0.22	0.2	510	ug/L	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.19 U
	PYRENE	0.5	1000	- -	ug/L	0.2 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.19 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.19 U
	TOTAL PAHs	- -	- -	- -	ug/L	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	0.25	0.2	ND	ND	ND	ND	ND	ND	ND	ND
VOCs	BENZENE	1	5	31.2	ug/L	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	ETHYLBENZENE	1	700	- -	ug/L	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	p/m-XYLENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	o-XYLENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	XYLENES (TOTAL)	2	10000	- -	ug/L	2 U	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	NA	NA	NA	NA	2 U	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	65	10 U	10 U	NA	NA	10 U	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	***0.064***	0.01 U	0.013	0.018	0.013	0.018	0.01 U	0.01	0.01 U	***0.032***	***0.03***	0.02 U	0.02 U	0.018 U	0.072 U	NA	0.018 U	***0.057***	***0.032***	***0.036***	***0.028***	***0.031***	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.02 U	0.018 U	0.014	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BORON	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CALCIUM METAL	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	0.039	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
	LEAD	0.007	0.015	0.015	mg/L	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	NA	NA	NA	NA	***0.2***	NA	0.005 U	0.0067	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U
	MAGNESIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	0.04 U	NA	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	NA	0.04 U	NA	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
	POTASSIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.095	NA	0.02 U	0.065	0.057	0.02 U	0.02 U	0.038	0.02 U	0.053	0.06	0.048	0.02 U	NA	NA	NA	NA	0.22	NA	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.045	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	***0.021***	NA	NA	0.072 U	0.018 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.02 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L	12	NA	6.4	3.8	4.8	9.2	3.9	7.5	3.7	6.3	6.4	3	6.8	NA	NA	NA	NA	16	NA	21	15	19	7.4	1.1	1.9	7.9	8.1	6.8	0.67	8.5	NA	15	17	10	13	11	6.6	8.6	13	13	9.6
	BICARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	- -	- -	- -	umhos/cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	- -	10	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SULFATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and Italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drink

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, f installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32 respectively.

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

					Location:	PDMW-39					PDMW-40P						PDMW-40R								PDMW-41					PDMW-42							PDMW-43						PDMW-45					
					Sample Date:	9/11/2002	2/7/2003	6/26/2003	1/30/2004	7/22/2004	9/10/2002	2/5/2003	6/24/2003	1/27/2004	7/20/2004	3/8/2006	4/3/2006	7/20/2008	10/7/2008	12/5/2009	6/17/2010	12/15/2010	6/16/2011	12/7/2011	11/5/2014	2/4/2003	6/25/2003	1/27/2004	7/21/2004	3/8/2006	9/13/2002	2/3/2003	6/24/2003	1/27/2004	7/21/2004	3/9/2006		9/13/2002	2/3/2003	6/24/2003	1/27/2004	7/20/2004	3/8/2006	11/14/2002	2/7/2003	6/27/2003	1/29/2004	7/22/2004	4/3/2006
					Sample Type:	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
					Sample ID:	PDMW-39_9/11/2002	PDMW-39_2/7/2003	PDMW-39_6/26/2003	PDMW-39_1/30/2004	PDMW-39_7/22/2004	40P_9/10/2002	40P_2/5/2003	40P_6/24/2003	40P_1/27/2004	40P_7/20/2004	40P_3/8/2006	40R_4/3/2006	40R_7/20/2008	40R_10/7/2008	40R_12/5/2009	40R_6/17/2010	40R_12/15/2010	40R-061611	40R_12072011	40R_110520 14	41_2/4/2003	41_6/25/2003	41_1/27/2004	41_7/21/2004	41_3/8/2006	42_9/13/2002	42_2/3/2003	42_6/24/2003	42_1/27/2004	42_7/21/2004	42-3/9/2006	42-(DUP)_3/9/2006	43_9/13/2002	43_2/3/2003	43_6/24/2003	43_1/27/2004	43_7/20/2004	43_3/8/2006	45_11/14/2002	45_2/7/2003	45_6/27/2003	45_1/29/2004	45_7/22/2004	45_4/3/2006
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	3.8	0.38	0.83 U	0.2 U	81	2.9	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	4.4	5.6	4.6	NA	NA	NA	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	140	91	54	20	31	57	28	340	110	100	0.2 U	89	280	NA	0.2 U	0.2 U	0.2 U	2	0.19 U
	ACENAPHTHYLENE	1.4	1	510	ug/L	0.31 U	0.2 U	0.83 U	0.2 U	4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	NA	NA	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	20 U	***2.1***	1	8 U	0.94 U	***5***	8 U	2 U	2 U	0.2 U	2 U	3.8 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U
	ANTHRACENE	0.2	0.2	5100	ug/L	***4.3***	***0.7***	0.83 U	0.2 U	4 U	***4.4***	***0.98***	***0.3***	***4.3***	***0.55***	***0.68***	0.2 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	NA	NA	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	20 U	***4.9***	***2.8***	8 U	***4.3***	0.38 U	***14***	***4.1***	***2.4***	***0.38***	***2.4***	***14***	NA	0.2 U	0.2 U	0.2 U	***0.46***	0.19 U
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	0.31 U	0.2 U	0.83 U	0.2 U	4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	NA	NA	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	20 U	***1.4***	***2.8***	8 U	0.94 U	0.38 U	8 U	2 U	2 U	0.2 U	2 U	3.8 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	0.31 U	0.2 U	0.83 U	0.2 U	4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	NA	NA	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	20 U	1 U	***0.62***	8 U	0.94 U	0.38 U	8 U	2 U	2 U	0.2 U	2 U	3.8 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	0.31 U	0.2 U	0.83 U	0.2 U	4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	NA	NA	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	20 U	1 U	0.4 U	8 U	0.94 U	0.38 U	8 U	2 U	2 U	0.2 U	2 U	3.8 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	0.31 U	0.2 U	0.83 U	0.2 U	4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	NA	NA	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	20 U	1 U	0.4 U	8 U	0.94 U	0.38 U	8 U	2 U	2 U	0.2 U	2 U	3.8 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	0.31 U	0.2 U	0.83 U	0.2 U	4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	NA	NA	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	20 U	1 U	1.3	8 U	0.94 U	0.38 U	8 U	2 U	2 U	0.2 U	2 U	3.8 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U
	CHRYSENE	0.2	0.2	65	ug/L	0.31 U	0.2 U	0.83 U	0.2 U	4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	NA	NA	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	20 U	***1.4***	***2.6***	8 U	0.94 U	0.38 U	8 U	2 U	2 U	0.2 U	2 U	3.8 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	0.31 U	0.2 U	0.83 U	0.2 U	4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	NA	NA	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	20 U	1 U	0.4 U	8 U	0.94 U	0.38 U	8 U	2 U	2 U	0.2 U	2 U	3.8 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U
	FLUORANTHENE	0.5	1000	- -	ug/L	1.1	0.2 U	0.83 U	0.2 U	4 U	0.64	0.2 U	0.2 U	0.35	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	1.9 U	0.31 U	NA	NA	NA	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	20 U	14	23	22	6.9	5.4	13	4.1	3	0.21	2 U	14	NA	0.2 U	0.2 U	0.2 U	0.48	0.19 U
	FLUORENE	0.5	1000	- -	ug/L	2.4	0.2 U	0.83 U	0.2 U	41	3	0.22	0.2 U	0.28	0.2 U	0.19 U	0.2 U	0.19 U	1.7	1.9 U	3	NA	NA	NA	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	73	30	21	8.7	14	18	0.38 U	130	24	25	0.2 U	3.3	120	NA	0.2 U	0.2 U	0.2 U	2.1	0.19 U
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	0.31 U	0.2 U	0.83 U	0.2 U	4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	NA	NA	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	20 U	1 U	0.4 U	8 U	0.94 U	0.38 U	8 U	2 U	2 U	0.2 U	2 U	3.8 U	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	1.2	0.2 U	0.83 U	0.2 U	44	1.8	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	7.6 U	0.39 U	NA	NA	NA	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	87	74	27	1.5	16	23	0.38 U	100	33	28	0.2 U	7.7	36	NA	0.2 U	0.2 U	0.2 U	0.42	0.19 U
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	0.32	0.2 U	0.83 U	0.2 U	4 U	4.1	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	NA	NA	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	100	89	4.5	0.4 U	8 U	0.94 U	0.38 U	31	2	2 U	0.2 U	2 U	3.8 U	NA	0.2 U	0.2 U	0.2 U	0.69	0.19 U
	NAPHTHALENE	1	20	20	ug/L	0.65	0.2	0.83 U	0.2 U	***340***	16	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	NA	NA	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	***1100***	***1300***	1 U	3.7	***160***	***90***	0.38 U	8 U	12	9.7	0.2 U	2 U	4.5	NA	0.2 U	0.2 U	0.2 U	1.6	0.19 U
	PHENANTHRENE	0.22	0.2	510	ug/L	***6.3***	***0.27***	0.83 U	0.2 U	***43***	***4***	***0.42***	0.2 U	***0.48***	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	NA	NA	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	***120***	***51***	***24***	***4.1***	***19***	***22***	0.38 U	***170***	***29***	***14***	0.2 U	***3.6***	***62***	NA	0.2 U	0.2 U	0.2 U	***3.6***	0.19 U
	PYRENE	0.5	1000	- -	ug/L	0.51	0.2 U	0.83 U	0.2 U	4 U	0.23	0.2 U	0.2 U	0.22	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	1.9 U	0.19 U	NA	NA	NA	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	20 U	10	15	18	3.5	2.3	8 U	2.3	2 U	0.2 U	2 U	5.1	NA	0.2 U	0.2 U	0.2 U	0.3	0.19 U
	TOTAL PAHs	- -	- -	- -	ug/L	20.58	1.55	ND	ND	549	37.07	1.62	0.3	5.63	0.55	0.68	ND	ND	6.1	5.6	7.6	NA	NA	NA	ND	ND	ND	ND	ND	ND	1620	1635	164.3	87.12	280	224.7	40.7	798	220.5	182.1	0.59	106	535.6	NA	ND	ND	ND	11.65	ND
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	1 U	1 U	***0.8***	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	***6***	4.3	1.7	1 U	1 U	1.6	1.8	***15***	***7.8***	4.9	1 U	1 U	1.3	NA	1 U	1 U	1 U	1 U	1 U
	ETHYLBENZENE	1	700	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1.9	1.4	1 U	1 U	1 U	1 U	1 U	1.9	1.1	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U
	p/m-XYLENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	o-XYLENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.7 U	1 U	1 U	1 U	1 U	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1.8	1.5	1 U	1 U	1 U	1 U	1 U	4.4	1	1 U	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U
	XYLENES (TOTAL)	2	10000	- -	ug/L	2 U	2 U	2 U	2 U	7.9	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	NA	NA	NA	NA	2 U	2 U	2 U	2 U	2 U	17	26	11	2 U	2 U	2 U	2.1	2.8	6.4	2 U	2 U	2 U	2 U	NA	2 U	2 U	2 U	2 U	2 U
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	10 U	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	10 U	NA	NA	NA	NA	NA	10 U
	TOTAL BTEX	- -	- -	- -	ug/L	ND	ND	ND	ND	16.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	ND	26.7	33.2	12.7	ND	ND	1.6	3.9	24.1	16.3	4.9	ND	ND	1.3	NA	ND	ND	ND	ND	ND
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.02 U	NA	NA	NA	NA	0.01 U	0.015	0.01 U	0.01 U	0.01 U	***0.029***	***0.023***	***0.022***	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	***0.031***	0.012	***0.031***	***0.092***	0.01 U	0.01 U
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BORON	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CALCIUM METAL	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	NA	0.01 U	0.01 U	0.032	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	0.01 U	0.01 U	0.014	0.01 U	0.01 U
	LEAD	0.007	0.015	0.015	mg/L	NA	***0.022***	***0.018***	***0.098***	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	NA	NA	NA	NA	0.005 U	0.0072	***0.031***	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	***0.016***	0.0091	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	***0.018***	***0.022***	***0.075***	NA	0.005 U	0.005 U	***0.049***	0.005 U	0.005 U
	MAGNESIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	NA	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	NA	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
	POTASSIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	NA	0.052	0.02	0.077	0.02 U	0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.028	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA	0.02 U	0.02 U	0.02 U	0.039	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.056	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.062	0.27	0.02 U	NA	0.02 U	0.02 U	0.081	0.02 U	0.02 U
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NICKEL	0.13	0.1	2	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L	0.21	17	15	18	***300***	***40***	***50***	***34***	***47***	0.045	***34***	***41***	***45***	***39***	***50***	***41***	***60***	***56***	***38***	***44***	6.5	4.4	4.3	4.6	2.9	***650***	***730***	***160***	0.8	***110***	***190***	***150***	***180***	***72***	***80***	0.18	0.055	***110***	NA	17	14	18	14	1.5
	BICARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	- -	- -	- -	umhos/cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	- -	10	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SULFATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and Italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drink

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidacates constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, F installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32 respectively.

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

| | | |

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

Location:						TMW-1																																				TW2
Sample Date:						10/11/1997	8/11/1999		9/28/1999	11/18/1999	2/24/2000	5/16/2000	8/22/2000	1/10/2001	7/16/2001	2/5/2002	9/10/2002	2/5/2003	6/25/2003	1/27/2004	7/23/2004	3/9/2006		4/3/2008	7/18/2008	10/5/2008	12/5/2009		6/18/2010	12/15/2010		6/15/2011		12/6/2011		12/11/2013	6/5/2014	11/5/2014		5/21/2015	5/21/2015	10/11/1997
Sample Type:						Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Dup	Normal	Dup	Normal	Dup	Normal	Normal	Normal	Dup	Dup	Normal	Normal
Sample ID:						TMW-1_10/11/1997	TMM-1_8/11/1999	TMW-1_8/11/1999	TMW-1_9/28/1999	TMW-1_11/18/1999	TMW-1_2/24/2000	TMW-1_5/16/2000	TMW-1_8/22/2000	TMW-1_1/10/2001	TMW-1_7/16/2001	TMW-1_2/5/2002	TMW-1_9/10/2002	TMW-1_2/5/2003	TMW-1_6/25/2003	TMW-1_1/27/2004	TMW-1_7/23/2004	TMW-1_3/9/2006	TMW-1 (DUP)_3/9/2006	TMW-1_4/3/2008	TMW-1_7/18/2008	TMW-1_10/5/2008	TMW-1_12/5/2009	TMW-1-DUP_12/5/2009	TMW-1_6/18/2010	TMW-1_12/15/2010	TMW-1 DUP1_12/15/2010	TMW-1_061511	DUP-1_061511	TMW-1_12062011	DUP-02_12062011	TMW-1_12/11/2013	TMW-1_06052014	TMW-1_11052014	DUP-1_11052014	DUP_01_05212015	TMW_1_05212015	TW2_10/11/1997
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	5 U	2.2	1 U	NA	10 U	2.1 J	1 U	1 U	1 U	1 U	NA	2 U	2 U	3.8	2 U	1 U	1 U	0.19 U	1.9 U	0.2 U	0.38 U	0.2 U	0.2 U	1.9 U	1.9 U	0.19 U	1.9 U	1.9 U	1.9 U	1.9 U	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	1 U
	ACENAPHTHYLENE	1.4	1	510	ug/L	5 U	1 U	1 U	NA	10 U	1 U	***200 D***	***85***	1 U	***7.4 D***	NA	2 U	2 U	0.2 U	2 U	1 U	1 U	0.19 U	1.9 U	0.2 U	0.38 U	0.2 U	0.2 U	1.9 U	1.9 U	0.19 U	1.9 U	1.9 U	1.9 U	1.9 U	9.2 U	***9.8 U***	9.7 U	9.8 U	9.9 U	9.7 U	1 U
	ANTHRACENE	0.2	0.2	5100	ug/L	1 U	0.2 U	0.2 U	NA	2 U	0.2 U	***0.32 J***	0.2 U	0.2 U	0.2 U	NA	2 U	2 U	***0.26***	2 U	1 U	1 U	0.19 U	1.9 U	0.2 U	0.38 U	0.2 U	0.2 U	0.19 U	1.9 U	0.19 U	1.9 U	1.9 U	1.9 U	1.9 U	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	0.2 U
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	1 U	0.2 U	0.2 U	NA	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	2 U	2 U	0.2 U	2 U	1 U	1 U	0.19 U	1.9 U	0.2 U	0.38 U	0.2 U	0.2 U	0.19 U	1.9 U	0.19 U	1.9 U	1.9 U	1.9 U	1.9 U	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	0.2 U
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	1 U	0.2 U	0.2 U	NA	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	2 U	2 U	0.2 U	2 U	1 U	1 U	0.19 U	1.9 U	0.2 U	0.38 U	0.2 U	0.2 U	0.19 U	1.9 U	0.19 U	1.9 U	1.9 U	1.9 U	1.9 U	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	0.2 U
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	1 U	0.2 U	0.2 U	NA	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	2 U	2 U	0.2 U	2 U	1 U	1 U	0.19 U	1.9 U	0.2 U	0.38 U	0.2 U	0.2 U	0.19 U	1.9 U	0.19 U	1.9 U	1.9 U	1.9 U	1.9 U	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	0.2 U
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	2.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 U	2 U	0.2 U	2 U	1 U	1 U	0.19 U	1.9 U	0.2 U	0.38 U	0.2 U	0.2 U	0.19 U	1.9 U	0.19 U	1.9 U	1.9 U	1.9 UJ	1.9 UJ	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	0.5 U
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	2.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 U	2 U	0.2 U	2 U	1 U	1 U	0.19 U	1.9 U	0.2 U	0.38 U	0.2 U	0.2 U	0.19 U	1.9 U	0.19 U	1.9 U	1.9 U	1.9 U	1.9 U	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	0.5 U
	CHRYSENE	0.2	0.2	65	ug/L	1 U	0.2 U	0.2 U	NA	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NA	2 U	2 U	0.2 U	2 U	1 U	1 U	0.19 U	1.9 U	0.2 U	0.38 U	0.2 U	0.2 U	0.19 U	1.9 U	0.19 U	1.9 U	1.9 U	1.9 U	1.9 U	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	0.2 U
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 U	2 U	0.2 U	2 U	1 U	1 U	0.19 U	1.9 U	0.2 U	0.38 U	0.2 U	0.2 U	0.19 U	1.9 U	0.19 U	1.9 U	1.9 U	1.9 U	1.9 U	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	1 U
	FLUORANTHENE	0.5	1000	- -	ug/L	2.5 U	0.5 U	0.5 U	NA	5 U	0.5 U	0.5 U	0.5	0.5 U	0.5 U	NA	2 U	2 U	0.2 U	2 U	1 U	1 U	0.19 U	1.9 U	0.2 U	0.38 U	0.2 U	0.2 U	0.19 U	1.9 U	0.19 U	1.9 U	1.9 U	1.9 U	1.9 U	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	0.5 U
	FLUORENE	0.5	1000	- -	ug/L	2.5 U	0.5 U	0.5 U	NA	5 U	0.5 U	0.64 J	0.5 U	0.76	0.5 U	NA	2 U	2 U	0.34	2 U	1 U	1 U	0.19 U	1.9 U	0.2 U	0.38 U	0.2 U	0.2 U	0.19 U	1.9 U	0.19 U	1.9 U	1.9 U	1.9 U	1.9 U	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	0.5 U
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	2.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 U	2 U	0.2 U	2 U	1 U	1 U	0.19 U	1.9 U	0.2 U	0.38 U	0.2 U	0.2 U	0.19 U	1.9 U	0.19 U	1.9 U	1.9 U	1.9 U	1.9 U	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	0.5 U
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	17	17	18	17	12	22	19	15	2	7 D	1.2	1.2	0.38 U	6.3	7	6.6	6.7	9.7	10	12	15	12	12	11	9.7 U	NA
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	30	31	46 D	28	17	36	29	18	2.1	5.4 D	0.84	0.75	0.19 U	5.1	5.5	6.6	6.6	13	14	7	15	16	16	11	9.7 U	NA
	NAPHTHALENE	1	20	20	ug/L	***59***	***54 D***	1 U	NA	***88***	***67 D***	***140 D***	***92***	***110 D***	***110 D***	NA	***100***	***120***	***140 D***	***92***	***27 "X***	***69***	16	***72***	14	***27 D***	6.4	6.1	1.8	***33***	***37***	***33***	***34***	***52***	***55***	5.2	***39***	***44***	***40***	***44***	***40***	1 U
	PHENANTHRENE	0.22	0.2	510	ug/L	1 U	***0.62***	***0.25***	NA	2 U	***0.54 J***	***1.7***	***1***	***0.69***	***0.35 J***	NA	2 U	2 U	***0.46***	2 U	1 U	1 U	0.19 U	1.9 U	0.2 U	0.38 U	0.2 U	0.2 U	0.19 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	0.2 U
	PYRENE	0.5	1000	- -	ug/L	2.5 U	0.5 U	0.5 U	NA	5 U	0.5 U	0.5 U	0.53	0.5 U	0.5 U	NA	2 U	2 U	0.2 U	2 U	1 U	1 U	0.19 U	1.9 U	0.2 U	0.38 U	0.2 U	0.2 U	0.19 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	9.2 U	9.8 U	9.7 U	9.8 U	9.9 U	9.7 U	0.5 U
	TOTAL PAHs	- -	- -	- -	ug/L	59	56.82	0.25	NA	88	69.64	342.66	179.03	111.45	117.75	NA	147	168	208.86	137	56	127	64	105	18.1	39.4	8.44	8.05	1.8	44.4	49.5	46.2	47.3	74.7	79	31.3	69	72	68	66	40	ND
VOCs	BENZENE	1	5	31.2	ug/L	***120***	1 U	***84***	50 U	***120***	***130***	***120***	***140***	***150***	***160***	NA	***120***	***110***	***90***	***87***	***25***	***18***	***14***	***56***	***47***	***41***	***30***	***21***	***32***	***52***	***51***	***42***	***44***	NA	NA	***58***	***81***	***80***	***77***	***48***	***47***	1 U
	ETHYLBENZENE	1	700	- -	ug/L	250	1 U	10 U	570	250	370	490	580	580	650	NA	420	530	340	390	1 U	77	21	1.2	12	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA	160	2 U	5 U	5 U	1 U	1 U	1 U
	p/m-XYLENE	- -	- -	- -	ug/L	NA	1 U	500	1500	490	840	1300	670	1400	1400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	5 U	50 U	250 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	NA	NA
	o-XYLENE	- -	- -	- -	ug/L	NA	1 U	360	50 U	460	880	620	1000	830	880	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	700	1 U	280	***1100***	550	970	***1100***	730	***1300***	950	NA	450	880	740	750	1.4	140	76	1.5 U	11	1 U	1 U	1 U	1.5 U	1 U	1 U	1 U	1 U	NA	NA	1.2	2 U	5 U	5 U	1 U	1 U	1 U
	XYLENES (TOTAL)	2	10000	- -	ug/L	1000	NA	860	1500	950	1720	1920	1670	2230	2280	NA	1500	1900	1400	1400	2 U	310	200	440 D	220	93	22	12	18	120	110	130	140	NA	NA	3.5	250	420	420	120	110	2 U
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	10 U	10 U	NA	NA	NA	10 U	NA	NA	NA	NA	NA	NA	NA	20 U	20 U	NA	NA	NA	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	2070	ND	1220	3170	1870	3190	3630	3120	4260	4040	NA	2490	3420	2570	2627	26.4	545	311	497.2	290	134	52	33	50	172	161	172	184	NA	NA	222.7	331	500	497	168	157	ND
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	***0.479***	***0.57***	0.01 U	NA	***0.54***	***0.36***	***0.57***	0.01 U	0.01 U	***0.33***	NA	***0.35***	***0.43***	***0.34***	***0.33***	***0.32***	***0.37***	***0.36***	***0.058***	***0.082***	***0.045***	0.02 U	0.02 U	0.02 U	***0.14***	***0.12***	0.072 U	0.072 U	***0.15***	***0.17***	***0.15***	***0.095***	***0.13***	***0.15***	***0.14***	***0.16 F1***	0.01 U
	BERYLLIUM	- -	0.004	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U
	BORON	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U
	CALCIUM METAL	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	0.0706	0.1 U	0.01 U	NA	0.095	0.072	0.1	0.01 U	0.01 U	0.055	NA	0.061	0.075	0.056	0.065	0.063	0.053	0.052	0.01 U	0.014	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	0.023	0.017	0.026	0.03	0.019	0.032	0.01 U
	LEAD	0.007	0.015	0.015	mg/L	***0.0202***	0.05 U	0.005 U	NA	***0.038***	***0.034***	***0.05***	0.005 U	0.005 U	***0.021***	NA	0.025 U	***0.017***	***0.021***	0.025 U	***0.041***	0.014	***0.016***	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.04 U	0.04 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.005 U
	MAGNESIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0002 U
	NICKEL	0.13	0.1	2	mg/L	0.0442	0.4 U	0.04 U	NA	0.04 U	0.045	0.06	0.04 U	0.04 U	0.042	NA	0.2 U	0.057	0.045	0.2 U	***0.2 UF***	0.04	0.04	0.063	0.077	0.049	0.04 U	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	0.041	0.04 U	0.041	0.04 U	0.04 U	0.04 U	0.04 U
	POTASSIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.0895	0.2	0.02 U	NA	0.1 U	0.09	0.12	0.02 U	0.02 U	0.12	NA	0.59	0.18	0.18	0.64	0.34	0.068	0.07	0.21	0.59	0.16	0.21	0.23	0.036	NA	NA	NA	NA	NA	NA	0.091	0.072	0.097	0.094	0.072	0.077	0.02 U
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	NA	NA	NA	NA	***0.13***	***0.34***	***0.54***	NA	NA	***0.29***	***0.35***	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U
	CHROMIUM	0.013	0.1	- -	mg/L	NA	NA	NA	NA	0.023	0.067	0.1	NA	NA	0.046	0.046	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U
	LEAD	0.007	0.015	0.015	mg/L	NA	NA	NA	NA	0.0097	***0.04***	***0.055***	NA	NA	***0.018***	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0002 U
	NICKEL	0.13	0.1	2	mg/L	NA	NA	NA	NA	0.2 U	0.043	0.061	NA	NA	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04 U
	ZINC	0.96	2	31	mg/L	NA	NA	NA	NA	0.031	0.1	0.13	NA	NA	0.13	0.075	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.02 U
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L	***3500***	***15000***	***170***	NA	***3500***	***5400***	***9400***	***18000***	***3300***	***5300***	NA	***7600***	***5900***	***7300***	***6700***	NA	***9400***	***8000***	***1400***	***1700***	***1100***	***330***	***350***	***500***	***3200***	***3200***	***1000***	***1100***	***4600***	***4300***	***2900***	***2600***	***3800***	***3900***	***3700***	***4300***	0.037
	BICARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	- -	- -	- -	umhos/cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	- -	10	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	88	170	120	100	280	290	NA
	SULFATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and italic text indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drink

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, I installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32 respectively.

Table 3
Summary of Historical Groundwater Analytical Results
HSI Site #10101, Hutchinson Island, GA

					Location:	TMW-4																		TMW-4R														UMW	FIELDQC	
					Sample Date:	10/9/1997	8/10/1999	11/17/1999	2/23/2000	5/16/2000	8/22/2000	1/10/2001	7/16/2001	2/6/2002	9/11/2002	2/7/2003	6/25/2003	1/29/2004		7/20/2004	4/3/2008	7/20/2008	10/5/2008	12/1/2009	6/17/2010	12/14/2010	6/13/2011	12/21/2011	12/12/2013		6/3/2014	11/4/2014	5/19/2015	10/19/1997	6/3/2014	11/6/2014
					Sample Type:	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Dup	Normal	Normal	Normal	Normal	Normal	Normal
					Sample ID:	TMW-4_10/9/1997	TMW-4_8/10/1999	TMW-4_11/17/1999	TMW-4_2/23/2000	TMW-4_5/16/2000	TMW-4_8/22/2000	TMW-4_1/10/2001	TMW-4_7/16/2001	TMW-4_2/6/2002	TMW-4_9/11/2002	TMW-4_2/7/2003	TMW-4_6/25/2003	TMW-4_1/29/2004	TMW-4 (DUP)_1/29/2004	TMW-4_7/20/2004	TMW-4R_4/3/2008	TMW-4R_7/20/2008	TMW-4R_10/5/2008	TMW-4R_12/1/2009	TMW-4R_6/17/2010	TMW-4R_12/14/2010	TMW-4R-061311	TMW-4R_12212011	TMW-4R_12/12/2013	DUP-2_12/12/2013	TMW-4R_06032014	TMW-4R_11042014	TMW-4R_05152015	UMW_10/19/1997	FB-01_06032014	FB-01_11062014
Method Group	Analyte	Background	Type 3 RRS	Type 4 RRS	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
PAHs	ACENAPHTHENE	1	2000	- -	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.41	0.33	0.38	0.32	0.3	0.33	0.19 U	0.19 U	0.29	0.19 U	0.32	NA	NA	NA	10 U	10 U	9.9 U	NA	NA	1 U	9.8 U	9.6 U
	ACENAPHTHYLENE	1.4	1	510	ug/L	1 U	1 U	***1.6***	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	10 U	10 U	9.9 U	NA	NA	1 U	9.8 U	9.6 U
	ANTHRACENE	0.2	0.2	5100	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	***0.34***	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	10 U	10 U	9.9 U	NA	NA	0.2 U	9.8 U	9.6 U
	BENZO(A)ANTHRACENE	0.2	0.1	3.9	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	10 U	10 U	9.9 U	NA	NA	0.2 U	9.8 U	9.6 U
	BENZO(A)PYRENE	0.2	0.2	0.39	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	10 U	10 U	9.9 U	NA	NA	0.2 U	9.8 U	9.6 U
	BENZO(B)FLUORANTHENE	0.2	0.2	0.65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	10 U	10 U	9.9 U	NA	NA	0.2 U	9.8 U	9.6 U
	BENZO(G,H,I)PERYLENE	- -	- -	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	10 U	10 U	9.9 U	NA	NA	0.5 U	9.8 U	9.6 U
	BENZO(K)FLUORANTHENE	- -	- -	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	10 U	10 U	9.9 U	NA	NA	0.5 U	9.8 U	9.6 U
	CHRYSENE	0.2	0.2	65	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	10 U	10 U	9.9 U	NA	NA	0.2 U	9.8 U	9.6 U
	DIBENZO(A,H)ANTHRACENE	- -	0.3	- -	ug/L	1 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	10 U	10 U	9.9 U	NA	NA	1 U	9.8 U	9.6 U
	FLUORANTHENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	10 U	10 U	9.9 U	NA	NA	0.5 U	9.8 U	9.6 U
	FLUORENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.37	0.26	0.35	0.33	0.31	0.29	0.19 U	0.19 U	0.48	0.32	0.47	NA	NA	NA	10 U	10 U	9.9 U	NA	NA	0.5 U	9.8 U	9.6 U
	INDENO(1,2,3-CD)PYRENE	- -	0.4	- -	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	10 U	10 U	9.9 U	NA	NA	0.5 U	9.8 U	9.6 U
	1-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.78 U	0.38 U	NA	NA	NA	10 U	10 U	9.9 U	NA	NA	NA	9.8 U	9.6 U
	2-METHYLNAPHTHALENE	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	10 U	10 U	9.9 U	NA	NA	NA	9.8 U	9.6 U
	NAPHTHALENE	1	20	20	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.28	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	10 U	10 U	9.9 U	NA	NA	1 U	9.8 U	9.6 U
	PHENANTHRENE	0.22	0.2	510	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	10 U	10 U	9.9 U	NA	NA	0.2 U	9.8 U	9.6 U
	PYRENE	0.5	1000	- -	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	NA	NA	NA	10 U	10 U	9.9 U	NA	NA	0.5 U	9.8 U	9.6 U
	TOTAL PAHs	- -	- -	- -	ug/L	ND	ND	1.6	ND	ND	ND	ND	ND	ND	0.78	1.21	0.73	0.65	0.61	0.62	ND	ND	0.77	0.32	0.79	NA	NA	NA	ND	ND	ND	NA	NA	ND	ND	ND
VOCs	BENZENE	1	5	31.2	ug/L	1 U	1 U	1 U	***13***	1 U	1 U	3.9	1 U	1 U	***7.4***	1 U	1 U	***9.6***	***9.2***	***9.1***	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	1 U	1 U	1 U	NA	NA	1 U	1 U	1 U
	ETHYLBENZENE	1	700	- -	ug/L	1 U	1 U	1 U	12	1.2	1 U	4.3	1 U	1 U	3.3	1 U	1 U	4	3.9	3	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	1 U	1 U	1 U	NA	NA	1 U	1 U	1 U
	p/m-XYLENE	- -	- -	- -	ug/L	NA	1.2	1 U	1.8	1	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	METHYLENE CHLORIDE	- -	- -	- -	ug/L	NA	5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 U	5 U	NA	NA	NA	NA	NA	NA
	o-XYLENE	- -	- -	- -	ug/L	NA	1 U	1 U	3.4	1 U	1 U	2.4	3.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	TOLUENE	1	1000	1900	ug/L	1 U	1 U	1 U	8	1 U	1 U	1 U	2.4	1 U	1 U	1 U	1 U	1 U	1 U	5.7	1 U	1 U	1 U	1 U	1 U	NA	NA	NA	1 U	1 U	1 U	NA	NA	1 U	1 U	1 U
	XYLENES (TOTAL)	2	10000	- -	ug/L	7.6	1.2	1 U	5.2	1	1 U	2.4	3.7	2 U	2 U	2 U	2.6	2.3	2.3	2 U	2 U	2 U	2 U	2 U	2 U	NA	NA	NA	2 U	2 U	2 U	NA	NA	2 U	2 U	2 U
	METHYL TERT BUTYL ETHER	- -	- -	- -	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10 U	10 U	NA	NA	10 U	NA	NA	NA	10 U	10 U	NA	NA	NA	NA	NA	NA
	TOTAL BTEX	- -	- -	- -	ug/L	7.6	1.2	ND	38.2	2.2	ND	10.6	6.1	ND	10.7	ND	2.6	15.9	15.4	17.8	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	NA	NA	ND	ND	ND
Metals, Total	ARSENIC	0.018	0.018	0.018	mg/L	0.01 U	0.014	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	***0.021***	***0.025***	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	***0.021***	***0.032***	0.02 U	0.02 U	0.018 U	NA	0.018 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.01 U	0.02 U	0.02 U
	BERYLLIUM	- -	0.004	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA	NA
	BORON	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA	NA
	CALCIUM METAL	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	0.01 U	0.01 U	0.01 U	NA	NA	0.01 U	0.01 U	0.01 U
	LEAD	0.007	0.015	0.015	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.014	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005	0.01 U	0.01 U	NA	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.005 U	0.01 U	0.01 U
	MAGNESIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MERCURY	- -	0.002	- -	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA
	NICKEL	0.13	0.1	2	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	0.04 U	0.04 U	0.04 U	NA	NA	0.04 U	0.04 U	0.04 U
	POTASSIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SODIUM	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZINC	0.96	2	31	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	0.028	0.02 U	0.053	0.074	0.021	0.02 U	0.02 U	0.02 U	0.035	0.033	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	0.02 U	0.02 U	0.02 U	NA	NA	0.02 U	0.02 U	0.066
Metals, Dissolved	ARSENIC	0.018	0.018	0.018	mg/L	NA	NA	0.01 U	0.01 U	0.01 U	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	***0.02***	***0.029***	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA	NA
	BERYLLIUM	- -	0.004	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA	NA
	CADMIUM	- -	0.005	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA	NA
	CHROMIUM	0.013	0.1	- -	mg/L	NA	NA	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA	NA
	LEAD	0.007	0.015	0.015	mg/L	NA	NA	0.005 U	0.005 U	NA	NA	NA	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA	NA
	MERCURY	- -	0.002	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA
	NICKEL	0.13	0.1	2	mg/L	NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04 U	NA	NA
	ZINC	0.96	2	31	mg/L	NA	NA	0.02 U	0.02 U	0.02 U	NA	0.026	0.028	0.02 U	NA	NA	NA	NA	NA	NA	NA	0.02 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.02 U	NA	NA
Miscellaneous	ALKALINITY	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ALKALINITY, TOTAL (AS CACO3)	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	AMMONIA AS N	15	30	30	mg/L	NA	20	0.32	18	20	12	2.2	30	6	21	8.9	16	3.4	3.3	10	2.1	2.9	9.3	17	20	NA	23	NA	1.9	1.6	6.1	7.8	6.8	17	0.054	0.05 U
	BICARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CARBONATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	CONDUCTIVITY	- -	- -	- -	umhos/cm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	NITRATE (AS N)	- -	10	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	NA	0.17	0.17
	SULFATE	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SOLIDS, TOTAL DISSOLVED	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cell indicates comparison standard used in data evaluation.

Highlighted cell indicates analytical result exceeds comparison criteria.

Bold and Italic text Indicates analytical result exceeds background value.

- Nitrate comparison standard based on the Maximum Contaminant Level (MCL) established by the USEPA National Primary Drink

ND - No constituents detected above the laboratory minimum detection limit.

U: Incidactes constituent was not detected above value shown.

J: Indicates constituent was detected at an estimated value.

UJ: Indicates constituent was not detected at an estimated value shown.

Monitoring wells MW-3R, PDMW-8R, PDMW-10R, PDMW-11R, PDMW-14TR, PDMW-23R, PDMW-31R2, PDMW-32R, PDMW-33R, I installed to replace wells MW-3, PDMW-8T, PDMW-10T, PDMW-11P, PDMW-14T, PDMW-23T, PDMW-30P, PDMW-31R, PDMW-32 respectively.

Sample ID: / Date Collected: / Tide Stage:	Units	Samples Collected from Location Upstream SW																			
		Canal - Up 11/07/97 Low	SW1 Up 11/17/99 Low	SW1 Up-High 11/17/99 High	SW1-High 02/25/00 High	SW1-Low 02/25/00 Low	SW1-HIGH 05/16/00 High	SW1-LOW 05/16/00 Low	SW1-HIGH 08/22/00 High	SW1-LOW 08/22/00 Low	SW1-HIGH 01/09/01 High	SW1-LOW 01/09/01 Low	SW1-HIGH 07/16/01 High	SW1-Low 07/16/01 Low	SW1-High 02/04/02 High	SW1-Low 02/05/02 Low	SW UPSTREAM 09/12/02 High	SW-UPSTREAM 02/07/03 Low	SW-UPSTREAM 06/26/03 Low	SW Upstream 01/27/04 High	SW-UPSTREAM 07/23/04 High
PAHs																					
1-Methylnaphthalene	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U [0.2 U]	0.2 U
2-Methylnaphthalene	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U [0.2 U]	0.2 U
Acenaphthene	ug/L	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U [0.2 U]	0.2 U
Acenaphthylene	ug/L	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U [0.2 U]	0.2 U
Anthracene	ug/L	0.2 U	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U [0.2 U]	0.2 U
Benzo(a)anthracene	ug/L	0.2 U	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U [0.2 U]	0.2 U
Benzo(a)pyrene	ug/L	0.2 U	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U [0.2 U]	0.2 U
Benzo(b)fluoranthene	ug/L	0.2 U	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U [0.2 U]	0.2 U
Benzo(g,h,i)perylene	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U [0.2 U]	0.2 U
Benzo(k)fluoranthene	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U [0.2 U]	0.2 U
Chrysene	ug/L	0.2 U	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U [0.2 U]	0.2 U
Dibenz(a,h)anthracene	ug/L	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U [0.2 U]	0.2 U
Fluoranthene	ug/L	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U [0.2 U]	0.2
Fluorene	ug/L	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U [0.2 U]	0.2 U
Indeno(1,2,3-cd)pyrene	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U [0.2 U]	0.2 U
Naphthalene	ug/L	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U [0.2 U]	0.2 U
Phenanthrene	ug/L	0.2 U	0.2 U	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U [0.2 U]	0.63
Pyrene	ug/L	0.5 U	0.5 U	0.5 U	NA	NA	NA	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U [0.2 U]	0.21
Total PAHs	ug/L	ND	ND	ND	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	NA	ND	ND [ND]	ND	ND [ND]	1.04
Volatile Organic Compounds																					
Benzene	ug/L	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U [1 U]	1 U	1 U [1 U]	1 U
Ethylbenzene	ug/L	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U [1 U]	1 U	1 U [1 U]	1 U
m&p-Xylene	ug/L	NA	1 U	1 U	NA	NA	NA	NA	NA	NA	1 U	1 U	NA	1 U	NA	NA	NA	NA	NA	NA	NA
o-Xylene	ug/L	NA	1 U	1 U	NA	NA	NA	NA	NA	NA	1 U	1 U	NA	1 U	NA	NA	NA	NA	NA	NA	NA
Toluene	ug/L	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U [1 U]	1 U	1 U [1 U]	1 U
Xylenes (total)	ug/L	2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 U	2 U	2 U	2 U [2 U]	2 U	2 U [2 U]	2 U
Total BTEX	ug/L	ND	ND	ND	NA	NA	NA	NA	NA	NA	ND	ND	NA	ND	ND	NA	ND	ND [ND]	ND	ND [ND]	ND
Metals																					
Arsenic	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U [0.01 U]	0.01 U	0.01 U [0.01 U]	0.01 U
Beryllium	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U [0.01 U]	0.01 U	0.02 [0.01 U]	0.01 U
Lead	mg/L	0.005 U	0.005 U	0.005 U	0.0073 U	0.005 U	0.005 U	0.01	0.015 U	0.015 U	0.005 U	0.005 U	0.005 U	0.005 U	0.023	0.005 U	0.005 U	0.005 U [0.0057]	0.0064	0.02 [0.005 U]	0.005 U
Mercury	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U [0.04 U]	0.04 U	0.04 U [0.04 U]	0.04 U
Zinc	mg/L	0.02 U	0.02 U	0.02 U	0.11	0.093	0.02 U	0.081	0.072	0.14	0.07	0.02 U	0.11	0.05	0.12	0.06	0.026	0.044 [0.043]	0.044	0.15 [0.082]	0.02 U
Metals-Filtered																					
Arsenic	mg/L	NA	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	mg/L	NA	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/L	NA	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	0.005 U	NA	NA	NA	NA	NA	NA
Nickel	mg/L	NA	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	mg/L	NA	0.02 U	0.02 U	0.049	0.071	NA	0.047	NA	0.03	0.039	NA	0.028	0.024	0.028	0.02 U	NA	NA	NA	NA	NA
Miscellaneous																					
Ammonia-N	mg/L	0.36	0.84	0.42	4.1	2.6	0.36	1.3	0.26	1.4	1.8	0.76	0.21	1.8	0.94	NA	0.14	2.6 [2.7]	0.92	3.5 [3.9]	0.33

Notes:

1) NA = Analyte was not analyzed.
2) ND = Not Detected
3) U = Indicates result value is below the laboratory quantitaton limit.
4) Total BTEX and Total PAHs were calculated as the sum of detected results where at least one of the analytes was detected, and reported as Not Detected (ND) in cases where all analytes were below their respective laboratory quantitation limits.
5) [value] indicates results of field duplicate sample

Table 4
Summary of Historical Surface Water Testing Results

Sample ID: / Date Collected: / Tide Stage:	Units	Samples Collected from Location Downstream SW														Samples Collected from Location Downstream SW				
		Canal - Down 11/08/97 Low	SW1 Down 11/17/99 Low	SW1 Down-High 11/17/99 High	SW2-High 02/25/00 High	SW2-Low 02/25/00 Low	SW2-HIGH 05/16/00 High	SW2-LOW 05/16/00 Low	SW2-HIGH 08/22/00 High	SW2-LOW 08/22/00 Low	SW2-HIGH 01/09/01 High	SW2-LOW 01/09/01 Low	SW2-HIGH 07/16/01 High	SW2-Low 07/16/01 Low	SW2-High 02/04/02 High	SW Downstream 09/12/02 High	SW Downstream 02/07/03 Low	SW Downstream 06/25/03 Low	SW Downstream 01/27/04 High	SW Downstream 07/22/04 High
PAHs																				
1-Methylnaphthalene	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U
2-Methylnaphthalene	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U
Acenaphthene	ug/L	1 U	1 U	1 U	NA	1 U	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U
Acenaphthylene	ug/L	1 U	1 U	1 U	NA	1 U	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U
Anthracene	ug/L	0.2 U	0.2 U	0.2 U	NA	0.2 U	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U
Benzo(a)anthracene	ug/L	0.2 U	0.2 U	0.2 U	NA	0.2 U	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U
Benzo(a)pyrene	ug/L	0.2 U	0.2 U	0.2 U	NA	0.2 U	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U
Benzo(b)fluoranthene	ug/L	0.2 U	0.2 U	0.2 U	NA	0.2 U	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U
Benzo(g,h,i)perylene	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U
Benzo(k)fluoranthene	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U
Chrysene	ug/L	0.2 U	0.2 U	0.2 U	NA	0.2 U	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U
Dibenz(a,h)anthracene	ug/L	1 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U
Fluoranthene	ug/L	0.5 U	0.5 U	0.5 U	NA	0.5 U	NA	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U
Fluorene	ug/L	0.5 U	0.5 U	0.5 U	NA	0.5 U	NA	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U
Indeno(1,2,3-cd)pyrene	ug/L	0.5 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U
Naphthalene	ug/L	1 U	1 U	1 U	NA	1 U	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U
Phenanthrene	ug/L	0.2 U	0.2 U	0.2 U	NA	0.2 U	NA	NA	NA	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U
Pyrene	ug/L	0.5 U	0.5 U	0.5 U	NA	0.5 U	NA	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U [0.2 U]	0.2 U	0.2 U
Total PAHs	ug/L	ND	ND	ND	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND [ND]	ND	ND
Volatile Organic Compounds																				
Benzene	ug/L	1 U	1 U	1 U	NA	1 U	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U [1 U]	1 U	1 U
Ethylbenzene	ug/L	1 U	1 U	1 U	NA	1 U	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	1.3	1 U	1 U [1 U]	1 U	1 U
m&p-Xylene	ug/L	NA	1 U	1 U	NA	NA	NA	NA	NA	NA	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA
o-Xylene	ug/L	NA	1 U	1 U	NA	NA	NA	NA	NA	NA	1 U	1 U	1 U	1 U	NA	NA	NA	NA	NA	NA
Toluene	ug/L	1 U	1 U	1 U	NA	1 U	NA	NA	NA	NA	1 U	1 U	1 U	1 U	1 U	2	1 U	1 U [1 U]	1 U	1 U
Xylenes (total)	ug/L	2 U	NA	NA	NA	2 U	NA	NA	NA	NA	NA	NA	NA	NA	2 U	7.2	2 U	2 U [2 U]	2 U	2 U
Total BTEX	ug/L	ND	ND	ND	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	10.5	ND	ND [ND]	ND	ND
Metals																				
Arsenic	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U [0.01 U]	0.01 U	0.01 U
Beryllium	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	mg/L	0.005 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U [0.01 U]	0.01 U	0.01 U
Lead	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.015 U	0.0087	0.005 U	0.005 U	0.005 U	0.0069	0.005 U	0.005 U	0.005 U	0.0075 [0.0083]	0.005 U	0.005 U
Mercury	mg/L	0.0002 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U [0.04 U]	0.04 U	0.04 U
Zinc	mg/L	0.052	0.02 U	0.02 U	0.022	0.02 U	0.02 U	0.025	0.072	0.025	0.024	0.02 U	0.027	0.038	0.02 U	0.02 U	0.02 U	0.032 [0.027]	0.13	0.02 U
Metals-Filtered																				
Arsenic	mg/L	NA	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	mg/L	NA	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	mg/L	NA	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA	NA	0.005 U	NA	NA	NA	0.005 U	NA	NA	NA	NA	NA	NA
Nickel	mg/L	NA	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	mg/L	NA	0.02 U	0.02 U	0.02 U	0.02 U	NA	0.02 U	NA	0.02 U	0.032	NA	0.053	0.02	NA	NA	NA	NA	NA	NA
Miscellaneous																				
Ammonia-N	mg/L	0.93	6.2	0.48	0.64	5.2	0.64	1.8	0.18	2.2	0.17	2.8	0.82	4.3	0.12	0.57	5.6	3 [3]	1.1	0.32

Notes:

1) NA = Analyte was not analyzed.
2) ND = Not Detected
3) U = Indicates result value is below
4) Total BTEX and Total PAHs were
   where at least one of the analytes v
   (ND) in cases where all analytes we
   quantitation limits.
5) [value] indicates results of field dup

Table 5 - Summary of 2013-2015 Surface Water Analytical Results

Sample ID:		SW-1								SW-2							
Date Collected:		12/13/13		06/05/14		11/06/14		05/21/15		12/13/13		06/05/14		11/06/14		05/21/15	
Tide Stage:	Units	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
Polycyclic Aromatic Hydrocarbons																	
1-Methylnaphthalene	ug/L	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA	9.5 U	NA	9.7 U	9.5 U	NA	NA	NA	NA
2-Methylnaphthalene	ug/L	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA	9.5 U	NA	9.7 U	9.5 U	NA	NA	NA	NA
Acenaphthene	ug/L	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA	9.5 U	NA	9.7 U	9.5 U	NA	NA	NA	NA
Acenaphthylene	ug/L	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA	9.5 U	NA	9.7 U	9.5 U	NA	NA	NA	NA
Anthracene	ug/L	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA	9.5 U	NA	9.7 U	9.5 U	NA	NA	NA	NA
Benzo(a)anthracene	ug/L	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA	9.5 U	NA	9.7 U	9.5 U	NA	NA	NA	NA
Benzo(a)pyrene	ug/L	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA	9.5 U	NA	9.7 U	9.5 U	NA	NA	NA	NA
Benzo(b)fluoranthene	ug/L	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA	9.5 U	NA	9.7 U	9.5 U	NA	NA	NA	NA
Benzo(g,h,i)perylene	ug/L	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA	9.5 U	NA	9.7 U	9.5 U	NA	NA	NA	NA
Benzo(k)fluoranthene	ug/L	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA	9.5 U	NA	9.7 U	9.5 U	NA	NA	NA	NA
Chrysene	ug/L	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA	9.5 U	NA	9.7 U	9.5 U	NA	NA	NA	NA
Dibenz(a,h)anthracene	ug/L	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA	9.5 U	NA	9.7 U	9.5 U	NA	NA	NA	NA
Fluoranthene	ug/L	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA	9.5 U	NA	9.7 U	9.5 U	NA	NA	NA	NA
Fluorene	ug/L	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA	9.5 U	NA	9.7 U	9.5 U	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	ug/L	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA	9.5 U	NA	9.7 U	9.5 U	NA	NA	NA	NA
Naphthalene	ug/L	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA	9.5 U	NA	9.7 U	9.5 U	NA	NA	NA	NA
Phenanthrene	ug/L	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA	9.5 U	NA	9.7 U	9.5 U	NA	NA	NA	NA
Pyrene	ug/L	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA	9.5 U	NA	9.7 U	9.5 U	NA	NA	NA	NA
Total PAHs	ug/L	ND	ND	ND	ND	NA	NA	NA	NA	ND	NA	ND	ND	NA	NA	NA	NA
Volatile Organic Compounds																	
Benzene	ug/L	1 U	1 U	1 U	1 U	NA	NA	NA	NA	1 U	NA	1 U	1 U	NA	NA	NA	NA
Ethylbenzene	ug/L	1 U	1 U	1 U	1 U	NA	NA	NA	NA	1 U	NA	1 U	1 U	NA	NA	NA	NA
Toluene	ug/L	1 U	1 U	1 U	1 U	NA	NA	NA	NA	1 U	NA	1 U	1 U	NA	NA	NA	NA
Xylenes (total)	ug/L	2 U	2 U	2 U	2 U	NA	NA	NA	NA	2 U	NA	2 U	2 U	NA	NA	NA	NA
Total BTEX	ug/L	ND	ND	ND	ND	NA	NA	NA	NA	ND	NA	ND	ND	NA	NA	NA	NA
Dissolved Metals																	
Arsenic	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA
Chromium	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA
Lead	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA
Nickel	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	NA	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	NA
Zinc	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA
Miscellaneous																	
Alkalinity	mg/L	NA	NA	NA	NA	88	62	77	39	NA	NA	NA	NA	87	62	130	39
Ammonia-N	mg/L	0.30	0.25	1.4	0.44	0.29	0.16	0.62	0.41	0.29	0.053	1.6	0.12	0.40	0.20	1.5	0.52
Nitrite	mg/L	NA	NA	NA	NA	NA	NA	0.050 U	0.050 U	NA	NA	NA	NA	NA	NA	0.085	0.050 U
Nitrate	mg/L	0.21	0.4	0.32	0.34	0.12	0.25	0.27	0.28	0.18	NA	0.22	0.37	0.085	0.24	0.28	0.29

Notes:

U = Indicates the analyte was not detected above the minimum laboratory reporting limit

NA = Analyte was not analyzed.

ND = None of the constituents were detected above the minimum laboratory reporting limit

mg/L = milligrams per liter

ug/L = micrograms per liter

Table 5 - Summary of 2013-2015 Surface Water Analytical Results

Sample ID:		SW-3								SW-4							
Date Collected:		12/13/13		06/05/14		11/06/14		05/21/15		12/13/13		06/05/14		11/06/14		05/21/15	
Tide Stage:	Units	LOW	HIGH	LOW	HGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
Polycyclic Aromatic Hydrocarbons																	
1-Methylnaphthalene	ug/L	9.5 U	9.5 U	9.6 U	9.7 U	NA	NA	NA	NA	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA
2-Methylnaphthalene	ug/L	9.5 U	9.5 U	9.6 U	9.7 U	NA	NA	NA	NA	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA
Acenaphthene	ug/L	9.5 U	9.5 U	9.6 U	9.7 U	NA	NA	NA	NA	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA
Acenaphthylene	ug/L	9.5 U	9.5 U	9.6 U	9.7 U	NA	NA	NA	NA	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA
Anthracene	ug/L	9.5 U	9.5 U	9.6 U	9.7 U	NA	NA	NA	NA	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA
Benzo(a)anthracene	ug/L	9.5 U	9.5 U	9.6 U	9.7 U	NA	NA	NA	NA	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA
Benzo(a)pyrene	ug/L	9.5 U	9.5 U	9.6 U	9.7 U	NA	NA	NA	NA	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA
Benzo(b)fluoranthene	ug/L	9.5 U	9.5 U	9.6 U	9.7 U	NA	NA	NA	NA	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA
Benzo(g,h,i)perylene	ug/L	9.5 U	9.5 U	9.6 U	9.7 U	NA	NA	NA	NA	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA
Benzo(k)fluoranthene	ug/L	9.5 U	9.5 U	9.6 U	9.7 U	NA	NA	NA	NA	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA
Chrysene	ug/L	9.5 U	9.5 U	9.6 U	9.7 U	NA	NA	NA	NA	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA
Dibenz(a,h)anthracene	ug/L	9.5 U	9.5 U	9.6 U	9.7 U	NA	NA	NA	NA	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA
Fluoranthene	ug/L	9.5 U	9.5 U	9.6 U	9.7 U	NA	NA	NA	NA	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA
Fluorene	ug/L	9.5 U	9.5 U	9.6 U	9.7 U	NA	NA	NA	NA	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	ug/L	9.5 U	9.5 U	9.6 U	9.7 U	NA	NA	NA	NA	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA
Naphthalene	ug/L	9.5 U	9.5 U	9.6 U	9.7 U	NA	NA	NA	NA	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA
Phenanthrene	ug/L	9.5 U	9.5 U	9.6 U	9.7 U	NA	NA	NA	NA	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA
Pyrene	ug/L	9.5 U	9.5 U	9.6 U	9.7 U	NA	NA	NA	NA	9.5 U	9.5 U	10 U	10 U	NA	NA	NA	NA
Total PAHs	ug/L	ND	ND	ND	ND	NA	NA	NA	NA	ND	ND	10 U	ND	NA	NA	NA	NA
Volatile Organic Compounds																	
Benzene	ug/L	1 U	1 U	1 U	1 U	NA	NA	NA	NA	1 U	1 U	1 U	1 U	NA	NA	NA	NA
Ethylbenzene	ug/L	1 U	1 U	1 U	1 U	NA	NA	NA	NA	1 U	1 U	1 U	1 U	NA	NA	NA	NA
Toluene	ug/L	1 U	1 U	1 U	1 U	NA	NA	NA	NA	1 U	1 U	1 U	1 U	NA	NA	NA	NA
Xylenes (total)	ug/L	2 U	2 U	2 U	2 U	NA	NA	NA	NA	2 U	2 U	2 U	2 U	NA	NA	NA	NA
Total BTEX	ug/L	ND	ND	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA
Dissolved Metals																	
Arsenic	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA
Chromium	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA
Lead	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA	0.01 U	0.01 U	0.01 U	0.01 U	NA	NA	NA	NA
Nickel	mg/L	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	NA	0.04 U	0.04 U	0.04 U	0.04 U	NA	NA	NA	NA
Zinc	mg/L	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA	0.02 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA
Miscellaneous																	
Alkalinity	mg/L	NA	NA	NA	NA	100	60	120	71	NA	NA	NA	NA	84	58	120	100
Ammonia-N	mg/L	0.27	0.092	1.7	0.31	0.19	0.22	0.80	0.91	0.17	0.33	1.9	0.39	0.13	0.16	1.5	0.83
Nitrite	mg/L	NA	NA	NA	NA	NA	NA	0.050 U	0.050 U	NA	NA	NA	NA	NA	NA	0.094	0.060
Nitrate	mg/L	0.18	0.42	0.26	0.36	0.083	0.25	0.21	0.27	0.41	0.24	0.28	0.39	0.078	0.24	0.17	0.25

Notes:

U = Indicates the analyte was not detected above the minimum laboratory reporting limit

NA = Analyte was not analyzed.

ND = None of the constituents were detected above the minimum laboratory reporting limit

mg/L = milligrams per liter

ug/L = micrograms per liter

Table 6
Monitoring Well Construction Details and Water Level Data

Well ID	Well Diameter (inches)	Ground Surface Elevation (ft above msl)	Top of Casing Elevation (ft above msl)	Well Depth (ft bgs)	Top of Screen Depth (ft bgs)	Bottom of Screen Depth (ft bgs)	Top of Screen Elevation (ft msl)	Bottom of Screen Elevation (ft msl)	May 2015 Depth to Water (ft below TOC)	May 2015 Water Table Elevation (ft msl)
MW-1	2	4.87	7.67	15.0	5.0	15.0	-0.13	-10.13	3.37	4.30
MW-2	2	5.25	7.90	15.0	5.0	15.0	0.25	-9.75	3.05	4.85
MW-3R	2	4.21	5.90	10.0	2.0	10.0	2.21	-5.79	2.05	3.85
PDMW-1T	2	5.21	7.71	8.0	3.0	8.0	2.21	-2.79	2.63	5.08
PDMW-2T	2	4.87	7.37	8.0	3.0	8.0	1.87	-3.13	2.07	5.30
PDMW-3T	2	7.05	9.55	8.0	3.0	8.0	4.05	-0.95	4.85	4.70
PDMW-4T	2	6.85	9.35	8.0	3.0	8.0	3.85	-1.15	4.58	4.77
PDMW-5T	2	5.59	8.09	8.0	3.0	8.0	2.59	-2.41	3.18	4.91
PDMW-6P	2	6.74	9.24	8.0	3.0	8.0	3.74	-1.26	4.55	4.69
PDMW-7P	2	4.74	7.24	8.0	3.0	8.0	1.74	-3.26	2.51	4.73
PDMW-8R	2	6.43	9.08	9.0	1.0	9.0	5.43	-2.57	3.98	5.10
PDMW-9T	2	6.91	9.38	8.0	3.0	8.0	3.91	-1.09	4.31	5.07
PDMW-10R	2	7.03	9.44	9.0	1.0	9.0	6.03	-1.97	4.40	5.04
PDMW-12P	2	6.92	9.42	8.0	3.0	8.0	3.92	-1.08	4.41	5.01
PDMW-13P	2	5.59	8.09	8.0	3.0	8.0	2.59	-2.41	3.13	4.96
PDMW-15T	2	5.94	8.44	8.0	3.0	8.0	2.94	-2.06	3.24	5.20
PDMW-17T	2	6.60	9.10	8.0	3.0	8.0	3.60	-1.40	4.2	4.90
PDMW-19P	2	6.77	9.27	8.0	3.0	8.0	3.77	-1.23	4.45	4.82
PDMW-20T	2	5.14	7.64	8.0	3.0	8.0	2.14	-2.86	2.42	5.22
PDMW-21T	2	4.59	7.09	8.0	3.0	8.0	1.59	-3.41	5	2.09
PDMW-22T	2	6.13	8.63	8.0	3.0	8.0	3.13	-1.87	3.56	5.07
PDMW-23R	2	7.36	10.07	8.0	1.0	8.0	6.36	-0.64	5.11	4.96
PDMW-24T	2	6.69	9.19	7.5	2.5	7.5	4.19	-0.81	4.21	4.98
PDMW-26T	2	4.77	7.27	8.0	3.0	8.0	1.77	-3.23	1.99	5.28
PDMW-27R	2	6.42	8.78	9.5	1.5	9.5	4.92	-3.08	4.00	4.78
PDMW-29D	2	5.58	8.56	49.5	44.5	49.5	-38.92	-43.92	6.95	1.61
PDMW-30P	2	6.63	9.13	8.0	3.0	8.0	3.63	-1.37	4.71	4.42
PDMW-31R2	2	5.47	8.23	8.0	1.0	8.0	4.47	-2.53	3.08	5.15
PDMW-32R	2	7.31	9.40	7.5	2.5	7.5	4.81	-0.19	4.38	5.02
PDMW-33R2	2	5.40	8.48	15.0	10.0	15.0	-4.60	-9.60	3.72	4.76
PDMW-35P	1	5.73	9.53	25.0	15.0	25.0	-9.27	-19.27	5.01	4.52
PDMW-36P	1	6.18	9.92	12.0	2.0	12.0	4.18	-5.82	5.26	4.66
PDMW-37P	1	6.93	9.75	8.0	3.0	8.0	3.93	-1.07	5.05	4.70
PDMW-38P	1	6.47	10.37	12.0	2.0	12.0	4.47	-5.53	5.42	4.95
PDMW-40R	2	6.26	8.06	22.0	15.0	22.0	-8.74	-15.74	4.92	3.14
PDMW-45R	1	6.03	8.59	10.0	2.0	10.0	4.03	-3.97	3.99	4.60
PDMW-46	2	6.34	9.82	10.0	5.0	10.0	1.34	-3.66	5.13	4.69
PDMW-47	2	5.80	8.52	10.0	5.0	10.0	0.80	-4.20	4.48	4.04
PDMW-48	2	3.70	6.45	7.0	2.0	7.0	1.70	-3.30	3.02	3.43
PDMW-49	2	2.85	5.25	7.0	2.0	7.0	0.85	-4.15	2.89	2.36
PDMW-50	2	5.00	7.80	7.0	2.0	7.0	3.00	-2.00	3.67	4.13
PDMW-51	2	4.26	7.46	7.0	2.0	7.0	2.26	-2.74	3.7	3.76
PDMW-52	2	4.97	7.73	7.0	2.0	7.0	2.97	-2.03	4.03	3.70
PDMW-53	2	NA	NA	8.0	3.0	8.0	NA	NA	4.43	NA
TMW-1	2	5.13	8.45	13.0	8.0	13.0	-2.87	-7.87	3.08	5.37
TMW-4R	2	6.47	9.24	9.0	1.0	9.0	5.47	-2.53	4.44	4.80
EW-1	4	6.68	8.45	12.0	2.0	12.0	4.68	-5.32	3.53	4.92
MW-201	4	7.01	10.27	9.5	2.0	9.5	5.01	-2.49	5.03	5.24
MW-202	4	6.35	9.15	8.0	2.0	8.0	4.35	-1.65	4.17	4.98
MW-203	4	6.83	10.00	10.0	2.0	10.0	4.83	-3.17	5.07	4.93
MW-204	2	6.64	9.13	10.0	2.0	10.0	4.64	-3.36	3.63	5.50

Notes:

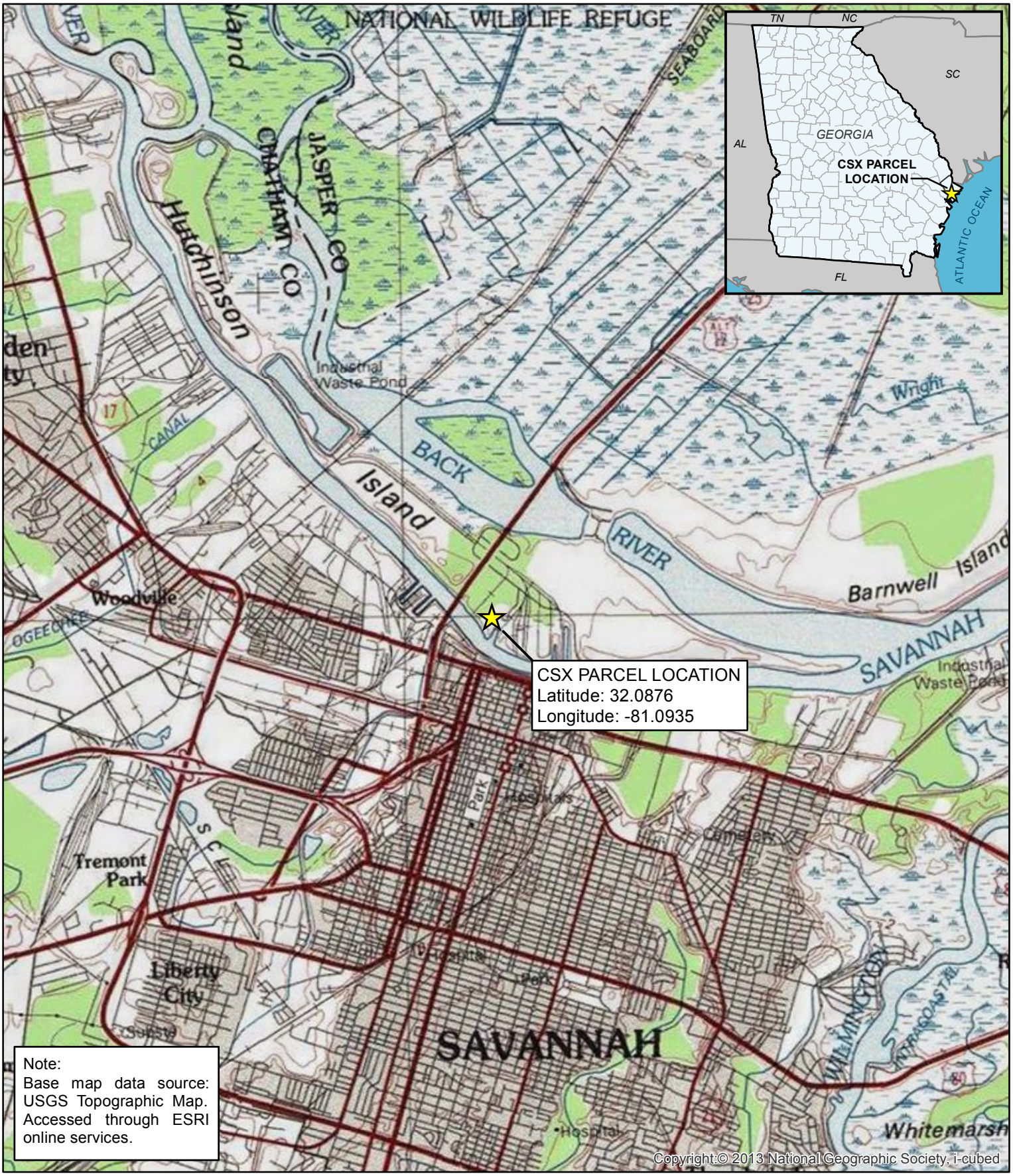
bgs = below ground surface
msl = mean sea level
ft = feet

Table 7
Historic Water Level Data

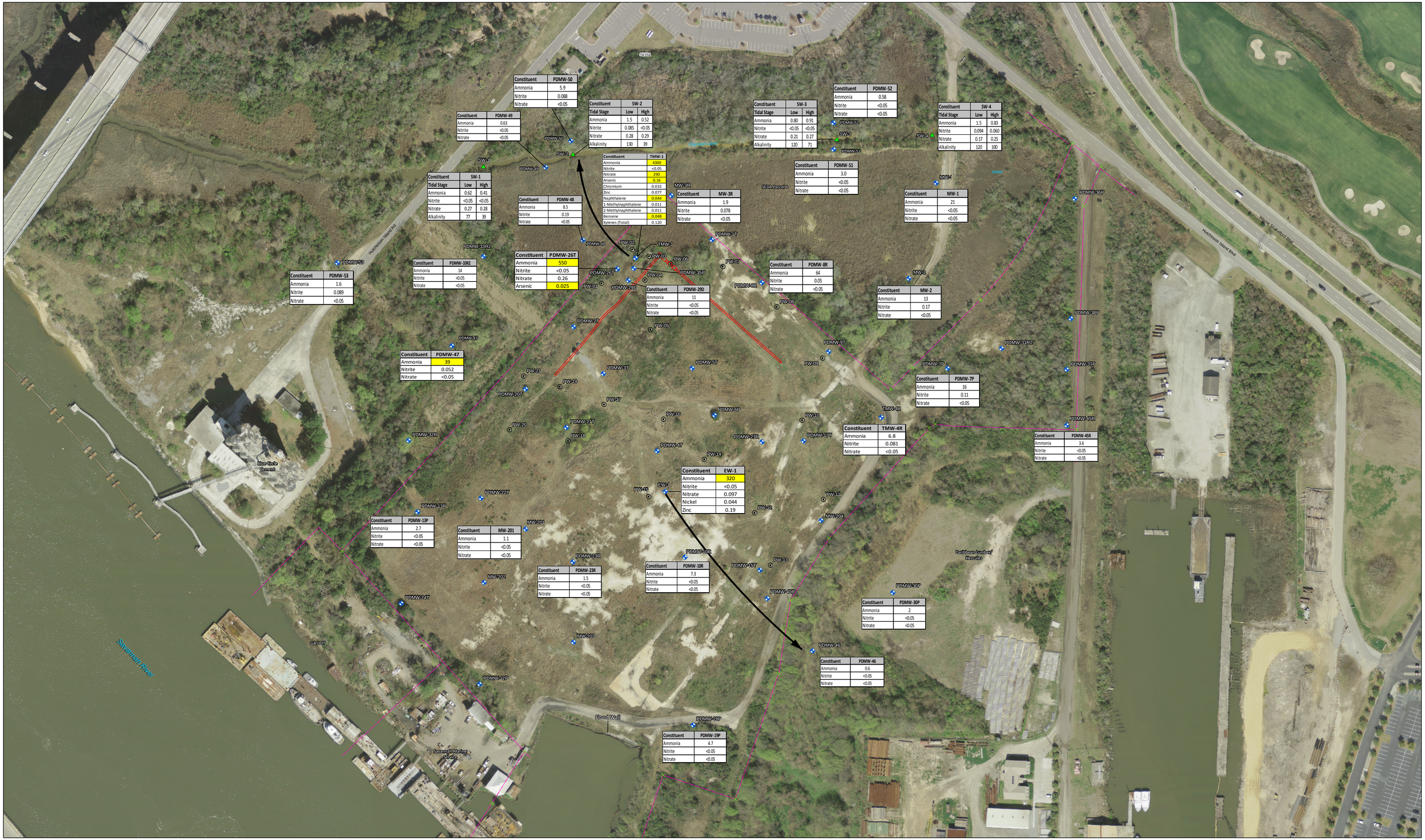
WELL ID	Top of Casing Elevation (ft msl)	12/10/2013		6/3/2014		11/6/2014		5/18/2015	
		Depth to water (ft below TOC)	Water Table Elevation (ft msl)	Depth to water (ft below TOC)	Water Table Elevation (ft msl)	Depth to water (ft below TOC)	Water Table Elevation (ft msl)	Depth to water (ft below TOC)	Water Table Elevation (ft msl)
MW-1	7.67	3.71	3.96	3.44	4.23	3.6	4.17	3.37	4.30
MW-2	7.90	Not Found	NA	Not Found	NA	3.64	4.26	3.05	4.85
MW-3R	5.90	1.12	4.78	2.21	3.69	2.3	3.60	2.05	3.85
PDMW-1T	7.71	2.68	5.03	2.72	4.99	2.94	4.77	2.63	5.08
PDMW-2T	7.37	2.03	5.34	2.49	4.88	3.28	4.09	2.07	5.30
PDMW-3T	9.55	3.96	5.59	4.94	4.61	5.42	4.13	4.85	4.70
PDMW-4T	9.35	3.55	5.8	5.07	4.28	5.2	4.15	4.58	4.77
PDMW-5T	8.09	2.29	5.8	Damaged	NA	4.05	4.04	3.18	4.91
PDMW-6P	9.24	3.47	5.77	4.96	4.28	5.18	4.06	4.55	4.69
PDMW-7P	7.24	2.36	4.88	2.86	4.38	2.98	4.26	2.51	4.73
PDMW-8R	9.08	3.34	5.74	4.3	4.78	4.85	4.23	3.98	5.10
PDMW-9T	9.38	3.83	5.55	4.65	4.73	5.11	4.27	4.31	5.07
PDMW-10R	9.44	3.79	5.65	5.02	4.42	5.37	4.07	4.4	5.04
PDMW-12P	9.42	4.27	5.15	5.04	4.38	5.02	4.40	4.41	5.01
PDMW-13P	8.09	3.07	5.02	3.67	4.42	3.8	4.29	3.13	4.96
PDMW-14TR	8.00	Damaged	NA	Destroyed	NA	Destroyed	NA	Destroyed	NA
PDMW-15T	8.44	2.67	5.77	4.03	4.41	4.32	4.12	3.24	5.20
PDMW-17T	9.10	3.18	5.92	4.67	4.43	4.97	4.13	4.2	4.90
PDMW-19P	9.27	4.38	4.89	5.3	3.97	5.32	3.95	4.45	4.82
PDMW-20T	7.64	2.11	5.53	2.68	4.96	3.31	4.33	2.42	5.22
PDMW-21T	7.09	4.22	2.87	5.41	1.68	5.71	1.38	5	2.09
PDMW-22T	8.63	3.29	5.34	4.11	4.52	4.31	4.32	3.56	5.07
PDMW-23R	10.07	4.72	5.35	5.62	4.45	5.86	4.21	5.11	4.96
PDMW-24T	9.19	4.25	4.94	4.72	4.47	4.81	4.38	4.21	4.98
PDMW-26T	7.27	2.07	5.2	2.26	5.01	2.85	4.42	1.99	5.28
PDMW-27R	8.78	2.94	5.84	4.46	4.32	4.82	3.96	4	4.78
PDMW-29D	8.56	6.3	2.26	5.88	2.68	7.5	1.06	6.95	1.61
PDMW-30P	9.13	6.15	2.98	6.08	3.05	5.96	3.17	4.71	4.42
PDMW-31R2	8.23	3.13	5.1	3.92	4.31	4.11	4.12	3.08	5.15
PDMW-32R	9.40	4.54	4.86	4.92	4.48	5.12	4.28	4.38	5.02
PDMW-33R2	8.48	4.54	3.94	3.98	4.50	4.03	4.45	3.72	4.76
PDMW-35P	9.53	5.08	4.45	5.23	4.30	5.02	4.51	5.01	4.52
PDMW-36P	9.92	4.99	4.93	5.63	4.29	5.51	4.41	5.26	4.66
PDMW-37P	9.75	4.45	5.3	5.82	3.93	5.77	3.98	5.05	4.70
PDMW-38P	10.37	4.78	5.59	6.12	4.25	6.07	4.30	5.42	4.95
PDMW-40R	8.06	5.21	2.85	5.27	2.79	5.52	2.54	4.92	3.14
PDMW-45R	8.59	2.94	5.65	4.92	3.67	4.92	3.67	3.99	4.60
PDMW-46	9.82	Not Installed	Not Measured	5.81	4.01	6.46	3.36	5.13	4.69
PDMW-47	8.52	Not Installed	Not Measured	4.18	4.34	5.47	3.05	4.48	4.04
PDMW-48	6.45	Not Installed	Not Measured	4.51	1.94	3.1	3.35	3.02	3.43
PDMW-49	5.25	Not Installed	Not Measured	3.12	2.13	2.55	2.70	2.89	2.39
PDMW-50	7.80	Not Installed	Not Measured	4.4	3.40	3.91	3.89	3.67	4.13
PDMW-51	7.46	Not Installed	Not Measured	4.16	3.30	4.41	3.05	3.7	3.76
PDMW-52	7.73	Not Installed	Not Measured	4.42	3.31	3.58	4.15	4.03	3.70
TMW-1	8.45	3.44	1.95	3.44	5.01	4.1	4.35	3.08	5.37
TMW-4R	9.24	4.81	3.36	4.81	4.43	5.4	3.84	4.44	4.80
EW-1	8.45	2.48	5.97	2.48	5.97	4.36	4.09	3.53	4.92
MW-201	10.27	4.98	5.29	4.98	5.29	5.7	4.57	5.03	5.24
MW-202	9.15	4.09	5.06	4.09	5.06	4.81	4.34	4.17	4.98
MW-203	10.00	4.87	5.13	4.87	5.13	5.7	4.30	5.07	4.93
MW-204	9.13	3.48	5.65	3.48	5.65	5.5	3.63	3.63	5.50

TOC - Top of Casing
MSL - Mean Sea Level

FIGURES



Amec Foster Wheeler Environment & Infrastructure **3800 Ezell Road Suite 100** **Nashville, Tennessee 37211**	N	**CSX Transportation, Inc.**	**FIGURE 1** **CSX Parcel Location** **HUTCHINSON ISLAND** **SAVANNAH, GEORGIA**
0 0.5 1 2 3 Miles	07/21/2015	Drawn: JNR	FILE: CSXT_Hutch_Is_Site_Loc_Topo_Map.mxd
	REV:	CHK: JJ	PROJ: 6-4300-5245



Constituent	PDMW-50
Ammonia	5.9
Nitrite	0.088
Nitrate	<0.05

Constituent	PDMW-49
Ammonia	0.63
Nitrite	<0.05
Nitrate	<0.05

Constituent	SW-2	
Tidal Stage	Low	High
Ammonia	1.5	0.52
Nitrite	0.085	<0.05
Nitrate	0.28	0.29
Alkalinity	130	39

Constituent	SW-3	
Tidal Stage	Low	High
Ammonia	0.80	0.91
Nitrite	<0.05	<0.05
Nitrate	0.21	0.27
Alkalinity	120	71

Constituent	PDMW-52
Ammonia	0.58
Nitrite	<0.05
Nitrate	<0.05

Constituent	SW-4	
Tidal Stage	Low	High
Ammonia	1.5	0.83
Nitrite	0.094	0.060
Nitrate	0.17	0.25
Alkalinity	120	100

Constituent	TMW-1
Ammonia	4300
Nitrite	<0.05
Nitrate	290
Arsenic	0.16
Chromium	0.032
Zinc	0.077
Naphthalene	0.044
1-Methylnaphthalene	0.011
2-Methylnaphthalene	0.011
Benzene	0.048
Xylenes (Total)	0.120

Constituent	PDMW-51
Ammonia	3.0
Nitrite	<0.05
Nitrate	<0.05

Constituent	SW-1	
Tidal Stage	Low	High
Ammonia	0.62	0.41
Nitrite	<0.05	<0.05
Nitrate	0.27	0.28
Alkalinity	77	39

Constituent	MW-3R
Ammonia	1.9
Nitrite	0.078
Nitrate	<0.05

Constituent	MW-1
Ammonia	21
Nitrite	<0.05
Nitrate	<0.05

Constituent	PDMW-48
Ammonia	8.5
Nitrite	0.19
Nitrate	<0.05

Constituent	PDMW-33R2
Ammonia	14
Nitrite	<0.05
Nitrate	<0.05

Constituent	PDMW-53
Ammonia	1.6
Nitrite	0.089
Nitrate	<0.05

Constituent	PDMW-26T
Ammonia	550
Nitrite	<0.05
Nitrate	0.26
Arsenic	0.025

Constituent	PDMW-8R
Ammonia	64
Nitrite	0.05
Nitrate	<0.05

Constituent	PDMW-29D
Ammonia	11
Nitrite	<0.05
Nitrate	<0.05

Constituent	MW-2
Ammonia	13
Nitrite	0.17
Nitrate	<0.05

Constituent	PDMW-47
Ammonia	39
Nitrite	0.052
Nitrate	<0.05

Constituent	PDMW-7P
Ammonia	16
Nitrite	0.11
Nitrate	<0.05

Constituent	TMW-4R
Ammonia	6.8
Nitrite	0.081
Nitrate	<0.05

Constituent	PDMW-45R
Ammonia	3.6
Nitrite	<0.05
Nitrate	<0.05

Constituent	EW-1
Ammonia	320
Nitrite	<0.05
Nitrate	0.097
Nickel	0.044
Zinc	0.19

Constituent	PDMW-13P
Ammonia	2.7
Nitrite	<0.05
Nitrate	<0.05

Constituent	MW-201
Ammonia	1.1
Nitrite	<0.05
Nitrate	<0.05

Constituent	PDMW-23R
Ammonia	1.5
Nitrite	<0.05
Nitrate	<0.05

Constituent	PDMW-10R
Ammonia	7.3
Nitrite	<0.05
Nitrate	<0.05

Constituent	PDMW-30P
Ammonia	2
Nitrite	<0.05
Nitrate	<0.05

Constituent	PDMW-46
Ammonia	0.6
Nitrite	<0.05
Nitrate	<0.05

Constituent	PDMW-19P
Ammonia	4.7
Nitrite	<0.05
Nitrate	<0.05

Amec Foster Wheeler
Environment & Infrastructure
3800 Ezell Road Suite 100
Nashville, Tennessee 37211

CSX Transportation, Inc.

0 100 200 400 600 800 Feet

07/20/2015 | REV:

Drawn: JNR | PROJ: 6-4300-5245

CSXT_Hutch_GW_SW_Results_May2015_July2015Rpt.mxd

March 2011 aerial data source: USGS; obtained through the National Map Online Data Viewer

FIGURE 2
Summary of Groundwater and Surface Water Analytical Results - May 2015
Hutchinson Island HSI - 10101 - Savannah, Georgia

NOTES:
Results are presented in milligrams per liter (mg/L)
-Shaded values indicate exceedance of applicable Risk Reduction Standard

SYMBOL KEY

- Surface Water Sample Location
- Extraction Well
- Monitoring Well
- Property Corners
- Property Line
- Trench
- Modeled Groundwater Flow Path

** PDMW-29D results not used during contour development

PDMW-50 5.9
PDMW-49 0.63
SW-2 High tide = 1.50 Low tide = 0.52
SW-1 High tide = 0.62 Low tide = 0.41
SW-3 High tide = 0.80 Low tide = 0.91
PDMW-52 0.58
Drainage Canal
SW-4 High tide = 1.50 Low tide = 0.83
PDMW-51 3
MW-1 21
Water
PDMW-36P NS
Wayne Shakelford Blvd
Hutchinson Island Blvd
SEDA Parcel B
MW-3R 1.9
500
1,000
3,000
PDMW-53 1.6
PDMW-48 8.5
PDMW-1T NS
PDMW-33R2 14
PDMW-26T 550
TMW-1 4300
PDMW-35P NS
PDMW-29D 11
PDMW-8R 64
MW-2 13
PDMW-38P NS
PDMW-2T NS
30
PDMW-47 39
PDMW-9T NS
PDMW-31R2 NS
PDMW-7P 16
500
PDMW-3T NS
PDMW-5T NS
PDMW-37P NS
PDMW-20T NS
100
PDMW-6P NS
TMW-4R 6.8
PDMW-45R 3.6
PDMW-21T NS
PDMW-32R 0.7
PDMW-27R NS
PDMW-4T NS
100
PDMW-17T NS
Blue Circle Cement
EW-1 320
PDMW-22T NS
PDMW-13P 2.7
MW-204 NS
MW-201 1.1
PDMW-23R 1.5
PDMW-10R 7.3
PDMW-15T NS
Caribbean Lumber/ Hercules
MW-202 NS
PDMW-30P 2
PDMW-24T NS
PDMW-40R NS
MW-203 NS
PDMW-46 0.6
GA DOT
PDMW-12P NS
Flood Wall
Savannah River
PDMW-19P 4.7
Savannah Marine Service

NOTES:
-mg/L = milligrams per liter
-Ammonia background concentration = 15 mg/L
-Ammonia delineation concentration = 30 mg/L
-NS = monitoring well not sampled during the May 2015 groundwater monitoring event
-November 2014 ammonia results were used to develop isoconcentration contours for wells not

SYMBOL KEY

- Surface Water Sample
- Monitoring Well
- Property Corners
- Property Line
- Ammonia Isoconcentration Line (mg/L) (30)
- Modeled Groundwater Flow Path

Amec Foster Wheeler
Environment & Infrastructure
3800 Ezell Road Suite 100
Nashville, Tennessee 37211

N

CSX Transportation, Inc.

FIGURE 3

Ammonia Isoconcentration Map - May 2015
Hutchinson Island HSI - 10101 - Savannah, Georgia

0 200 400 800 1,200 1,600 Feet

07/20/2015	REV:	File: CSXT_Hutch_Is_Ammonia_Conc_May2015Rpt.mxd
Drawn: JNR	PROJ: 6-4300-5245	March 2011 aerial data source: USGS; obtained through The National Map online GIS Data Viewer.

** Anomalous groundwater elevation data from wells PDMW-21T, PDMW-29D, and PDMW-40R were not used to develop groundwater contours.

SEDA
SEDA Parcel B
Drainage Canal
Water
Wayne Shakelford Blvd
Hutchinson Island Blvd
Blue Circle Cement
GA DOT
Savannah Marine Service
Flood Wall
Savannah River
Caribbean Lumber/ Hercules

PDMW-50 4.13
PDMW-52 3.7
PDMW-49 2.36
PDMW-51 3.76
MW-3R 3.85
MW-1 4.30
PDMW-36P 4.66
PDMW-53 ND
PDMW-48 3.43
PDMW-1T 5.08
PDMW-33R2 4.67
PDMW-26T 5.28
TMW-1 5.37
PDMW-35P 4.42
PDMW-8R 5.10
MW-2 4.85
PDMW-29D 1.61**
PDMW-2T 5.30
PDMW-38P 4.95
PDMW-47 4.04
PDMW-31R2 5.15
PDMW-9T 5.07
PDMW-5T 4.91
PDMW-3T 4.70
PDMW-20T 5.22
PDMW-7P 4.73
PDMW-37P 4.7
PDMW-6P 4.69
TMW-4R 4.80
PDMW-32R 5.02
PDMW-21T 2.09**
PDMW-17T 4.90
PDMW-45R 3.67
PDMW-4T 4.77
PDMW-27R 4.78
EW-1 4.92
PDMW-22T 5.07
PDMW-13P 4.96
MW-204 5.50
MW-201 5.24
PDMW-10R 5.04
PDMW-23R 4.96
MW-202 4.34
PDMW-15T 5.20
PDMW-24T 4.98
PDMW-30P 4.42
PDMW-40R 3.14**
MW-203 4.93
PDMW-46 4.69
PDMW-12P 5.01
PDMW-19P 4.82

4.00 3.75 4.25 3.25 3.00 2.75 3.50 4.50 4.75 5.00 5.50

SYMBOL KEY

- Contour Line (elevation in feet amsl)
- Monitoring Well (w/ gw elevation in feet msl)
- Property Corners
- PropertyLine
- Modeled Groundwater Flow Path

Amec Foster Wheeler Environment & Infrastructure 3800 Ezell Road Suite 100 Nashville, Tennessee 37211	amec foster wheeler	N	**CSX Transportation, Inc.**	**FIGURE 4** **May 2015 Potentiometric Surface Map** **Hutchinson Island HSI - 10101 - Savannah, Georgia**
0 200 400 800 1,200 1,600 Feet		07/21/2015	REV:	CSXT_Hutch_Is_May2015_GW_Contour_Map_July2015Rpt.mxd
		Drawn: JNR	PROJ: 6-4300-5245	March 2011 aerial data source: USGS; obtained through The National Map online GIS Data Viewer.

APPENDIX A
LABORATORY DATA REPORTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-112658-1
Client Project/Site: CSX GA, Hutchinson Island, VRP

For:
AMEC Foster Wheeler E & I, Inc
2677 Buford Highway
Atlanta, Georgia 30324

Attn: Aaron Getchell

Authorized for release by:
5/21/2015 3:30:06 PM

Lisa Harvey, Project Manager II
(912)354-7858 e.3221
lisa.harvey@testamericainc.com

LINKS

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Have a Question? Ask The Expert

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Job ID: 680-112658-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE
Client: AMEC Foster Wheeler E & I, Inc
Project: CSX GA, Hutchinson Island, VRP
Report Number: 680-112658-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 05/19/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 5.4 C.

AMMONIA

Samples PDMW-52_05182015 (680-112658-1), PDMW-51_05182015 (680-112658-2) and PDMW-49_05182015 (680-112658-3) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 05/20/2015.

Sample PDMW-51_05182015 (680-112658-2)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITRATE-NITRITE AS NITROGEN

Samples PDMW-52_05182015 (680-112658-1), PDMW-51_05182015 (680-112658-2) and PDMW-49_05182015 (680-112658-3) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 05/19/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112658-1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112658-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-112658-1	PDMW-52_05182015	Water	05/18/15 14:40	05/19/15 08:30
680-112658-2	PDMW-51_05182015	Water	05/18/15 16:00	05/19/15 08:30
680-112658-3	PDMW-49_05182015	Water	05/18/15 16:15	05/19/15 08:30

Method Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112658-1

Method	Method Description	Protocol	Laboratory
350.1	Nitrogen, Ammonia	MCAWW	TAL SAV
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL SAV

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112658-1

Client Sample ID: PDMW-52_05182015
Date Collected: 05/18/15 14:40
Date Received: 05/19/15 08:30

Lab Sample ID: 680-112658-1
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**0.58**		0.25		mg/L			05/20/15 12:23	1
Nitrate as N	0.050	U	0.050		mg/L			05/19/15 16:29	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/19/15 16:29	1
Nitrite as N	0.050	U	0.050		mg/L			05/19/15 16:29	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112658-1

Client Sample ID: PDMW-51_05182015
Date Collected: 05/18/15 16:00
Date Received: 05/19/15 08:30

Lab Sample ID: 680-112658-2
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**3.0**		0.50		mg/L			05/20/15 12:32	2
Nitrate as N	0.050	U	0.050		mg/L			05/19/15 16:30	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/19/15 16:30	1
Nitrite as N	0.050	U	0.050		mg/L			05/19/15 16:30	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112658-1

Client Sample ID: PDMW-49_05182015
Date Collected: 05/18/15 16:15
Date Received: 05/19/15 08:30

Lab Sample ID: 680-112658-3
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**0.63**		0.25		mg/L			05/20/15 12:24	1
Nitrate as N	0.050	U	0.050		mg/L			05/19/15 16:31	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/19/15 16:31	1
Nitrite as N	0.050	U	0.050		mg/L			05/19/15 16:31	1

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-384034/28
Matrix: Water
Analysis Batch: 384034

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.25	U	0.25		mg/L			05/20/15 12:28	1

Lab Sample ID: LCS 680-384034/35
Matrix: Water
Analysis Batch: 384034

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	0.994		mg/L		99	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 680-383888/13
Matrix: Water
Analysis Batch: 383888

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.050	U	0.050		mg/L			05/19/15 15:42	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/19/15 15:42	1
Nitrite as N	0.050	U	0.050		mg/L			05/19/15 15:42	1

Lab Sample ID: LCS 680-383888/16
Matrix: Water
Analysis Batch: 383888

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.500	0.545		mg/L		109	75 - 125
Nitrate Nitrite as N	1.00	1.05		mg/L		105	90 - 110
Nitrite as N	0.500	0.509		mg/L		102	90 - 110

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112658-1

General Chemistry

Analysis Batch: 383888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112658-1	PDMW-52_05182015	Total/NA	Water	353.2	
680-112658-2	PDMW-51_05182015	Total/NA	Water	353.2	
680-112658-3	PDMW-49_05182015	Total/NA	Water	353.2	
LCS 680-383888/16	Lab Control Sample	Total/NA	Water	353.2	
MB 680-383888/13	Method Blank	Total/NA	Water	353.2	

Analysis Batch: 384034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112658-1	PDMW-52_05182015	Total/NA	Water	350.1	
680-112658-2	PDMW-51_05182015	Total/NA	Water	350.1	
680-112658-3	PDMW-49_05182015	Total/NA	Water	350.1	
LCS 680-384034/35	Lab Control Sample	Total/NA	Water	350.1	
MB 680-384034/28	Method Blank	Total/NA	Water	350.1	

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112658-1

Client Sample ID: PDMW-52_05182015

Lab Sample ID: 680-112658-1
Matrix: Water
Date Collected: 05/18/15 14:40
Date Received: 05/19/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	2 mL	2 mL	384034	05/20/15 12:23	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	383888	05/19/15 16:29	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: PDMW-51_05182015

Lab Sample ID: 680-112658-2
Matrix: Water
Date Collected: 05/18/15 16:00
Date Received: 05/19/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		2	2 mL	2 mL	384034	05/20/15 12:32	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	383888	05/19/15 16:30	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: PDMW-49_05182015

Lab Sample ID: 680-112658-3
Matrix: Water
Date Collected: 05/18/15 16:15
Date Received: 05/19/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	2 mL	2 mL	384034	05/20/15 12:24	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	383888	05/19/15 16:31	GRX	TAL SAV
	Instrument ID: LACHAT2									

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

CSX TRANSPORTATION — CHAIN OF CUSTODY

COC #

LABORATORY INFORMATION

- [x] TestAmerica Savannah - 5102 LaRoche Avenue, Savannah, GA 31404 P: 912-354-7858 F: 912-352-0165
- [ ] TestAmerica North Canton - 4101 Shuffel Drive NW, North Canton, OH 44720 P: 330-497-9396 F: 330-497-0772
- [ ] TestAmerica Tampa - 6712 Benjamin Road, Suite 100, Tampa, FL 33634 P: 813-885-7427 F: 813-885-7049
- [ ] TestAmerica Pensacola - 3355 McLemore Drive, Pensacola, FL 32514 P: 850-474-1001 F: 850-478-2671
- [ ] TestAmerica Buffalo - 10 Hazelwood Drive, Suite 106, Amherst, NY 14228 P: 716-691-2600 F: 716-691-7991
- [ ] TestAmerica Chicago - 2417 Bond Street, University Park, IL 60466 P: 708-534-5200 F: 708-534-5211

SHIPMENT INFORMATION

Shipment Method: Lab Courier

Shipment Tracking No:

CSXT PROJECT INFORMATION

CSXT Project Number: 9415575

Proj State (State of Origin): GA

Proj. City: Savannah

CSXT Project Name: Hutchinson Island

CSXT Contact: Sam Ross

LWON: ENV00000120647

CONSULTANT INFORMATION

Company: Amec Foster Wheeler

Project #: 6-4300-5245

PM: Pat Harrison

Address: 3800 Ezell Rd Ste 100

Email: pat.harrison@amecfw.com

City, State, Zip: Nashville, TN 37211

Phone: (678)658-1374

Fax:

Turnaround Time:

- [ ] 1 Day Rush
- [ ] 2 Day Rush
- [ ] 3 Day Rush
- [x] Standard 6-13 Days
- [ ] Specify # Days
- [ ] Standard 14 Days
- [ ] Other

Deliverables:

- [x] CSXT Standard (Level II)
- [ ] Level III
- [ ] Level IV
- [ ] Other Deliv:
- [ ] EDD Required, Format:

Preservative Codes: 0 = No Preservatives; 1 = Hydrochloric Acid; 2 = Nitric Acid; 3 = Sulfuric Acid; 4 = Sodium Thiosulfate; 5 = Sodium Hydroxide; 6 = Other

Note ➡ 3 | 0/3 | 0/3

Pres. Code

Matrix Codes: GW = Groundwater; WW = Waste Water; SW = Surface Water; SO = Soil; SL = Sludge; OI = Oil; SOL = Other Solid; LIQ = Liquid

SAMPLE INFORMATION

Sample Identification	Containers Number & Type	Sample Collection Date	Time	Sampler	Filtered Y or N	Type Comp or Grab	Matrix Code	METHODS FOR ANALYSIS: Ammonia	Nitrate	Nitrite	COMMENTS	LAB USE
PDMW-52_05182015	3 poly	5/18/15	1440	PG	N	G	GW	X	X	X		
PDMW-51_05182015	3 poly	5/18/15	1600	PG	N	G	GW	X	X	X		
PDMW-49_05182015	3 poly	5/18/15	1615	JJ	N	G	GW	X	X	X		

680-112658 Chain of Custody

	Date/Time		Date/Time	
Relinquished By: Pat Harrison	5/19/15 0750	Received By:	5/19/15 0750	Comments & Special Analytical Requirements: 5.0 5.4
Relinquished By:	Date/Time:	Received By:	5/19/15 8:30	
Relinquished By:	Date/Time:	Received By:	Date/Time:	
Received By Laboratory:	Date/Time:	Lab Remarks:	LAB USE: Custody Intact ☐ Yes ☐ No	Custody Seal # # / LAB Log Number #

ORIGINAL – RETURN TO LABORATORY WITH SAMPLES

INVOICE MUST BE SUBMITTED TO CSXT WITH ORIGINAL COC

TAL-6006 (0509)

Login Sample Receipt Checklist

Client: AMEC Foster Wheeler E & I, Inc

Job Number: 680-112658-1

Login Number: 112658
List Number: 1
Creator: White, Menica R

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112658-1

Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Georgia	State Program	4	803	06-30-15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-112692-1
Client Project/Site: CSX GA, Hutchinson Island, VRP

For:
AMEC Foster Wheeler E & I, Inc
2677 Buford Highway
Atlanta, Georgia 30324

Attn: Aaron Getchell

Authorized for release by:
5/26/2015 3:04:36 PM

Lisa Harvey, Project Manager II
(912)354-7858 e.3221
lisa.harvey@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Job ID: 680-112692-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE
Client: AMEC Foster Wheeler E & I, Inc
Project: CSX GA, Hutchinson Island, VRP
Report Number: 680-112692-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 05/20/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.4 C.

A dissolved metals container for ID: PDMW-13P_05192015 was received, however, was not listed on COC. The lab was instructed to put this sample on hold, pending test results for total metals.

METALS (ICP)

Samples PDMW-13P_05192015 (680-112692-1), PDMW-7P_05192015 (680-112692-2), PDMW-32R_05192015 (680-112692-3), TMW-4R_05192015 (680-112692-4), PDMW-23R_05192015 (680-112692-5), MW-3R_05192015 (680-112692-7) and MW-2_05192015 (680-112692-10) were analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared and analyzed on 05/22/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA

Samples PDMW-13P_05192015 (680-112692-1), PDMW-7P_05192015 (680-112692-2), PDMW-32R_05192015 (680-112692-3), TMW-4R_05192015 (680-112692-4), PDMW-23R_05192015 (680-112692-5), PDMW-50_05192015 (680-112692-6), MW-3R_05192015 (680-112692-7), PDMW-53_05192015 (680-112692-8), PDMW-48_05192015 (680-112692-9) and MW-2_05192015 (680-112692-10) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 05/21/2015.

Samples PDMW-13P_05192015 (680-112692-1)[2X], PDMW-7P_05192015 (680-112692-2)[10X], TMW-4R_05192015 (680-112692-4)[5X], PDMW-50_05192015 (680-112692-6)[5X], PDMW-48_05192015 (680-112692-9)[5X] and MW-2_05192015 (680-112692-10)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITRATE-NITRITE AS NITROGEN

Samples PDMW-13P_05192015 (680-112692-1), PDMW-7P_05192015 (680-112692-2), PDMW-32R_05192015 (680-112692-3), TMW-4R_05192015 (680-112692-4), PDMW-23R_05192015 (680-112692-5), PDMW-50_05192015 (680-112692-6), MW-3R_05192015 (680-112692-7), PDMW-53_05192015 (680-112692-8), PDMW-48_05192015 (680-112692-9) and MW-2_05192015 (680-112692-10) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 05/20/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112692-1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112692-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-112692-1	PDMW-13P_05192015	Water	05/19/15 09:43	05/20/15 08:15
680-112692-2	PDMW-7P_05192015	Water	05/19/15 09:00	05/20/15 08:15
680-112692-3	PDMW-32R_05192015	Water	05/19/15 10:56	05/20/15 08:15
680-112692-4	TMW-4R_05192015	Water	05/19/15 10:05	05/20/15 08:15
680-112692-5	PDMW-23R_05192015	Water	05/19/15 11:05	05/20/15 08:15
680-112692-6	PDMW-50_05192015	Water	05/19/15 14:38	05/20/15 08:15
680-112692-7	MW-3R_05192015	Water	05/19/15 14:50	05/20/15 08:15
680-112692-8	PDMW-53_05192015	Water	05/19/15 16:08	05/20/15 08:15
680-112692-9	PDMW-48_05192015	Water	05/19/15 16:25	05/20/15 08:15
680-112692-10	MW-2_05192015	Water	05/19/15 17:00	05/20/15 08:15

Method Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112692-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL SAV
350.1	Nitrogen, Ammonia	MCAWW	TAL SAV
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL SAV

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112692-1

Client Sample ID: PDMW-13P_05192015
Date Collected: 05/19/15 09:43
Date Received: 05/20/15 08:15

Lab Sample ID: 680-112692-1
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/22/15 09:35	05/22/15 20:30	1
Lead	10	U	10		ug/L		05/22/15 09:35	05/22/15 20:30	1
Nickel	40	U	40		ug/L		05/22/15 09:35	05/22/15 20:30	1
Zinc	20	U	20		ug/L		05/22/15 09:35	05/22/15 20:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**2.7**		0.50		mg/L			05/21/15 09:08	2
Nitrate as N	0.050	U	0.050		mg/L			05/20/15 14:54	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/20/15 14:54	1
Nitrite as N	0.050	U	0.050		mg/L			05/20/15 14:54	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112692-1

Client Sample ID: PDMW-7P_05192015
Date Collected: 05/19/15 09:00
Date Received: 05/20/15 08:15

Lab Sample ID: 680-112692-2
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/22/15 09:35	05/22/15 21:02	1
Lead	10	U	10		ug/L		05/22/15 09:35	05/22/15 21:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**16**		2.5		mg/L			05/21/15 09:08	10
Nitrate as N	0.050	U	0.050		mg/L			05/20/15 14:58	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/20/15 14:58	1
Nitrite as N	**0.11**		0.050		mg/L			05/20/15 14:58	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112692-1

Client Sample ID: PDMW-32R_05192015
Date Collected: 05/19/15 10:56
Date Received: 05/20/15 08:15

Lab Sample ID: 680-112692-3
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/22/15 09:35	05/22/15 21:06	1
Lead	10	U	10		ug/L		05/22/15 09:35	05/22/15 21:06	1
Nickel	40	U	40		ug/L		05/22/15 09:35	05/22/15 21:06	1
Zinc	**110**		20		ug/L		05/22/15 09:35	05/22/15 21:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**0.70**		0.25		mg/L			05/21/15 08:51	1
Nitrate as N	0.050	U	0.050		mg/L			05/20/15 15:03	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/20/15 15:03	1
Nitrite as N	0.050	U	0.050		mg/L			05/20/15 15:03	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112692-1

Client Sample ID: TMW-4R_05192015
Date Collected: 05/19/15 10:05
Date Received: 05/20/15 08:15

Lab Sample ID: 680-112692-4
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/22/15 09:35	05/22/15 21:11	1
Lead	10	U	10		ug/L		05/22/15 09:35	05/22/15 21:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**6.8**		1.3		mg/L			05/21/15 10:09	5
Nitrate as N	0.050	U	0.050		mg/L			05/20/15 15:04	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/20/15 15:04	1
Nitrite as N	**0.081**		0.050		mg/L			05/20/15 15:04	1

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112692-1

Client Sample ID: PDMW-23R_05192015
Date Collected: 05/19/15 11:05
Date Received: 05/20/15 08:15

Lab Sample ID: 680-112692-5
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/22/15 09:35	05/22/15 21:15	1
Lead	10	U	10		ug/L		05/22/15 09:35	05/22/15 21:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**1.5**		0.25		mg/L			05/21/15 09:17	1
Nitrate as N	0.050	U	0.050		mg/L			05/20/15 15:05	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/20/15 15:05	1
Nitrite as N	0.050	U	0.050		mg/L			05/20/15 15:05	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112692-1

Client Sample ID: PDMW-50_05192015
Date Collected: 05/19/15 14:38
Date Received: 05/20/15 08:15

Lab Sample ID: 680-112692-6
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**5.9**		1.3		mg/L			05/21/15 10:19	5
Nitrate as N	0.050	U	0.050		mg/L			05/20/15 15:06	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/20/15 15:06	1
Nitrite as N	**0.088**		0.050		mg/L			05/20/15 15:06	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112692-1

Client Sample ID: MW-3R_05192015
Date Collected: 05/19/15 14:50
Date Received: 05/20/15 08:15

Lab Sample ID: 680-112692-7
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/22/15 09:35	05/22/15 21:20	1
Lead	10	U	10		ug/L		05/22/15 09:35	05/22/15 21:20	1
Nickel	40	U	40		ug/L		05/22/15 09:35	05/22/15 21:20	1
Zinc	**89**		20		ug/L		05/22/15 09:35	05/22/15 21:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**1.9**		0.25		mg/L			05/21/15 09:17	1
Nitrate as N	0.050	U	0.050		mg/L			05/20/15 15:07	1
Nitrate Nitrite as N	**0.055**		0.050		mg/L			05/20/15 15:07	1
Nitrite as N	**0.078**		0.050		mg/L			05/20/15 15:07	1

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112692-1

Client Sample ID: PDMW-53_05192015
Date Collected: 05/19/15 16:08
Date Received: 05/20/15 08:15

Lab Sample ID: 680-112692-8
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**1.6**		0.25		mg/L			05/21/15 09:17	1
Nitrate as N	0.050	U	0.050		mg/L			05/20/15 15:09	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/20/15 15:09	1
Nitrite as N	**0.089**		0.050		mg/L			05/20/15 15:09	1

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112692-1

Client Sample ID: PDMW-48_05192015
Date Collected: 05/19/15 16:25
Date Received: 05/20/15 08:15

Lab Sample ID: 680-112692-9
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**8.5**		1.3		mg/L			05/21/15 09:35	5
Nitrate as N	0.050	U	0.050		mg/L			05/20/15 15:10	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/20/15 15:10	1
Nitrite as N	**0.19**		0.050		mg/L			05/20/15 15:10	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112692-1

Client Sample ID: MW-2_05192015
Date Collected: 05/19/15 17:00
Date Received: 05/20/15 08:15

Lab Sample ID: 680-112692-10
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/22/15 09:35	05/22/15 21:25	1
Lead	10	U	10		ug/L		05/22/15 09:35	05/22/15 21:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**13**		2.5		mg/L			05/21/15 09:35	10
Nitrate as N	0.050	U	0.050		mg/L			05/20/15 15:11	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/20/15 15:11	1
Nitrite as N	**0.17**		0.050		mg/L			05/20/15 15:11	1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 680-384313/1-A
Matrix: Water
Analysis Batch: 384501

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 384313

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/22/15 09:35	05/22/15 20:20	1
Lead	10	U	10		ug/L		05/22/15 09:35	05/22/15 20:20	1
Nickel	40	U	40		ug/L		05/22/15 09:35	05/22/15 20:20	1
Zinc	20	U	20		ug/L		05/22/15 09:35	05/22/15 20:20	1

Lab Sample ID: LCS 680-384313/2-A
Matrix: Water
Analysis Batch: 384501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 384313

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	96.8		ug/L		97	80 - 120
Lead	500	484		ug/L		97	80 - 120
Nickel	100	100		ug/L		100	80 - 120
Zinc	100	100		ug/L		100	80 - 120

Lab Sample ID: 680-112692-1 MS
Matrix: Water
Analysis Batch: 384501

Client Sample ID: PDMW-13P_05192015
Prep Type: Total/NA
Prep Batch: 384313

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20	U	100	97.4		ug/L		97	75 - 125
Lead	10	U	500	489		ug/L		96	75 - 125
Nickel	40	U	100	101		ug/L		101	75 - 125
Zinc	20	U	100	105		ug/L		105	75 - 125

Lab Sample ID: 680-112692-1 MSD
Matrix: Water
Analysis Batch: 384501

Client Sample ID: PDMW-13P_05192015
Prep Type: Total/NA
Prep Batch: 384313

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	20	U	100	95.5		ug/L		96	75 - 125	2	20
Lead	10	U	500	490		ug/L		96	75 - 125	0	20
Nickel	40	U	100	100		ug/L		100	75 - 125	1	20
Zinc	20	U	100	107		ug/L		107	75 - 125	2	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-384165/34
Matrix: Water
Analysis Batch: 384165

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.25	U	0.25		mg/L			05/21/15 09:17	1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 680-384165/41
Matrix: Water
Analysis Batch: 384165

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.00		mg/L		100	90 - 110

Lab Sample ID: 680-112692-1 DU
Matrix: Water
Analysis Batch: 384165

Client Sample ID: PDMW-13P_05192015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia	2.7		2.74		mg/L		0.4	30

Lab Sample ID: MB 680-384166/20
Matrix: Water
Analysis Batch: 384166

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.25	U	0.25		mg/L			05/21/15 09:25	1

Lab Sample ID: LCS 680-384166/41
Matrix: Water
Analysis Batch: 384166

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.00		mg/L		100	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 680-384064/16
Matrix: Water
Analysis Batch: 384064

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.050	U	0.050		mg/L			05/20/15 14:53	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/20/15 14:53	1
Nitrite as N	0.050	U	0.050		mg/L			05/20/15 14:53	1

Lab Sample ID: LCS 680-384064/15
Matrix: Water
Analysis Batch: 384064

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.500	0.538		mg/L		108	75 - 125
Nitrate Nitrite as N	1.00	1.04		mg/L		104	90 - 110
Nitrite as N	0.500	0.504		mg/L		101	90 - 110

Lab Sample ID: 680-112692-1 MS
Matrix: Water
Analysis Batch: 384064

Client Sample ID: PDMW-13P_05192015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.050	U	0.500	0.535		mg/L		107	75 - 125

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 680-112692-1 MS
Matrix: Water
Analysis Batch: 384064

Client Sample ID: PDMW-13P_05192015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	0.050	U	1.00	1.04		mg/L		104	90 - 110
Nitrite as N	0.050	U	0.500	0.503		mg/L		101	90 - 110

Lab Sample ID: 680-112692-1 MSD
Matrix: Water
Analysis Batch: 384064

Client Sample ID: PDMW-13P_05192015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	0.050	U	0.500	0.533		mg/L		107	75 - 125	0	30
Nitrate Nitrite as N	0.050	U	1.00	1.03		mg/L		103	90 - 110	0	10
Nitrite as N	0.050	U	0.500	0.502		mg/L		100	90 - 110	0	10

Lab Sample ID: 680-112692-2 DU
Matrix: Water
Analysis Batch: 384064

Client Sample ID: PDMW-7P_05192015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	0.050	U	0.050	U	mg/L		NC	30
Nitrate Nitrite as N	0.050	U	0.050	U	mg/L		NC	10
Nitrite as N	0.11		0.107		mg/L		0.6	10

Metals

Prep Batch: 384313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112692-1	PDMW-13P_05192015	Total/NA	Water	3010A	
680-112692-1 MS	PDMW-13P_05192015	Total/NA	Water	3010A	
680-112692-1 MSD	PDMW-13P_05192015	Total/NA	Water	3010A	
680-112692-2	PDMW-7P_05192015	Total/NA	Water	3010A	
680-112692-3	PDMW-32R_05192015	Total/NA	Water	3010A	
680-112692-4	TMW-4R_05192015	Total/NA	Water	3010A	
680-112692-5	PDMW-23R_05192015	Total/NA	Water	3010A	
680-112692-7	MW-3R_05192015	Total/NA	Water	3010A	
680-112692-10	MW-2_05192015	Total/NA	Water	3010A	
LCS 680-384313/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-384313/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 384501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112692-1	PDMW-13P_05192015	Total/NA	Water	6010C	384313
680-112692-1 MS	PDMW-13P_05192015	Total/NA	Water	6010C	384313
680-112692-1 MSD	PDMW-13P_05192015	Total/NA	Water	6010C	384313
680-112692-2	PDMW-7P_05192015	Total/NA	Water	6010C	384313
680-112692-3	PDMW-32R_05192015	Total/NA	Water	6010C	384313
680-112692-4	TMW-4R_05192015	Total/NA	Water	6010C	384313
680-112692-5	PDMW-23R_05192015	Total/NA	Water	6010C	384313
680-112692-7	MW-3R_05192015	Total/NA	Water	6010C	384313
680-112692-10	MW-2_05192015	Total/NA	Water	6010C	384313
LCS 680-384313/2-A	Lab Control Sample	Total/NA	Water	6010C	384313
MB 680-384313/1-A	Method Blank	Total/NA	Water	6010C	384313

General Chemistry

Analysis Batch: 384064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112692-1	PDMW-13P_05192015	Total/NA	Water	353.2	
680-112692-1 MS	PDMW-13P_05192015	Total/NA	Water	353.2	
680-112692-1 MSD	PDMW-13P_05192015	Total/NA	Water	353.2	
680-112692-2	PDMW-7P_05192015	Total/NA	Water	353.2	
680-112692-2 DU	PDMW-7P_05192015	Total/NA	Water	353.2	
680-112692-3	PDMW-32R_05192015	Total/NA	Water	353.2	
680-112692-4	TMW-4R_05192015	Total/NA	Water	353.2	
680-112692-5	PDMW-23R_05192015	Total/NA	Water	353.2	
680-112692-6	PDMW-50_05192015	Total/NA	Water	353.2	
680-112692-7	MW-3R_05192015	Total/NA	Water	353.2	
680-112692-8	PDMW-53_05192015	Total/NA	Water	353.2	
680-112692-9	PDMW-48_05192015	Total/NA	Water	353.2	
680-112692-10	MW-2_05192015	Total/NA	Water	353.2	
LCS 680-384064/15	Lab Control Sample	Total/NA	Water	353.2	
MB 680-384064/16	Method Blank	Total/NA	Water	353.2	

Analysis Batch: 384165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112692-1	PDMW-13P_05192015	Total/NA	Water	350.1	
680-112692-1 DU	PDMW-13P_05192015	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 384165 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112692-2	PDMW-7P_05192015	Total/NA	Water	350.1	
680-112692-3	PDMW-32R_05192015	Total/NA	Water	350.1	
680-112692-4	TMW-4R_05192015	Total/NA	Water	350.1	
680-112692-5	PDMW-23R_05192015	Total/NA	Water	350.1	
680-112692-6	PDMW-50_05192015	Total/NA	Water	350.1	
680-112692-7	MW-3R_05192015	Total/NA	Water	350.1	
680-112692-8	PDMW-53_05192015	Total/NA	Water	350.1	
LCS 680-384165/41	Lab Control Sample	Total/NA	Water	350.1	
MB 680-384165/34	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 384166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112692-9	PDMW-48_05192015	Total/NA	Water	350.1	
680-112692-10	MW-2_05192015	Total/NA	Water	350.1	
LCS 680-384166/41	Lab Control Sample	Total/NA	Water	350.1	
MB 680-384166/20	Method Blank	Total/NA	Water	350.1	

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112692-1

Client Sample ID: PDMW-13P_05192015
Date Collected: 05/19/15 09:43
Date Received: 05/20/15 08:15

Lab Sample ID: 680-112692-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384313	05/22/15 09:35	BJB	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384501	05/22/15 20:30	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		2	2 mL	2 mL	384165	05/21/15 09:08	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384064	05/20/15 14:54	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: PDMW-7P_05192015
Date Collected: 05/19/15 09:00
Date Received: 05/20/15 08:15

Lab Sample ID: 680-112692-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384313	05/22/15 09:35	BJB	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384501	05/22/15 21:02	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		10	2 mL	2 mL	384165	05/21/15 09:08	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384064	05/20/15 14:58	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: PDMW-32R_05192015
Date Collected: 05/19/15 10:56
Date Received: 05/20/15 08:15

Lab Sample ID: 680-112692-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384313	05/22/15 09:35	BJB	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384501	05/22/15 21:06	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		1	2 mL	2 mL	384165	05/21/15 08:51	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384064	05/20/15 15:03	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: TMW-4R_05192015
Date Collected: 05/19/15 10:05
Date Received: 05/20/15 08:15

Lab Sample ID: 680-112692-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384313	05/22/15 09:35	BJB	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384501	05/22/15 21:11	BCB	TAL SAV
	Instrument ID: ICPE									

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112692-1

Client Sample ID: TMW-4R_05192015

Lab Sample ID: 680-112692-4
Date Collected: 05/19/15 10:05
Matrix: Water
Date Received: 05/20/15 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		5	2 mL	2 mL	384165	05/21/15 10:09	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384064	05/20/15 15:04	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: PDMW-23R_05192015

Lab Sample ID: 680-112692-5
Date Collected: 05/19/15 11:05
Matrix: Water
Date Received: 05/20/15 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384313	05/22/15 09:35	BJB	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384501	05/22/15 21:15	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		1	2 mL	2 mL	384165	05/21/15 09:17	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384064	05/20/15 15:05	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: PDMW-50_05192015

Lab Sample ID: 680-112692-6
Date Collected: 05/19/15 14:38
Matrix: Water
Date Received: 05/20/15 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		5	2 mL	2 mL	384165	05/21/15 10:19	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384064	05/20/15 15:06	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: MW-3R_05192015

Lab Sample ID: 680-112692-7
Date Collected: 05/19/15 14:50
Matrix: Water
Date Received: 05/20/15 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384313	05/22/15 09:35	BJB	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384501	05/22/15 21:20	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		1	2 mL	2 mL	384165	05/21/15 09:17	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384064	05/20/15 15:07	GRX	TAL SAV
	Instrument ID: LACHAT2									

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112692-1

Client Sample ID: PDMW-53_05192015

Date Collected: 05/19/15 16:08
Date Received: 05/20/15 08:15

Lab Sample ID: 680-112692-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	2 mL	2 mL	384165	05/21/15 09:17	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384064	05/20/15 15:09	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: PDMW-48_05192015

Date Collected: 05/19/15 16:25
Date Received: 05/20/15 08:15

Lab Sample ID: 680-112692-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		5	2 mL	2 mL	384166	05/21/15 09:35	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384064	05/20/15 15:10	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: MW-2_05192015

Date Collected: 05/19/15 17:00
Date Received: 05/20/15 08:15

Lab Sample ID: 680-112692-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384313	05/22/15 09:35	BJB	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384501	05/22/15 21:25	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		10	2 mL	2 mL	384166	05/21/15 09:35	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384064	05/20/15 15:11	GRX	TAL SAV
	Instrument ID: LACHAT2									

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

CSX TRANSPORTATION — CHAIN OF CUSTODY

COC #

LABORATORY INFORMATION

- [x] TestAmerica Savannah - 5102 LaRoche Avenue, Savannah, GA 31404 P: 912-354-7858 F: 912-352-0165
- [ ] TestAmerica North Canton - 4101 Shuffel Drive NW, North Canton, OH 44720 P: 330-497-9396 F: 330-497-0772
- [ ] TestAmerica Tampa - 6712 Benjamin Road, Suite 100, Tampa, FL 33634 P: 813-885-7427 F: 813-885-7049
- [ ] TestAmerica Pensacola - 3355 McLemore Drive, Pensacola, FL 32514 P: 850-474-1001 F: 850-478-2671
- [ ] TestAmerica Buffalo - 10 Hazelwood Drive, Suite 106, Amherst, NY 14228 P: 716-691-2600 F: 716-961-7991
- [ ] TestAmerica Chicago - 2417 Bond Street, University Park, IL 60466 P: 708-534-5200 F: 708-534-5211

SHIPMENT INFORMATION

Shipment Method: Lab Couriers

Shipment Tracking No:

CSXT PROJECT INFORMATION

CSXT Project Number: 9415575

CSXT Project Name: Hutchinson Island

CSXT Contact: Sam Ross

Proj. State (State of Origin): GA

Proj City: Savannah

LWON: ENV00000120647

CONSULTANT INFORMATION

Company: Amec Foster Wheeler

Address: 3800 Ezell Rd Ste 100

City, State, Zip: Nashville, TN 37211

Project #: 6-4300-5245

PM: Aaron Getchell

Email: aaron.getchell@amecfw.com

Phone: (813)636-1541 Fax

Turnaround Time:

- [ ] 1 Day Rush
- [ ] 2 Day Rush
- [ ] 3 Day Rush
- [x] Standard 6-13 Days
- [ ] Specify # Days
- [ ] Standard 14 Days
- [ ] Other

Deliverables:

- [x] CSXT Standard (Level II)
- [ ] Level III
- [ ] Level IV
- [ ] Other Deliv:
- [ ] EDD Required, Format:

Preservative Codes: 0 = No Preservatives; 1 = Hydrochloric Acid; 2 = Nitric Acid; 3 = Sulfuric Acid; 4 = Sodium Thiosulfate; 5 = Sodium Hydroxide; 6 = Other

Matrix Codes: GW = Groundwater; WW = Waste Water; SW = Surface Water; SO = Soil; SL = Sludge; OI = Oil; SOL = Other Solid; LIQ = Liquid

SAMPLE INFORMATION

Sample Identification	Containers Number & Type	Sample Collection Date	Time	Sampler	Filtered Y or N	Type Comp or Grab	Matrix Code	Note ➡ 3	3/0	3/0	2	2	2	2	2	COMMENTS	LAB USE
								Pres. Code	METHODS FOR ANALYSIS: Ammonia	Nitrate	Nitrite	Arsenic	Chromium	Lead	Nickel	Zinc		
PDMW-13P_05192015	4	5/19/15	0943	JJ	N	G	GW		X	X	X	X		X	X	X		
PDMW-7P_05192015	4	5/19/15	0900	PG	N	G	GW		X	X	X	X		X				
PDMW-32R-05192015	4	5/19/15	1056	JJ	N	G	GW		X	X	X	X		X	X	X		
TMW-4R_05192015	4	5/19/15	1005	PG	N	G	GW		X	X	X	X		X				
PDMW-23R_05192015	4	5/19/15	1105	PG	N	G	GW		X	X	X	X		X				
PDMW-50_05192015	3	5/19/15	1438	JJ	N	G	GW		X	X	X							
MW-3R_05192015	4	5/19/15	1450	PG	N	G	GW		X	X	X	X		X	X	X		
PDMW-53_05192015	3	5/19/15	1608	JJ	N	G	GW		X	X	X							
PDMW-48_05192015	3	5/19/15	1625	PG	N	G	GW		X	X	X							
MW-2_05192015	4	5/19/15	1700	JJ	N	G	GW		X	X	X	X		X				

680-112692 Chain of Custody

Relinquished By:	Date/Time:	Received By:	Date/Time:
	5/20/15 0740		5/20/15 07:40
Relinquished By:	Date/Time:	Received By:	Date/Time:
	5/20/15 0815		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Received By Laboratory:	Date/Time:	Lab Remarks: 680-112692	LAB USE: Custody Intact ☐ Yes ☐ No; Custody Seal #; LAB Log Number #
	05-2015 0815		

Comments & Special Analytical Requirements:

3.0(F)34c

ORIGINAL – RETURN TO LABORATORY WITH SAMPLES

INVOICE MUST BE SUBMITTED TO CSXT WITH ORIGINAL COC

TAL-6006 (0509)

5/26/2015

Login Sample Receipt Checklist

Client: AMEC Foster Wheeler E & I, Inc

Job Number: 680-112692-1

Login Number: 112692
List Number: 1
Creator: Banda, Christy S

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	False	Received extra samples not listed on COC.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112692-1

Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Georgia	State Program	4	803	06-30-15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-112765-1
Client Project/Site: CSX GA, Hutchinson Island, VRP

For:
AMEC Foster Wheeler E & I, Inc
2677 Buford Highway
Atlanta, Georgia 30324

Attn: Aaron Getchell

Authorized for release by:
5/28/2015 4:46:36 PM

Lisa Harvey, Project Manager II
(912)354-7858 e.3221
lisa.harvey@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Job ID: 680-112765-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE
Client: AMEC Foster Wheeler E & I, Inc
Project: CSX GA, Hutchinson Island, VRP
Report Number: 680-112765-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 05/21/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.8 C.

METALS (ICP)

Samples PDMW-10R_05202015 (680-112765-1), PDMW-45R_05202015 (680-112765-2), MW-201_05202015 (680-112765-3), DUP-03_05202015 (680-112765-4), EW-01_05202015 (680-112765-5), DUP-02_05202015 (680-112765-6), MW-1_05202015 (680-112765-7), PDMW-8R_05202015 (680-112765-8), PDMW-19P_05202015 (680-112765-9), PDMW-47_05202015 (680-112765-10), PDMW-46_05202015 (680-112765-11), PDMW-33R2_05202015 (680-112765-12) and PDMW-30P_05202015 (680-112765-13) were analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 05/22/2015 and 05/26/2015 and analyzed on 05/22/2015 and 05/27/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA

Samples PDMW-10R_05202015 (680-112765-1), PDMW-45R_05202015 (680-112765-2), MW-201_05202015 (680-112765-3), DUP-03_05202015 (680-112765-4), EW-01_05202015 (680-112765-5), DUP-02_05202015 (680-112765-6), MW-1_05202015 (680-112765-7), PDMW-8R_05202015 (680-112765-8), PDMW-19P_05202015 (680-112765-9), PDMW-47_05202015 (680-112765-10), PDMW-46_05202015 (680-112765-11), PDMW-33R2_05202015 (680-112765-12) and PDMW-30P_05202015 (680-112765-13) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 05/26/2015 and 05/27/2015.

Ammonia recovery is outside criteria high for the MS of sample EW-01_05202015MS (680-112765-5) in batch 680-384906. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. Refer to the QC report for details.

Samples PDMW-10R_05202015 (680-112765-1)[5X], PDMW-45R_05202015 (680-112765-2)[2X], EW-01_05202015 (680-112765-5) [400X], DUP-02_05202015 (680-112765-6)[200X], MW-1_05202015 (680-112765-7)[20X], PDMW-8R_05202015 (680-112765-8)[50X], PDMW-19P_05202015 (680-112765-9)[5X], PDMW-47_05202015 (680-112765-10)[20X], PDMW-33R2_05202015 (680-112765-12)[10X] and PDMW-30P_05202015 (680-112765-13)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITRATE-NITRITE AS NITROGEN

Samples PDMW-10R_05202015 (680-112765-1), PDMW-45R_05202015 (680-112765-2), MW-201_05202015 (680-112765-3), DUP-03_05202015 (680-112765-4), EW-01_05202015 (680-112765-5), DUP-02_05202015 (680-112765-6), MW-1_05202015 (680-112765-7), PDMW-8R_05202015 (680-112765-8), PDMW-19P_05202015 (680-112765-9), PDMW-47_05202015 (680-112765-10), PDMW-46_05202015 (680-112765-11), PDMW-33R2_05202015 (680-112765-12) and PDMW-30P_05202015 (680-112765-13) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 05/21/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-112765-1	PDMW-10R_05202015	Water	05/20/15 11:05	05/21/15 08:20
680-112765-2	PDMW-45R_05202015	Water	05/20/15 09:25	05/21/15 08:20
680-112765-3	MW-201_05202015	Water	05/20/15 08:55	05/21/15 08:20
680-112765-4	DUP-03_05202015	Water	05/20/15 00:00	05/21/15 08:20
680-112765-5	EW-01_05202015	Water	05/20/15 10:10	05/21/15 08:20
680-112765-6	DUP-02_05202015	Water	05/20/15 00:00	05/21/15 08:20
680-112765-7	MW-1_05202015	Water	05/20/15 10:47	05/21/15 08:20
680-112765-8	PDMW-8R_05202015	Water	05/20/15 13:15	05/21/15 08:20
680-112765-9	PDMW-19P_05202015	Water	05/20/15 13:25	05/21/15 08:20
680-112765-10	PDMW-47_05202015	Water	05/20/15 14:36	05/21/15 08:20
680-112765-11	PDMW-46_05202015	Water	05/20/15 14:50	05/21/15 08:20
680-112765-12	PDMW-33R2_05202015	Water	05/20/15 15:42	05/21/15 08:20
680-112765-13	PDMW-30P_05202015	Water	05/20/15 16:00	05/21/15 08:20

Method Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL SAV
350.1	Nitrogen, Ammonia	MCAWW	TAL SAV
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL SAV

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Client Sample ID: PDMW-10R_05202015
Date Collected: 05/20/15 11:05
Date Received: 05/21/15 08:20

Lab Sample ID: 680-112765-1
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/22/15 09:35	05/22/15 22:20	1
Lead	10	U	10		ug/L		05/22/15 09:35	05/22/15 22:20	1
Nickel	40	U	40		ug/L		05/22/15 09:35	05/22/15 22:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	7.3		1.3		mg/L			05/26/15 16:50	5
Nitrate as N	0.050	U	0.050		mg/L			05/21/15 18:14	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:14	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:14	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Client Sample ID: PDMW-45R_05202015

Lab Sample ID: 680-112765-2

Date Collected: 05/20/15 09:25

Matrix: Water

Date Received: 05/21/15 08:20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/22/15 09:35	05/22/15 22:24	1
Lead	10	U	10		ug/L		05/22/15 09:35	05/22/15 22:24	1
Nickel	40	U	40		ug/L		05/22/15 09:35	05/22/15 22:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**3.6**		0.50		mg/L			05/26/15 17:19	2
Nitrate as N	0.050	U	0.050		mg/L			05/21/15 18:15	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:15	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:15	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Client Sample ID: MW-201_05202015
Date Collected: 05/20/15 08:55
Date Received: 05/21/15 08:20

Lab Sample ID: 680-112765-3
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/22/15 09:35	05/22/15 22:38	1
Lead	10	U	10		ug/L		05/22/15 09:35	05/22/15 22:38	1
Nickel	40	U	40		ug/L		05/22/15 09:35	05/22/15 22:38	1
Zinc	20	U	20		ug/L		05/22/15 09:35	05/22/15 22:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	1.1		0.25		mg/L			05/26/15 16:15	1
Nitrate as N	0.050	U	0.050		mg/L			05/21/15 18:16	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:16	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:16	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Client Sample ID: DUP-03_05202015
Date Collected: 05/20/15 00:00
Date Received: 05/21/15 08:20

Lab Sample ID: 680-112765-4
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/22/15 09:35	05/22/15 22:43	1
Lead	10	U	10		ug/L		05/22/15 09:35	05/22/15 22:43	1
Nickel	40	U	40		ug/L		05/22/15 09:35	05/22/15 22:43	1
Zinc	20	U	20		ug/L		05/22/15 09:35	05/22/15 22:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	1.1		0.25		mg/L			05/26/15 16:20	1
Nitrate as N	0.050	U	0.050		mg/L			05/21/15 18:17	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:17	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:17	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Client Sample ID: EW-01_05202015
Date Collected: 05/20/15 10:10
Date Received: 05/21/15 08:20

Lab Sample ID: 680-112765-5
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/26/15 10:40	05/27/15 13:36	1
Chromium	10	U	10		ug/L		05/26/15 10:40	05/27/15 13:36	1
Lead	10	U	10		ug/L		05/26/15 10:40	05/27/15 13:36	1
Nickel	**44**		40		ug/L		05/26/15 10:40	05/27/15 13:36	1
Zinc	**190**		20		ug/L		05/26/15 10:40	05/27/15 13:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**320**	**F1**	100		mg/L			05/27/15 10:29	400
Nitrate as N	**0.063**		0.050		mg/L			05/21/15 18:18	1
Nitrate Nitrite as N	**0.065**		0.050		mg/L			05/21/15 18:18	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:18	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Client Sample ID: DUP-02_05202015
Date Collected: 05/20/15 00:00
Date Received: 05/21/15 08:20

Lab Sample ID: 680-112765-6
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/26/15 10:40	05/27/15 13:59	1
Chromium	10	U	10		ug/L		05/26/15 10:40	05/27/15 13:59	1
Lead	10	U	10		ug/L		05/26/15 10:40	05/27/15 13:59	1
Nickel	**44**		40		ug/L		05/26/15 10:40	05/27/15 13:59	1
Zinc	**190**		20		ug/L		05/26/15 10:40	05/27/15 13:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**260**		50		mg/L			05/26/15 18:48	200
Nitrate as N	**0.097**		0.050		mg/L			05/21/15 18:19	1
Nitrate Nitrite as N	**0.10**		0.050		mg/L			05/21/15 18:19	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:19	1

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Client Sample ID: MW-1_05202015
Date Collected: 05/20/15 10:47
Date Received: 05/21/15 08:20

Lab Sample ID: 680-112765-7
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/26/15 10:40	05/27/15 14:03	1
Lead	10	U	10		ug/L		05/26/15 10:40	05/27/15 14:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	21		5.0		mg/L			05/26/15 16:50	20
Nitrate as N	0.050	U	0.050		mg/L			05/21/15 18:21	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:21	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:21	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Client Sample ID: PDMW-8R_05202015
Date Collected: 05/20/15 13:15
Date Received: 05/21/15 08:20

Lab Sample ID: 680-112765-8
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/26/15 10:40	05/27/15 14:08	1
Lead	10	U	10		ug/L		05/26/15 10:40	05/27/15 14:08	1
Nickel	40	U	40		ug/L		05/26/15 10:40	05/27/15 14:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**64**		13		mg/L			05/26/15 17:23	50
Nitrate as N	0.050	U	0.050		mg/L			05/21/15 18:22	1
Nitrate Nitrite as N	**0.098**		0.050		mg/L			05/21/15 18:22	1
Nitrite as N	**0.050**		0.050		mg/L			05/21/15 18:22	1

Client Sample ID: PDMW-19P_05202015

Lab Sample ID: 680-112765-9

Date Collected: 05/20/15 13:25

Matrix: Water

Date Received: 05/21/15 08:20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/26/15 10:40	05/27/15 14:21	1
Lead	10	U	10		ug/L		05/26/15 10:40	05/27/15 14:21	1
Nickel	40	U	40		ug/L		05/26/15 10:40	05/27/15 14:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**4.7**		1.3		mg/L			05/26/15 17:00	5
Nitrate as N	0.050	U	0.050		mg/L			05/21/15 18:25	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:25	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:25	1

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Client Sample ID: PDMW-47_05202015
Date Collected: 05/20/15 14:36
Date Received: 05/21/15 08:20

Lab Sample ID: 680-112765-10
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/26/15 10:40	05/27/15 14:26	1
Lead	10	U	10		ug/L		05/26/15 10:40	05/27/15 14:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**39**		5.0		mg/L			05/26/15 17:00	20
Nitrate as N	0.050	U	0.050		mg/L			05/21/15 18:27	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:27	1
Nitrite as N	**0.052**		0.050		mg/L			05/21/15 18:27	1

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Client Sample ID: PDMW-46_05202015
Date Collected: 05/20/15 14:50
Date Received: 05/21/15 08:20

Lab Sample ID: 680-112765-11
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/26/15 10:40	05/27/15 14:31	1
Lead	10	U	10		ug/L		05/26/15 10:40	05/27/15 14:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.60		0.25		mg/L			05/26/15 16:20	1
Nitrate as N	0.050	U	0.050		mg/L			05/21/15 18:28	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:28	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:28	1

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Client Sample ID: PDMW-33R2_05202015
Date Collected: 05/20/15 15:42
Date Received: 05/21/15 08:20

Lab Sample ID: 680-112765-12
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/26/15 10:40	05/27/15 14:35	1
Lead	10	U	10		ug/L		05/26/15 10:40	05/27/15 14:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	14		2.5		mg/L			05/26/15 17:00	10
Nitrate as N	0.050	U	0.050		mg/L			05/21/15 18:29	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:29	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:29	1

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Client Sample ID: PDMW-30P_05202015
Date Collected: 05/20/15 16:00
Date Received: 05/21/15 08:20

Lab Sample ID: 680-112765-13
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/26/15 10:40	05/27/15 14:40	1
Lead	10	U	10		ug/L		05/26/15 10:40	05/27/15 14:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**2.0**		0.50		mg/L			05/26/15 17:00	2
Nitrate as N	0.050	U	0.050		mg/L			05/21/15 18:30	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:30	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 18:30	1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 680-384313/1-A
Matrix: Water
Analysis Batch: 384501

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 384313

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/22/15 09:35	05/22/15 20:20	1
Lead	10	U	10		ug/L		05/22/15 09:35	05/22/15 20:20	1
Nickel	40	U	40		ug/L		05/22/15 09:35	05/22/15 20:20	1
Zinc	20	U	20		ug/L		05/22/15 09:35	05/22/15 20:20	1

Lab Sample ID: LCS 680-384313/2-A
Matrix: Water
Analysis Batch: 384501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 384313

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	96.8		ug/L		97	80 - 120
Lead	500	484		ug/L		97	80 - 120
Nickel	100	100		ug/L		100	80 - 120
Zinc	100	100		ug/L		100	80 - 120

Lab Sample ID: MB 680-384639/1-A
Matrix: Water
Analysis Batch: 384988

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 384639

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/26/15 10:40	05/27/15 13:27	1
Chromium	10	U	10		ug/L		05/26/15 10:40	05/27/15 13:27	1
Lead	10	U	10		ug/L		05/26/15 10:40	05/27/15 13:27	1
Nickel	40	U	40		ug/L		05/26/15 10:40	05/27/15 13:27	1
Zinc	20	U	20		ug/L		05/26/15 10:40	05/27/15 13:27	1

Lab Sample ID: LCS 680-384639/2-A
Matrix: Water
Analysis Batch: 384988

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 384639

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	99.6		ug/L		100	80 - 120
Chromium	100	105		ug/L		105	80 - 120
Lead	500	509		ug/L		102	80 - 120
Nickel	100	103		ug/L		103	80 - 120
Zinc	100	104		ug/L		104	80 - 120

Lab Sample ID: 680-112765-5 MS
Matrix: Water
Analysis Batch: 384988

Client Sample ID: EW-01_05202015
Prep Type: Total/NA
Prep Batch: 384639

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	20	U	100	106		ug/L		98	75 - 125
Chromium	10	U	100	109		ug/L		102	75 - 125
Lead	10	U	500	494		ug/L		99	75 - 125
Nickel	44		100	144		ug/L		99	75 - 125
Zinc	190		100	292		ug/L		98	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 680-112765-5 MSD — **Client Sample ID: EW-01_05202015**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 384988 — **Prep Batch: 384639**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	20	U	100	107		ug/L		99	75 - 125	1	20
Chromium	10	U	100	107		ug/L		100	75 - 125	2	20
Lead	10	U	500	485		ug/L		97	75 - 125	2	20
Nickel	44		100	142		ug/L		98	75 - 125	1	20
Zinc	190		100	284		ug/L		90	75 - 125	3	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-384905/23 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 384905

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.25	U	0.25		mg/L			05/26/15 16:15	1

Lab Sample ID: LCS 680-384905/30 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 384905

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.00		mg/L		100	90 - 110

Lab Sample ID: MB 680-384906/47 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 384906

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.25	U	0.25		mg/L			05/27/15 10:19	1

Lab Sample ID: LCS 680-384906/29 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 384906

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.00		mg/L		100	90 - 110

Lab Sample ID: LCSD 680-384906/21 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 384906

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	1.00	1.00		mg/L		100	90 - 110	0	30

Lab Sample ID: 680-112765-5 MS — **Client Sample ID: EW-01_05202015**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 384906

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	320	F1	200	547	F1	mg/L		113	90 - 110

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 680-112765-5 MSD
Matrix: Water
Analysis Batch: 384906

Client Sample ID: EW-01_05202015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	320	F1	200	538		mg/L		108	90 - 110	2	30

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 680-384265/13
Matrix: Water
Analysis Batch: 384265

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.050	U	0.050		mg/L			05/21/15 17:28	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/21/15 17:28	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 17:28	1

Lab Sample ID: LCS 680-384265/16
Matrix: Water
Analysis Batch: 384265

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.500	0.561		mg/L		112	75 - 125
Nitrate Nitrite as N	1.00	1.06		mg/L		106	90 - 110
Nitrite as N	0.500	0.502		mg/L		100	90 - 110

Metals

Prep Batch: 384313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112765-1	PDMW-10R_05202015	Total/NA	Water	3010A	
680-112765-2	PDMW-45R_05202015	Total/NA	Water	3010A	
680-112765-3	MW-201_05202015	Total/NA	Water	3010A	
680-112765-4	DUP-03_05202015	Total/NA	Water	3010A	
LCS 680-384313/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-384313/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 384501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112765-1	PDMW-10R_05202015	Total/NA	Water	6010C	384313
680-112765-2	PDMW-45R_05202015	Total/NA	Water	6010C	384313
680-112765-3	MW-201_05202015	Total/NA	Water	6010C	384313
680-112765-4	DUP-03_05202015	Total/NA	Water	6010C	384313
LCS 680-384313/2-A	Lab Control Sample	Total/NA	Water	6010C	384313
MB 680-384313/1-A	Method Blank	Total/NA	Water	6010C	384313

Prep Batch: 384639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112765-5	EW-01_05202015	Total/NA	Water	3010A	
680-112765-5 MS	EW-01_05202015	Total/NA	Water	3010A	
680-112765-5 MSD	EW-01_05202015	Total/NA	Water	3010A	
680-112765-6	DUP-02_05202015	Total/NA	Water	3010A	
680-112765-7	MW-1_05202015	Total/NA	Water	3010A	
680-112765-8	PDMW-8R_05202015	Total/NA	Water	3010A	
680-112765-9	PDMW-19P_05202015	Total/NA	Water	3010A	
680-112765-10	PDMW-47_05202015	Total/NA	Water	3010A	
680-112765-11	PDMW-46_05202015	Total/NA	Water	3010A	
680-112765-12	PDMW-33R2_05202015	Total/NA	Water	3010A	
680-112765-13	PDMW-30P_05202015	Total/NA	Water	3010A	
LCS 680-384639/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-384639/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 384988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112765-5	EW-01_05202015	Total/NA	Water	6010C	384639
680-112765-5 MS	EW-01_05202015	Total/NA	Water	6010C	384639
680-112765-5 MSD	EW-01_05202015	Total/NA	Water	6010C	384639
680-112765-6	DUP-02_05202015	Total/NA	Water	6010C	384639
680-112765-7	MW-1_05202015	Total/NA	Water	6010C	384639
680-112765-8	PDMW-8R_05202015	Total/NA	Water	6010C	384639
680-112765-9	PDMW-19P_05202015	Total/NA	Water	6010C	384639
680-112765-10	PDMW-47_05202015	Total/NA	Water	6010C	384639
680-112765-11	PDMW-46_05202015	Total/NA	Water	6010C	384639
680-112765-12	PDMW-33R2_05202015	Total/NA	Water	6010C	384639
680-112765-13	PDMW-30P_05202015	Total/NA	Water	6010C	384639
LCS 680-384639/2-A	Lab Control Sample	Total/NA	Water	6010C	384639
MB 680-384639/1-A	Method Blank	Total/NA	Water	6010C	384639

General Chemistry

Analysis Batch: 384265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112765-1	PDMW-10R_05202015	Total/NA	Water	353.2	
680-112765-2	PDMW-45R_05202015	Total/NA	Water	353.2	
680-112765-3	MW-201_05202015	Total/NA	Water	353.2	
680-112765-4	DUP-03_05202015	Total/NA	Water	353.2	
680-112765-5	EW-01_05202015	Total/NA	Water	353.2	
680-112765-6	DUP-02_05202015	Total/NA	Water	353.2	
680-112765-7	MW-1_05202015	Total/NA	Water	353.2	
680-112765-8	PDMW-8R_05202015	Total/NA	Water	353.2	
680-112765-9	PDMW-19P_05202015	Total/NA	Water	353.2	
680-112765-10	PDMW-47_05202015	Total/NA	Water	353.2	
680-112765-11	PDMW-46_05202015	Total/NA	Water	353.2	
680-112765-12	PDMW-33R2_05202015	Total/NA	Water	353.2	
680-112765-13	PDMW-30P_05202015	Total/NA	Water	353.2	
LCS 680-384265/16	Lab Control Sample	Total/NA	Water	353.2	
MB 680-384265/13	Method Blank	Total/NA	Water	353.2	

Analysis Batch: 384905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112765-1	PDMW-10R_05202015	Total/NA	Water	350.1	
680-112765-2	PDMW-45R_05202015	Total/NA	Water	350.1	
LCS 680-384905/30	Lab Control Sample	Total/NA	Water	350.1	
MB 680-384905/23	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 384906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112765-3	MW-201_05202015	Total/NA	Water	350.1	
680-112765-4	DUP-03_05202015	Total/NA	Water	350.1	
680-112765-5	EW-01_05202015	Total/NA	Water	350.1	
680-112765-5 MS	EW-01_05202015	Total/NA	Water	350.1	
680-112765-5 MSD	EW-01_05202015	Total/NA	Water	350.1	
680-112765-6	DUP-02_05202015	Total/NA	Water	350.1	
680-112765-7	MW-1_05202015	Total/NA	Water	350.1	
680-112765-8	PDMW-8R_05202015	Total/NA	Water	350.1	
680-112765-9	PDMW-19P_05202015	Total/NA	Water	350.1	
680-112765-10	PDMW-47_05202015	Total/NA	Water	350.1	
680-112765-11	PDMW-46_05202015	Total/NA	Water	350.1	
680-112765-12	PDMW-33R2_05202015	Total/NA	Water	350.1	
680-112765-13	PDMW-30P_05202015	Total/NA	Water	350.1	
LCS 680-384906/29	Lab Control Sample	Total/NA	Water	350.1	
LCSD 680-384906/21	Lab Control Sample Dup	Total/NA	Water	350.1	
MB 680-384906/47	Method Blank	Total/NA	Water	350.1	

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Client Sample ID: PDMW-10R_05202015
Date Collected: 05/20/15 11:05
Date Received: 05/21/15 08:20

Lab Sample ID: 680-112765-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384313	05/22/15 09:35	BJB	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384501	05/22/15 22:20	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		5	2 mL	2 mL	384905	05/26/15 16:50	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384265	05/21/15 18:14	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: PDMW-45R_05202015
Date Collected: 05/20/15 09:25
Date Received: 05/21/15 08:20

Lab Sample ID: 680-112765-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384313	05/22/15 09:35	BJB	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384501	05/22/15 22:24	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		2	2 mL	2 mL	384905	05/26/15 17:19	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384265	05/21/15 18:15	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: MW-201_05202015
Date Collected: 05/20/15 08:55
Date Received: 05/21/15 08:20

Lab Sample ID: 680-112765-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384313	05/22/15 09:35	BJB	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384501	05/22/15 22:38	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		1	2 mL	2 mL	384906	05/26/15 16:15	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384265	05/21/15 18:16	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: DUP-03_05202015
Date Collected: 05/20/15 00:00
Date Received: 05/21/15 08:20

Lab Sample ID: 680-112765-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384313	05/22/15 09:35	BJB	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384501	05/22/15 22:43	BCB	TAL SAV
	Instrument ID: ICPE									

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Client Sample ID: DUP-03_05202015

Lab Sample ID: 680-112765-4
Matrix: Water
Date Collected: 05/20/15 00:00
Date Received: 05/21/15 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	2 mL	2 mL	384906	05/26/15 16:20	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384265	05/21/15 18:17	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: EW-01_05202015

Lab Sample ID: 680-112765-5
Matrix: Water
Date Collected: 05/20/15 10:10
Date Received: 05/21/15 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384639	05/26/15 10:40	CRW	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384988	05/27/15 13:36	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		400	2 mL	2 mL	384906	05/27/15 10:29	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384265	05/21/15 18:18	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: DUP-02_05202015

Lab Sample ID: 680-112765-6
Matrix: Water
Date Collected: 05/20/15 00:00
Date Received: 05/21/15 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384639	05/26/15 10:40	CRW	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384988	05/27/15 13:59	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		200	2 mL	2 mL	384906	05/26/15 18:48	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384265	05/21/15 18:19	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: MW-1_05202015

Lab Sample ID: 680-112765-7
Matrix: Water
Date Collected: 05/20/15 10:47
Date Received: 05/21/15 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384639	05/26/15 10:40	CRW	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384988	05/27/15 14:03	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		20	2 mL	2 mL	384906	05/26/15 16:50	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384265	05/21/15 18:21	GRX	TAL SAV
	Instrument ID: LACHAT2									

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Client Sample ID: PDMW-8R_05202015

Lab Sample ID: 680-112765-8
Date Collected: 05/20/15 13:15
Matrix: Water
Date Received: 05/21/15 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384639	05/26/15 10:40	CRW	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384988	05/27/15 14:08	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		50	2 mL	2 mL	384906	05/26/15 17:23	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384265	05/21/15 18:22	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: PDMW-19P_05202015

Lab Sample ID: 680-112765-9
Date Collected: 05/20/15 13:25
Matrix: Water
Date Received: 05/21/15 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384639	05/26/15 10:40	CRW	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384988	05/27/15 14:21	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		5	2 mL	2 mL	384906	05/26/15 17:00	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384265	05/21/15 18:25	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: PDMW-47_05202015

Lab Sample ID: 680-112765-10
Date Collected: 05/20/15 14:36
Matrix: Water
Date Received: 05/21/15 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384639	05/26/15 10:40	CRW	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384988	05/27/15 14:26	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		20	2 mL	2 mL	384906	05/26/15 17:00	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384265	05/21/15 18:27	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: PDMW-46_05202015

Lab Sample ID: 680-112765-11
Date Collected: 05/20/15 14:50
Matrix: Water
Date Received: 05/21/15 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384639	05/26/15 10:40	CRW	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384988	05/27/15 14:31	BCB	TAL SAV
	Instrument ID: ICPE									

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Client Sample ID: PDMW-46_05202015

Lab Sample ID: 680-112765-11

Date Collected: 05/20/15 14:50
Matrix: Water
Date Received: 05/21/15 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	2 mL	2 mL	384906	05/26/15 16:20	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384265	05/21/15 18:28	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: PDMW-33R2_05202015

Lab Sample ID: 680-112765-12

Date Collected: 05/20/15 15:42
Matrix: Water
Date Received: 05/21/15 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384639	05/26/15 10:40	CRW	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384988	05/27/15 14:35	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		10	2 mL	2 mL	384906	05/26/15 17:00	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384265	05/21/15 18:29	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: PDMW-30P_05202015

Lab Sample ID: 680-112765-13

Date Collected: 05/20/15 16:00
Matrix: Water
Date Received: 05/21/15 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384639	05/26/15 10:40	CRW	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384988	05/27/15 14:40	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		2	2 mL	2 mL	384906	05/26/15 17:00	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384265	05/21/15 18:30	GRX	TAL SAV
	Instrument ID: LACHAT2									

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

CSX TRANSPORTATION — CHAIN OF CUSTODY

LABORATORY INFORMATION

- [X] TestAmerica Savannah - 5102 LaRoche Avenue, Savannah, GA 31404 P: 912-354-7858 F: 912-352-0165
- [ ] TestAmerica North Canton - 4101 Shuffel Drive NW, North Canton, OH 44720 P: 330-497-9396 F: 330-497-0772
- [ ] TestAmerica Tampa - 6712 Benjamin Road, Suite 100, Tampa, FL 33634 P: 813-885-7427 F: 813-885-7049
- [ ] TestAmerica Pensacola - 3355 McLemore Drive, Pensacola, FL 32514 P: 850-474-1001 F: 850-478-2671
- [ ] TestAmerica Buffalo - 10 Hazelwood Drive, Suite 106, Amherst, NY 14228 P: 716-691-2600 F: 716-961-7991
- [ ] TestAmerica Chicago - 2417 Bond Street, University Park, IL 60466 P: 708-534-5200 F: 708-534-5211

SHIPMENT INFORMATION

Shipment Method: Lab Courier

Shipment Tracking No:

CSXT PROJECT INFORMATION

CSXT Project Number: 9415575

CSXT Project Name: Hutchinson Island

CSXT Contact: Sam Ross

Proj. State (State of Origin): GA

Proj. City: Savannah

LWON: ENV000012647

CONSULTANT INFORMATION

Company: Amec Foster Wheeler

Address: 3800 Ezell Rd Ste 100

City, State, Zip: Nashville, TN 37211

Project #: 6-4300-5245

PM: Aaron Getchell

Email: aaron.getchell@amecfw.com

Phone: (813) 636-1541 Fax:

Turnaround Time:
- [ ] 1 Day Rush
- [ ] 2 Day Rush
- [ ] 3 Day Rush
- [X] Standard 6-13 Days
- [ ] Specify # Days
- [ ] Standard 14 Days
- [ ] Other

Preservative Codes: 0 = No Preservatives; 1 = Hydrochloric Acid; 2 = Nitric Acid; 3 = Sulfuric Acid; 4 = Sodium Thiosulfate; 5 = Sodium Hydroxide; 6 = Other

Deliverables:
- [X] CSXT Standard (Level II)
- [ ] Level III
- [ ] Level IV
- [ ] Other Deliv:
- [ ] EDD Required, Format:

Matrix Codes: GW = Groundwater; WW = Waste Water; SW = Surface Water; SO = Soil; SL = Sludge; OI = Oil; SOL = Other Solid; LIQ = Liquid

SAMPLE INFORMATION

Sample Identification	Containers Number & Type	Sample Collection Date	Time	Sampler	Filtered Y or N	Type Comp or Grab	Matrix Code	Ammonia	Nitrate	Nitrite	Arsenic	Chromium	Lead	Nickel	Zinc	Note / Pres. Code	COMMENTS	LAB USE
PDMW-10R_05202015	4	5/20/15	1105	PG	N	G	GW	X	X	X	X		X	X				
PDMW-45R_05202015	4	5/20/15	0925	JJ	N	G	GW	X	X	X	X		X	X				
MW-201_05202015	4	5/20/15	0855	PG	N	G	GW	X	X	X	X		X	X	X			
DUP-03_05202015	4	5/20/15	—	PG	N	G	GW	X	X	X	X		X	X	X			
EW-01_05202015	4	5/20/15	1010	PG	N	G	GW	X	X	X	X	X	X	X	X			
DUP-02_05202015	4	5/20/15	—	PG	N	G	GW	X	X	X	X	X	X	X	X			
MW-1_05202015	4	5/20/15	1047	JJ	N	G	GW	X	X	X	X		X					
PDMW-8R_05202015	4	5/20/15	1315	JJ	N	G	GW	X	X	X	X		X	X				
PDMW-19P_05202015	4	5/20/15	1325	PG	N	G	GW	X	X	X	X		X	X				
PDMW-47_05202015	4	5/20/15	1436	JJ	N	G	GW	X	X	X	X		X					

Relinquished By: [signature]	Date/Time: 5/21/15	Received By: [signature]	Date/Time: 5/21/15 0750
Relinquished By: [signature]	Date/Time: 5/21/15 0820	Received By: [signature]	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Received By Laboratory:	Date/Time:	Lab Remarks:	LAB USE: Custody Intact ☐ Yes ☐ No; Custody Seal # ; LAB Log Number #

Comments & Special Analytical Requirements:

680-112765

0.9°C

ORIGINAL – RETURN TO LABORATORY WITH SAMPLES

INVOICE MUST BE SUBMITTED TO CSXT WITH ORIGINAL COC

TAL-6006 (0509)

CSX TRANSPORTATION — CHAIN OF CUSTODY

LABORATORY INFORMATION

- [x] TestAmerica Savannah - 5102 LaRoche Avenue, Savannah, GA 31404 P: 912-354-7858 F: 912-352-0165
- [ ] TestAmerica North Canton - 4101 Shuffel Drive NW, North Canton, OH 44720 P: 330-497-9396 F: 330-497-0772
- [ ] TestAmerica Tampa - 6712 Benjamin Road, Suite 100, Tampa, FL 33634 P: 813-885-7427 F: 813-885-7049
- [ ] TestAmerica Pensacola - 3355 McLemore Drive, Pensacola, FL 32514 P: 850-474-1001 F: 850-478-2671
- [ ] TestAmerica Buffalo - 10 Hazelwood Drive, Suite 106, Amherst, NY 14228 P: 716-691-2600 F: 716-961-7991
- [ ] TestAmerica Chicago - 2417 Bond Street, University Park, IL 60466 P: 708-534-5200 F: 708-534-5211

SHIPMENT INFORMATION

Shipment Method: Lab Courier

Shipment Tracking No:

CSXT PROJECT INFORMATION

CSXT Project Number: 9415575

CSXT Project Name: Hutchinson Island

CSXT Contact: Sam Ross

Proj. State (State of Origin): GA

Proj. City: Savannah

LWON: ENV000120647

CONSULTANT INFORMATION

Company: Amec Foster Wheeler

Address: 3800 Ezell Rd Ste 100

City, State, Zip: Nashville, TN 37211

Project #: 6-4300-5245

PM: Aaron Getchell

Email: aaron.getchell@amecfw.com

Phone: (813) 636-1541 Fax:

Turnaround Time:

- [ ] 1 Day Rush
- [ ] 2 Day Rush
- [ ] 3 Day Rush
- [x] Standard 6-13 Days
- [ ] Specify # Days _____
- [ ] Standard 14 Days
- [ ] Other _____

Deliverables:

- [x] CSXT Standard (Level II)
- [ ] Level III
- [ ] Level IV
- [ ] Other Deliv: _____
- [ ] EDD Required, Format: _____

Preservative Codes:

0 = No Preservatives; 1 = Hydrochloric Acid; 2 = Nitric Acid; 3 = Sulfuric Acid; 4 = Sodium Thiosulfate; 5 = Sodium Hydroxide; 6 = Other _____

Matrix Codes:

GW = Groundwater; WW = Waste Water; SW = Surface Water; SO = Soil; SL = Sludge; OI = Oil; SOL = Other Solid; LIQ = Liquid

SAMPLE INFORMATION

Sample Identification	Containers Number & Type	Sample Collection Date	Time	Sampler	Filtered Y or N	Type Comp or Grab	Matrix Code	Note ⇒ 3	3/0	3/0	2	2	2	2	2	COMMENTS	LAB USE
								Pres. Code	METHODS FOR ANALYSIS: Ammonia	Nitrite	Nitrate	Arsenic	Chromium	Lead	Nickel	Zinc		
PDMW-46_05202015	4	5/20/15	1450	PG	N	G	GW		X	X	X	X		X			
PDMW-33R2_05202015	4	5/20/15	1542	JS	N	G	GW		X	X	X	X		X			
PDMW-30P_05202015	4	5/20/15	1600	PG	N	G	GW		X	X	X	X		X			

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	5/21/15 0750	[signature]	5/21/15 0750
[signature]	5/21/15 0820	[signature]	
Relinquished By:	Date/Time:	Received By:	Date/Time:
Received By Laboratory:	Date/Time:	Lab Remarks:	

Comments & Special Analytical Requirements:

680-112765

0.8°C

LAB USE: Custody Intact ☐ Yes ☐ No

Custody Seal # #

LAB Log Number #

ORIGINAL – RETURN TO LABORATORY WITH SAMPLES

INVOICE MUST BE SUBMITTED TO CSXT WITH ORIGINAL COC

TAL-6006 (0509)

5/28/2015

Login Sample Receipt Checklist

Client: AMEC Foster Wheeler E & I, Inc

Job Number: 680-112765-1

Login Number: 112765
List Number: 1
Creator: Barnett, Eddie T

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112765-1

Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Georgia	State Program	4	803	06-30-15 *

* Certification renewal pending - certification considered valid.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-112797-1
Client Project/Site: CSX GA, Hutchinson Island, VRP

For:
AMEC Foster Wheeler E & I, Inc
2677 Buford Highway
Atlanta, Georgia 30324

Attn: Aaron Getchell

Authorized for release by:
6/4/2015 9:54:02 AM

Lisa Harvey, Project Manager II
(912)354-7858 e.3221
lisa.harvey@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Job ID: 680-112797-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE
Client: AMEC Foster Wheeler E & I, Inc
Project: CSX GA, Hutchinson Island, VRP
Report Number: 680-112797-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 5/21/2015 4:21 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 4.0º C and 5.2º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples TMW_1_05212015 (680-112797-7), DUP_01_05212015 (680-112797-8), EB-01_05212015 (680-112797-9), FB-01_05212015 (680-112797-10) and Trip Blank (680-112797-16) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 05/28/2015.

Method(s) 8260B: The following samples were collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory: TMW_1_05212015 (680-112797-7) and DUP_01_05212015 (680-112797-8). All of the sample vials have HCL stickers.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (AQUEOUS)

Samples TMW_1_05212015 (680-112797-7), DUP_01_05212015 (680-112797-8), EB-01_05212015 (680-112797-9) and FB-01_05212015 (680-112797-10) were analyzed for Semivolatile Organic Compounds (Aqueous) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 05/27/2015 and analyzed on 06/02/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

METALS (ICP)

Samples PDMW-29D_05212015 (680-112797-5), PDMW-26T_05212015 (680-112797-6), TMW_1_05212015 (680-112797-7), DUP_01_05212015 (680-112797-8), EB-01_05212015 (680-112797-9), FB-01_05212015 (680-112797-10) and EB-02_05212015 (680-112797-15) were analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 05/26/2015 and 05/27/2015 and analyzed on 05/27/2015 and 05/28/2015.

Arsenic failed the recovery criteria low for the MSD of sample TMW_1_05212015 (680-112797-7) in batch 680-385189. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ALKALINITY

Samples SW-04_05212015_LOW (680-112797-1), SW-03_05212015_LOW (680-112797-2), SW-02_05212015_LOW (680-112797-3), SW-01_05212015_LOW (680-112797-4), SW-02_05212015_HIGH (680-112797-11), SW-01_05212015_HIGH (680-112797-12), SW-03_05212015_HIGH (680-112797-13) and SW-04_05212015_HIGH (680-112797-14) were analyzed for alkalinity in accordance with EPA Method 310.1. The samples were analyzed on 05/28/2015 and 05/29/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 680-112797-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

AMMONIA

Samples SW-04_05212015_LOW (680-112797-1), SW-03_05212015_LOW (680-112797-2), SW-02_05212015_LOW (680-112797-3), SW-01_05212015_LOW (680-112797-4), PDMW-29D_05212015 (680-112797-5), PDMW-26T_05212015 (680-112797-6), TMW_1_05212015 (680-112797-7), DUP_01_05212015 (680-112797-8), EB-01_05212015 (680-112797-9), FB-01_05212015 (680-112797-10), SW-02_05212015_HIGH (680-112797-11), SW-01_05212015_HIGH (680-112797-12), SW-03_05212015_HIGH (680-112797-13), SW-04_05212015_HIGH (680-112797-14) and EB-02_05212015 (680-112797-15) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 05/27/2015.

Method(s) 350.1: The reference method requires samples to be preserved to a pH of <2. The following samples were received with insufficient preservation at a pH of 6: TMW_1_05212015 (680-112797-7) and DUP_01_05212015 (680-112797-8). The samples were preserved to the appropriate pH in the laboratory.

Ammonia recovery is outside criteria high for the MS of sample TMW_1_05212015 (680-112797-7) in batch 680-384908.

Ammonia recovery is outside criteria low for the MSD of sample TMW_1_05212015 (680-112797-7) in batch 680-384908.

Refer to the QC report for details.

Samples SW-04_05212015_LOW (680-112797-1)[2X], PDMW-29D_05212015 (680-112797-5)[10X], PDMW-26T_05212015 (680-112797-6)[500X], TMW_1_05212015 (680-112797-7)[5000X], DUP_01_05212015 (680-112797-8)[2000X] and SW-02_05212015_HIGH (680-112797-11)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITRATE-NITRITE AS NITROGEN

Samples SW-04_05212015_LOW (680-112797-1), SW-03_05212015_LOW (680-112797-2), SW-02_05212015_LOW (680-112797-3), SW-01_05212015_LOW (680-112797-4), PDMW-29D_05212015 (680-112797-5), PDMW-26T_05212015 (680-112797-6), TMW_1_05212015 (680-112797-7), DUP_01_05212015 (680-112797-8), EB-01_05212015 (680-112797-9), FB-01_05212015 (680-112797-10), SW-02_05212015_HIGH (680-112797-11), SW-01_05212015_HIGH (680-112797-12), SW-03_05212015_HIGH (680-112797-13), SW-04_05212015_HIGH (680-112797-14) and EB-02_05212015 (680-112797-15) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 05/21/2015.

Nitrate Nitrite as N and Nitrite as N have recovery outside criteria low for the MS and/or MSD of sample TMW_1_05212015 (680-112797-7) in batch 680-384267. Refer to the QC report for details.

Samples TMW_1_05212015 (680-112797-7)[1000X] and DUP_01_05212015 (680-112797-8)[1000X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-112797-1	SW-04_05212015_LOW	Water	05/21/15 08:20	05/21/15 16:21
680-112797-2	SW-03_05212015_LOW	Water	05/21/15 08:45	05/21/15 16:21
680-112797-3	SW-02_05212015_LOW	Water	05/21/15 09:02	05/21/15 16:21
680-112797-4	SW-01_05212015_LOW	Water	05/21/15 09:15	05/21/15 16:21
680-112797-5	PDMW-29D_05212015	Water	05/21/15 10:26	05/21/15 16:21
680-112797-6	PDMW-26T_05212015	Water	05/21/15 11:32	05/21/15 16:21
680-112797-7	TMW_1_05212015	Water	05/21/15 10:40	05/21/15 16:21
680-112797-8	DUP_01_05212015	Water	05/21/15 00:00	05/21/15 16:21
680-112797-9	EB-01_05212015	Water	05/21/15 12:40	05/21/15 16:21
680-112797-10	FB-01_05212015	Water	05/21/15 13:00	05/21/15 16:21
680-112797-11	SW-02_05212015_HIGH	Water	05/21/15 12:10	05/21/15 16:21
680-112797-12	SW-01_05212015_HIGH	Water	05/21/15 12:20	05/21/15 16:21
680-112797-13	SW-03_05212015_HIGH	Water	05/21/15 13:00	05/21/15 16:21
680-112797-14	SW-04_05212015_HIGH	Water	05/21/15 13:10	05/21/15 16:21
680-112797-15	EB-02_05212015	Water	05/21/15 13:30	05/21/15 16:21
680-112797-16	Trip Blank	Water	05/21/15 00:00	05/21/15 16:21

Method Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL SAV
6010C	Metals (ICP)	SW846	TAL SAV
310.1	Alkalinity	MCAWW	TAL SAV
350.1	Nitrogen, Ammonia	MCAWW	TAL SAV
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL SAV

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: SW-04_05212015_LOW
Date Collected: 05/21/15 08:20
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-1
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	120		5.0		mg/L			05/28/15 18:02	1
Ammonia	1.5		0.50		mg/L			05/27/15 09:59	2
Nitrate as N	0.17		0.050		mg/L			05/21/15 19:23	1
Nitrate Nitrite as N	0.27		0.050		mg/L			05/21/15 19:23	1
Nitrite as N	0.094		0.050		mg/L			05/21/15 19:23	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: SW-03_05212015_LOW
Date Collected: 05/21/15 08:45
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-2
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**120**		5.0		mg/L			05/28/15 18:38	1
Ammonia	**0.80**		0.25		mg/L			05/27/15 09:05	1
Nitrate as N	**0.21**		0.050		mg/L			05/21/15 19:25	1
Nitrate Nitrite as N	**0.23**		0.050		mg/L			05/21/15 19:25	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 19:25	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: SW-02_05212015_LOW
Date Collected: 05/21/15 09:02
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-3
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	130		5.0		mg/L			05/29/15 08:11	1
Ammonia	1.5		0.25		mg/L			05/27/15 09:05	1
Nitrate as N	0.28		0.050		mg/L			05/21/15 19:26	1
Nitrate Nitrite as N	0.37		0.050		mg/L			05/21/15 19:26	1
Nitrite as N	0.085		0.050		mg/L			05/21/15 19:26	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: SW-01_05212015_LOW
Date Collected: 05/21/15 09:15
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**77**		5.0		mg/L			05/28/15 20:27	1
Ammonia	**0.62**		0.25		mg/L			05/27/15 09:05	1
Nitrate as N	**0.27**		0.050		mg/L			05/21/15 19:28	1
Nitrate Nitrite as N	**0.31**		0.050		mg/L			05/21/15 19:28	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 19:28	1

Client Sample ID: PDMW-29D_05212015

Lab Sample ID: 680-112797-5

Date Collected: 05/21/15 10:26

Matrix: Water

Date Received: 05/21/15 16:21

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/26/15 10:40	05/27/15 14:44	1
Lead	10	U	10		ug/L		05/26/15 10:40	05/27/15 14:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	11		2.5		mg/L			05/27/15 11:36	10
Nitrate as N	0.050	U	0.050		mg/L			05/21/15 19:29	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/21/15 19:29	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 19:29	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: PDMW-26T_05212015
Date Collected: 05/21/15 11:32
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-6
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**25**		20		ug/L		05/27/15 14:38	05/28/15 18:27	1
Lead	10	U	10		ug/L		05/27/15 14:38	05/28/15 18:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**550**		130		mg/L			05/27/15 13:18	500
Nitrate as N	**0.26**		0.050		mg/L			05/21/15 19:30	1
Nitrate Nitrite as N	**0.28**		0.050		mg/L			05/21/15 19:30	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 19:30	1

Client Sample ID: TMW_1_05212015

Date Collected: 05/21/15 10:40
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-7

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**47**		1.0		ug/L			05/28/15 16:25	1
Ethylbenzene	1.0	U	1.0		ug/L			05/28/15 16:25	1
Toluene	1.0	U	1.0		ug/L			05/28/15 16:25	1
Xylenes, Total	**110**		1.0		ug/L			05/28/15 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*70 - 130*		*05/28/15 16:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*		*05/28/15 16:25*	*1*
Dibromofluoromethane (Surr)	*115*		*70 - 130*		*05/28/15 16:25*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*05/28/15 16:25*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 20:01	1
Acenaphthylene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 20:01	1
Anthracene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 20:01	1
Benzo[a]anthracene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 20:01	1
Benzo[a]pyrene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 20:01	1
Benzo[b]fluoranthene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 20:01	1
Benzo[g,h,i]perylene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 20:01	1
Benzo[k]fluoranthene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 20:01	1
Chrysene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 20:01	1
Dibenz(a,h)anthracene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 20:01	1
Fluoranthene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 20:01	1
Fluorene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 20:01	1
Indeno[1,2,3-cd]pyrene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 20:01	1
1-Methylnaphthalene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 20:01	1
2-Methylnaphthalene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 20:01	1
Naphthalene	**40**		9.7		ug/L		05/27/15 15:58	06/02/15 20:01	1
Phenanthrene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 20:01	1
Pyrene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*32 - 114*	*05/27/15 15:58*	*06/02/15 20:01*	*1*
Nitrobenzene-d5 (Surr)	*65*		*30 - 117*	*05/27/15 15:58*	*06/02/15 20:01*	*1*
Terphenyl-d14 (Surr)	*30*		*10 - 132*	*05/27/15 15:58*	*06/02/15 20:01*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**160**	**F1**	20		ug/L		05/27/15 14:38	05/28/15 18:32	1
Chromium	**32**		10		ug/L		05/27/15 14:38	05/28/15 18:32	1
Lead	10	U	10		ug/L		05/27/15 14:38	05/28/15 18:32	1
Nickel	40	U	40		ug/L		05/27/15 14:38	05/28/15 18:32	1
Zinc	**77**		20		ug/L		05/27/15 14:38	05/28/15 18:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**4300**		1300		mg/L			05/27/15 11:27	5000
Nitrate as N	**290**		50		mg/L			05/21/15 19:37	1000
Nitrate Nitrite as N	**290**	**F1**	50		mg/L			05/21/15 19:37	1000

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: TMW_1_05212015
Date Collected: 05/21/15 10:40
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-7
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	50	U F1	50		mg/L			05/21/15 19:37	1000

Client Sample ID: DUP_01_05212015

Date Collected: 05/21/15 00:00
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-8

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**48**		1.0		ug/L			05/28/15 16:48	1
Ethylbenzene	1.0	U	1.0		ug/L			05/28/15 16:48	1
Toluene	1.0	U	1.0		ug/L			05/28/15 16:48	1
Xylenes, Total	**120**		1.0		ug/L			05/28/15 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*70 - 130*		*05/28/15 16:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*05/28/15 16:48*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*05/28/15 16:48*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*05/28/15 16:48*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	9.9	U	9.9		ug/L		05/27/15 15:58	06/02/15 20:27	1
Acenaphthylene	9.9	U	9.9		ug/L		05/27/15 15:58	06/02/15 20:27	1
Anthracene	9.9	U	9.9		ug/L		05/27/15 15:58	06/02/15 20:27	1
Benzo[a]anthracene	9.9	U	9.9		ug/L		05/27/15 15:58	06/02/15 20:27	1
Benzo[a]pyrene	9.9	U	9.9		ug/L		05/27/15 15:58	06/02/15 20:27	1
Benzo[b]fluoranthene	9.9	U	9.9		ug/L		05/27/15 15:58	06/02/15 20:27	1
Benzo[g,h,i]perylene	9.9	U	9.9		ug/L		05/27/15 15:58	06/02/15 20:27	1
Benzo[k]fluoranthene	9.9	U	9.9		ug/L		05/27/15 15:58	06/02/15 20:27	1
Chrysene	9.9	U	9.9		ug/L		05/27/15 15:58	06/02/15 20:27	1
Dibenz(a,h)anthracene	9.9	U	9.9		ug/L		05/27/15 15:58	06/02/15 20:27	1
Fluoranthene	9.9	U	9.9		ug/L		05/27/15 15:58	06/02/15 20:27	1
Fluorene	9.9	U	9.9		ug/L		05/27/15 15:58	06/02/15 20:27	1
Indeno[1,2,3-cd]pyrene	9.9	U	9.9		ug/L		05/27/15 15:58	06/02/15 20:27	1
1-Methylnaphthalene	**11**		9.9		ug/L		05/27/15 15:58	06/02/15 20:27	1
2-Methylnaphthalene	**11**		9.9		ug/L		05/27/15 15:58	06/02/15 20:27	1
Naphthalene	**44**		9.9		ug/L		05/27/15 15:58	06/02/15 20:27	1
Phenanthrene	9.9	U	9.9		ug/L		05/27/15 15:58	06/02/15 20:27	1
Pyrene	9.9	U	9.9		ug/L		05/27/15 15:58	06/02/15 20:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*32 - 114*	*05/27/15 15:58*	*06/02/15 20:27*	*1*
Nitrobenzene-d5 (Surr)	*70*		*30 - 117*	*05/27/15 15:58*	*06/02/15 20:27*	*1*
Terphenyl-d14 (Surr)	*36*		*10 - 132*	*05/27/15 15:58*	*06/02/15 20:27*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**140**		20		ug/L		05/27/15 14:38	05/28/15 18:55	1
Chromium	**19**		10		ug/L		05/27/15 14:38	05/28/15 18:55	1
Lead	10	U	10		ug/L		05/27/15 14:38	05/28/15 18:55	1
Nickel	40	U	40		ug/L		05/27/15 14:38	05/28/15 18:55	1
Zinc	**72**		20		ug/L		05/27/15 14:38	05/28/15 18:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**3700**		500		mg/L			05/27/15 10:00	2000
Nitrate as N	**280**		50		mg/L			05/21/15 19:31	1000
Nitrate Nitrite as N	**290**		50		mg/L			05/21/15 19:31	1000

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: DUP_01_05212015
Date Collected: 05/21/15 00:00
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-8
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	50	U	50		mg/L			05/21/15 19:31	1000

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: EB-01_05212015
Date Collected: 05/21/15 12:40
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			05/28/15 12:39	1
Ethylbenzene	1.0	U	1.0		ug/L			05/28/15 12:39	1
Toluene	1.0	U	1.0		ug/L			05/28/15 12:39	1
Xylenes, Total	1.0	U	1.0		ug/L			05/28/15 12:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*70 - 130*		*05/28/15 12:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*05/28/15 12:39*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*05/28/15 12:39*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*05/28/15 12:39*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	9.8	U	9.8		ug/L		05/27/15 15:58	06/02/15 20:53	1
Acenaphthylene	9.8	U	9.8		ug/L		05/27/15 15:58	06/02/15 20:53	1
Anthracene	9.8	U	9.8		ug/L		05/27/15 15:58	06/02/15 20:53	1
Benzo[a]anthracene	9.8	U	9.8		ug/L		05/27/15 15:58	06/02/15 20:53	1
Benzo[a]pyrene	9.8	U	9.8		ug/L		05/27/15 15:58	06/02/15 20:53	1
Benzo[b]fluoranthene	9.8	U	9.8		ug/L		05/27/15 15:58	06/02/15 20:53	1
Benzo[g,h,i]perylene	9.8	U	9.8		ug/L		05/27/15 15:58	06/02/15 20:53	1
Benzo[k]fluoranthene	9.8	U	9.8		ug/L		05/27/15 15:58	06/02/15 20:53	1
Chrysene	9.8	U	9.8		ug/L		05/27/15 15:58	06/02/15 20:53	1
Dibenz(a,h)anthracene	9.8	U	9.8		ug/L		05/27/15 15:58	06/02/15 20:53	1
Fluoranthene	9.8	U	9.8		ug/L		05/27/15 15:58	06/02/15 20:53	1
Fluorene	9.8	U	9.8		ug/L		05/27/15 15:58	06/02/15 20:53	1
Indeno[1,2,3-cd]pyrene	9.8	U	9.8		ug/L		05/27/15 15:58	06/02/15 20:53	1
1-Methylnaphthalene	9.8	U	9.8		ug/L		05/27/15 15:58	06/02/15 20:53	1
2-Methylnaphthalene	9.8	U	9.8		ug/L		05/27/15 15:58	06/02/15 20:53	1
Naphthalene	9.8	U	9.8		ug/L		05/27/15 15:58	06/02/15 20:53	1
Phenanthrene	9.8	U	9.8		ug/L		05/27/15 15:58	06/02/15 20:53	1
Pyrene	9.8	U	9.8		ug/L		05/27/15 15:58	06/02/15 20:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*32 - 114*	*05/27/15 15:58*	*06/02/15 20:53*	*1*
Nitrobenzene-d5 (Surr)	*85*		*30 - 117*	*05/27/15 15:58*	*06/02/15 20:53*	*1*
Terphenyl-d14 (Surr)	*77*		*10 - 132*	*05/27/15 15:58*	*06/02/15 20:53*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/26/15 10:40	05/27/15 14:49	1
Chromium	10	U	10		ug/L		05/26/15 10:40	05/27/15 14:49	1
Lead	10	U	10		ug/L		05/26/15 10:40	05/27/15 14:49	1
Nickel	40	U	40		ug/L		05/26/15 10:40	05/27/15 14:49	1
Zinc	20	U	20		ug/L		05/26/15 10:40	05/27/15 14:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.31		0.25		mg/L			05/27/15 08:55	1
Nitrate as N	0.050	U	0.050		mg/L			05/21/15 19:32	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/21/15 19:32	1

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: EB-01_05212015
Date Collected: 05/21/15 12:40
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-9
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 19:32	1

Client Sample ID: FB-01_05212015

Date Collected: 05/21/15 13:00
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			05/28/15 13:01	1
Ethylbenzene	1.0	U	1.0		ug/L			05/28/15 13:01	1
Toluene	1.0	U	1.0		ug/L			05/28/15 13:01	1
Xylenes, Total	1.0	U	1.0		ug/L			05/28/15 13:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*05/28/15 13:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*05/28/15 13:01*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*05/28/15 13:01*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*05/28/15 13:01*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 21:18	1
Acenaphthylene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 21:18	1
Anthracene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 21:18	1
Benzo[a]anthracene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 21:18	1
Benzo[a]pyrene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 21:18	1
Benzo[b]fluoranthene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 21:18	1
Benzo[g,h,i]perylene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 21:18	1
Benzo[k]fluoranthene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 21:18	1
Chrysene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 21:18	1
Dibenz(a,h)anthracene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 21:18	1
Fluoranthene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 21:18	1
Fluorene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 21:18	1
Indeno[1,2,3-cd]pyrene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 21:18	1
1-Methylnaphthalene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 21:18	1
2-Methylnaphthalene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 21:18	1
Naphthalene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 21:18	1
Phenanthrene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 21:18	1
Pyrene	9.7	U	9.7		ug/L		05/27/15 15:58	06/02/15 21:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*32 - 114*	*05/27/15 15:58*	*06/02/15 21:18*	*1*
Nitrobenzene-d5 (Surr)	*79*		*30 - 117*	*05/27/15 15:58*	*06/02/15 21:18*	*1*
Terphenyl-d14 (Surr)	*73*		*10 - 132*	*05/27/15 15:58*	*06/02/15 21:18*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/26/15 10:40	05/27/15 14:53	1
Chromium	10	U	10		ug/L		05/26/15 10:40	05/27/15 14:53	1
Lead	10	U	10		ug/L		05/26/15 10:40	05/27/15 14:53	1
Nickel	40	U	40		ug/L		05/26/15 10:40	05/27/15 14:53	1
Zinc	20	U	20		ug/L		05/26/15 10:40	05/27/15 14:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.25	U	0.25		mg/L			05/27/15 08:55	1
Nitrate as N	0.050	U	0.050		mg/L			05/21/15 19:34	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/21/15 19:34	1

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: FB-01_05212015
Date Collected: 05/21/15 13:00
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-10
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 19:34	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: SW-02_05212015_HIGH
Date Collected: 05/21/15 12:10
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-11
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**39**		5.0		mg/L			05/28/15 18:16	1
Ammonia	**0.52**		0.50		mg/L			05/27/15 10:19	2
Nitrate as N	**0.29**		0.050		mg/L			05/21/15 19:38	1
Nitrate Nitrite as N	**0.30**		0.050		mg/L			05/21/15 19:38	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 19:38	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: SW-01_05212015_HIGH
Date Collected: 05/21/15 12:20
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-12
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**39**		5.0		mg/L			05/28/15 18:09	1
Ammonia	**0.41**		0.25		mg/L			05/27/15 08:55	1
Nitrate as N	**0.28**		0.050		mg/L			05/21/15 19:39	1
Nitrate Nitrite as N	**0.29**		0.050		mg/L			05/21/15 19:39	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 19:39	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: SW-03_05212015_HIGH
Date Collected: 05/21/15 13:00
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-13
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**71**		5.0		mg/L			05/28/15 18:23	1
Ammonia	**0.91**		0.25		mg/L			05/27/15 09:05	1
Nitrate as N	**0.27**		0.050		mg/L			05/21/15 19:41	1
Nitrate Nitrite as N	**0.32**		0.050		mg/L			05/21/15 19:41	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 19:41	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: SW-04_05212015_HIGH
Date Collected: 05/21/15 13:10
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-14
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	100		5.0		mg/L			05/28/15 18:31	1
Ammonia	0.83		0.25		mg/L			05/27/15 09:05	1
Nitrate as N	0.25		0.050		mg/L			05/21/15 19:42	1
Nitrate Nitrite as N	0.31		0.050		mg/L			05/21/15 19:42	1
Nitrite as N	0.060		0.050		mg/L			05/21/15 19:42	1

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: EB-02_05212015
Date Collected: 05/21/15 13:30
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-15
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/26/15 10:40	05/27/15 15:01	1
Lead	10	U	10		ug/L		05/26/15 10:40	05/27/15 15:01	1
Nickel	40	U	40		ug/L		05/26/15 10:40	05/27/15 15:01	1
Zinc	20	U	20		ug/L		05/26/15 10:40	05/27/15 15:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.25	U	0.25		mg/L			05/27/15 09:05	1
Nitrate as N	0.050	U	0.050		mg/L			05/21/15 19:43	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/21/15 19:43	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 19:43	1

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: Trip Blank
Date Collected: 05/21/15 00:00
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-16
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			05/28/15 11:31	1
Ethylbenzene	1.0	U	1.0		ug/L			05/28/15 11:31	1
Toluene	1.0	U	1.0		ug/L			05/28/15 11:31	1
Xylenes, Total	1.0	U	1.0		ug/L			05/28/15 11:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*70 - 130*		*05/28/15 11:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*05/28/15 11:31*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*05/28/15 11:31*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*05/28/15 11:31*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-384972/9
Matrix: Water
Analysis Batch: 384972

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			05/28/15 11:00	1
Ethylbenzene	1.0	U	1.0		ug/L			05/28/15 11:00	1
Toluene	1.0	U	1.0		ug/L			05/28/15 11:00	1
Xylenes, Total	1.0	U	1.0		ug/L			05/28/15 11:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*05/28/15 11:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*05/28/15 11:00*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*05/28/15 11:00*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*05/28/15 11:00*	*1*

Lab Sample ID: LCS 680-384972/4
Matrix: Water
Analysis Batch: 384972

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			50.0	45.7		ug/L		91	73 - 131		
Ethylbenzene			50.0	51.8		ug/L		104	80 - 120		
Toluene			50.0	49.0		ug/L		98	80 - 122		
Xylenes, Total			100	108		ug/L		108	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*
Dibromofluoromethane (Surr)	*111*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 680-384972/5
Matrix: Water
Analysis Batch: 384972

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			50.0	46.5		ug/L		93	73 - 131	2	30
Ethylbenzene			50.0	52.1		ug/L		104	80 - 120	1	20
Toluene			50.0	49.5		ug/L		99	80 - 122	1	20
Xylenes, Total			100	109		ug/L		109	80 - 120	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*
Dibromofluoromethane (Surr)	*110*		*70 - 130*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 680-112797-7 MS
Matrix: Water
Analysis Batch: 384972

Client Sample ID: TMW_1_05212015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	47		50.0	92.0		ug/L		90	73 - 131
Ethylbenzene	1.0	U	50.0	50.6		ug/L		101	80 - 120
Toluene	1.0	U	50.0	49.5		ug/L		99	80 - 122
Xylenes, Total	110		100	224		ug/L		111	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*
Dibromofluoromethane (Surr)	*108*		*70 - 130*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*

Lab Sample ID: 680-112797-7 MSD
Matrix: Water
Analysis Batch: 384972

Client Sample ID: TMW_1_05212015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	47		50.0	92.0		ug/L		90	73 - 131	0	30
Ethylbenzene	1.0	U	50.0	52.7		ug/L		105	80 - 120	4	20
Toluene	1.0	U	50.0	50.3		ug/L		101	80 - 122	2	20
Xylenes, Total	110		100	206		ug/L		93	80 - 120	8	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*
Dibromofluoromethane (Surr)	*109*		*70 - 130*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-384797/5-A
Matrix: Water
Analysis Batch: 385722

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 384797

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	10	U	10		ug/L		05/27/15 15:58	06/02/15 18:44	1
Acenaphthylene	10	U	10		ug/L		05/27/15 15:58	06/02/15 18:44	1
Anthracene	10	U	10		ug/L		05/27/15 15:58	06/02/15 18:44	1
Benzo[a]anthracene	10	U	10		ug/L		05/27/15 15:58	06/02/15 18:44	1
Benzo[a]pyrene	10	U	10		ug/L		05/27/15 15:58	06/02/15 18:44	1
Benzo[b]fluoranthene	10	U	10		ug/L		05/27/15 15:58	06/02/15 18:44	1
Benzo[g,h,i]perylene	10	U	10		ug/L		05/27/15 15:58	06/02/15 18:44	1
Benzo[k]fluoranthene	10	U	10		ug/L		05/27/15 15:58	06/02/15 18:44	1
Chrysene	10	U	10		ug/L		05/27/15 15:58	06/02/15 18:44	1
Dibenz(a,h)anthracene	10	U	10		ug/L		05/27/15 15:58	06/02/15 18:44	1
Fluoranthene	10	U	10		ug/L		05/27/15 15:58	06/02/15 18:44	1
Fluorene	10	U	10		ug/L		05/27/15 15:58	06/02/15 18:44	1
Indeno[1,2,3-cd]pyrene	10	U	10		ug/L		05/27/15 15:58	06/02/15 18:44	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-384797/5-A
Matrix: Water
Analysis Batch: 385722

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 384797

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	10	U	10		ug/L		05/27/15 15:58	06/02/15 18:44	1
2-Methylnaphthalene	10	U	10		ug/L		05/27/15 15:58	06/02/15 18:44	1
Naphthalene	10	U	10		ug/L		05/27/15 15:58	06/02/15 18:44	1
Phenanthrene	10	U	10		ug/L		05/27/15 15:58	06/02/15 18:44	1
Pyrene	10	U	10		ug/L		05/27/15 15:58	06/02/15 18:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*32 - 114*	*05/27/15 15:58*	*06/02/15 18:44*	*1*
Nitrobenzene-d5 (Surr)	*80*		*30 - 117*	*05/27/15 15:58*	*06/02/15 18:44*	*1*
Terphenyl-d14 (Surr)	*75*		*10 - 132*	*05/27/15 15:58*	*06/02/15 18:44*	*1*

Lab Sample ID: LCS 680-384797/6-A
Matrix: Water
Analysis Batch: 385722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 384797

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	100	67.4		ug/L		67	32 - 107
Acenaphthylene	100	62.6		ug/L		63	10 - 119
Anthracene	100	79.1		ug/L		79	38 - 112
Benzo[a]anthracene	100	77.0		ug/L		77	36 - 115
Benzo[a]pyrene	100	72.9		ug/L		73	13 - 120
Benzo[b]fluoranthene	100	80.2		ug/L		80	32 - 117
Benzo[g,h,i]perylene	100	76.5		ug/L		76	21 - 118
Benzo[k]fluoranthene	100	72.5		ug/L		73	28 - 125
Chrysene	100	71.1		ug/L		71	36 - 113
Dibenz(a,h)anthracene	100	82.4		ug/L		82	32 - 115
Fluoranthene	100	83.0		ug/L		83	41 - 113
Fluorene	100	69.2		ug/L		69	39 - 115
Indeno[1,2,3-cd]pyrene	100	79.1		ug/L		79	16 - 119
1-Methylnaphthalene	100	68.7		ug/L		69	26 - 94
2-Methylnaphthalene	100	68.2		ug/L		68	24 - 92
Naphthalene	100	67.8		ug/L		68	24 - 85
Phenanthrene	100	78.5		ug/L		78	40 - 114
Pyrene	100	77.0		ug/L		77	29 - 118

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*64*		*32 - 114*
Nitrobenzene-d5 (Surr)	*71*		*30 - 117*
Terphenyl-d14 (Surr)	*70*		*10 - 132*

Lab Sample ID: 680-112797-7 MS
Matrix: Water
Analysis Batch: 385722

Client Sample ID: TMW_1_05212015
Prep Type: Total/NA
Prep Batch: 384797

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	9.7	U	97.8	67.9		ug/L		69	32 - 107
Acenaphthylene	9.7	U	97.8	57.4		ug/L		59	10 - 119
Anthracene	9.7	U	97.8	74.1		ug/L		76	38 - 112

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 680-112797-7 MS
Matrix: Water
Analysis Batch: 385722

Client Sample ID: TMW_1_05212015
Prep Type: Total/NA
Prep Batch: 384797

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	9.7	U	97.8	52.4		ug/L		54	36 - 115
Benzo[a]pyrene	9.7	U	97.8	43.2		ug/L		44	13 - 120
Benzo[b]fluoranthene	9.7	U	97.8	45.9		ug/L		47	32 - 117
Benzo[g,h,i]perylene	9.7	U	97.8	42.6		ug/L		44	21 - 118
Benzo[k]fluoranthene	9.7	U	97.8	42.2		ug/L		43	28 - 125
Chrysene	9.7	U	97.8	48.3		ug/L		49	36 - 113
Dibenz(a,h)anthracene	9.7	U	97.8	46.4		ug/L		47	32 - 115
Fluoranthene	9.7	U	97.8	70.6		ug/L		72	41 - 113
Fluorene	9.7	U	97.8	67.8		ug/L		69	39 - 115
Indeno[1,2,3-cd]pyrene	9.7	U	97.8	48.7		ug/L		50	16 - 119
1-Methylnaphthalene	9.7	U	97.8	69.0		ug/L		61	26 - 94
2-Methylnaphthalene	9.7	U	97.8	70.9		ug/L		64	24 - 92
Naphthalene	40		97.8	96.9		ug/L		58	24 - 85
Phenanthrene	9.7	U	97.8	77.6		ug/L		79	40 - 114
Pyrene	9.7	U	97.8	62.5		ug/L		64	29 - 118

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*62*		*32 - 114*
Nitrobenzene-d5 (Surr)	*68*		*30 - 117*
Terphenyl-d14 (Surr)	*31*		*10 - 132*

Lab Sample ID: 680-112797-7 MSD
Matrix: Water
Analysis Batch: 385722

Client Sample ID: TMW_1_05212015
Prep Type: Total/NA
Prep Batch: 384797

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	9.7	U	97.4	63.1		ug/L		65	32 - 107	7	20
Acenaphthylene	9.7	U	97.4	52.4		ug/L		54	10 - 119	9	20
Anthracene	9.7	U	97.4	69.8		ug/L		72	38 - 112	6	20
Benzo[a]anthracene	9.7	U	97.4	51.7		ug/L		53	36 - 115	1	40
Benzo[a]pyrene	9.7	U	97.4	41.6		ug/L		43	13 - 120	4	40
Benzo[b]fluoranthene	9.7	U	97.4	44.8		ug/L		46	32 - 117	2	50
Benzo[g,h,i]perylene	9.7	U	97.4	41.5		ug/L		43	21 - 118	3	50
Benzo[k]fluoranthene	9.7	U	97.4	40.0		ug/L		41	28 - 125	5	40
Chrysene	9.7	U	97.4	46.7		ug/L		48	36 - 113	3	50
Dibenz(a,h)anthracene	9.7	U	97.4	41.8		ug/L		43	32 - 115	10	40
Fluoranthene	9.7	U	97.4	65.5		ug/L		67	41 - 113	7	40
Fluorene	9.7	U	97.4	64.0		ug/L		66	39 - 115	6	20
Indeno[1,2,3-cd]pyrene	9.7	U	97.4	43.9		ug/L		45	16 - 119	10	40
1-Methylnaphthalene	9.7	U	97.4	65.0		ug/L		57	26 - 94	6	50
2-Methylnaphthalene	9.7	U	97.4	66.6		ug/L		60	24 - 92	6	30
Naphthalene	40		97.4	94.7		ug/L		57	24 - 85	2	40
Phenanthrene	9.7	U	97.4	71.2		ug/L		73	40 - 114	9	40
Pyrene	9.7	U	97.4	61.5		ug/L		63	29 - 118	2	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*54*		*32 - 114*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 680-112797-7 MSD
Matrix: Water
Analysis Batch: 385722

Client Sample ID: TMW_1_05212015
Prep Type: Total/NA
Prep Batch: 384797

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*60*		*30 - 117*
Terphenyl-d14 (Surr)	*30*		*10 - 132*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 680-384639/1-A
Matrix: Water
Analysis Batch: 384988

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 384639

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/26/15 10:40	05/27/15 13:27	1
Chromium	10	U	10		ug/L		05/26/15 10:40	05/27/15 13:27	1
Lead	10	U	10		ug/L		05/26/15 10:40	05/27/15 13:27	1
Nickel	40	U	40		ug/L		05/26/15 10:40	05/27/15 13:27	1
Zinc	20	U	20		ug/L		05/26/15 10:40	05/27/15 13:27	1

Lab Sample ID: LCS 680-384639/2-A
Matrix: Water
Analysis Batch: 384988

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 384639

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	99.6		ug/L		100	80 - 120
Chromium	100	105		ug/L		105	80 - 120
Lead	500	509		ug/L		102	80 - 120
Nickel	100	103		ug/L		103	80 - 120
Zinc	100	104		ug/L		104	80 - 120

Lab Sample ID: MB 680-384879/1-A
Matrix: Water
Analysis Batch: 385189

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 384879

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20	U	20		ug/L		05/27/15 14:38	05/28/15 18:18	1
Chromium	10	U	10		ug/L		05/27/15 14:38	05/28/15 18:18	1
Lead	10	U	10		ug/L		05/27/15 14:38	05/28/15 18:18	1
Nickel	40	U	40		ug/L		05/27/15 14:38	05/28/15 18:18	1
Zinc	20	U	20		ug/L		05/27/15 14:38	05/28/15 18:18	1

Lab Sample ID: LCS 680-384879/2-A
Matrix: Water
Analysis Batch: 385189

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 384879

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	97.6		ug/L		98	80 - 120
Chromium	100	103		ug/L		103	80 - 120
Lead	500	492		ug/L		98	80 - 120
Nickel	100	102		ug/L		102	80 - 120
Zinc	100	102		ug/L		102	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 680-112797-7 MS — **Client Sample ID: TMW_1_05212015**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 385189 — **Prep Batch: 384879**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	160	F1	100	250		ug/L		88	75 - 125
Chromium	32		100	123		ug/L		91	75 - 125
Lead	10	U	500	493		ug/L		99	75 - 125
Nickel	40	U	100	128		ug/L		95	75 - 125
Zinc	77		100	171		ug/L		94	75 - 125

Lab Sample ID: 680-112797-7 MSD — **Client Sample ID: TMW_1_05212015**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 385189 — **Prep Batch: 384879**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	160	F1	100	227	F1	ug/L		65	75 - 125	10	20
Chromium	32		100	120		ug/L		88	75 - 125	3	20
Lead	10	U	500	481		ug/L		96	75 - 125	3	20
Nickel	40	U	100	125		ug/L		92	75 - 125	2	20
Zinc	77		100	170		ug/L		93	75 - 125	1	20

Method: 310.1 - Alkalinity

Lab Sample ID: MB 680-385163/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 385163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.0	U	5.0		mg/L			05/28/15 17:47	1

Lab Sample ID: LCS 680-385163/6 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 385163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	250	251		mg/L		100	80 - 120

Lab Sample ID: LCSD 680-385163/31 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 385163

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity	250	250		mg/L		100	80 - 120	0	30

Lab Sample ID: MB 680-385222/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 385222

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.0	U	5.0		mg/L			05/29/15 06:16	1

Method: 310.1 - Alkalinity (Continued)

Lab Sample ID: LCS 680-385222/6
Matrix: Water
Analysis Batch: 385222

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	250	253		mg/L		101	80 - 120

Lab Sample ID: LCSD 680-385222/32
Matrix: Water
Analysis Batch: 385222

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity	250	264		mg/L		106	80 - 120	4	30

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-384907/30
Matrix: Water
Analysis Batch: 384907

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.25	U	0.25		mg/L			05/27/15 10:19	1

Lab Sample ID: LCS 680-384907/1
Matrix: Water
Analysis Batch: 384907

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.01		mg/L		101	90 - 110

Lab Sample ID: LCSD 680-384907/4
Matrix: Water
Analysis Batch: 384907

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	1.00	1.02		mg/L		102	90 - 110	1	30

Lab Sample ID: MB 680-384908/37
Matrix: Water
Analysis Batch: 384908

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.25	U	0.25		mg/L			05/27/15 10:19	1

Lab Sample ID: LCS 680-384908/1
Matrix: Water
Analysis Batch: 384908

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1.00	1.01		mg/L		101	90 - 110

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCSD 680-384908/10
Matrix: Water
Analysis Batch: 384908

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia			1.00	1.01		mg/L		101	90 - 110	0	30

Lab Sample ID: 680-112797-7 MS
Matrix: Water
Analysis Batch: 384908

Client Sample ID: TMW_1_05212015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia	4300		100	4720	4	mg/L		377	90 - 110		

Lab Sample ID: 680-112797-7 MSD
Matrix: Water
Analysis Batch: 384908

Client Sample ID: TMW_1_05212015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	4300		100	3830	4	mg/L		-512	90 - 110	21	30

Lab Sample ID: 680-112797-12 DU
Matrix: Water
Analysis Batch: 384908

Client Sample ID: SW-01_05212015_HIGH
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Ammonia	0.41			0.400		mg/L				1	30

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 680-384267/13
Matrix: Water
Analysis Batch: 384267

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.050	U	0.050		mg/L			05/21/15 17:28	1
Nitrate Nitrite as N	0.050	U	0.050		mg/L			05/21/15 17:28	1
Nitrite as N	0.050	U	0.050		mg/L			05/21/15 17:28	1

Lab Sample ID: LCS 680-384267/16
Matrix: Water
Analysis Batch: 384267

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N			0.500	0.561		mg/L		112	75 - 125		
Nitrate Nitrite as N			1.00	1.06		mg/L		106	90 - 110		
Nitrite as N			0.500	0.502		mg/L		100	90 - 110		

Lab Sample ID: 680-112797-7 MS
Matrix: Water
Analysis Batch: 384267

Client Sample ID: TMW_1_05212015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N	290		500	730		mg/L		88	75 - 125		

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 680-112797-7 MS
Matrix: Water
Analysis Batch: 384267

Client Sample ID: TMW_1_05212015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	290	F1	1000	1130	F1	mg/L		84	90 - 110
Nitrite as N	50	U F1	500	405	F1	mg/L		81	90 - 110

Lab Sample ID: 680-112797-7 MSD
Matrix: Water
Analysis Batch: 384267

Client Sample ID: TMW_1_05212015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	290		500	732		mg/L		89	75 - 125	0	30
Nitrate Nitrite as N	290	F1	1000	1140	F1	mg/L		85	90 - 110	0	10
Nitrite as N	50	U F1	500	406	F1	mg/L		81	90 - 110	0	10

Lab Sample ID: 680-112797-1 DU
Matrix: Water
Analysis Batch: 384267

Client Sample ID: SW-04_05212015_LOW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	0.17		0.177		mg/L		3	30
Nitrate Nitrite as N	0.27		0.270		mg/L		2	10
Nitrite as N	0.094		0.0929		mg/L		1	10

GC/MS VOA

Analysis Batch: 384972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112797-7	TMW_1_05212015	Total/NA	Water	8260B	
680-112797-7 MS	TMW_1_05212015	Total/NA	Water	8260B	
680-112797-7 MSD	TMW_1_05212015	Total/NA	Water	8260B	
680-112797-8	DUP_01_05212015	Total/NA	Water	8260B	
680-112797-9	EB-01_05212015	Total/NA	Water	8260B	
680-112797-10	FB-01_05212015	Total/NA	Water	8260B	
680-112797-16	Trip Blank	Total/NA	Water	8260B	
LCS 680-384972/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-384972/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-384972/9	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 384797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112797-7	TMW_1_05212015	Total/NA	Water	3520C	
680-112797-7 MS	TMW_1_05212015	Total/NA	Water	3520C	
680-112797-7 MSD	TMW_1_05212015	Total/NA	Water	3520C	
680-112797-8	DUP_01_05212015	Total/NA	Water	3520C	
680-112797-9	EB-01_05212015	Total/NA	Water	3520C	
680-112797-10	FB-01_05212015	Total/NA	Water	3520C	
LCS 680-384797/6-A	Lab Control Sample	Total/NA	Water	3520C	
MB 680-384797/5-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 385722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112797-7	TMW_1_05212015	Total/NA	Water	8270D	384797
680-112797-7 MS	TMW_1_05212015	Total/NA	Water	8270D	384797
680-112797-7 MSD	TMW_1_05212015	Total/NA	Water	8270D	384797
680-112797-8	DUP_01_05212015	Total/NA	Water	8270D	384797
680-112797-9	EB-01_05212015	Total/NA	Water	8270D	384797
680-112797-10	FB-01_05212015	Total/NA	Water	8270D	384797
LCS 680-384797/6-A	Lab Control Sample	Total/NA	Water	8270D	384797
MB 680-384797/5-A	Method Blank	Total/NA	Water	8270D	384797

Metals

Prep Batch: 384639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112797-5	PDMW-29D_05212015	Total/NA	Water	3010A	
680-112797-9	EB-01_05212015	Total/NA	Water	3010A	
680-112797-10	FB-01_05212015	Total/NA	Water	3010A	
680-112797-15	EB-02_05212015	Total/NA	Water	3010A	
LCS 680-384639/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-384639/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 384879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112797-6	PDMW-26T_05212015	Total/NA	Water	3010A	
680-112797-7	TMW_1_05212015	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 384879 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112797-7 MS	TMW_1_05212015	Total/NA	Water	3010A	
680-112797-7 MSD	TMW_1_05212015	Total/NA	Water	3010A	
680-112797-8	DUP_01_05212015	Total/NA	Water	3010A	
LCS 680-384879/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-384879/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 384988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112797-5	PDMW-29D_05212015	Total/NA	Water	6010C	384639
680-112797-9	EB-01_05212015	Total/NA	Water	6010C	384639
680-112797-10	FB-01_05212015	Total/NA	Water	6010C	384639
680-112797-15	EB-02_05212015	Total/NA	Water	6010C	384639
LCS 680-384639/2-A	Lab Control Sample	Total/NA	Water	6010C	384639
MB 680-384639/1-A	Method Blank	Total/NA	Water	6010C	384639

Analysis Batch: 385189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112797-6	PDMW-26T_05212015	Total/NA	Water	6010C	384879
680-112797-7	TMW_1_05212015	Total/NA	Water	6010C	384879
680-112797-7 MS	TMW_1_05212015	Total/NA	Water	6010C	384879
680-112797-7 MSD	TMW_1_05212015	Total/NA	Water	6010C	384879
680-112797-8	DUP_01_05212015	Total/NA	Water	6010C	384879
LCS 680-384879/2-A	Lab Control Sample	Total/NA	Water	6010C	384879
MB 680-384879/1-A	Method Blank	Total/NA	Water	6010C	384879

General Chemistry

Analysis Batch: 384267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112797-1	SW-04_05212015_LOW	Total/NA	Water	353.2	
680-112797-1 DU	SW-04_05212015_LOW	Total/NA	Water	353.2	
680-112797-2	SW-03_05212015_LOW	Total/NA	Water	353.2	
680-112797-3	SW-02_05212015_LOW	Total/NA	Water	353.2	
680-112797-4	SW-01_05212015_LOW	Total/NA	Water	353.2	
680-112797-5	PDMW-29D_05212015	Total/NA	Water	353.2	
680-112797-6	PDMW-26T_05212015	Total/NA	Water	353.2	
680-112797-7	TMW_1_05212015	Total/NA	Water	353.2	
680-112797-7 MS	TMW_1_05212015	Total/NA	Water	353.2	
680-112797-7 MSD	TMW_1_05212015	Total/NA	Water	353.2	
680-112797-8	DUP_01_05212015	Total/NA	Water	353.2	
680-112797-9	EB-01_05212015	Total/NA	Water	353.2	
680-112797-10	FB-01_05212015	Total/NA	Water	353.2	
680-112797-11	SW-02_05212015_HIGH	Total/NA	Water	353.2	
680-112797-12	SW-01_05212015_HIGH	Total/NA	Water	353.2	
680-112797-13	SW-03_05212015_HIGH	Total/NA	Water	353.2	
680-112797-14	SW-04_05212015_HIGH	Total/NA	Water	353.2	
680-112797-15	EB-02_05212015	Total/NA	Water	353.2	
LCS 680-384267/16	Lab Control Sample	Total/NA	Water	353.2	
MB 680-384267/13	Method Blank	Total/NA	Water	353.2	

General Chemistry (Continued)

Analysis Batch: 384907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112797-1	SW-04_05212015_LOW	Total/NA	Water	350.1	
LCS 680-384907/1	Lab Control Sample	Total/NA	Water	350.1	
LCSD 680-384907/4	Lab Control Sample Dup	Total/NA	Water	350.1	
MB 680-384907/30	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 384908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112797-2	SW-03_05212015_LOW	Total/NA	Water	350.1	
680-112797-3	SW-02_05212015_LOW	Total/NA	Water	350.1	
680-112797-4	SW-01_05212015_LOW	Total/NA	Water	350.1	
680-112797-5	PDMW-29D_05212015	Total/NA	Water	350.1	
680-112797-6	PDMW-26T_05212015	Total/NA	Water	350.1	
680-112797-7	TMW_1_05212015	Total/NA	Water	350.1	
680-112797-7 MS	TMW_1_05212015	Total/NA	Water	350.1	
680-112797-7 MSD	TMW_1_05212015	Total/NA	Water	350.1	
680-112797-8	DUP_01_05212015	Total/NA	Water	350.1	
680-112797-9	EB-01_05212015	Total/NA	Water	350.1	
680-112797-10	FB-01_05212015	Total/NA	Water	350.1	
680-112797-11	SW-02_05212015_HIGH	Total/NA	Water	350.1	
680-112797-12	SW-01_05212015_HIGH	Total/NA	Water	350.1	
680-112797-12 DU	SW-01_05212015_HIGH	Total/NA	Water	350.1	
680-112797-13	SW-03_05212015_HIGH	Total/NA	Water	350.1	
680-112797-14	SW-04_05212015_HIGH	Total/NA	Water	350.1	
680-112797-15	EB-02_05212015	Total/NA	Water	350.1	
LCS 680-384908/1	Lab Control Sample	Total/NA	Water	350.1	
LCSD 680-384908/10	Lab Control Sample Dup	Total/NA	Water	350.1	
MB 680-384908/37	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 385163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112797-1	SW-04_05212015_LOW	Total/NA	Water	310.1	
680-112797-2	SW-03_05212015_LOW	Total/NA	Water	310.1	
680-112797-4	SW-01_05212015_LOW	Total/NA	Water	310.1	
680-112797-11	SW-02_05212015_HIGH	Total/NA	Water	310.1	
680-112797-12	SW-01_05212015_HIGH	Total/NA	Water	310.1	
680-112797-13	SW-03_05212015_HIGH	Total/NA	Water	310.1	
680-112797-14	SW-04_05212015_HIGH	Total/NA	Water	310.1	
LCS 680-385163/6	Lab Control Sample	Total/NA	Water	310.1	
LCSD 680-385163/31	Lab Control Sample Dup	Total/NA	Water	310.1	
MB 680-385163/5	Method Blank	Total/NA	Water	310.1	

Analysis Batch: 385222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112797-3	SW-02_05212015_LOW	Total/NA	Water	310.1	
LCS 680-385222/6	Lab Control Sample	Total/NA	Water	310.1	
LCSD 680-385222/32	Lab Control Sample Dup	Total/NA	Water	310.1	
MB 680-385222/5	Method Blank	Total/NA	Water	310.1	

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: SW-04_05212015_LOW
Date Collected: 05/21/15 08:20
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	310.1		1			385163	05/28/15 18:02	DAM	TAL SAV
	Instrument ID: MANTECH									
Total/NA	Analysis	350.1		2	2 mL	2 mL	384907	05/27/15 09:59	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384267	05/21/15 19:23	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: SW-03_05212015_LOW
Date Collected: 05/21/15 08:45
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	310.1		1			385163	05/28/15 18:38	DAM	TAL SAV
	Instrument ID: MANTECH									
Total/NA	Analysis	350.1		1	2 mL	2 mL	384908	05/27/15 09:05	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384267	05/21/15 19:25	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: SW-02_05212015_LOW
Date Collected: 05/21/15 09:02
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	310.1		1			385222	05/29/15 08:11	DAM	TAL SAV
	Instrument ID: MANTECH									
Total/NA	Analysis	350.1		1	2 mL	2 mL	384908	05/27/15 09:05	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384267	05/21/15 19:26	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: SW-01_05212015_LOW
Date Collected: 05/21/15 09:15
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	310.1		1			385163	05/28/15 20:27	DAM	TAL SAV
	Instrument ID: MANTECH									
Total/NA	Analysis	350.1		1	2 mL	2 mL	384908	05/27/15 09:05	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384267	05/21/15 19:28	GRX	TAL SAV
	Instrument ID: LACHAT2									

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: PDMW-29D_05212015

Date Collected: 05/21/15 10:26
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384639	05/26/15 10:40	CRW	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384988	05/27/15 14:44	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		10	2 mL	2 mL	384908	05/27/15 11:36	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384267	05/21/15 19:29	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: PDMW-26T_05212015

Date Collected: 05/21/15 11:32
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384879	05/27/15 14:38	BJB	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	385189	05/28/15 18:27	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		500	2 mL	2 mL	384908	05/27/15 13:18	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384267	05/21/15 19:30	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: TMW_1_05212015

Date Collected: 05/21/15 10:40
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	384972	05/28/15 16:25	JD1	TAL SAV
	Instrument ID: CMSAC									
Total/NA	Prep	3520C			257.5 mL	0.5 mL	384797	05/27/15 15:58	RBS	TAL SAV
Total/NA	Analysis	8270D		1	257.5 mL	0.5 mL	385722	06/02/15 20:01	RAM	TAL SAV
	Instrument ID: CMST									
Total/NA	Prep	3010A			50 mL	50 mL	384879	05/27/15 14:38	BJB	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	385189	05/28/15 18:32	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		5000	2 mL	2 mL	384908	05/27/15 11:27	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1000	2 mL	2 mL	384267	05/21/15 19:37	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: DUP_01_05212015

Lab Sample ID: 680-112797-8

Date Collected: 05/21/15 00:00

Matrix: Water

Date Received: 05/21/15 16:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	384972	05/28/15 16:48	JD1	TAL SAV
	Instrument ID: CMSAC									
Total/NA	Prep	3520C			252 mL	0.5 mL	384797	05/27/15 15:58	RBS	TAL SAV
Total/NA	Analysis	8270D		1	252 mL	0.5 mL	385722	06/02/15 20:27	RAM	TAL SAV
	Instrument ID: CMST									
Total/NA	Prep	3010A			50 mL	50 mL	384879	05/27/15 14:38	BJB	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	385189	05/28/15 18:55	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		2000	2 mL	2 mL	384908	05/27/15 10:00	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1000	2 mL	2 mL	384267	05/21/15 19:31	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: EB-01_05212015

Lab Sample ID: 680-112797-9

Date Collected: 05/21/15 12:40

Matrix: Water

Date Received: 05/21/15 16:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	384972	05/28/15 12:39	JD1	TAL SAV
	Instrument ID: CMSAC									
Total/NA	Prep	3520C			254.4 mL	0.5 mL	384797	05/27/15 15:58	RBS	TAL SAV
Total/NA	Analysis	8270D		1	254.4 mL	0.5 mL	385722	06/02/15 20:53	RAM	TAL SAV
	Instrument ID: CMST									
Total/NA	Prep	3010A			50 mL	50 mL	384639	05/26/15 10:40	CRW	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384988	05/27/15 14:49	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		1	2 mL	2 mL	384908	05/27/15 08:55	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384267	05/21/15 19:32	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: FB-01_05212015

Lab Sample ID: 680-112797-10

Date Collected: 05/21/15 13:00

Matrix: Water

Date Received: 05/21/15 16:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	384972	05/28/15 13:01	JD1	TAL SAV
	Instrument ID: CMSAC									
Total/NA	Prep	3520C			258.8 mL	0.5 mL	384797	05/27/15 15:58	RBS	TAL SAV
Total/NA	Analysis	8270D		1	258.8 mL	0.5 mL	385722	06/02/15 21:18	RAM	TAL SAV
	Instrument ID: CMST									
Total/NA	Prep	3010A			50 mL	50 mL	384639	05/26/15 10:40	CRW	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384988	05/27/15 14:53	BCB	TAL SAV
	Instrument ID: ICPE									

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: FB-01_05212015
Date Collected: 05/21/15 13:00
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	2 mL	2 mL	384908	05/27/15 08:55	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384267	05/21/15 19:34	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: SW-02_05212015_HIGH
Date Collected: 05/21/15 12:10
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	310.1		1			385163	05/28/15 18:16	DAM	TAL SAV
	Instrument ID: MANTECH									
Total/NA	Analysis	350.1		2	2 mL	2 mL	384908	05/27/15 10:19	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384267	05/21/15 19:38	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: SW-01_05212015_HIGH
Date Collected: 05/21/15 12:20
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	310.1		1			385163	05/28/15 18:09	DAM	TAL SAV
	Instrument ID: MANTECH									
Total/NA	Analysis	350.1		1	2 mL	2 mL	384908	05/27/15 08:55	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384267	05/21/15 19:39	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: SW-03_05212015_HIGH
Date Collected: 05/21/15 13:00
Date Received: 05/21/15 16:21

Lab Sample ID: 680-112797-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	310.1		1			385163	05/28/15 18:23	DAM	TAL SAV
	Instrument ID: MANTECH									
Total/NA	Analysis	350.1		1	2 mL	2 mL	384908	05/27/15 09:05	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384267	05/21/15 19:41	GRX	TAL SAV
	Instrument ID: LACHAT2									

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Client Sample ID: SW-04_05212015_HIGH

Lab Sample ID: 680-112797-14

Date Collected: 05/21/15 13:10
Matrix: Water
Date Received: 05/21/15 16:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	310.1		1			385163	05/28/15 18:31	DAM	TAL SAV
	Instrument ID: MANTECH									
Total/NA	Analysis	350.1		1	2 mL	2 mL	384908	05/27/15 09:05	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384267	05/21/15 19:42	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: EB-02_05212015

Lab Sample ID: 680-112797-15

Date Collected: 05/21/15 13:30
Matrix: Water
Date Received: 05/21/15 16:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	384639	05/26/15 10:40	CRW	TAL SAV
Total/NA	Analysis	6010C		1	50 mL	50 mL	384988	05/27/15 15:01	BCB	TAL SAV
	Instrument ID: ICPE									
Total/NA	Analysis	350.1		1	2 mL	2 mL	384908	05/27/15 09:05	JME	TAL SAV
	Instrument ID: KONELAB1									
Total/NA	Analysis	353.2		1	2 mL	2 mL	384267	05/21/15 19:43	GRX	TAL SAV
	Instrument ID: LACHAT2									

Client Sample ID: Trip Blank

Lab Sample ID: 680-112797-16

Date Collected: 05/21/15 00:00
Matrix: Water
Date Received: 05/21/15 16:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	384972	05/28/15 11:31	JD1	TAL SAV
	Instrument ID: CMSAC									

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

CSX TRANSPORTATION — CHAIN OF CUSTODY

COC # Pg. 1 of 3

LABORATORY INFORMATION

- [x] TestAmerica Savannah - 5102 LaRoche Avenue, Savannah, GA 31404 P: 912-354-7858 F: 912-352-0165
- [ ] TestAmerica North Canton - 4101 Shuffel Drive NW, North Canton, OH 44720 P: 330-497-9396 F: 330-497-0772
- [ ] TestAmerica Tampa - 6712 Benjamin Road, Suite 100, Tampa, FL 33634 P: 813-885-7427 F: 813-885-7049
- [ ] TestAmerica Pensacola - 3355 McLemore Drive, Pensacola, FL 32514 P: 850-474-1001 F: 850-478-2671
- [ ] TestAmerica Buffalo - 10 Hazelwood Drive, Suite 106, Amherst, NY 14228 P: 716-691-2600 F: 716-691-7991
- [ ] TestAmerica Chicago - 2417 Bond Street, University Park, IL 60466 P: 708-534-5200 F: 708-534-5211

SHIPMENT INFORMATION

Shipment Method: Lab ~~Courier~~

Shipment Tracking No: Drop off

CSXT PROJECT INFORMATION

CSXT Project Number: 9415575

CSXT Project Name: Hutchinson Island

CSXT Contact: Sam Ross

Proj. State (State of Origin): GA

Proj. City: Savannah

LWON: ENV0000120647

CONSULTANT INFORMATION

Company: Amec Foster Wheeler

Address: 3800 Ezell Rd Ste 100

City, State, Zip: Nashville, TN 37211

Project #: 6-4300-5245

PM: Aaron Getchell

Email: aaron.getchell@amecfw.com

Phone: (813) 636-1541 Fax:

Turnaround Time:
- [ ] 1 Day Rush
- [ ] 2 Day Rush
- [ ] 3 Day Rush
- [x] Standard 6-13 Days
- [ ] Specify # Days
- [ ] Standard 14 Days
- [ ] Other

Deliverables:
- [x] CSXT Standard (Level II)
- [ ] Level III
- [ ] Level IV
- [ ] Other Deliv:
- [ ] EDD Required, Format:

Preservative Codes: 0 = No Preservatives; 1 = Hydrochloric Acid; 2 = Nitric Acid; 3 = Sulfuric Acid; 4 = Sodium Thiosulfate; 5 = Sodium Hydroxide; 6 = Other

Matrix Codes: GW = Groundwater; WW = Waste Water; SW = Surface Water; SO = Soil; SL = Sludge; OI = Oil; SOL = Other Solid; LIQ = Liquid

SAMPLE INFORMATION

Sample Identification	Containers Number & Type	Sample Collection Date	Time	Sampler	Filtered Y or N	Type Comp or Grab	Matrix Code	Note ➡ Pres. Code	3	3b	3o	0	1	0	2	2	COMMENTS	LAB USE
								METHODS FOR ANALYSIS	Ammonia	Nitrate	Nitrite	Alkalinity	BTEX	PAHs	As and Pb	Cr, Ni, and Zn		
SW-04_05212015_LOW	4 poly	5/21/15	0820	PG	N	G	SW		X	X	X	X						
SW-03_05212015_LOW	4 poly	5/21/15	0845	PG	N	G	SW		X	X	X	X						
SW-02_05212015_LOW	4 poly	5/21/15	0902	JJ	N	G	SW		X	X	X	X						
SW-01_05212015_LOW	4 poly	5/21/15	0915	JJ	N	G	SW		X	X	X	X						
PDMW-29D_05212015	4 poly	5/21/15	1026	JJ	N	G	GW		X	X	X				X			
PDMW-26T_05212015	4 poly	5/21/15	1132	JJ	N	G	GW		X	X	X				X			
TMW-1_05212015	27	5/21/15	1040	PG	N	G	GW		X	X	X		X	X	X	X	MS/MSD	
DUP-01_05212015	9	5/21/15	—	PG	N	G	GW		X	X	X		X	X	X	X		
EB-01_05212015	9	5/21/15	1240	PG	N	G	GW		X	X	X		X	X	X	X		
FB-01_05212015	9	5/21/15	1300	PG	N	G	GW		X	X	X		X	X	X	X		

Relinquished By:	Date/Time: 5/21/15 1621	Received By:	Date/Time: 05-21-15 1621	Comments & Special Analytical Requirements:
Relinquished By:	Date/Time:	Received By:	Date/Time:	
Relinquished By:		Received By:	Date/Time	4.8/3.6(cf)5.2/4.0°C
Received By Laborat		Lab Remarks: 680-112797	LAB USE: Custody Intact ☐ Yes ☐ No	Custody Seal # # / LAB Log Number #

ORIGINAL – RETURN

680-112797 Chain of Custody

INVOICE MUST BE SUBMITTED TO CSXT WITH ORIGINAL COC

TAL-6006 (0509)

CSX TRANSPORTATION

CHAIN OF CUSTODY

COC # pg. 2 of 3

LABORATORY INFORMATION

- [x] TestAmerica Savannah - 5102 LaRoche Avenue, Savannah, GA 31404 P: 912-354-7858 F: 912-352-0165
- [ ] TestAmerica North Canton - 4101 Shuffel Drive NW, North Canton, OH 44720 P: 330-497-9396 F. 330-497-0772
- [ ] TestAmerica Tampa - 6712 Benjamin Road, Suite 100, Tampa, FL 33634 P. 813-885-7427 F: 813-885-7049
- [ ] TestAmerica Pensacola - 3355 McLemore Drive, Pensacola, FL 32514 P 850-474-1001 F. 850-478-2671
- [ ] TestAmerica Buffalo - 10 Hazelwood Drive, Suite 106, Amherst, NY 14228 P: 716-691-2600 F. 716-961-7991
- [ ] TestAmerica Chicago - 2417 Bond Street, University Park, IL 60466 P. 708-534-5200 F 708-534-5211

SHIPMENT INFORMATION

Shipment Method: Lab-Courier (80)

Shipment Tracking No: Drop off

CSXT PROJECT INFORMATION

CSXT Project Number: 9415575

CSXT Project Name: Hutchinson Island

CSXT Contact: Sam Ross

Proj. State (State of Origin): GA

Proj City: Savannah

LWON: ENV00001206447

CONSULTANT INFORMATION

Company: Amec Foster Wheeler

Address: 3800 Ezell Rd Ste 100

City, State, Zip: Nashville, TN 37211

Project #: 6-4300-5245

PM: Aaron Getchell

Email: aaron.getchell@amecfw.com

Phone: (813) 636-1547 Fax:

Turnaround Time:

- [ ] 1 Day Rush
- [ ] 2 Day Rush
- [ ] 3 Day Rush
- [x] Standard 6-13 Days
- [ ] Specify # Days
- [ ] Standard 14 Days
- [ ] Other

Deliverables:

- [x] CSXT Standard (Level II)
- [ ] Level III
- [ ] Level IV
- [ ] Other Deliv:
- [ ] EDD Required, Format:

Preservative Codes: 0 = No Preservatives; 1 = Hydrochloric Acid; 2 = Nitric Acid; 3 = Sulfuric Acid; 4 = Sodium Thiosulfate; 5 = Sodium Hydroxide; 6 = Other

Matrix Codes: GW = Groundwater; WW = Waste Water; SW = Surface Water; SO = Soil; SL = Sludge; OI = Oil; SOL = Other Solid; LIQ = Liquid

SAMPLE INFORMATION

Sample Identification	Containers Number & Type	Sample Collection Date	Time	Sampler	Filtered Y or N	Type Comp or Grab	Matrix Code	Note ➡ Pres. Code	Ammonia	Nitrate	Nitrite	Alkalinity	As	Pb	Ni	Zn	COMMENTS	LAB USE
								3	3	0	3	0	0	2	2	2	2	
SW-02_05212015_HIGH	4	5/21/2015	1210	JJ	N	G	SW		X	X	X	X						
SW-01_05212015_HIGH	4	5/21/2015	1220	JJ	N	G	SW		X	X	X	X						
SW-03_05212015_HIGH	4	5/21/2015	1300	JJ	N	G	SW		X	X	X	X						
SW-04_05212015_HIGH	4	5/21/2015	1310	JJ	N	G	SW		X	X	X	X						
EB-02_05212015	4	5/21/2015	1330	JJ	N	G	SW		X	X	X		X	X	X	X		

	Date/Time:		Date/Time:
Relinquished By:	5/21/2015 1624	Received By: Banda	05-21-15 1621
Relinquished By	Date/Time.	Received By:	Date/Time:
Relinquished By.	Date/Time.	Received By	Date/Time:
Received By Laboratory:	Date/Time:	Lab Remarks: 680-112797	LAB USE. Custody Intact ☐ Yes ☐ No

Comments & Special Analytical Requirements:

4.8/3.6(CF)5.2/4.0°C

Custody Seal # #

LAB Log Number #

ORIGINAL – RETURN TO LABORATORY WITH SAMPLES

INVOICE MUST BE SUBMITTED TO CSXT WITH ORIGINAL COC

TAL-6006 (0509)

CSX TRANSPORTATION — CHAIN OF CUSTODY

LABORATORY INFORMATION

- [x] TestAmerica Savannah - 5102 LaRoche Avenue, Savannah, GA 31404 P: 912-354-7858 F: 912-352-0165
- [ ] TestAmerica North Canton - 4101 Shuffel Drive NW, North Canton, OH 44720 P 330-497-9396 F 330-497-0772
- [ ] TestAmerica Tampa - 6712 Benjamin Road, Suite 100, Tampa, FL 33634 P 813-885-7427 F: 813-885-7049
- [ ] TestAmerica Pensacola - 3355 McLemore Drive, Pensacola, FL 32514 P: 850-474-1001 F: 850-478-2671
- [ ] TestAmerica Buffalo - 10 Hazelwood Drive, Suite 106, Amherst, NY 14228 P 716-691-2600 F: 716-961-7991
- [ ] TestAmerica Chicago - 2417 Bond Street, University Park, IL 60466 P: 708-534-5200 F: 708-534-5211

SHIPMENT INFORMATION

Shipment Method: Lab Drop Off

Shipment Tracking No:

CSXT PROJECT INFORMATION

CSXT Project Number: 9415575

CSXT Project Name: Hutchinson Island

CSXT Contact

Proj. State (State of Origin): GA

Proj. City: Savannah

LWON: ENV0000120647

CONSULTANT INFORMATION

Company: Amec Foster Wheeler

Address: 3800 Ezell Rd Ste 100

City, State, Zip: Nashville, TN 37211

Project #: 6-4300-5245

PM: Aaron Getchell

Email: aaron.getchell@amecfw.com

Phone: (813) 636-1541 Fax:

Turnaround Time:

- [ ] 1 Day Rush
- [ ] 2 Day Rush
- [ ] 3 Day Rush
- [x] Standard 6-13 Days
- [ ] Specify # Days
- [ ] Standard 14 Days
- [ ] Other

Deliverables:

- [x] CSXT Standard (Level II)
- [ ] Level III
- [ ] Level IV
- [ ] Other Deliv:
- [ ] EDD Required, Format:

Preservative Codes: 0 = No Preservatives; 1 = Hydrochloric Acid; 2 = Nitric Acid; 3 = Sulfuric Acid; 4 = Sodium Thiosulfate; 5 = Sodium Hydroxide; 6 = Other

Matrix Codes: GW = Groundwater; WW = Waste Water; SW = Surface Water; SO = Soil; SL = Sludge; OI = Oil; SOL = Other Solid; LIQ = Liquid

SAMPLE INFORMATION

Sample Identification	Containers Number & Type	Sample Collection Date	Time	Sampler	Filtered Y or N	Type Comp or Grab	Matrix Code	Note ➡ Pres. Code: 8 TEX	COMMENTS	LAB USE
Trip Blank	2 vials	5-21-2015	—	—	N	G	W			

METHODS FOR ANALYSIS

Relinquished By:	Date/Time:	Received By:	Date/Time:
	5/21/2015 1621		05/15/1621
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Received By Laboratory.	Date/Time:	Lab Remarks: 680-112797	LAB USE: Custody Intact ☐ Yes ☐ No; Custody Seal # ; LAB Log Number #

Comments & Special Analytical Requirements:

4.8/3.6(cf) 5.2/4.0

ORIGINAL – RETURN TO LABORATORY WITH SAMPLES

INVOICE MUST BE SUBMITTED TO CSXT WITH ORIGINAL COC

TAL-6006 (0509)

Login Sample Receipt Checklist

Client: AMEC Foster Wheeler E & I, Inc

Job Number: 680-112797-1

Login Number: 112797
List Number: 1
Creator: Banda, Christy S

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: CSX GA, Hutchinson Island, VRP

TestAmerica Job ID: 680-112797-1

Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Georgia	State Program	4	803	06-30-15 *

* Certification renewal pending - certification considered valid.

APPENDIX B
FIELD DATA SHEETS

amec

GROUNDWATER SAMPLING LOG

CLIENT: CSX-RPI LOCATION: Hutchinson Is., Savannah, GA DATE: 5-19-2015

WELL NO. PDMW-32R WEATHER: Sunny, 83°F SAMPLE TIME: 1056

REMARKS: SAMPLER(S): JJJ

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 4.56 ft. WELL DEPTH: 9.32 ft.

LENGTH OF SATURATED ZONE: 4.76 linear ft. ONE WELL VOLUME: 0.8 gals.

THREE WELL VOLUMES = 2.4 gals. ACTUAL VOLUME EVACUATED: _____ gals.

PURGE METHOD: peristaltic pump DEPTH OF PUMP INTAKE: ~7 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	~~drawdown~~ Water level (ft)	COMMENTS
1016	24.26	4.36	7.95	0.413	105	1.38	320	4.56	
1021	24.16	4.54	7.53	0.444	86	1.23	320	4.56	
1026	24.08	4.76	7.41	0.489	66	1.20	320	4.56	
1031	24.05	4.79	7.62	0.505	69	1.16	320	4.56	
1036	23.91	5.33	24.8	0.599	24	1.14	320	4.58	
1041	23.95	4.89	12.8	0.570	49	1.08	320	4.58	
1046	23.84	4.79	4.25	0.530	60	1.09	320	4.58	
1051	23.93	4.78	3.10	0.536	61	1.08	320	4.58	
1056	23.93	4.78	3.01	0.534	62	1.08	320	4.58	

SAMPLE WITHDRAWL METHOD: per SAP

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1 x 250ml poly w/ H_2SO_4 for ammonia; 1x125 ml poly unpres. and 1x125 ml poly w/ H_2SO_4 for nitrate-nitrite; 1x250 ml poly w/ HNO_3 for As, Pb, Ni, Zn.

SAMPLE ID NUMBER(s): PDMW-32R-05192015

DECON METHOD: per SAP

PURGE WATER MANAGEMENT: per SAP

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5/20/2015 TIME: ~~1056~~ 0800

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

amec

GROUNDWATER SAMPLING LOG

Page ___ of ___

CLIENT: CSX LOCATION: Hutchinson Island / Savannah GA DATE: 5/18/15

WELL NO. PDMW52 WEATHER: clear and 80's SAMPLE TIME: 1440

REMARKS: ___ SAMPLER(S): P. Gilland

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 4.03 ft. WELL DEPTH: 9.85 ft.

LENGTH OF SATURATED ZONE: 5.82 linear ft. ONE WELL VOLUME: .9 gals.

THREE WELL VOLUMES = 2.7 gals. ACTUAL VOLUME EVACUATED: 2.4 gals.

PURGE METHOD: Per Pump DEPTH OF PUMP INTAKE: 7.5 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
1410	29.60	6.24	198	7.54	18	1.07	300	.41	
1415	25.30	6.16	176	8.25	-79	1.22	300	.42	
1420	24.87	6.14	85	8.44	-107	1.34	300	.41	
1425	23.81	6.13	58	8.55	-111	1.17	300	.42	
1430	23.35	6.13	15	8.63	-113	1.06	300	.35	
1435	23.84	6.14	9	8.67	-112	1.03	300	.35	
1440	23.83	6.15	6	8.71	-111	1.00	300	.33	
Sample Time			1440						

SAMPLE WITHDRAWL METHOD: ___

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ammonia Nitrate + Nitrite

SAMPLE ID NUMBER(s): PDMW52-05-18-2015

DECON METHOD: Per the Plan

PURGE WATER MANAGEMENT: Drum 5

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: ___ TIME: ___

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

Page ____ of ____

CLIENT: PDMW61 LOCATION: CSX Hotchkinson Island GA DATE: 5/18/15

WELL NO. AMEC FW WEATHER: clear + 80's SAMPLE TIME: 1600

REMARKS: _____ SAMPLER(S): P Guzzo

WELL PURGING: WELL DIAMETER: 2" in. STATIC WATER LEVEL: 3.70 ft. WELL DEPTH: 10.22 ft.

LENGTH OF SATURATED ZONE: 6.52 linear ft. ONE WELL VOLUME : 1.1 gals.

THREE WELL VOLUMES = 3.3 gals. ACTUAL VOLUME EVACUATED: 3.2 gals.

PURGE METHOD: Peristaltic Pump DEPTH OF PUMP INTAKE: 6' ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
1520	29.53	6.32	229	11.4	-68	2.71	300	.12	
1525	28.17	6.28	223	11.3	-77	1.73	300	.14	
1530	25.65	6.21	214	11.7	-81	.97	300	.13	
1535	25.30	6.20	202	11.7	-85	.85	300	.13	
1540	24.95	6.20	68	11.6	-96	.76	300	.11	
1545	24.88	6.20	30	11.6	-97	.75	300	.11	
1550	24.18	6.18	9	11.7	-100	.68	300	.10	
1555	24.10	6.18	5	11.7	-100	.69	300	.10	
1600	24.16	6.18	2	11.7	-100	.68	300	.10	

SAMPLE WITHDRAWL METHOD: _____

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ammonia, Nitrates + Nitrites

Sample Time 1600

SAMPLE ID NUMBER(s): PDMW-61-05182015

DECON METHOD: Per Sampling Plan

PURGE WATER MANAGEMENT: Drums

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: _____ TIME: _____

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

amec

GROUNDWATER SAMPLING LOG

CLIENT: CSX-RPI LOCATION: Hutchinson Island, Savannah, GA DATE: 5/18/15

WELL NO. PDMW-49 WEATHER: Sunny, 86°F SAMPLE TIME: 1615

REMARKS: SAMPLER(S): JJJ

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 2.89 ft. WELL DEPTH: 8.65 ft.

LENGTH OF SATURATED ZONE: 5.76 linear ft. ONE WELL VOLUME: 0.9 gals.

THREE WELL VOLUMES = 2.7 gals. ACTUAL VOLUME EVACUATED: 1.8 gals.

PURGE METHOD: peristaltic pump DEPTH OF PUMP INTAKE: ~6 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
1415	35.82	6.64	–	7.66	-100	1.40	200	3.36	
1420	31.42	6.62	–	8.44	-138	0.95	200	3.41	
1425	29.77	6.55	121	9.52	-151	0.77	200	3.46	
1430	29.05	6.53	131	9.74	-154	0.80	200	3.52	
1435	28.64	6.51	156	10.1	-157	0.75	200	3.58	
1440	26.81	6.52	132	10.1	-159	0.74	200	3.64	
1445	26.18	6.48	93.1	10.6	-156	0.75	200	3.70	
1480	25.49	6.46	81.4	10.9	-158	0.80	200	3.76	
1455	24.89	6.45	61.4	11.2	-158	0.80	200	3.82	

SAMPLE WITHDRAWL METHOD: per SAP

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1x250ml H_2SO_4 ~~and 1x250~~ ammonia; 1x125ml unpres. and 1x125ml H_2SO_4 for nitrate & nitrite

SAMPLE ID NUMBER(s): PDMW-49_05182015

DECON METHOD: per SAP

PURGE WATER MANAGEMENT: per SAP

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5/19/2015 TIME: 0800

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

CLIENT: CSX-RPI LOCATION: Hutchinson Island, Savannah, GA DATE: 5/18/2015

WELL NO: DMW-49 WEATHER: Sunny, 86° F SAMPLE TIME: ~~1555~~ 1615

REMARKS: SAMPLER(S): JJJ

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 2.89 ft. WELL DEPTH: 8.65 ft.

LENGTH OF SATURATED ZONE: 5.76 linear ft. ONE WELL VOLUME: 0.9 gals.

THREE WELL VOLUMES = 2.7 gals. ACTUAL VOLUME EVACUATED: 1.8 gals.

PURGE METHOD: peristaltic pump DEPTH OF PUMP INTAKE: ~6 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
1555 ~~1500~~	26.96	6.46	49.7	10.9	-166	1.23	200	3.92	
1600	26.36	6.47	41.8	10.9	-164	0.89	200	3.98	
1605	23.83	6.45	33.8	11.6	-163	0.91	200	4.10	
1610	23.54	6.44	30.1	11.7	-162	0.89	200	4.22	
1615	23.32	6.43	30.6	11.8	-162	0.88	200	4.34	

SAMPLE WITHDRAWL METHOD: per SAP

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1x 125ml H_2SO_4 & 1x 125ml unpres. poly for nitrate-nitrite

1x 250ml H_2SO_4 for ammonia

SAMPLE ID NUMBER(s): DMW-49_05182015

DECON METHOD: per SAP

PURGE WATER MANAGEMENT: per SAP

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5/19/2015 TIME: 0800

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

Page ___ of ___

CLIENT: AMEC for CSX LOCATION: CSX Hutchinson Island DATE: 5/19/15

WELL NO. PDMW7P WEATHER: clear + 80's SAMPLE TIME: 0900

REMARKS: ___ SAMPLER(S): P. Garro

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 2.50 ft. WELL DEPTH: 10.38 ft.

LENGTH OF SATURATED ZONE: 7.88 linear ft. ONE WELL VOLUME: 1.3 gals.

THREE WELL VOLUMES = 4 gals. ACTUAL VOLUME EVACUATED: 2.8 gals.

PURGE METHOD: Peristaltic Pump DEPTH OF PUMP INTAKE: 6' ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
0825	21.66	5.67	115	10.1	-85	10.20	300	—	
0830	19.74	5.78	93	9.54	-103	7.34	300	-02	
0835	19.74	5.79	31	9.38	-105	6.33	300	.03	
840	19.67	5.79	9	9.34	-107	5.34	300	.03	
845	19.64	5.79	8	9.38	-108	4.53	300	.03	
0850	19.66	5.80	7	9.42	-108	3.66	300	.04	
0855	19.65	5.80	3	9.43	-109	3.60	300	.05	
0900	19.65	5.80	3	9.43	-109	3.53	300	.05	

SAMPLE WITHDRAWL METHOD: Pump

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ammonia, Nitrate, Nitrite, Arsenic + Lead

SAMPLE ID NUMBER(s): PDMW-07-05192015

DECON METHOD: Per SAMPLING Plan

PURGE WATER MANAGEMENT: Drums

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: ___ TIME: ___

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

amec

GROUNDWATER SAMPLING LOG

CLIENT: CSX-RPI LOCATION: Hutchinson Island, Savannah, GA DATE: 5/19/15

WELL NO. PDMW-13P WEATHER: Sunny, 76°F SAMPLE TIME: 0943

REMARKS: _____ SAMPLER(S): JSS

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 3.21 ft. WELL DEPTH: 10.50 ft.

LENGTH OF SATURATED ZONE: 7.29 linear ft. ONE WELL VOLUME: 1.2 gals.

THREE WELL VOLUMES = 3.6 gals. ACTUAL VOLUME EVACUATED: 3.8 gals.

PURGE METHOD: peristaltic pump DEPTH OF PUMP INTAKE: ~8 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	~~draw down~~ water level (ft)	COMMENTS
0853	22.29	5.80	47.4	0.679	-14	2.11	260	3.21	
0858	22.40	5.27	33.0	0.246	19	1.73	260	3.21	
0903	22.36	5.15	36.1	0.170	25	1.59	260	3.21	
0908	22.39	5.09	29.4	0.153	29	1.50	260	3.21	
0913	22.41	5.05	22.1	0.149	31	1.48	260	3.21	
0918	22.42	5.03	18.0	0.147	31	1.48	260	3.21	
0923	22.42	5.03	13.4	0.146	31	1.42	260	3.21	
0928	22.47	5.02	13.1	0.145	30	1.37	260	3.21	
0933	22.50	5.01	11.6	0.144	30	1.35	260	3.21	

SAMPLE WITHDRAWL METHOD: Per SAP

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1 x 250 ml poly w/ H_2SO_4 for ammonia; 1 x 125 ml poly unpres. and 1 x 125 ml H_2SO_4 for nitrate and nitrite; 1 x 250 ml poly HNO_3 for Pb, As, Ni, Zn

SAMPLE ID NUMBER(s): PDMW-13P_05192015

DECON METHOD: per SAP

PURGE WATER MANAGEMENT: per SAP

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5/20/2015 TIME: 0800

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

CLIENT: CSX-RPI LOCATION: Hutchinson Is., Savannah, GA DATE: 5/19/15

WELL NO. PDMW-13P WEATHER: Sunny, 76°F SAMPLE TIME: 0943

REMARKS: _____ SAMPLER(S): JJJ

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 3.21 ft. WELL DEPTH: 10.50 ft.

LENGTH OF SATURATED ZONE: 7.29 linear ft. ONE WELL VOLUME: 1.2 gals.

THREE WELL VOLUMES = 3.6 gals. ACTUAL VOLUME EVACUATED: 3.8 gals.

PURGE METHOD: peristaltic pump DEPTH OF PUMP INTAKE: ~8 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
0938	22.58	5.01	11.2	0.144	30	1.33	260	3.21	
0943	22.63	5.00	11.5	0.144	29	1.30	260	3.21	

SAMPLE WITHDRAWL METHOD: per SAP

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1x250 ml poly w/ H_2SO_4 for ammonia; 1x125 ml poly unpres. & 1x125 ml poly w/ H_2SO_4 for nitrate and nitrite; 1x250 ml poly HNO_3 for As, Pb, Ni, Zn

SAMPLE ID NUMBER(s): PDMW-13P_05192015

DECON METHOD: per SAP

PURGE WATER MANAGEMENT: per SAP

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5/20/2015 TIME: 0800

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

Page ____ of ____

CLIENT: CSX LOCATION: Hutchinson Island DATE: 5/19/15

WELL NO. AS-TMW 4R WEATHER: Clear 70's SAMPLE TIME: 1005

REMARKS: SAMPLER(S): P. Gaddo

WELL PURGING: WELL DIAMETER: 2" in. STATIC WATER LEVEL: 4.44 ft. WELL DEPTH: 12.70 ft.

LENGTH OF SATURATED ZONE: 8.26 linear ft. ONE WELL VOLUME: 1.4 gals.

THREE WELL VOLUMES = 4.2 gals. ACTUAL VOLUME EVACUATED: 1.6 gals.

PURGE METHOD: Peristaltic Pump DEPTH OF PUMP INTAKE: 7' ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
0925	21.49	6.00	13.8	1.86	-99	7.97	150	—	
0930	21.61	5.96	9	1.72	-107	5.52	150	.49	
0935	21.81	5.97	3	1.63	-109	5.65	150	.58	
0940	22.39	5.99	3	1.36	-112	3.57	150	.29	
0945	22.62	6.01	2	1.29	-111	3.36	150	.80	
0950	22.92	6.01	2	1.26	-109	3.09	150	.82	
0955	23.26	6.01	1.9	1.27	-109	2.76	150	.93	
1000	23.55	6.01	1.7	1.30	-108	2.69	150	.98	
1005	23.76	6.01	2.1	1.31	-109	2.60	150	.98	

SAMPLE WITHDRAWL METHOD:

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ammonia, Nitrates, Nitrites, Arsenic, Lead

SAMPLE ID NUMBER(s): TMW-4R-05192015

DECON METHOD: Per the Plan

PURGE WATER MANAGEMENT: Drum

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: TIME:

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

Page ___ of ___

CLIENT: CSX LOCATION: Hutchinson Island DATE: 5/19/15

WELL NO. PDMW-23R WEATHER: clear + 80's SAMPLE TIME: _____

REMARKS: _____ SAMPLER(S): RGM + RD

WELL PURGING: WELL DIAMETER: 2" in. STATIC WATER LEVEL: 5.11 ft. WELL DEPTH: 11.30 ft.

LENGTH OF SATURATED ZONE: 6.19 linear ft. ONE WELL VOLUME : 1 gals.

THREE WELL VOLUMES = 3 gals. ACTUAL VOLUME EVACUATED: 1 gals.

PURGE METHOD: Peristaltic Pump DEPTH OF PUMP INTAKE: 7' ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
1035	26.78	5.70	63	.456	-87	1.51	350	.11	
1040	24.00	5.63	21	.459	-97	.88	350	.10	
1045	23.66	5.57	4	.443	-98	.70	350	.10	
1050	23.89	5.53	3.9	.435	-99	.64	350	.10	
1055	23.91	5.56	3.7	.432	-102	.62	350	.10	
1100	23.86	5.55	4.5	.430	-103	.67	350	.10	
1105	23.86	5.54	4.5	.430	-102	.65	350	.10	

SAMPLE WITHDRAWL METHOD: _____

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ammonia, Nitrates, Nitrites, Arsenic, Lead

SAMPLE ID NUMBER(s): PDMW-23R-05192015

DECON METHOD: Per the Plan

PURGE WATER MANAGEMENT: Drums

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: _____ TIME: _____

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

w Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

amec

GROUNDWATER SAMPLING LOG

CLIENT: CSX-RPI LOCATION: Hutchinson IS, Savannah, GA DATE: 5-19-2015

WELL NO. PDMW-5D WEATHER: Sunny, 89°F SAMPLE TIME: 1438

REMARKS: SAMPLER(S): JSJ

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 4.08 ft. WELL DEPTH: 9.48 ft.

LENGTH OF SATURATED ZONE: 5.40 linear ft. ONE WELL VOLUME: 0.9 gals.

THREE WELL VOLUMES = 2.7 gals. ACTUAL VOLUME EVACUATED: _____ gals.

PURGE METHOD: peristaltic pump DEPTH OF PUMP INTAKE: ~7 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	water ~~draw down~~ level (ft)	COMMENTS
1338	22.75	6.28	154	13.3	-112	1.51	320	4.15	
1343	22.89	6.36	140	12.6	-125	1.31	320	4.15	
1348	23.00	6.43	191	11.9	-132	1.26	320	4.15	
1353	22.96	6.43	186	12.0	-134	1.29	320	4.15	
1358	22.94	6.44	145	12.0	-136	1.22	320	4.15	
1403	22.88	6.45	95.5	12.0	-139	1.19	320	4.15	
1408	22.85	6.45	66.7	12.0	-141	1.20	320	4.15	
1413	22.80	6.46	43.0	12.0	-143	1.18	320	4.15	
1418	22.62	6.47	27.7	11.9	-144	1.14	320	4.15	

SAMPLE WITHDRAWL METHOD: per SAP

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1 x 125ml unpres. and 1x125ml poly w/ H_2SO_4 for nitrate-nitrite; 1x250ml poly w/ H_2SO_4 for ammonia

SAMPLE ID NUMBER(s): PDMW-5D_05192015

DECON METHOD: per SAP

PURGE WATER MANAGEMENT: per SAP

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5-20-2015 TIME: 0800

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

amec

GROUNDWATER SAMPLING LOG

CLIENT: CSX-RPI LOCATION: Hutchinson Is., Savannah, GA DATE: 5-19-2015

WELL NO. PDMW-50 WEATHER: Sunny, 89°F SAMPLE TIME: 1438

REMARKS: _____ SAMPLER(S): JJJ

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 4.08 ft. WELL DEPTH: 9.48 ft.

LENGTH OF SATURATED ZONE: 5.40 linear ft. ONE WELL VOLUME: 0.9 gals.

THREE WELL VOLUMES = 2.7 gals. ACTUAL VOLUME EVACUATED: _____ gals.

PURGE METHOD: peristaltic pump DEPTH OF PUMP INTAKE: ~7 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	~~water draw down~~ water level (ft)	COMMENTS
1423	22.72	6.47	16.4	11.9	-145	1.13	320	4.17	
1428	22.77	6.47	11.8	11.9	-146	1.13	320	4.17	
1433	22.88	6.47	8.85	11.9	-147	1.10	320	4.17	
1438	22.63	6.47	5.96	11.9	-148	1.08	320	4.17	

SAMPLE WITHDRAWL METHOD: per SAP

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1 x 250ml poly w/ H_2SO_4 for ammonia; 1 x 125 ml poly unpres. ~~for~~ and 1 x 125ml poly w/ H_2SO_4 for nitrate-nitrite

SAMPLE ID NUMBER(s): PDMW-50_05192015

DECON METHOD: per SAP

PURGE WATER MANAGEMENT: per SAP

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5-20-2015 TIME: 0800

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

Page ___ of ___

CLIENT: CSX LOCATION: Hutchinson Island DATE: 5/19/15

WELL NO. MW3R WEATHER: clear 80's SAMPLE TIME: 1450

REMARKS: Poor Recharge at low Tide. SAMPLER(S): PGarzo

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 4.85 ft. WELL DEPTH: 10.10 ft.

LENGTH OF SATURATED ZONE: 5.25 linear ft. ONE WELL VOLUME: .9 gals.

THREE WELL VOLUMES = 2.7 gals. ACTUAL VOLUME EVACUATED: .8 gals.

PURGE METHOD: Peristaltic Pump DEPTH OF PUMP INTAKE: 10' ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
1320	3325	6.14	285	10.2	-127	5.98	150	7.16	
1325	3313	6.13	116	10.6	-126	5.88	150	5.17	
1330	2860	6.12	221	10.7	-125	5.46	150	7.16	
1335	2776	6.20	438	11.1	-111	5.29	150	9.18	
1340	2823	6.23	172	11.0	-101	4.88	150	10.00	
	DRY								
		SAMPLE TIME 1450							

SAMPLE WITHDRAWL METHOD:

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ammonia, Nitrate, Nitrite, Arsenic, Lead, Nickel +2 IVC

SAMPLE ID NUMBER(s): MW3R-05192015

DECON METHOD: Per Sample Plan

PURGE WATER MANAGEMENT: Drum

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: TIME:

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

CLIENT: CSX-RPI LOCATION: Hutchinson Island, Savannah, GA DATE: 5-19-15

WELL NO. PDMW-53 WEATHER: Partly cloudy, 90°F SAMPLE TIME: 1608

REMARKS: _____ SAMPLER(S): JJJ

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 4.47 ft. WELL DEPTH: 12.55 ft.

LENGTH OF SATURATED ZONE: 8.08 linear ft. ONE WELL VOLUME: 1.3 gals.

THREE WELL VOLUMES = 3.9 gals. ACTUAL VOLUME EVACUATED: 4.1 gals.

PURGE METHOD: peristaltic pump DEPTH OF PUMP INTAKE: ~10 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	~~water draw-down~~ level (ft)	COMMENTS
1508	26.24	6.20	36.9	6.22	-106	1.45	240	4.99	
1513	26.51	6.06	76.2	4.95	-115	1.26	240	5.00	
1518	27.04	6.05	74.2	4.94	-121	1.20	240	5.05	
1523	27.17	6.07	65.7	4.97	-123	1.19	240	5.05	
1528	27.37	6.09	56.3	5.08	-126	1.17	240	5.05	
1548	2762	6.16	22.2	5.27	-129	1.11	240	5.10	
1553	27.81	6.19	19.8	5.40	-129	1.08	240	5.10	
1558	27.84	6.19	13.6	5.41	-129	1.07	240	5.10	
1603	28.00	6.19	11.7	5.44	-128	1.03	240	5.10	

SAMPLE WITHDRAWL METHOD: per SAP

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1 x 250ml poly w/ H_2SO_4 For ammonia; 1x125ml poly unpres. and 1x125 ml poly w/ H_2SO_4 For nitrate and nitrite

SAMPLE ID NUMBER(s): PDMW-53_05192015

DECON METHOD: per SAP

PURGE WATER MANAGEMENT: per SAP

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5-20-2015 TIME: 0800

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

amec

GROUNDWATER SAMPLING LOG

CLIENT: CSX-RPI LOCATION: Hutchinson Island, Savannah, GA DATE: 5-19-15

WELL NO. PDMW-53 WEATHER: Partly Cloudy, 90°F SAMPLE TIME: 1608

REMARKS: SAMPLER(S): JDJ

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 4.47 ft. WELL DEPTH: 12.55 ft.

LENGTH OF SATURATED ZONE: 8.08 linear ft. ONE WELL VOLUME: 1.3 gals.

THREE WELL VOLUMES = 3.9 gals. ACTUAL VOLUME EVACUATED: 4.1 gals.

PURGE METHOD: peristaltic pump DEPTH OF PUMP INTAKE: ~10 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
1608	28.19	6.19	14.1	5.28	-128	1.03	240	5.10	

SAMPLE WITHDRAWL METHOD: per SAP

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1 x 250ml poly w/ H_2SO_4 for ammonia; 1 x 125ml poly unpres. & 1 x 125ml poly w/ H_2SO_4 for nitrate & nitrite; ~~1 x 250ml poly w/ HNO_3 for~~ (DO)

SAMPLE ID NUMBER(s): PDMW-53_05192015

DECON METHOD: per SAP

PURGE WATER MANAGEMENT: per SAP

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5/20/2015 TIME: 0800

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

CLIENT: CSX LOCATION: Hutchinson Island DATE: 5/19/15

WELL NO. PDMW 48 WEATHER: Clear And 80's SAMPLE TIME:

REMARKS: SAMPLER(S): P. Gazzo

WELL PURGING: WELL DIAMETER: 2" in. STATIC WATER LEVEL: 3.02 ft. WELL DEPTH: 9.40 ft.

LENGTH OF SATURATED ZONE: 6.38 linear ft. ONE WELL VOLUME : 1 gals.

THREE WELL VOLUMES = 3 gals. ACTUAL VOLUME EVACUATED: 2.6 gals.

PURGE METHOD: Peristaltic Pump DEPTH OF PUMP INTAKE: 7' ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
~~1520~~	~~37.77~~	~~6.35~~	~~Pump~~						
1520	37.54	6.33	255	9.42	-159	.46	150	—	
1525	36.91	6.28	241	9.28	-158	.39	150	.61	
1530	34.53	6.24	108	9.31	-159	.28	150	.67	
1535	34.13	6.26	102	9.10	-160	.27	150	.70	
1540	33.68	6.29	277	8.87	-157	.26	150	.84	
1545	33.57	6.28	231	9.08	-156	.25	150	.86	
1550	33.34	6.24	190	9.40	-154	.25	150	.86	
1555	33.00	6.22	240	9.65	-152	.24	150	.87	

SAMPLE WITHDRAWL METHOD:

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ammonia, Nitrates, Nitrite

SAMPLE ID NUMBER(s): PDMW-48-0519 2015

DECON METHOD: Per TL Plan

PURGE WATER MANAGEMENT: Drum

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: TIME:

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

CLIENT: CSX LOCATION: DATE:

WELL NO. PDMW 48 WEATHER: SAMPLE TIME:

REMARKS: SAMPLER(S):

WELL PURGING: WELL DIAMETER: in. STATIC WATER LEVEL: ft. WELL DEPTH: ft.

LENGTH OF SATURATED ZONE: linear ft. ONE WELL VOLUME : gals.

THREE WELL VOLUMES = gals. ACTUAL VOLUME EVACUATED: gals.

PURGE METHOD: DEPTH OF PUMP INTAKE: ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
1600	32.57	6.21	189	9.81	-152	.24	150	1.01	
1605	32.28	6.21	179	9.98	-154	.22	150	1.01	
1610	32.22	6.20	122	9.99	-153	.23	150	1.01	
1615	32.23	6.20	120	10.0	-152	.23	150	1.01	
1620	32.23	6.21	115	9.89	-152	.22	150	1.01	
1625	32.29	6.19	114	9.87	-150	.23	150	1.01	
	1625 Sample Time								

SAMPLE WITHDRAWL METHOD:

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

See Page #2

After 1 Hr well was stable with TURB stable But High.

SAMPLE ID NUMBER(s):

DECON METHOD:

PURGE WATER MANAGEMENT:

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: TIME:

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

amec

GROUNDWATER SAMPLING LOG

CLIENT: CSX-RPI LOCATION: Hutchinson Island, Savannah, GA DATE: 5-19-15

WELL NO. MW-2 WEATHER: Partly Sunny, 92°F SAMPLE TIME: 1700

REMARKS: SAMPLER(S): JJJ

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 3.07 ft. WELL DEPTH: 17.65 ft.

LENGTH OF SATURATED ZONE: 14.58 linear ft. ONE WELL VOLUME : 2.4 gals.

THREE WELL VOLUMES = 7.2 gals. ACTUAL VOLUME EVACUATED: 2.4 gals.

PURGE METHOD: peristaltic pump DEPTH OF PUMP INTAKE: ~15 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	~~draw down~~ water level (ft)	COMMENTS
1635	26.18	6.05	11.2	10.5	-109	1.25	260	4.38	
1640	25.68	6.08	11.0	10.8	-117	1.06	260	5.62	
1645	25.40	6.07	8.67	10.8	-119	0.99	260	6.05	
1650	25.77	6.06	8.99	10.7	-120	0.93	260	6.26	
1655	25.92	6.05	7.94	10.7	-119	0.92	260	6.40	
1700	25.86	6.03	8.31	10.7	-118	0.92	260	6.52	

SAMPLE WITHDRAWL METHOD: per SAP

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1 x 250ml poly w/ H_2SO_4 for ammonia; 1x125ml poly unpres. & 1x125ml poly w/ H_2SO_4 for nitrate and nitrite; 1 x 250ml w/ HNO_3 for As, Pb

SAMPLE ID NUMBER(s): MW-2-05192015

DECON METHOD: per SAP

PURGE WATER MANAGEMENT: per SAP

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5/20/2015 TIME: 0800

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

amec

GROUNDWATER SAMPLING LOG

CLIENT: CSX LOCATION: Hutchinson Island DATE: 5/20/15

WELL NO. MW 201 WEATHER: Clear 80's SAMPLE TIME:

REMARKS: DUP #3 Taken SAMPLER(S): PGrazzo

WELL PURGING: WELL DIAMETER: 4" in. STATIC WATER LEVEL: 5.03 ft. WELL DEPTH: 11.35 ft.

LENGTH OF SATURATED ZONE: 6.32 linear ft. ONE WELL VOLUME: 4.1 gals.

THREE WELL VOLUMES = 12 gals. ACTUAL VOLUME EVACUATED: 4 gals.

PURGE METHOD: Peristaltic Pump DEPTH OF PUMP INTAKE: 8' ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
0825	21.21	6.52	9	.384	+112	1.72	500	.13	
0830	20.98	6.32	9	.372	106	1.05	500	.14	
0835	21.26	6.08	2.6	.357	-91	.70	500	.17	
0840	21.61	6.04	3.7	.349	-91	.60	500	.23	
0845	21.97	6.03	3.8	.333	-89	.53	500	.24	
0850	22.47	6.01	2.3	.330	-76	.53	500	.24	
0855	22.50	6.01	2.1	.329	-76	.54	500	.25	
Sample Time	0855		DUP03 - Time			0900			

SAMPLE WITHDRAWL METHOD:

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ammonia, Nitrates, Nitrites, Arsenic, Lead, Nickel, Zinc

SAMPLE ID NUMBER(s): MW-201-05202015 DUP-03-05202015

DECON METHOD: Per the Plan

PURGE WATER MANAGEMENT: Drum

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: TIME:

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

amec

GROUNDWATER SAMPLING LOG

CLIENT: CSX-RPI LOCATION: Hutchinson Is, Savannah, GA DATE: 5-20-15

WELL NO. PDMW-45R WEATHER: Sunny, 79°F SAMPLE TIME: 0925

REMARKS: _____ SAMPLER(S): JJJ

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 3.41 ft. WELL DEPTH: 20.02 ft.

LENGTH OF SATURATED ZONE: 16.61 linear ft. ONE WELL VOLUME: 2.7 gals.

THREE WELL VOLUMES = 8.1 gals. ACTUAL VOLUME EVACUATED: 2.7 gals.

PURGE METHOD: peristaltic pump DEPTH OF PUMP INTAKE: ~18 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	~~draw down~~ Water level (ft)	COMMENTS
0900	29.94	6.05	6.33	1.93	49	1.59	300	3.64	
0905	29.02	6.29	4.58	1.96	-39	1.42	300	3.67	
0910	27.91	6.34	3.93	2.00	-87	1.26	300	3.71	
0915	27.49	6.37	3.85	2.03	-100	1.21	300	3.75	
0920	27.27	6.40	4.07	2.04	-108	1.21	300	3.75	
0925	27.27	6.46	4.25	2.02	-116	1.21	300	3.75	

SAMPLE WITHDRAWL METHOD: per SAP

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1 x 250 ml H_2SO_4 poly for ammonia; 1 x 125 ml poly unpres & 1 x 125 ml poly H_2SO_4 for nitrate and nitrite; 1 x 250 ml poly HNO_3 for As, Pb, Ni

SAMPLE ID NUMBER(s): PDMW-45R_05202015

DECON METHOD: per SAP

PURGE WATER MANAGEMENT: per SAP

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5/21/2015 TIME: 0800

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

Page ____ of ____

CLIENT: CSX LOCATION: Hutchinson Island DATE: 5/20/15

WELL NO. EW-1 WEATHER: Clear 80's SAMPLE TIME: ____

REMARKS: ____ SAMPLER(S): PG/ZCO

WELL PURGING: WELL DIAMETER: 4" in. STATIC WATER LEVEL: 3.53 ft. WELL DEPTH: 13.90 ft.

LENGTH OF SATURATED ZONE: 10.37 linear ft. ONE WELL VOLUME: 6.7 gals.

THREE WELL VOLUMES = 20 gals. ACTUAL VOLUME EVACUATED: 9.6 gals.

PURGE METHOD: Peristaltic Pump DEPTH OF PUMP INTAKE: 8' ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
0935	2037	3.67	47	3.04	146	.82	500	.36	
0940	2032	3.67	56	2.63	145	.77	500	.48	
0945	2071	3.80	20	1.61	146	.48	500	.45	
0950	2076	3.76	15	1.91	147	.41	500	.45	
0955	2075	3.74	10	2.24	145	.37	500	.44	
1000	2077	3.75	7.1	2.37	144	.36	500	.40	
1005	2083	3.74	3.4	2.39	143	.35	500	.40	
1010	2082	3.74	3.1	2.40	143	.35	500	.40	

Sample Time 1010 Dup#2 1015

SAMPLE WITHDRAWL METHOD: ____

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:
Ammonia, Nitrates, Nitrites, Arsenic, Chromium, Lead, Nickel + Zinc.

SAMPLE ID NUMBER(s): EW-01-05202015 Dup2-05202015

DECON METHOD: Per The Plan

PURGE WATER MANAGEMENT: Drum 1

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: ____ TIME: ____

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

CLIENT: CSX-RPI LOCATION: Hutchinson Island, Savannah, GA DATE: 5-20-2015

WELL NO. MW-1 WEATHER: Sunny, 83°F SAMPLE TIME: 1047

REMARKS: _____ SAMPLER(S): JJS

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 3.45 ft. WELL DEPTH: 17.40 ft.

LENGTH OF SATURATED ZONE: 13.95 linear ft. ONE WELL VOLUME: _____ gals.

THREE WELL VOLUMES = _____ gals. ACTUAL VOLUME EVACUATED: _____ gals.

PURGE METHOD: peristaltic pump DEPTH OF PUMP INTAKE: ~15 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	~~water draw-down~~ level (ft)	COMMENTS
1007	23.64	5.96	7.99	5.14	-46	1.89	240	4.97	
1012	23.86	5.95	10.2	5.13	-56	1.73	180	5.46	
1017	24.20	5.94	6.52	5.05	-62	1.68	180	5.84	
1022	24.28	5.93	6.23	5.02	-66	1.64	180	6.32	
1032	25.78	5.92	8.88	4.99	-69	1.64	160	6.64	
1037	26.51	5.89	7.01	4.93	-69	1.64	160	6.81	
1042	26.40	5.89	6.80	4.88	-68	1.66	160	6.92	
1047	26.56	5.87	8.12	4.83	-68	1.64	160	7.08	

SAMPLE WITHDRAWL METHOD: per SAP

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1 x 250 ml H_2SO_4 poly for ammonia, 1 x 125 ml poly unpres. and 1 x 125 mL H_2SO_4 for nitrate and nitrite, 1 x 250 ml poly HNO_3 for As, Pb

SAMPLE ID NUMBER(s): ~~PB-1~~ MW-1_05202015

DECON METHOD: per SAP

PURGE WATER MANAGEMENT: per SAP

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5/21/2015 TIME: 0800

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

Page ___ of ___

CLIENT: CSX LOCATION: Hutchinson Island DATE: 5/20/15

WELL NO. PDMW10R WEATHER: clear and 80s SAMPLE TIME: 1105

REMARKS: ___ SAMPLER(S): P. Guzzo

WELL PURGING: WELL DIAMETER: 2" in. STATIC WATER LEVEL: 4.40 ft. WELL DEPTH: 12.33 ft.

LENGTH OF SATURATED ZONE: 7.9 linear ft. ONE WELL VOLUME: 1.3 gals.

THREE WELL VOLUMES = 4 gals. ACTUAL VOLUME EVACUATED: ___ gals.

PURGE METHOD: Peristaltic Pump DEPTH OF PUMP INTAKE: 8' ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
1035	24.11	5.70	237	.580	-25	.78	300	.03	
1040	23.07	5.76	148	.560	-74	.62	300	.23	
1045	23.17	5.64	106	.562	-76	.74	300	.28	
1050	23.17	5.67	69	.565	-82	.42	300	.31	
1055	23.15	5.59	50	.566	-81	.36	300	.30	
1100	23.32	5.63	51	.564	-89	.35	300	.33	
1105	23.31	5.64	53	.566	-89	.34	300	.34	
Stable Time 1105									

SAMPLE WITHDRAWL METHOD: ___

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ammonia/nitrate/nitrite, Arsenic, Lead + Nickel

SAMPLE ID NUMBER(s): PDMW-10R-05202015

DECON METHOD: Per the Plan

PURGE WATER MANAGEMENT: Drum

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: ___ TIME: ___

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

amec GROUNDWATER SAMPLING LOG

CLIENT: CSX-RPI LOCATION: Hutchinson Is., Savannah, GA DATE: 5-20-15

WELL NO. PDMW-8R WEATHER: Sunny, 85°F SAMPLE TIME: 1315

REMARKS: _____ SAMPLER(S): JJJ

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 3.79 ft. WELL DEPTH: 12.69 ft.

LENGTH OF SATURATED ZONE: 8.9 linear ft. ONE WELL VOLUME : 1.5 gals.

THREE WELL VOLUMES = 4.5 gals. ACTUAL VOLUME EVACUATED: _____ gals.

PURGE METHOD: peristaltic pump DEPTH OF PUMP INTAKE: ~10 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	~~draw down~~ water Level (ft)	COMMENTS
1245	30.64	6.16	25.4	5.51	-58	1.30	300	3.84	
1250	27.83	6.31	16.8	5.84	-101	1.24	300	3.84	
1255	26.66	6.38	17.8	5.61	-121	1.25	300	3.84	
1300	26.73	6.44	14.8	5.46	-134	1.25	300	3.84	
1305	27.01	6.46	9.75	5.40	-142	1.23	300	3.84	
1310	27.27	6.46	7.40	5.38	-146	1.20	300	3.84	
1315	27.50	6.45	5.02	5.38	-149	1.18	300	3.84	

SAMPLE WITHDRAWL METHOD: per SAP

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1 x 250ml poly w/ H_2SO_4 for ammonia; 1x125 ml poly unpres. and 1x125ml poly w/ H_2SO_4 for nitrate and nitrite; 1 x 250ml poly w/ HNO_3 for As, Pb, Ni.

SAMPLE ID NUMBER(s): PDMW-8R_05202015

DECON METHOD: per SAP

PURGE WATER MANAGEMENT: per SAP

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America Savannah, GA

DATE: 5-21-2015 TIME: _____

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

Page ___ of ___

CLIENT: CSX LOCATION: Hutchinson Island DATE: 5/20/19

WELL NO. PDMW-19R WEATHER: clear 80's SAMPLE TIME: 1325

REMARKS: ___ SAMPLER(S): PGA ZED

WELL PURGING: WELL DIAMETER: 2" in. STATIC WATER LEVEL: 4.45 ft. WELL DEPTH: 10.33 ft.

LENGTH OF SATURATED ZONE: 5.88 linear ft. ONE WELL VOLUME : 1 gals.

THREE WELL VOLUMES = 3 gals. ACTUAL VOLUME EVACUATED: ___ gals.

PURGE METHOD: Peristaltic Pump DEPTH OF PUMP INTAKE: 7' ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
1250	20.29	5.94	43	.677	-18	~~1.62~~ 1.28	150	.46	
1255	23.71	5.78	52	.673	-43	.96	150	.62	
1300	2201	5.68	31	.670	-64	.75	150	.83	
1305	2218	5.70	18	.669	-67	.64	150	.85	
1310	2200	5.74	9	.674	-72	.52	150	.91	
1315	2209	5.75	6	.674	-72	.57	150	.92	
1320	2180	5.77	3	.672	-74	.47	150	.92	
1325	2181	5.77	2	.671	-74	.47	150	.92	

SAMPLE WITHDRAWL METHOD: ___

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

___

___

SAMPLE ID NUMBER(s): ___

DECON METHOD: ___

PURGE WATER MANAGEMENT: ___

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: ___ TIME: ___

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

CLIENT: CSX RPI LOCATION: Hutchinson I3, Savannah, GA DATE: 5-20-15

WELL NO. PDMW-47 WEATHER: Cloudy, 86°F. SAMPLE TIME: 1436

REMARKS: _____ SAMPLER(S): JJJ

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 4.57 ft. WELL DEPTH: 11.50 ft.

LENGTH OF SATURATED ZONE: 6.93 linear ft. ONE WELL VOLUME: 1.1 gals.

THREE WELL VOLUMES = 3.3 gals. ACTUAL VOLUME EVACUATED: _____ gals.

PURGE METHOD: peristaltic pump DEPTH OF PUMP INTAKE: ~10 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	~~draw down~~ water level (ft)	COMMENTS
1356	27.70	6.10	104	5.16	-97	1.41	260	5.05	
1401	25.64	5.96	101	5.62	-90	1.28	260	5.06	
1406	24.70	5.92	69.3	6.04	-89	1.28	260	5.07	
1411	24.32	5.92	45.1	6.30	-91	1.31	260	5.08	
1416	24.15	5.92	32.3	6.43	-93	1.34	260	5.10	
1421	24.40	5.93	24.9	6.54	-95	1.35	260	5.11	
1426	24.63	5.93	21.3	6.63	-97	1.36	260	5.12	
1431	24.45	5.95	20.9	6.63	-99	1.36	260	5.13	
1436	25.08	5.96	20.0	6.58	-101	1.40	260	5.14	

SAMPLE WITHDRAWL METHOD: per SAP

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:
1 x 250 ml poly w/ H_2SO_4 for ammonia; 1 x 125 ml poly unpres. and 1 x 125 ml poly w/ H_2SO_4 for nitrate and nitrite; 1 x 250 ml poly w/ HNO_3 for As and Pb

SAMPLE ID NUMBER(s): PDMW-47_05202015

DECON METHOD: per SAP

PURGE WATER MANAGEMENT: per SAP

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5/21/2015 TIME: 0800

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

Page ___ of ___

CLIENT: CSX LOCATION: Hutchinson Island DATE: 5/20/15

WELL NO. PDMW-46 WEATHER: overcast T storms SAMPLE TIME: 1450
805

REMARKS: ___ SAMPLER(S): PGAZZO

WELL PURGING: WELL DIAMETER: 2" in. STATIC WATER LEVEL: 5.13 ft. WELL DEPTH: 1058 ft.

LENGTH OF SATURATED ZONE: 5.45 linear ft. ONE WELL VOLUME : .9 gals.

THREE WELL VOLUMES = 2.8 gals. ACTUAL VOLUME EVACUATED: ___ gals.

PURGE METHOD: Peristaltic Pump DEPTH OF PUMP INTAKE: 7' ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
1415	27.66	6.19	12	.266	-29	.71	250	—	
1420	24.44	5.58	1.7	.266	-27	.39	250	.21	
1425	23.90	5.57	3.6	.301	-82	.35	250	.22	
1430	23.01	5.67	2.5	.348	-76	.31	250	.25	
1435	22.62	5.77	2.1	.377	-92	.29	250	.23	
1440	22.27	5.85	2.0	.378	-106	.29	250	.22	
1445	22.27	5.89	2	.393	-107	.28	250	.22	
1450	22.25	5.90	2	.401	-108	.27	250	.22	

SAMPLE WITHDRAWL METHOD: ___

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

___

___

SAMPLE ID NUMBER(s): ___

DECON METHOD: ___

PURGE WATER MANAGEMENT: ___

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: ___ TIME: ___

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

CLIENT: CSX RPI LOCATION: Hutchinson Island, Savannah, GA DATE: 5-20-2015

WELL NO. PDMW-33R2 WEATHER: Cloudy, 80°F SAMPLE TIME: 1542

REMARKS: _____ SAMPLER(S): JJJ

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 4.07 ft. WELL DEPTH: 17.50 ft.

LENGTH OF SATURATED ZONE: 13.43 linear ft. ONE WELL VOLUME: 2.2 gals.

THREE WELL VOLUMES = 6.6 gals. ACTUAL VOLUME EVACUATED: _____ gals.

PURGE METHOD: peristaltic pump DEPTH OF PUMP INTAKE: ~15 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	~~draw-down~~ (ft)	COMMENTS
1517	21.69	6.16	15.0	9.37	-68	1.75	300	5.10	
1522	21.89	6.21	7.92	9.44	-77	1.47	200	5.10	
1527	22.12	6.23	8.40	9.47	-82	1.41	200	5.10	
1532	22.03	6.23	6.80	9.51	-85	1.39	200	5.10	
1537	22.10	6.24	6.94	9.59	-87	1.36	200	5.10	
1542	21.90	6.25	7.88	9.60	-89	1.37	200	5.10	

SAMPLE WITHDRAWL METHOD: per SAP

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1 x 250ml poly w/ H_2SO_4 for ammonia; 1 x 125ml poly unpres. and 1 x 125ml poly w/ H_2SO_4 for nitrate and nitrite; 1 x 250ml poly w/ HNO_3 for As, Pb

SAMPLE ID NUMBER(s): PDMW-33R2_05202015

DECON METHOD: per SAP

PURGE WATER MANAGEMENT: per SAP

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5-21-2015 TIME: 0800

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

Page ___ of ___

CLIENT: CSX LOCATION: Hutchinson Island DATE: 5/20/15

WELL NO. PDMW30P WEATHER: Overcast Light Rain SAMPLE TIME: 1600

REMARKS: ___ SAMPLER(S): P. Gazzo

WELL PURGING: WELL DIAMETER: 2" in. STATIC WATER LEVEL: 4.71 ft. WELL DEPTH: 11.37 ft.

LENGTH OF SATURATED ZONE: 6.6 linear ft. ONE WELL VOLUME: 1 gals.

THREE WELL VOLUMES = 3 gals. ACTUAL VOLUME EVACUATED: ___ gals.

PURGE METHOD: Peristaltic Pump DEPTH OF PUMP INTAKE: 7' ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
1525	23.14	5.57	286	.529	-3	.74	300	—	
1530	22.07	5.74	78	.602	-62	.65	300	.13	
1535	22.15	5.78	40	.646	-78	.50	300	.13	
1540	22.11	5.73	30	.680	-82	.40	300	.13	
1545	22.12	5.85	22	.706	-94	.36	300	.13	
1550	22.24	5.83	9	.736	-98	.34	300	.13	
1555	22.28	5.87	9	.742	-101	.34	300	.13	
1600	22.28	5.86	6	.743	-101	.34	300	.13	

SAMPLE WITHDRAWL METHOD: ___

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ammonia, Nitrates, Nitrites, Arsenic, Lead

SAMPLE ID NUMBER(s): PDMW-30P-05202015

DECON METHOD: Per Yellow Book

PURGE WATER MANAGEMENT: Drum

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: ___ TIME: ___

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

Page ____ of ____

CLIENT: CSX RPI LOCATION: Hutchinson Is., Savannah, GA DATE: 5-21-2015

WELL NO. PDMW-29D WEATHER: Sunny, 78°F SAMPLE TIME: 1026

REMARKS: _____ SAMPLER(S): JSJ

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 7.70 ft. WELL DEPTH: 51.07 ft.

LENGTH OF SATURATED ZONE: 43.37 linear ft. ONE WELL VOLUME: 7 gals.

THREE WELL VOLUMES = 21 gals. ACTUAL VOLUME EVACUATED: 3 gals.

PURGE METHOD: peristaltic pump DEPTH OF PUMP INTAKE: ~49 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
0946	25.74	7.05	6.12	1.14	49	2.09	240	7.65	
0951	24.72	6.68	6.68	1.06	11	1.55	240	7.61	
0956	24.34	6.62	4.77 10.5	1.05	-7	1.48	240	7.58	
1001	24.14	6.59	7.03	1.05	-21	1.45	240	7.53	
1006	24.08	6.48	9.10	1.09	-22	1.36	240	7.49	
1011	23.70	6.25	13.4	1.17	-15	1.39	240	7.45	
1016	23.90	5.98	7.61	1.22	-14	1.37	240	7.41	
1021	23.91	5.94	5.75	1.24	-22	1.33	240	7.38	
1026	23.88	5.92	4.12	1.25	-31	1.30	240	7.33	

SAMPLE WITHDRAWL METHOD: per SAP

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1 x 250 ml poly w/ H_2SO_4 for ammonia; 1 x 125 ml poly unpres. & 1 x 125 ml poly w/ H_2SO_4 for nitrate & nitrite; 1 x 250 ml poly w/ HNO_3 for As, Pb

SAMPLE ID NUMBER(s): PDMW-29D_05212015

DECON METHOD: per SAP

PURGE WATER MANAGEMENT: per SAP

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5-21-2015 TIME: 1620

CASING CAPACITY (gallons/linear foot)

1" = 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

CLIENT: CSX LOCATION: Hutchinson Island DATE: 5/21/15

WELL NO. TMW-1 WEATHER: Clear + 80's SAMPLE TIME:

REMARKS: SAMPLER(S): PGATZ

WELL PURGING: WELL DIAMETER: 2" in. STATIC WATER LEVEL: 3.08 ft. WELL DEPTH: 9.82 ft.

LENGTH OF SATURATED ZONE: 6.74 linear ft. ONE WELL VOLUME: 1.1 gals.

THREE WELL VOLUMES = 3.4 gals. ACTUAL VOLUME EVACUATED: gals.

PURGE METHOD: Peristaltic Pump DEPTH OF PUMP INTAKE: 6' ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
0940	22.29	7.33	21	16	65	.86	150	.74	
0945	21.03	7.24	15	15	54	.60	150	.93	
0950	21.29	7.27	12	14	47	.50	150	1.03	
0955	21.37	7.31	9	14	44	.44	150	1.24	
1000	21.56	7.33	7	14	41	.40	150	1.43	
1005	2108	7.36	8	15	39	.36	150	1.64	
1010	20.63	7.35	8	15	38	.35	150	1.99	
1015	2112	7.36	9	15	.38	.33	150	2.25	
1020	20.87	7.38	6	16	.36	.31	150	2.71	

SAMPLE WITHDRAWL METHOD:

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ammonia, Nitrates, Nitrites, PAH's, Lead, Total Arsenic Chromium Nickel, Zinc

SAMPLE ID NUMBER(s): TMW-01-05212015

DECON METHOD: Per The Plan

PURGE WATER MANAGEMENT: Drums

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: TIME: 1620

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

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GROUNDWATER SAMPLING LOG

CLIENT: CSX LOCATION: Hutchinson Island DATE: 5/21/15

WELL NO. TMW-01 WEATHER: _____ SAMPLE TIME: _____

REMARKS: _____ SAMPLER(S): PGM

WELL PURGING: WELL DIAMETER: _____ in. STATIC WATER LEVEL: _____ ft. WELL DEPTH: _____ ft.

LENGTH OF SATURATED ZONE: _____ linear ft. ONE WELL VOLUME : _____ gals.

THREE WELL VOLUMES = _____ gals. ACTUAL VOLUME EVACUATED: _____ gals.

PURGE METHOD: _____ DEPTH OF PUMP INTAKE: _____ ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	draw down (ft)	COMMENTS
1025	20.57	7.92	5	16	34	.29	150	2.71	
1030	20.98	7.85	5	17	33	.26	150	2.68	
1035	20.63	7.94	5	18	32	.26	150	2.66	
1040	21.11	7.94	6	19	31	.25	150	2.66	
								~~2.66~~ 2.68	
1040 Sample Time.									

SAMPLE WITHDRAWL METHOD: _____

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

5ee PL #1

SAMPLE ID NUMBER(s): _____

DECON METHOD: _____

PURGE WATER MANAGEMENT: _____

SAMPLES DELIVERED TO: Test Americe, Savannah, GA TRANSPORTER: Test Americe, Savannah, GA

DATE: 5-21-2015 TIME: 1620

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

amec

GROUNDWATER SAMPLING LOG

Page ____ of ____

CLIENT: CSX-RPT LOCATION: Hutchinson Island, Savannah, GA DATE: 5-21-2015

WELL NO. PDMW-26T WEATHER: Sunny, 82°F SAMPLE TIME: 1132

REMARKS: _____ SAMPLER(S): JJ

WELL PURGING: WELL DIAMETER: 2 in. STATIC WATER LEVEL: 1.94 ft. WELL DEPTH: 9.75 ft.

LENGTH OF SATURATED ZONE: 7.81 linear ft. ONE WELL VOLUME: 1.3 gals.

THREE WELL VOLUMES = 3.9 gals. ACTUAL VOLUME EVACUATED: 2.8 gals.

PURGE METHOD: peristaltic pump DEPTH OF PUMP INTAKE: 7 ft

WELL PURGE DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	flow rate (ml/min)	~~draw down~~ water level (ft)	COMMENTS
1052	25.07	6.59	42.2	8.90	-94	1.62	300	3.04	
1057	24.11	6.80	18.1	9.15	-138	1.19	220	3.33	
1102	24.48	6.80	15.3	9.10	-151	1.07	220	3.37	
1107	24.68	6.79	15.0	9.01	-153	1.05	220	3.42	
1112	24.88	6.78	13.9	8.90	-155	0.99	220	3.46	
1117	25.17	6.77	12.8	8.83	-155	0.95	220	3.50	
1122	25.51	6.76	12.2	8.73	-154	0.91	220	3.52	
1127	25.86	6.75	11.2	8.64	-154	0.89	220	3.52	
1132	26.15	6.74	9.89	8.55	-153	0.86	220	3.56	

SAMPLE WITHDRAWL METHOD: per SAP

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

1 x 250ml poly w/ H_2SO_4 For ammonia; 1x125ml poly unpres; 1 x 125 ml poly w/ H_2SO_4 for nitrate and nitrite; 1 x 250ml poly w/ HNO_3 for As, Pb

SAMPLE ID NUMBER(s): PDMW-26T_05212015

DECON METHOD: per SAP

PURGE WATER MANAGEMENT: per SAP

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5-21-2015 TIME: 1620

CASING CAPACITY (gallons/linear foot)

1"= 0.04, 2" = 0.16, 4" = 0.65, 6" = 1.47, 8" = 2.6, 10" = 4.08, 12" = 5.87

Low Flow Stabilization Parameters: pH(+/-0.1), Cond. (+/-3%), ORP (+/-10mV), D.O. (+/-10%), Turbidity (+/-10%)

amec

SURFACE WATER SAMPLING LOG

CLIENT: CSX-RPI LOCATION: Hutchinson Is, Savannah, GA DATE: 5/21/15

STATION ID: SW-04 LOW WEATHER: Clear, 80°F SAMPLE TIME: 0820

REMARKS: Low Tide SAMPLER(S): PG

SURFACE WATER SAMPLING INFORMATION:

SAMPLE ID: SW-04_05212015_LOW WATER COLOR: Brown

SAMPLE DEPTH: 2" feet below surface CLARITY: Cloudy

SAMPLE METHOD: peristaltic pump FLOATING DEBRIS: Veg. debris

WATER QUALITY DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	Salinity (ppt)	Depth (feet)	COMMENTS
0815	23.53	7.11	165	4.73	88	5.77	1.8	2.0	
0820	23.29	6.93	167	4.76	89	5.71	1.8	2.0	

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ammonia, Nitrate, Nitrite, Alkalinity

SAMPLE ID NUMBER(s): SW-04_05212015_LOW

DECON METHOD: per SAP

COMMENTS/OBSERVATIONS:

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5/21/2015 TIME: 1620

amec

SURFACE WATER SAMPLING LOG

CLIENT: CSX RPI LOCATION: Hutchinson Is, Savannah, GA DATE: 5/21/2015

STATION ID: SW-03 WEATHER: Sunny, 80°F SAMPLE TIME: 0845

REMARKS: Low Tide SAMPLER(S): PG

SURFACE WATER SAMPLING INFORMATION:

SAMPLE ID: SW-03_05212015_LOW WATER COLOR: Brown

SAMPLE DEPTH: 1.0 feet below surface CLARITY: Cloudy

SAMPLE METHOD: Peristaltic pump FLOATING DEBRIS: Veg. debris

WATER QUALITY DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	Salinity (ppt)	Depth (feet)	COMMENTS
0840	24.75	7.18	168	4.79	67	5.96	1.9	1.0	
0845	23.77	7.00	162	4.83	73	5.72	1.9	1.0	

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ammonia, Nitrate, Nitrite, Alkalinity

SAMPLE ID NUMBER(s): SW-03_05212015_LOW

DECON METHOD: DI SAP

COMMENTS/OBSERVATIONS:

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5/21/2015 TIME: 1620

amec

SURFACE WATER SAMPLING LOG

CLIENT: CSX RPT LOCATION: Hutchinson Is, Savannah, GA DATE: 5/21/2015

STATION ID: SW-02 WEATHER: Sunny, 80°F SAMPLE TIME: 0902

REMARKS: Low Tide SAMPLER(S): JJ

SURFACE WATER SAMPLING INFORMATION:

SAMPLE ID: SW-02_05212015_LOW WATER COLOR: Brown

SAMPLE DEPTH: 0.5 feet below surface CLARITY: Cloudy

SAMPLE METHOD: FLOATING DEBRIS: Veg. debris

WATER QUALITY DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	Salinity (ppt)	Depth (feet)	COMMENTS
0902	25.97	6.79	114	5.61	90	6.44	3.0	1.0	

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ammonia, Nitrate, Nitrite, Alkalinity

SAMPLE ID NUMBER(s): SW-02_05212015_LOW

DECON METHOD: per SAP

COMMENTS/OBSERVATIONS:

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5/21/2015 TIME: 1620

amec

SURFACE WATER SAMPLING LOG

CLIENT: CSX RPI LOCATION: Hutchinson Is, Savannah, GA DATE: 5/21/2015

STATION ID: SW-01 WEATHER: Sunny, 80°F SAMPLE TIME: 0915

REMARKS: Low Tide SAMPLER(S): JS

SURFACE WATER SAMPLING INFORMATION:

SAMPLE ID: SW-01_05212015_LAW WATER COLOR: Brown

SAMPLE DEPTH: 1.5 feet below surface CLARITY: Cloudy

SAMPLE METHOD: Peristaltic pump FLOATING DEBRIS: Veg. Debris

WATER QUALITY DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	Salinity (ppt)	Depth (feet)	COMMENTS
0915	26.28	7.01	68.4	4.76	80	6.37	2.5	2.5	

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ammonia, Nitrate, Nitrite, Alkalinity

SAMPLE ID NUMBER(s): SW-01_05212015_LAW

DECON METHOD: per SAP

COMMENTS/OBSERVATIONS:

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5/21/2015 TIME: 1620

amec

SURFACE WATER SAMPLING LOG

CLIENT: CSX RPI LOCATION: Hutchinson Is, Savannah, GA DATE: 5/21/15

STATION ID: SW-02 WEATHER: Sunny, 86°F SAMPLE TIME: 1210

REMARKS: High Tide SAMPLER(S): JJ

SURFACE WATER SAMPLING INFORMATION:

SAMPLE ID: SW-02_05212015_HIGH WATER COLOR: Brown

SAMPLE DEPTH: 2.5 feet below surface CLARITY: Cloudy

SAMPLE METHOD: Peristaltic pump FLOATING DEBRIS: Veg Debris

WATER QUALITY DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	Salinity (ppt)	Depth (feet)	COMMENTS
1210	30.76	7.06	31.3	5.70	-85	4.50	3.1	5	

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ammonia, Nitrate, Nitrite, Alkalinity

SAMPLE ID NUMBER(s): SW-02_05212015_HIGH

DECON METHOD: per SAP

COMMENTS/OBSERVATIONS:

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5/21/2015 TIME: 1620

amec

SURFACE WATER SAMPLING LOG

CLIENT: CSX RPF LOCATION: Hutchinson Is, Savannah, GA DATE: 5/21/2015

STATION ID: SW-01 WEATHER: Sunny, 86°F SAMPLE TIME: 1220

REMARKS: High Tide SAMPLER(S): JJ

SURFACE WATER SAMPLING INFORMATION:

SAMPLE ID: SW-01_05212015_HIGH WATER COLOR: Brown

SAMPLE DEPTH: 2.5 feet below surface CLARITY: Cloudy

SAMPLE METHOD: peristaltic pump FLOATING DEBRIS: Very. Debris

WATER QUALITY DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	Salinity (ppt)	Depth (feet)	COMMENTS
1220	34.31	7.19	32.9	4.73	-16	4.04	2.5	5	

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ammonia, Nitrate, Nitrite, Alkalinity

SAMPLE ID NUMBER(s): SW-01_05212015_HIGH

DECON METHOD: per SAP

COMMENTS/OBSERVATIONS:

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5/21/2015 TIME: ~~1230~~ 1620

amec

SURFACE WATER SAMPLING LOG

CLIENT: CSX RPI LOCATION: Hutchinson IS, Savannah, GA DATE: 5/21/15

STATION ID: SW-03 WEATHER: Sunny, 86°F SAMPLE TIME: 1300

REMARKS: High Tide SAMPLER(S): JS

SURFACE WATER SAMPLING INFORMATION:

SAMPLE ID: SW-03_05212015_HIGH WATER COLOR: Brown

SAMPLE DEPTH: 1.5 feet below surface CLARITY: Cloudy

SAMPLE METHOD: peristaltic pump FLOATING DEBRIS: Veg. Debris

WATER QUALITY DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	Salinity (ppt)	Depth (feet)	COMMENTS
1300	30.65	7.40	49.8	4.32	21	5.35	2.3	3.0	

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ammonia, Nitrate, Nitrite, Alkalinity

SAMPLE ID NUMBER(s): SW-03_05212015_HIGH

DECON METHOD: per SAP

COMMENTS/OBSERVATIONS:

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5/21/2015 TIME: 1620

amec

SURFACE WATER SAMPLING LOG

CLIENT: CSX BPI LOCATION: Hutchinson Is, Savannah, GA DATE: 5/21/2015

STATION ID: SW-04 WEATHER: Sunny, 86°F SAMPLE TIME: 1310

REMARKS: High Tide SAMPLER(S): JJ

SURFACE WATER SAMPLING INFORMATION:

SAMPLE ID: SW-04_05212015_H16H WATER COLOR: Brown

SAMPLE DEPTH: 1.5 feet below surface CLARITY: Cloudy

SAMPLE METHOD: peristaltic pump FLOATING DEBRIS: Veg Debris

WATER QUALITY DATA:

TIME	TEMP (C)	pH	TURB. (NTU)	COND. (mS/cm)	ORP (mV)	DO (ppm)	Salinity (ppt)	Depth (feet)	COMMENTS
1310	30.28	7.30	43.0	4.71	-24	5.15	2.5	3.0	

LABORATORY ANALYSIS, SAMPLE CONTAINERS USED INCLUDING NUMBER, TYPE, AND PRESERVATIVES:

Ammonia, Nitrate, Nitrite, Alkalinity

SAMPLE ID NUMBER(s): SW-04_05212015_H16H

DECON METHOD: per SAP

COMMENTS/OBSERVATIONS:

SAMPLES DELIVERED TO: Test America, Savannah, GA TRANSPORTER: Test America, Savannah, GA

DATE: 5/21/2015 TIME: 1620

APPENDIX C
BIOCHLOR OUTPUT SHEETS

BIOCHLOR Natural Attenuation Decision Support System

Version 2.2
Excel 2000

Hutchinson Island
EW-1 - River
Run Name

Data Input Instructions:
115 → 1. Enter value directly....or
↑ or → 2. Calculate by filling in gray
0.02 cells. Press Enter, then (C)
(To restore formulas, hit "Restore Formulas" button)
Variable* → Data used directly in model.

Test if Biotransformation is Occurring → Natural Attenuation Screening Protocol

TYPE OF CONSTITUENT: Ammonia ◉ Ethanes ○

1. ADVECTION

Seepage Velocity*	Vs	17.9	(ft/yr)
or			
Hydraulic Conductivity	K	3.0E-03	(cm/sec)
Hydraulic Gradient	i	0.00146	(ft/ft)
Effective Porosity	n	0.25	(-)

2. DISPERSION

Alpha x*	10	(ft)
(Alpha y) / (Alpha x)*	0.1	(-)
(Alpha z) / (Alpha x)*	1.E-99	(-)

Calc. Alpha x

3. ADSORPTION

Retardation Factor* → R
or

Soil Bulk Density, rho	1.7	(kg/L)		
FractionOrganicCarbon, foc	1.0E-3	(-)		
Partition Coefficient	Koc			
Ammonia	14	(L/kg)	1.10	(-)
Nitrite	24	(L/kg)	1.16	(-)
Nitrate	0	(L/kg)	1.00	(-)
		(L/kg)	1.00	(-)
		(L/kg)	1.00	(-)
Common R (used in model)* =			**3.00**	

4. BIOTRANSFORMATION -1st Order Decay Coefficient*

Zone 1

	λ (1/yr)	half-life (yrs)	Yield
NH3 → Nitrite	0.350		0.79
Nitrite → Nitrate	0.010		0.74
→	0.000		0.64
→	0.000		0.45

Zone 2

λ (1/yr)	half-life (yrs)
0.000	
0.000	
0.000	
0.000	

λ HELP

5. GENERAL

Simulation Time*	40	(yr)
Modeled Area Width*	300	(ft)
Modeled Area Length*	540	(ft)
Zone 1 Length*	540	(ft)
Zone 2 Length*	0	(ft)

L, W

Zone 2= L - Zone 1

6. SOURCE DATA TYPE: Decaying, Single Planar

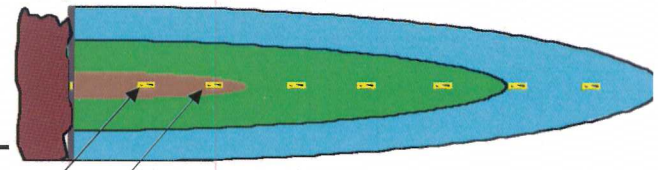
Source Options

Source Thickness in Sat. Zone* 10 (ft)

Width* (ft) Y1: 300

Conc. (mg/L)*	C1	k_s* (1/yr)
Ammonia	1100.0	0.035
Nitrite		0.035
Nitrate		0.035
		0.035
		0.035

Vertical Plane Source: Determine Source Well Location and Input Solvent Concentrations



View of Plume Looking Down

Observed Centerline Conc. at Monitoring Wells

7. FIELD DATA FOR COMPARISON

Ammonia Conc. (mg/L)	320.0	7.3	.6
Nitrite Conc. (mg/L)	.05	.05	.05
Nitrate Conc. (mg/L)	.05	.05	.05
Distance from Source (ft)	0	160	500
Date Data Collected	2015	2013	

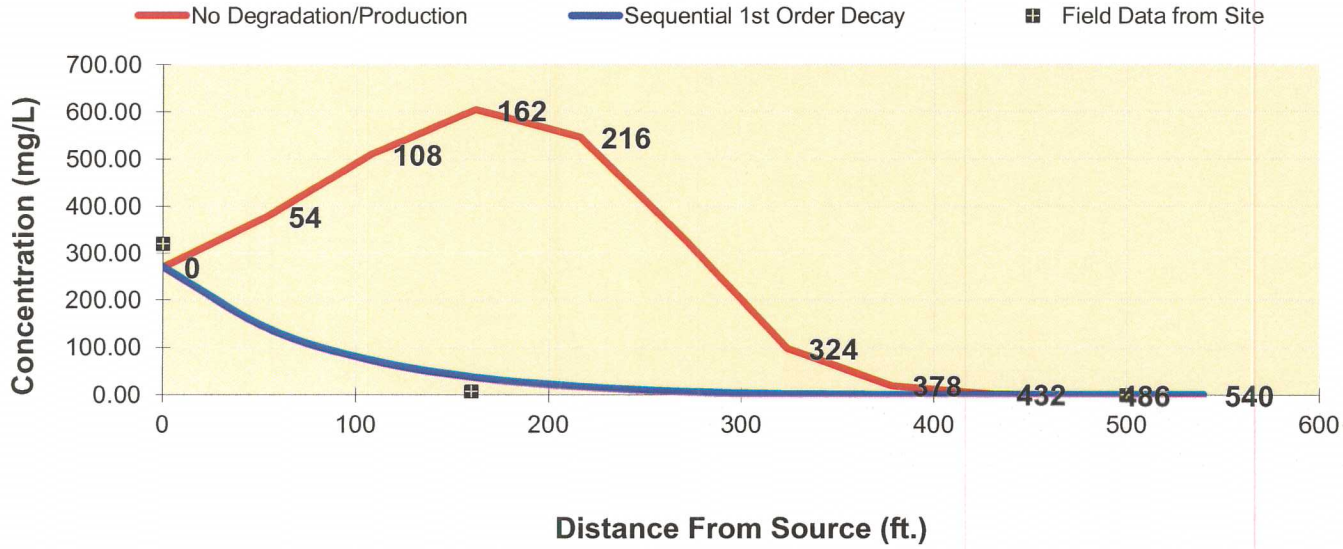
8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE | RUN ARRAY | Help | Restore | RESET | SEE OUTPUT | Paste

AMMONIA CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Ammonia	Distance from Source (ft)										
	0	54	108	162	216	270	324	378	432	486	540
No Degradation	271.257	378.592	509.975	604.108	546.484	332.033	98.292	20.685	2.501	0.171	0.007
Biotransformation	271.2566	140.367	72.532	36.966	17.622	6.991	1.810	0.324	0.035	0.002	0.000

	Monitoring Well Locations (ft)										
	TMW-1	PDMW-48	PDMW-49								
Field Data from Site	320.000	7.300	0.600								



See PCE

See TCE

See DCE

Prepare Animation

Time:

40.0 Years

Log ⟺ Linear

Return to Input

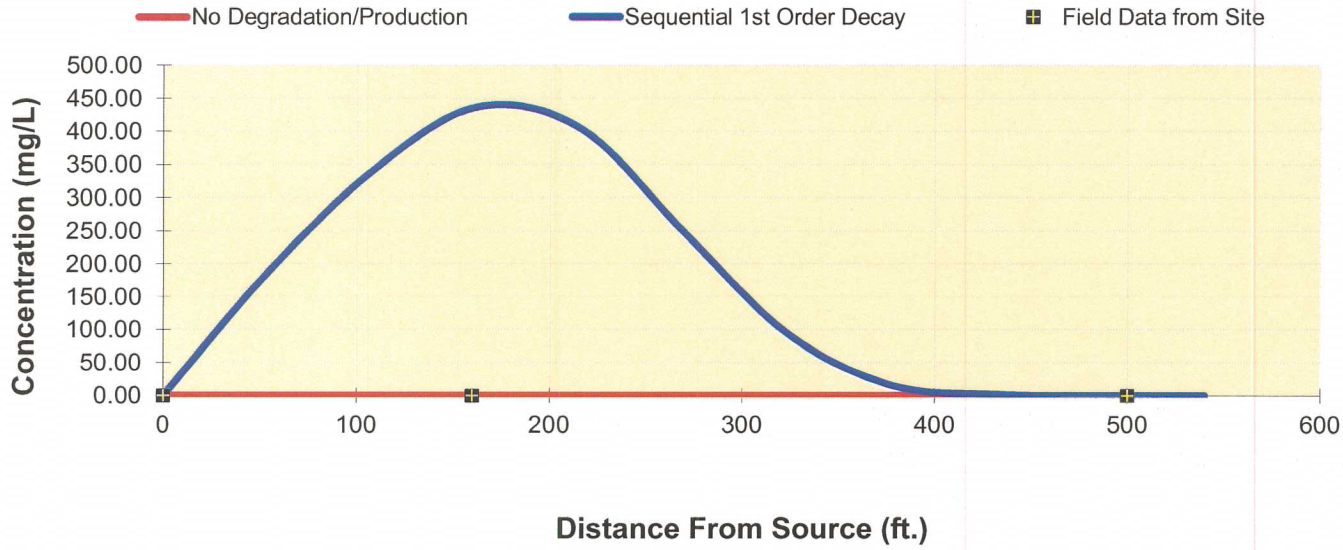
To All

To Array

AMMONIA CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Nitrite	Distance from Source (ft)										
	0	54	108	162	216	270	324	378	432	486	540
No Degradation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0000	186.995	339.687	436.239	404.050	247.268	93.004	15.457	1.869	0.128	0.005

	Monitoring Well Locations (ft)										
	TMW-1	PDMW-48	PDMW-49								
Field Data from Site	0.050	0.050	0.050								



See PCE

See TCE

See DCE

Prepare Animation

Time:

40.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

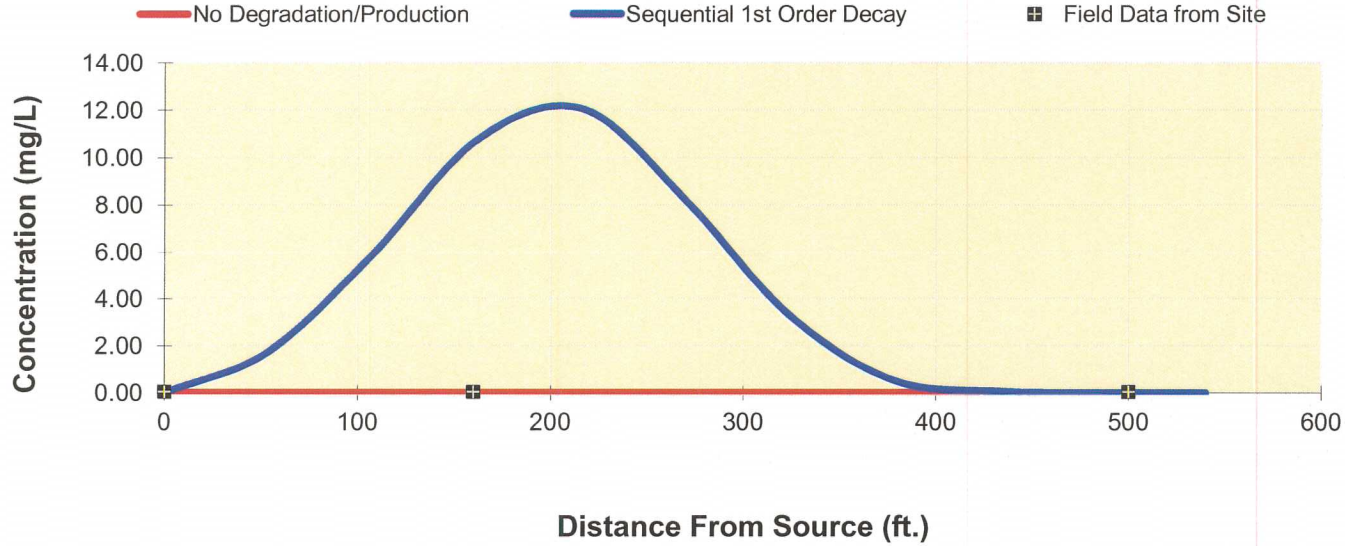
AMMONIA CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

Nitrate	0	54	108	162	216	270	324	378	432	486	540
No Degradation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0000	1.751	5.932	10.761	12.059	8.197	3.308	0.537	0.067	0.005	0.000

Monitoring Well Locations (ft)

	TMW-1	PDMW-48	PDMW-49								
Field Data from Site	0.050	0.050	0.050								



See PCE

See TCE

See DCE

Prepare Animation

Time:

40.0 Years

Log ⟺ Linear

Return to Input

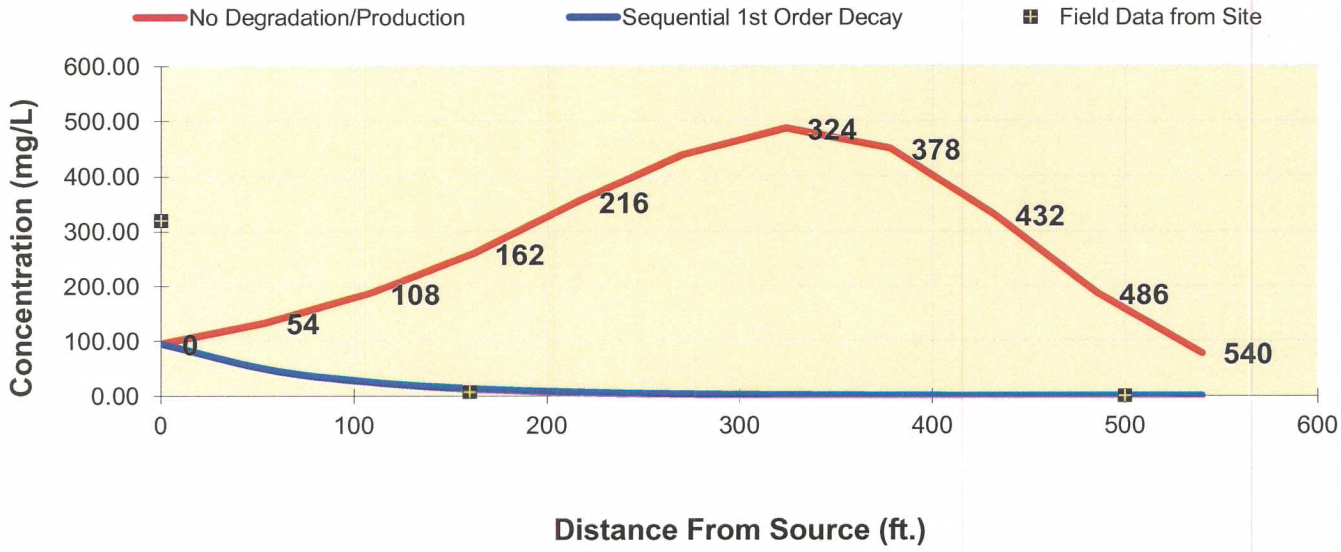
To All

To Array

AMMONIA CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Ammonia	Distance from Source (ft)										
	0	54	108	162	216	270	324	378	432	486	540
No Degradation	94.923	133.072	186.392	259.660	353.929	437.933	486.385	449.918	330.276	185.730	78.101
Biotransformation	94.9229	49.123	25.421	13.155	6.806	3.512	1.794	0.886	0.406	0.163	0.054

	Monitoring Well Locations (ft)										
	TMW-1	PDMW-48	PDMW-49								
Field Data from Site	320.000	7.300	0.600								



See PCE

See TCE

See DCE

Prepare Animation

Time:

70.0 Years

Log ⟺ Linear

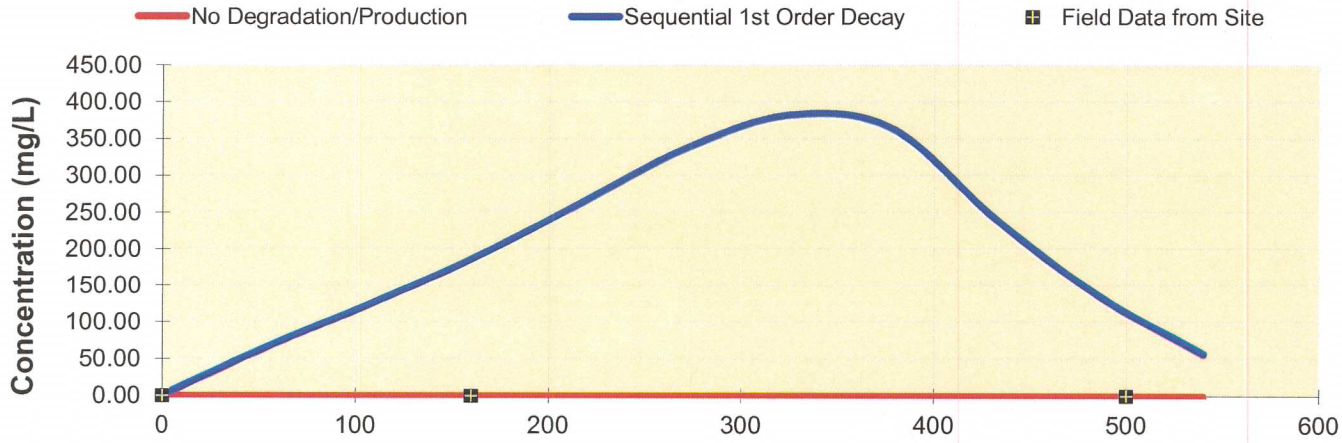
Return to Input

To All

To Array

AMMONIA CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Nitrite	Distance from Source (ft)										
	0	54	108	162	216	270	324	378	432	486	540
No Degradation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0000	65.873	124.750	188.386	261.574	335.780	382.016	364.543	240.771	134.987	56.636
	Monitoring Well Locations (ft)										
	TMW-1	PDMW-48	PDMW-49								
Field Data from Site	0.050	0.050	0.050								



See PCE

See TCE

See DCE

Prepare Animation

Time:

70.0 Years

Log ⟺ Linear

Return to Input

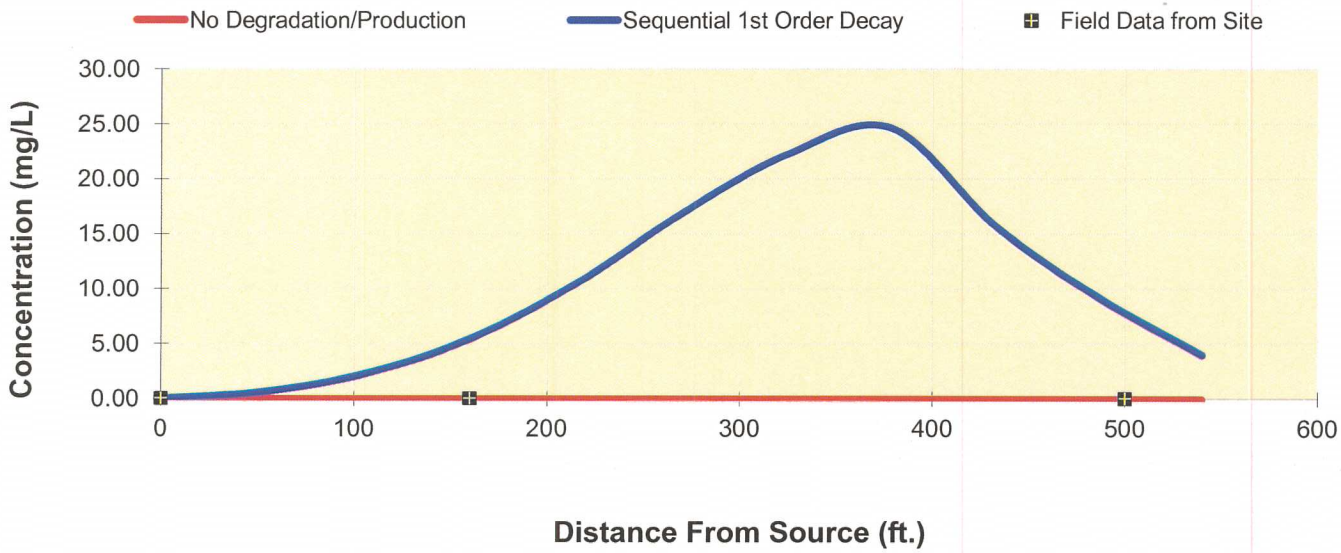
To All

To Array

AMMONIA CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Nitrate	Distance from Source (ft)										
	0	54	108	162	216	270	324	378	432	486	540
No Degradation	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0000	0.634	2.366	5.579	10.590	16.879	22.191	24.661	15.817	9.235	3.986

	Monitoring Well Locations (ft)										
	TMW-1	PDMW-48	PDMW-49								
Field Data from Site	0.050	0.050	0.050								



See PCE

See TCE

See DCE

Prepare Animation

Time:

70.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

BIOCHLOR Natural Attenuation Decision Support System

Version 2.2
Excel 2000

Hutchinson Island
TMW-1 - Canal
Run Name

Data Input Instructions:
115 → 1. Enter value directly....or
↑ or → 2. Calculate by filling in gray
0.02 cells. Press Enter, then (C)
(To restore formulas, hit "Restore Formulas" button)
Variable* → Data used directly in model.

Test if Biotransformation is Occurring → Natural Attenuation Screening Protocol

TYPE OF CONSTITUENT: Ammonia ◉ Ethanes ○

1. ADVECTION

Seepage Velocity*	Vs	14.2	(ft/yr)
or			
Hydraulic Conductivity	K	7.8E-04	(cm/sec)
Hydraulic Gradient	i	0.0044	(ft/ft)
Effective Porosity	n	0.25	(-)

2. DISPERSION

Alpha x*	10	(ft)
(Alpha y) / (Alpha x)*	0.1	(-)
(Alpha z) / (Alpha x)*	1.E-99	(-)

Calc. Alpha x

3. ADSORPTION

Retardation Factor* → R
or

Soil Bulk Density, rho	1.7	(kg/L)		
FractionOrganicCarbon, foc	1.0E-3	(-)		
Partition Coefficient	Koc			
Ammonia	14	(L/kg)	10.00	(-)
Nitrite	24	(L/kg)	1.16	(-)
Nitrate	0	(L/kg)	1.00	(-)
		(L/kg)	1.00	(-)
		(L/kg)	1.00	(-)
Common R (used in model)* =			**7.00**	

4. BIOTRANSFORMATION

-1st Order Decay Coefficient*

Zone 1

		λ (1/yr)	half-life (yrs)	Yield
NH3	Nitrite	0.347	2.00	0.79
Nitrite	Nitrate	0.630	1.10	0.74
		0.000		0.64
		0.000		0.45

Zone 2

λ (1/yr)	half-life (yrs)
0.000	
0.000	
0.000	
0.000	

λ HELP

5. GENERAL

Simulation Time*	40	(yr)
Modeled Area Width*	300	(ft)
Modeled Area Length*	320	(ft)
Zone 1 Length*	320	(ft)
Zone 2 Length*	0	(ft)

L, W

Zone 2= L - Zone 1

6. SOURCE DATA

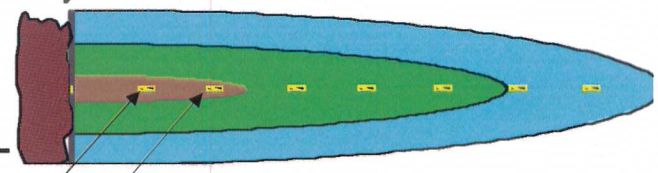
TYPE: Decaying
Single Planar

Source Options

Source Thickness in Sat. Zone* 10 (ft)

	Y1	k_s* (1/yr)
Width* (ft)	300	
Conc. (mg/L)*	C1	
Ammonia	18000.0	0.035
Nitrite	.0	0.035
Nitrate	.0	0.035
		0.035
		0.035

Vertical Plane Source: Determine Source Well Location and Input Solvent Concentrations



View of Plume Looking Down

Observed Centerline Conc. at Monitoring Wells

7. FIELD DATA FOR COMPARISON

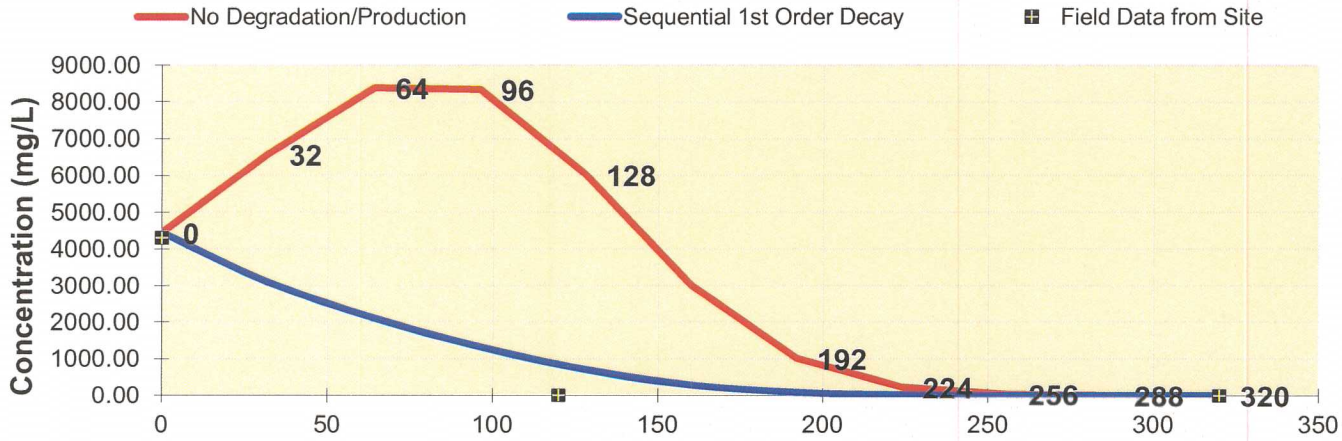
Ammonia Conc. (mg/L)	4300.0	8.5	.63
Nitrite Conc. (mg/L)	.05	.19	.05
Nitrate Conc. (mg/L)	290.0	.05	.05
Distance from Source (ft)	0	120	320
Date Data Collected	2015	2013	2

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE | RUN ARRAY | Help | Restore | RESET | SEE OUTPUT | Paste

AMMONIA CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Ammonia	Distance from Source (ft)										
	0	32	64	96	128	160	192	224	256	288	320
No Degradation	4438.746	6576.667	8379.784	8338.928	6020.333	3007.726	1010.702	224.572	32.647	1.953	0.117
Biotransformation	4438.7449	3099.733	2112.011	1327.502	705.034	289.319	85.692	17.522	2.361	0.159	0.009
	Monitoring Well Locations (ft)										
	TMW-1	PDMW-48	PDMW-49								
Field Data from Site	4300.000	8.500	0.630								



See PCE

See TCE

See DCE

Prepare Animation

Time:

40.0 Years

Log ⟺ Linear

Return to Input

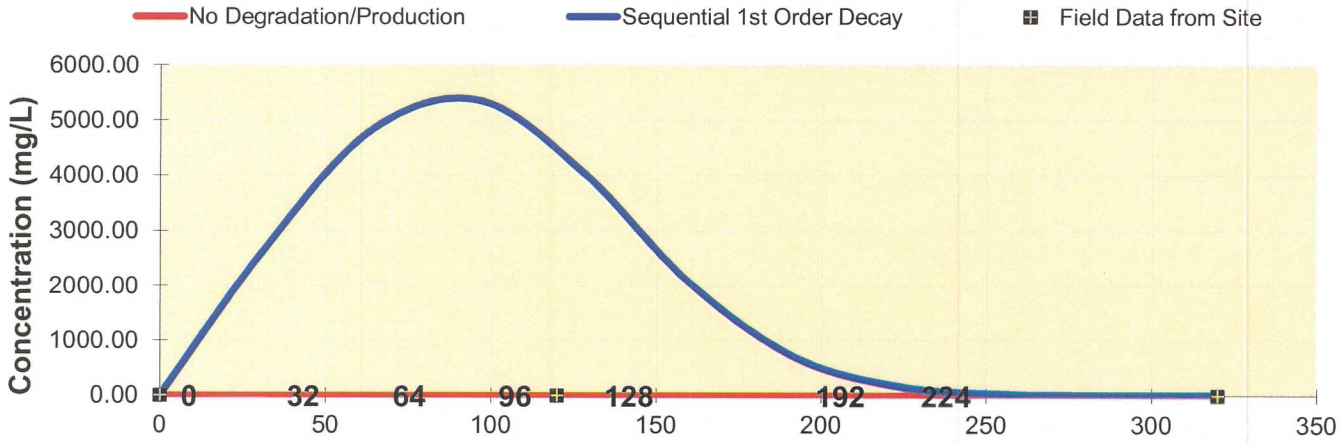
To All

To Array

AMMONIA CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Nitrite	Distance from Source (ft)										
	0	32	64	96	128	160	192	224	256	288	320
No Degradation	0.047	0.069	0.088	0.088	0.064	0.032	0.011	0.002	0.000	0.000	0.000
Biotransformation	0.0477	2709.256	4832.956	5364.743	4045.597	2061.797	699.929	156.416	22.856	2.203	0.082

	Monitoring Well Locations (ft)										
	TMW-1	PDMW-48	PDMW-49								
Field Data from Site	0.050	0.190	0.050								



See PCE

See TCE

See DCE

Prepare Animation

Time:

40.0 Years

Log ⟺ Linear

Return to Input

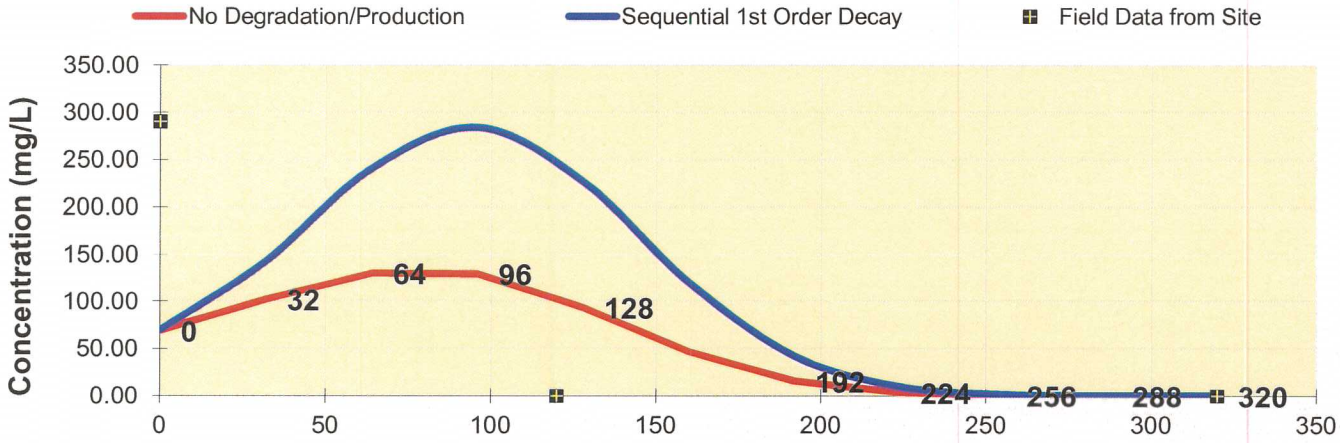
To All

To Array

AMMONIA CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Nitrate	Distance from Source (ft) 0	32	64	96	128	160	192	224	256	288	320
No Degradation	69.047	102.304	130.352	129.717	93.650	46.787	15.722	3.493	0.508	0.048	0.002
Biotransformation	69.0472	142.636	240.600	283.735	226.164	119.901	41.819	9.522	1.407	0.137	0.005

	Monitoring Well Locations (ft) TMW-1	PDMW-48	PDMW-49								
Field Data from Site	290.000	0.050	0.050								



See PCE

See TCE

See DCE

Prepare Animation

Time:

40.0 Years

Log ⟺ Linear

Return to Input

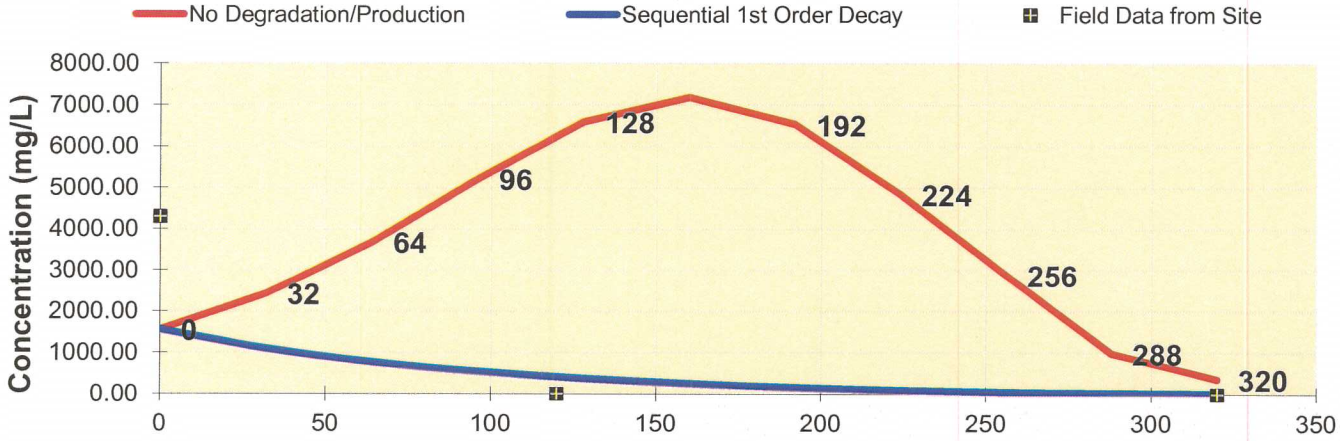
To All

To Array

AMMONIA CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Ammonia	Distance from Source (ft)										
	0	32	64	96	128	160	192	224	256	288	320
No Degradation	1553.285	2431.987	3683.510	5207.872	6590.361	7178.993	6527.064	4844.120	2890.004	991.934	362.252
Biotransformation	1553.2844	1089.042	763.023	532.728	367.339	245.218	153.441	86.527	42.369	15.100	4.941

	Monitoring Well Locations (ft)										
	TMW-1	PDMW-48	PDMW-49								
Field Data from Site	4300.000	8.500	0.630								



See PCE

See TCE

See DCE

Prepare Animation

Time:

70.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

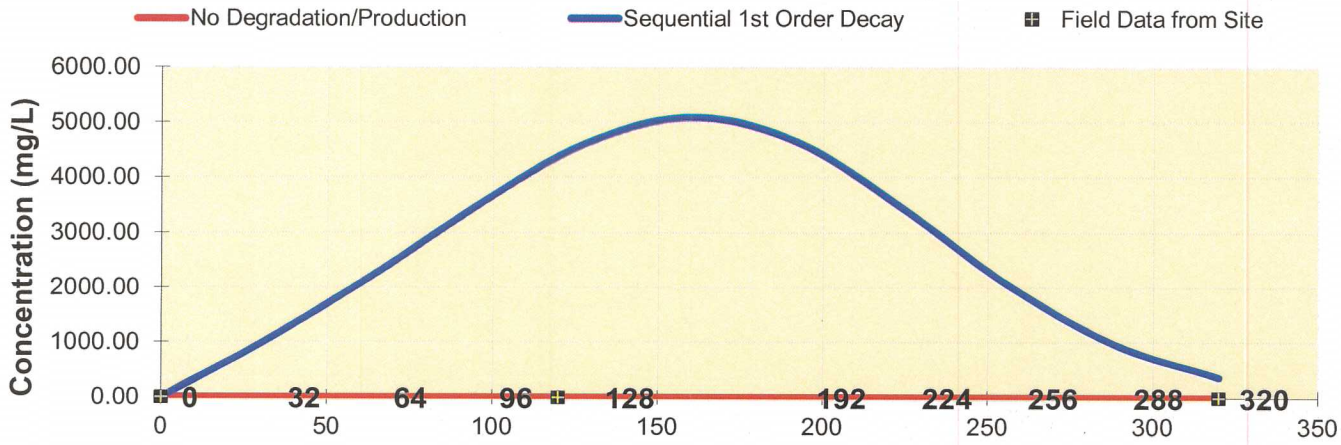
AMMONIA CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

Nitrite	0	32	64	96	128	160	192	224	256	288	320
No Degradation	0.016	0.026	0.039	0.055	0.070	0.076	0.069	0.051	0.031	0.014	0.005
Biotransformation	0.0167	1041.091	2226.416	3509.009	4610.797	5086.553	4641.380	3446.040	2054.539	976.117	365.665

Monitoring Well Locations (ft)

	TMW-1	PDMW-48	PDMW-49								
Field Data from Site	0.050	0.190	0.050								



See PCE

See TCE

See DCE

Prepare Animation

Time:

70.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

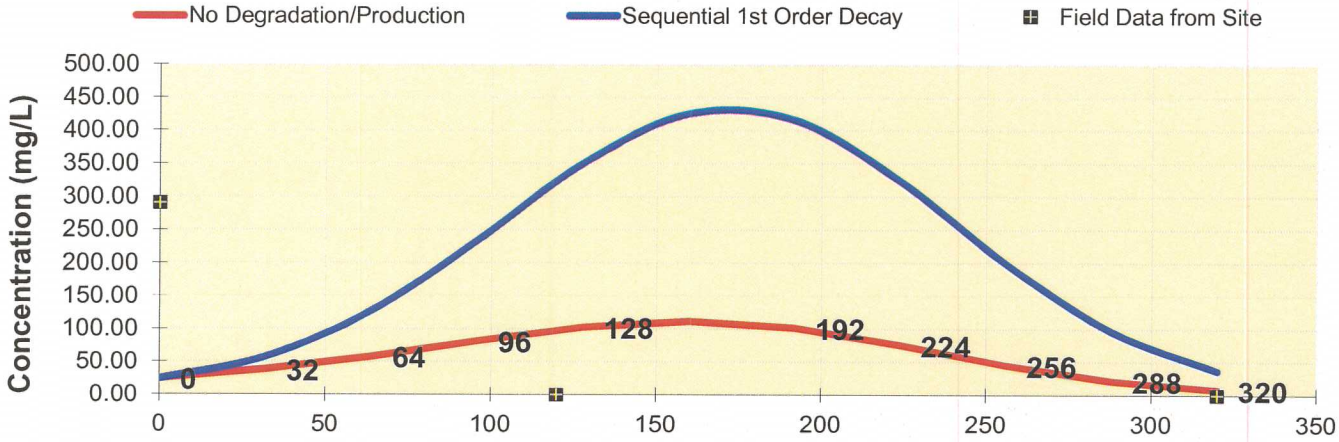
AMMONIA CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

Distance from Source (ft)

Nitrate	0	32	64	96	128	160	192	224	256	288	320
No Degradation	24.162	37.831	57.299	81.011	102.517	111.673	101.532	75.353	44.956	21.336	7.998
Biotransformation	24.1622	57.348	127.483	233.960	350.347	425.313	415.092	323.067	199.176	96.723	36.853

Monitoring Well Locations (ft)

	TMW-1	PDMW-48	PDMW-49								
Field Data from Site	290.000	0.050	0.050								



See PCE

See TCE

See DCE

Prepare Animation

Time:

70.0 Years

Log ⟺ Linear

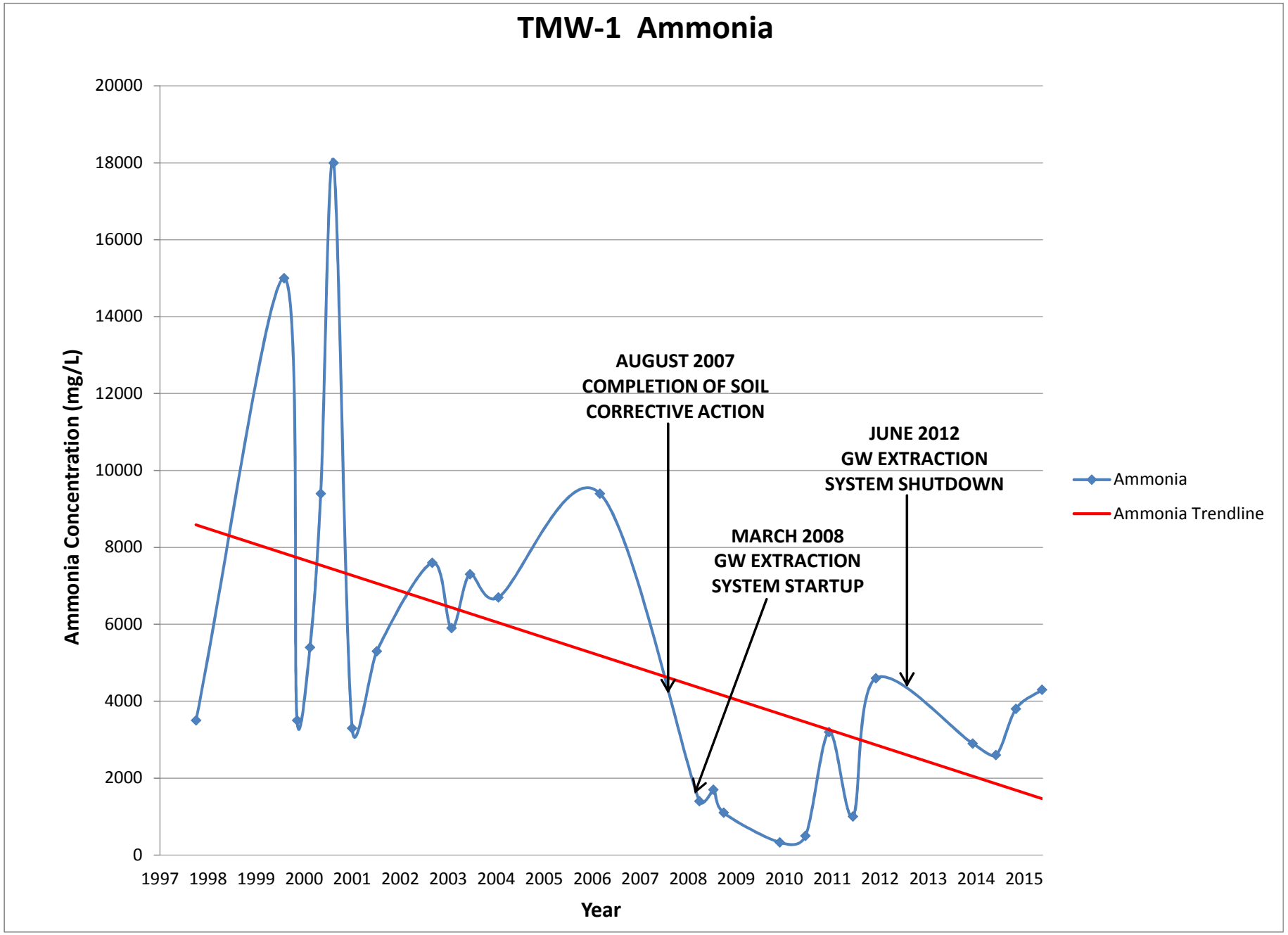
Return to Input

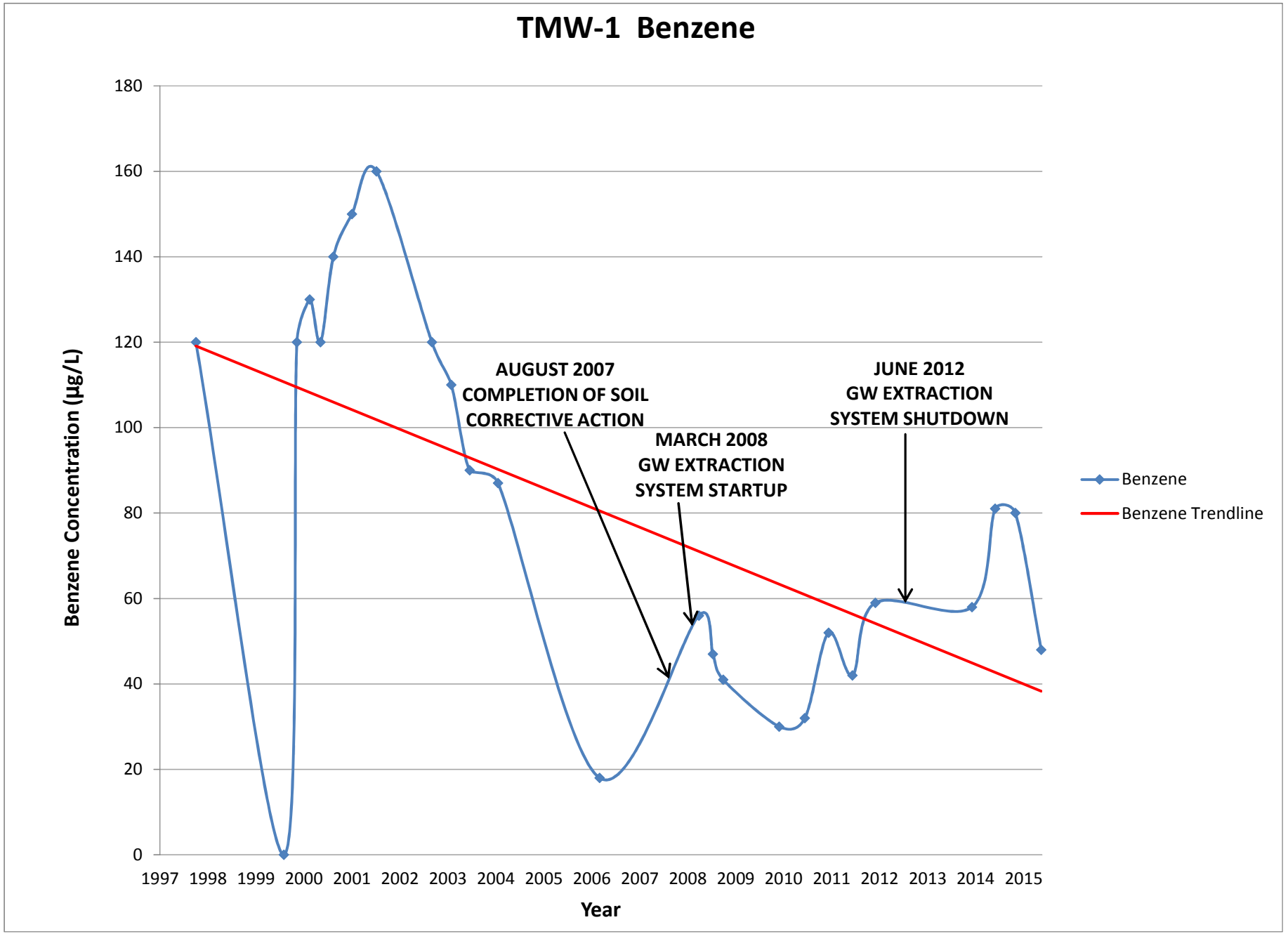
To All

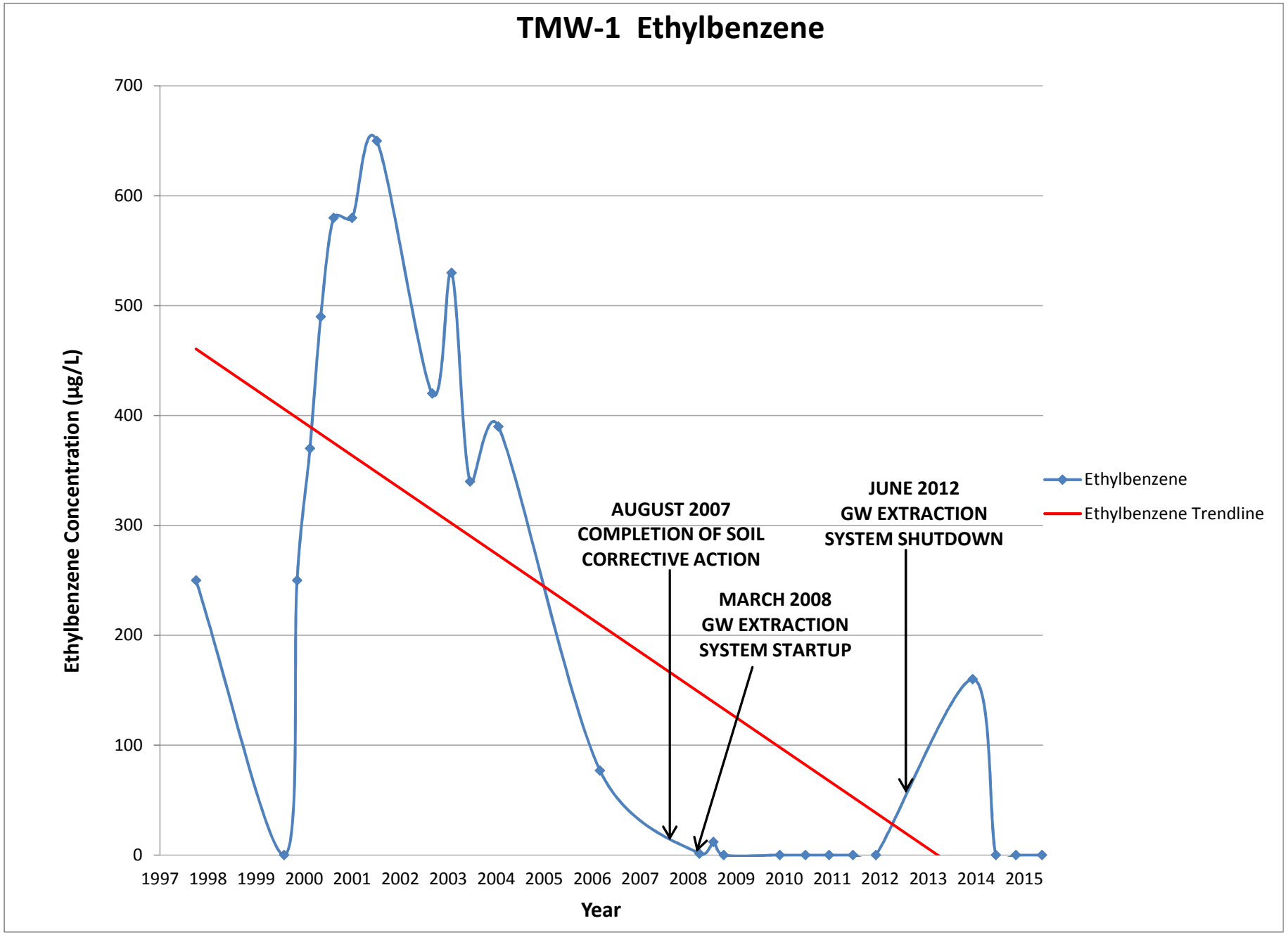
To Array

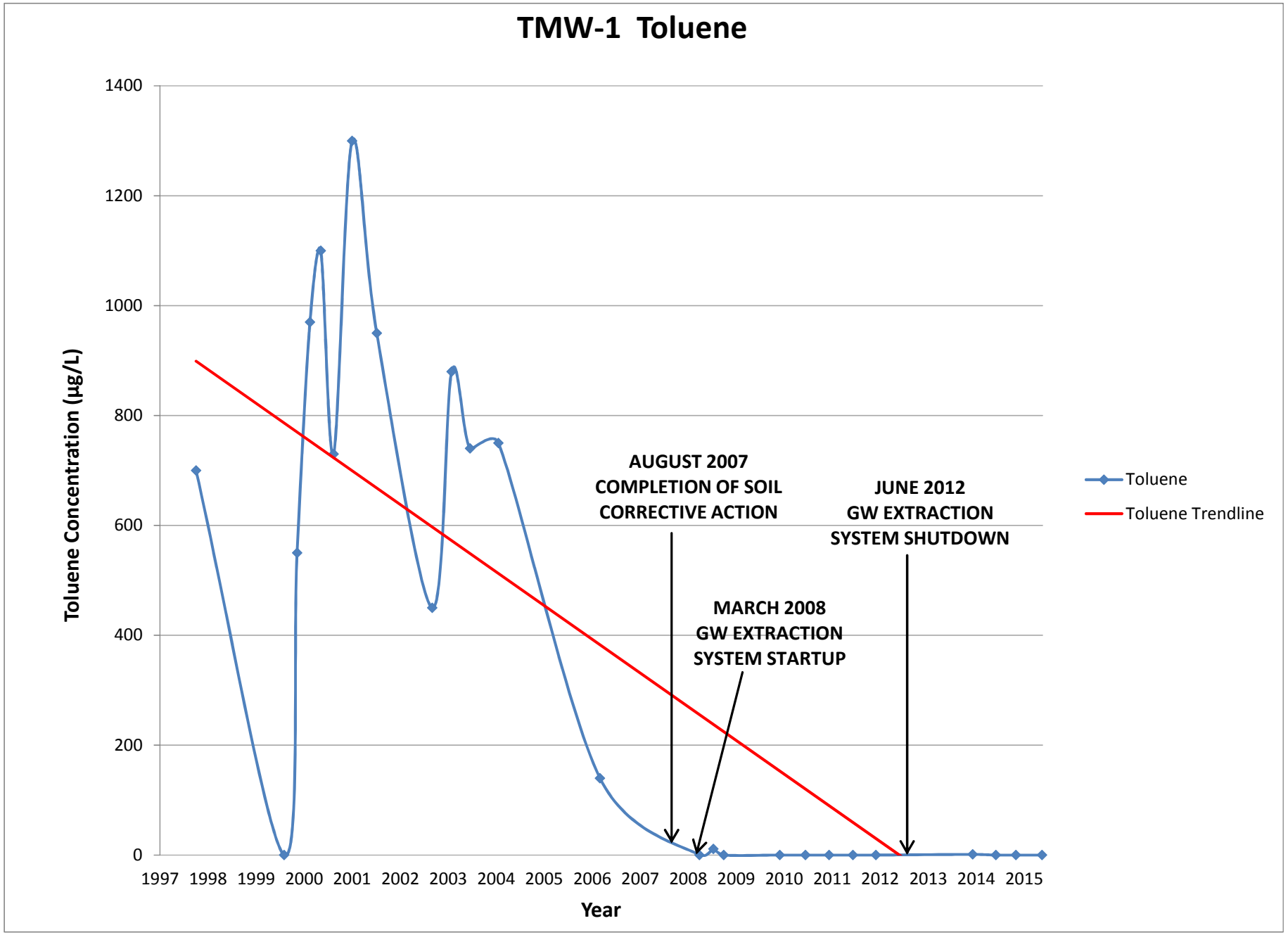
APPENDIX D

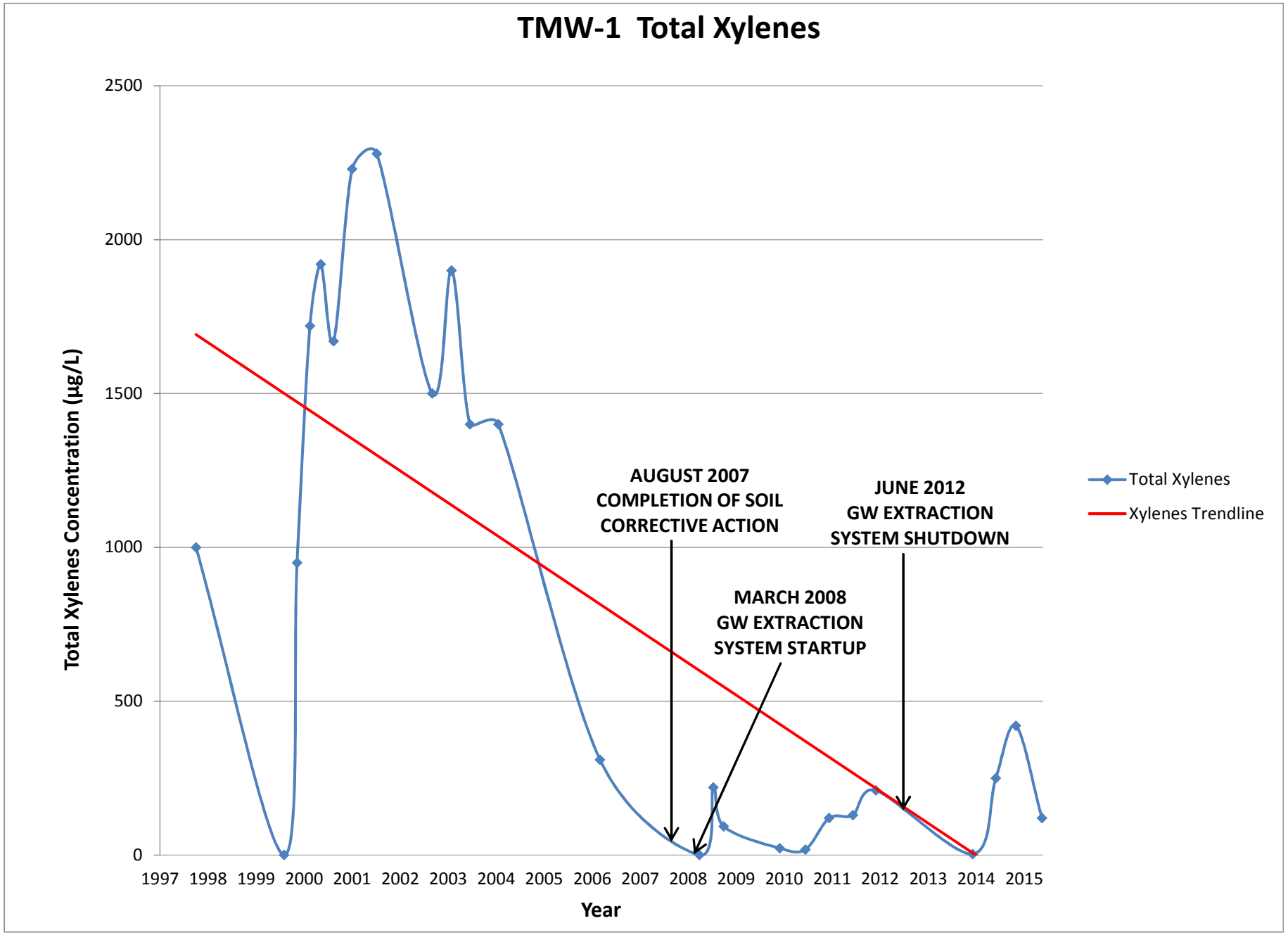
WATER QUALITY VS. TIME TREND GRAPHS

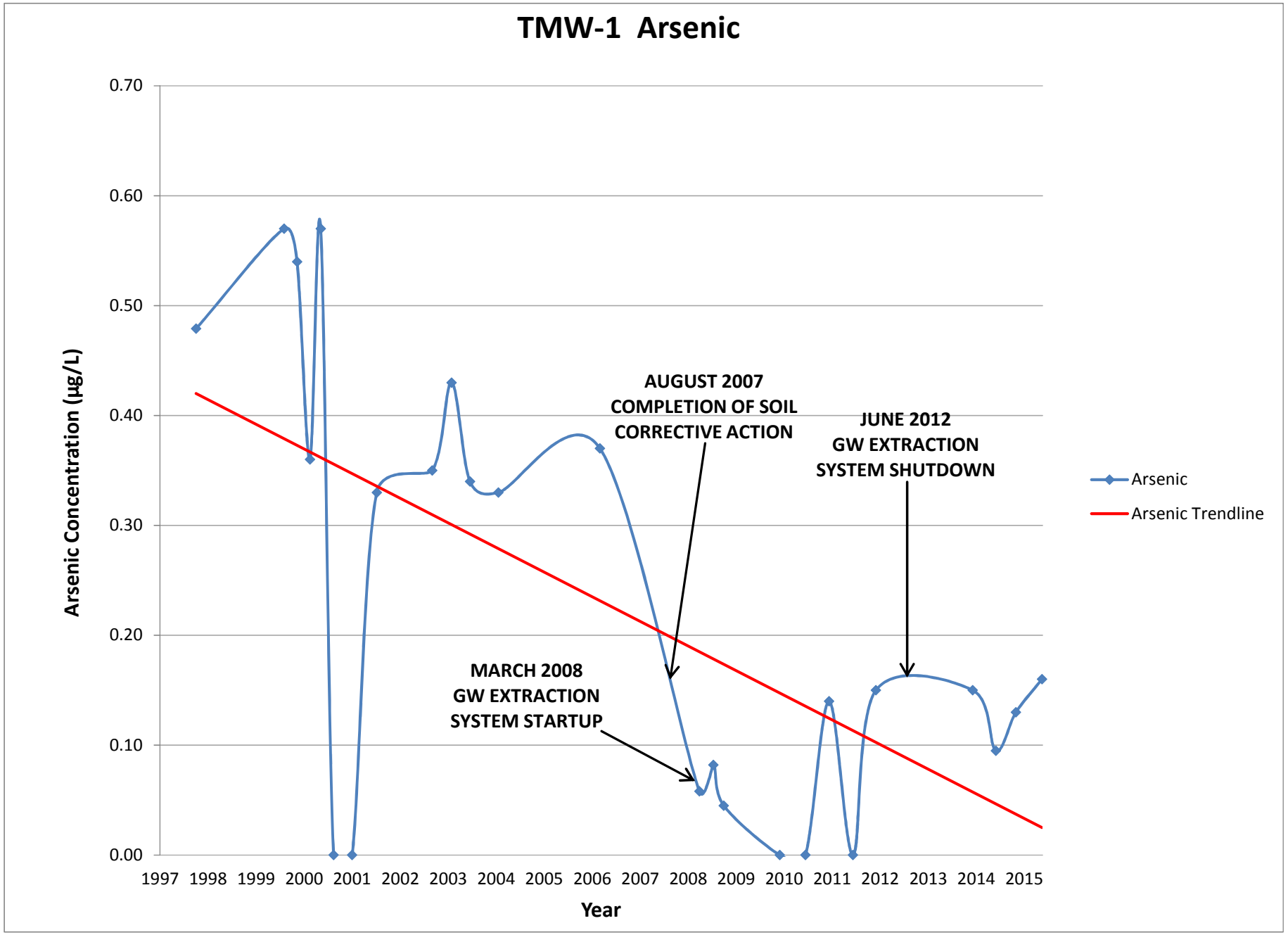

TMW-1 Ammonia
Ammonia Concentration (mg/L)
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
Ammonia
Ammonia Trendline

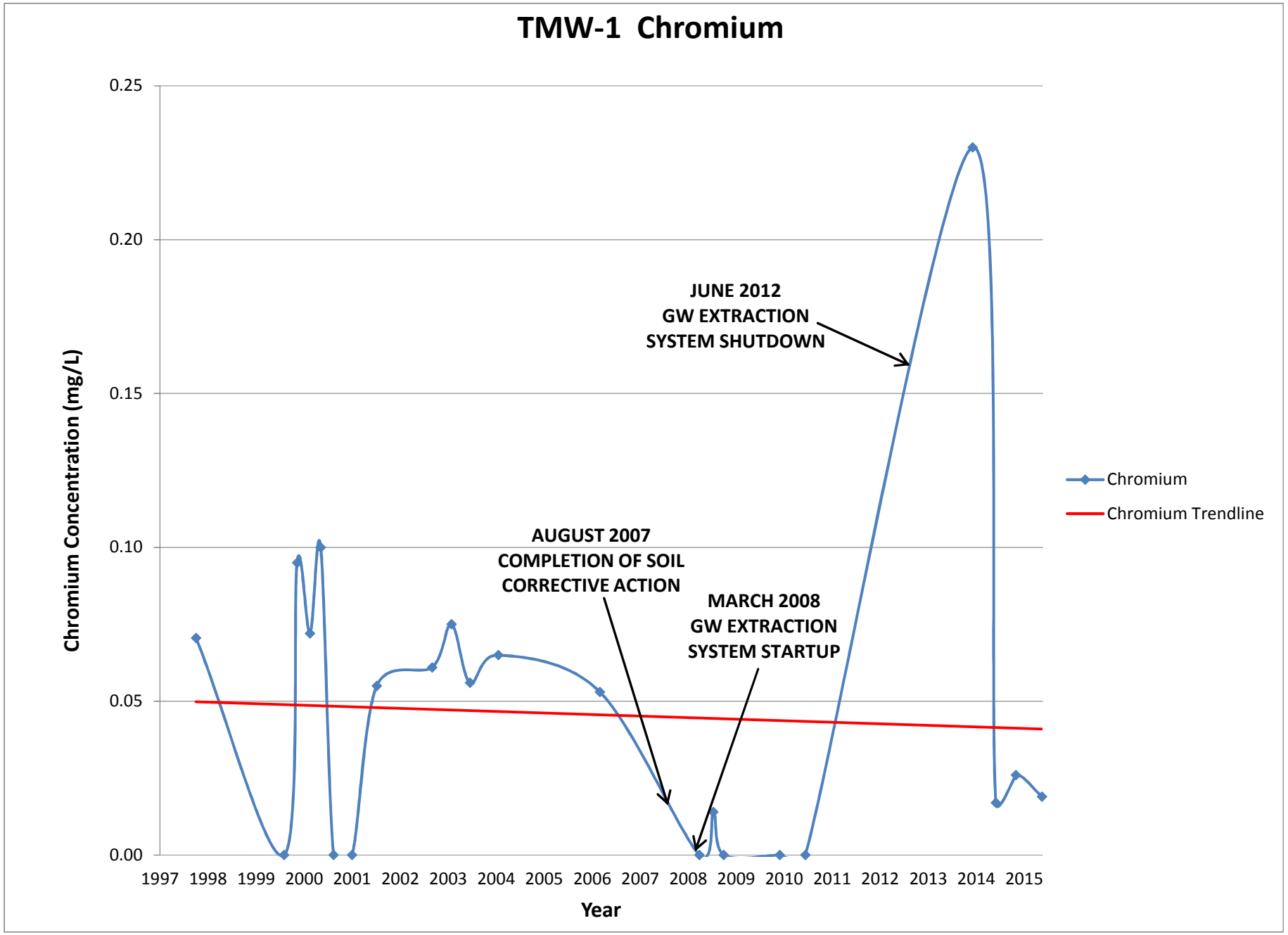

TMW-1 Benzene
Benzene Concentration (µg/L)
180
160
140
120
100
80
60
40
20
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Benzene
Benzene Trendline

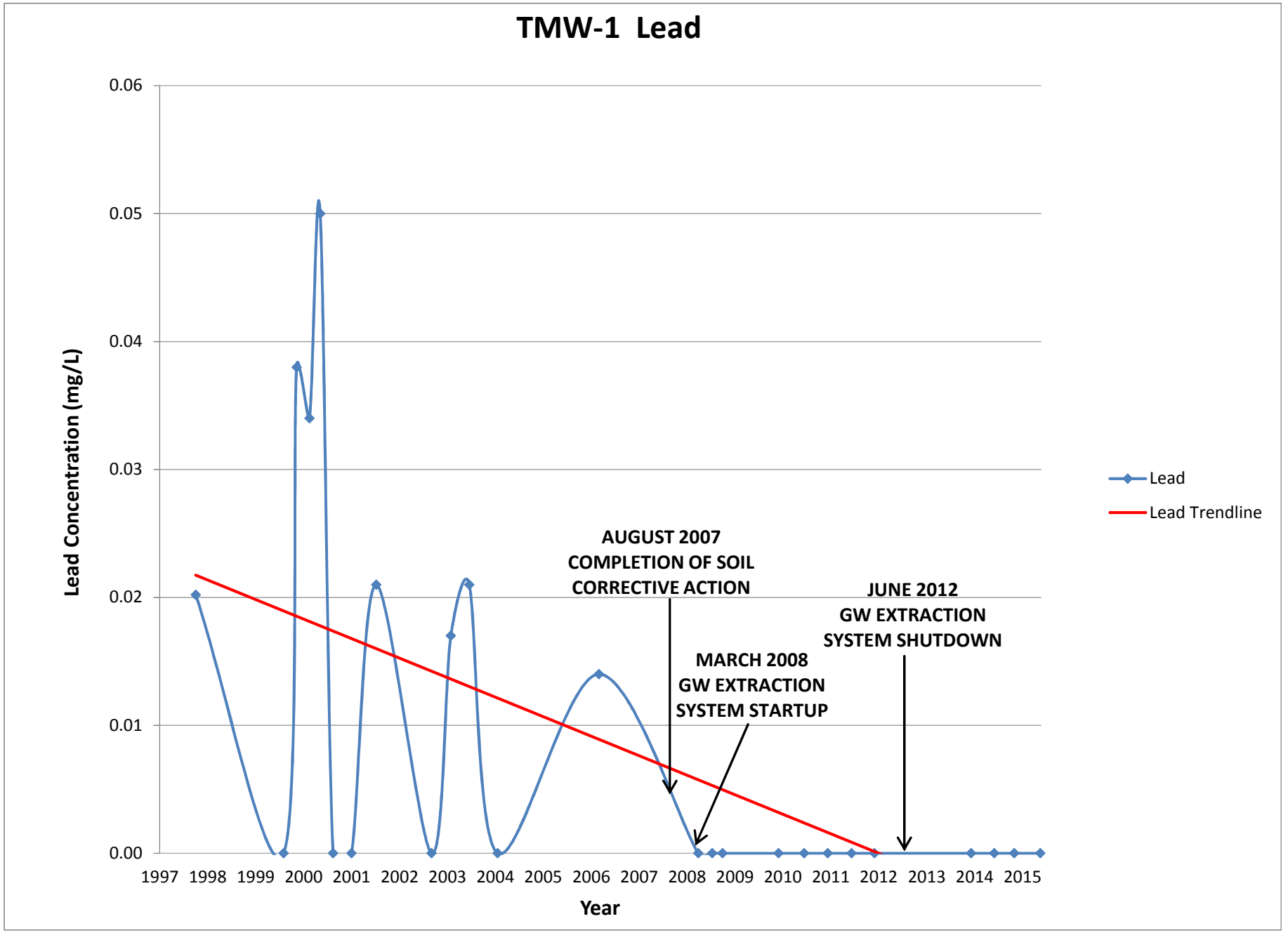

TMW-1 Ethylbenzene
Ethylbenzene Concentration (µg/L)
700
600
500
400
300
200
100
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Ethylbenzene
Ethylbenzene Trendline

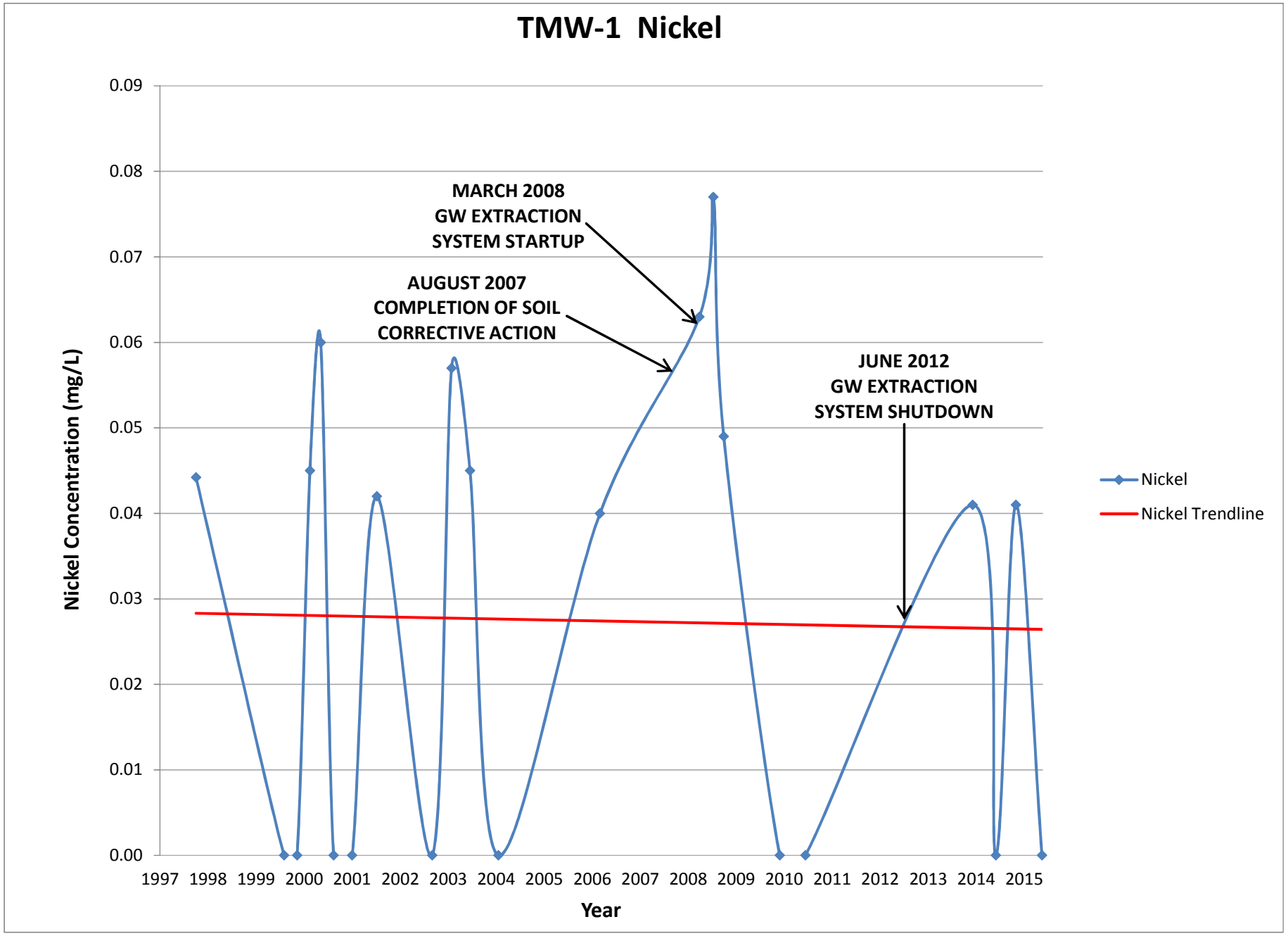

TMW-1 Toluene
Toluene Concentration (µg/L)
1400
1200
1000
800
600
400
200
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Toluene
Toluene Trendline

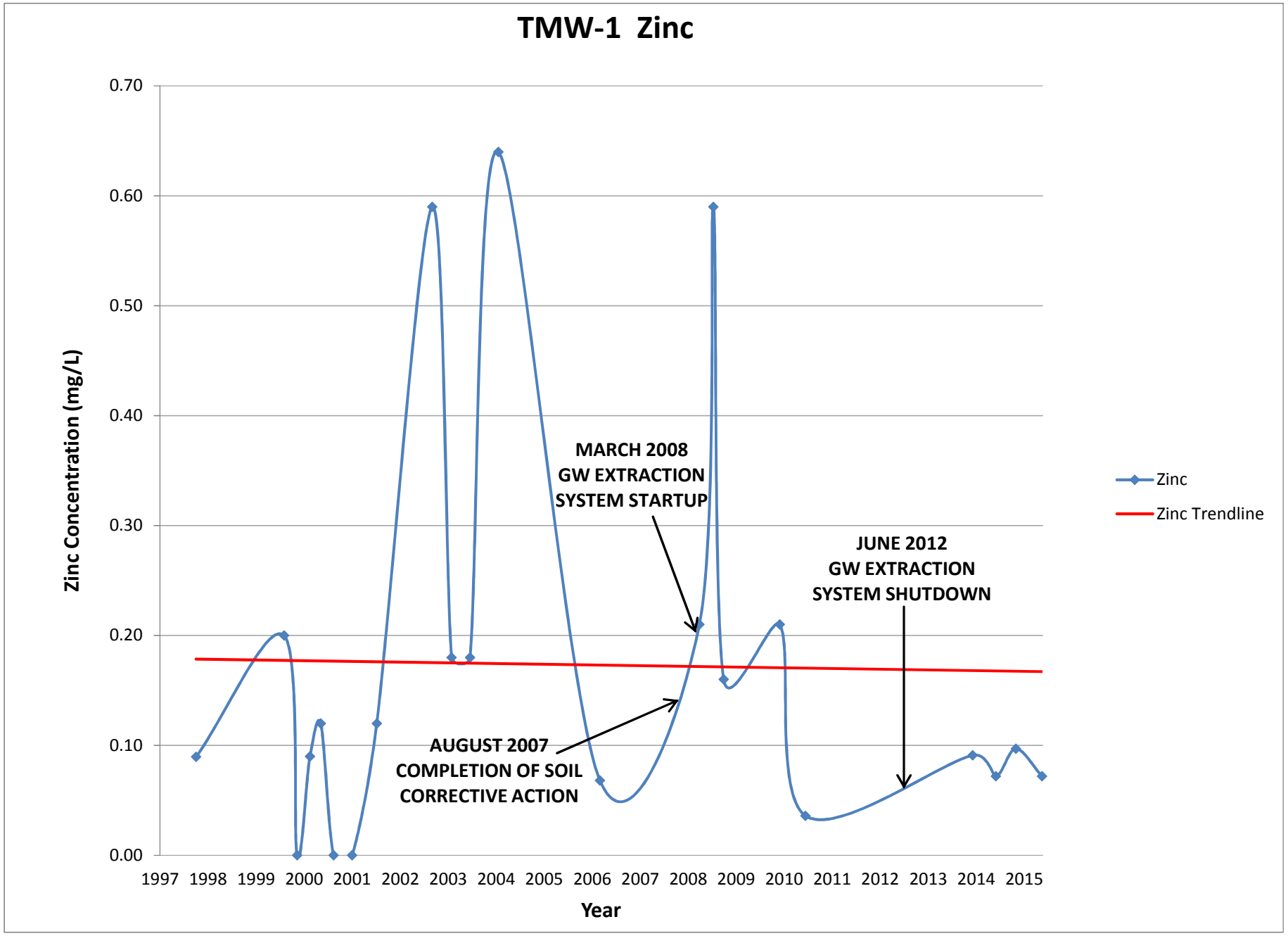

TMW-1 Total Xylenes
Total Xylenes Concentration (µg/L)
2500
2000
1500
1000
500
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Total Xylenes
Xylenes Trendline

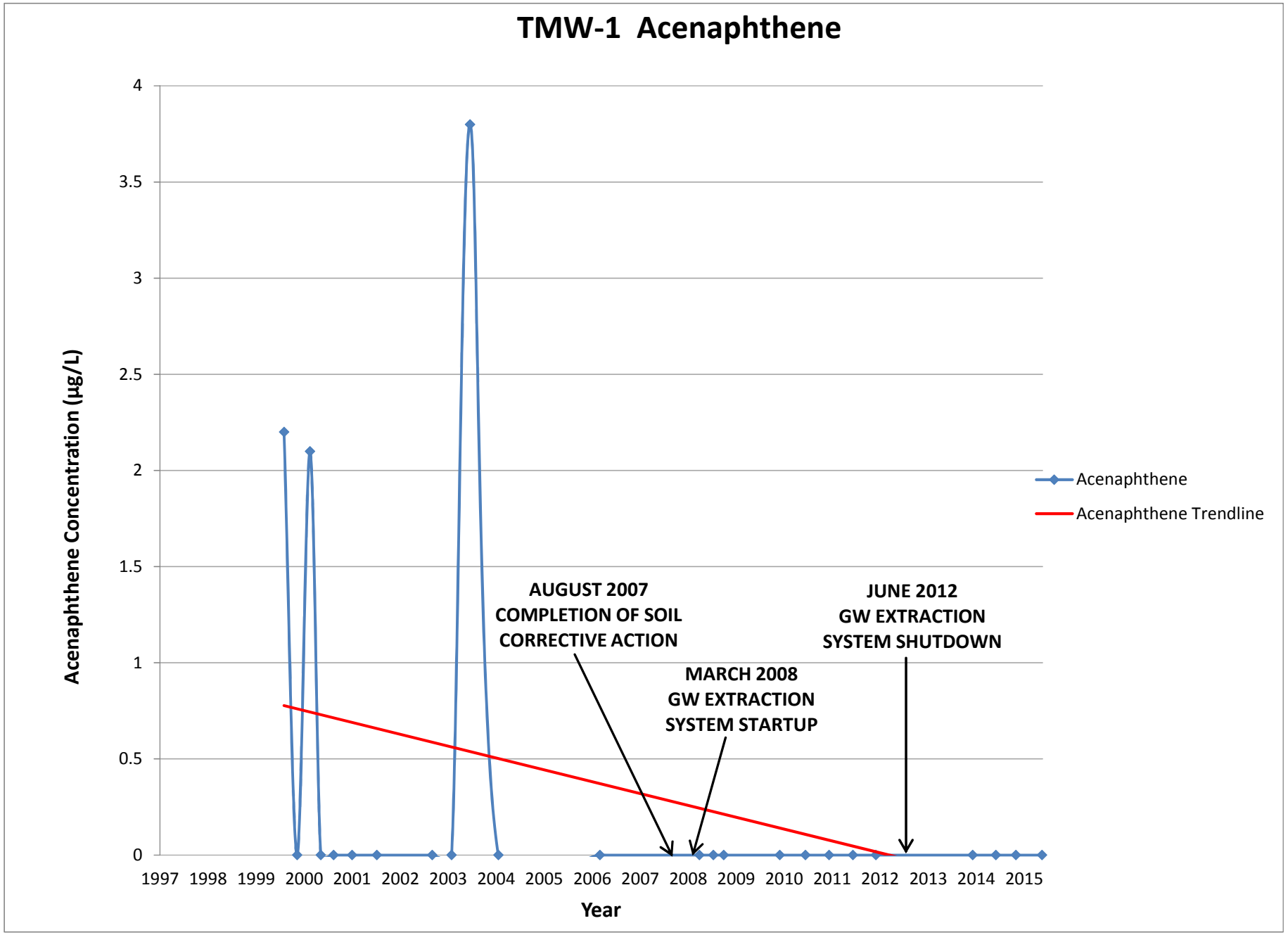

TMW-1 Arsenic
Arsenic Concentration (µg/L)
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
Arsenic
Arsenic Trendline

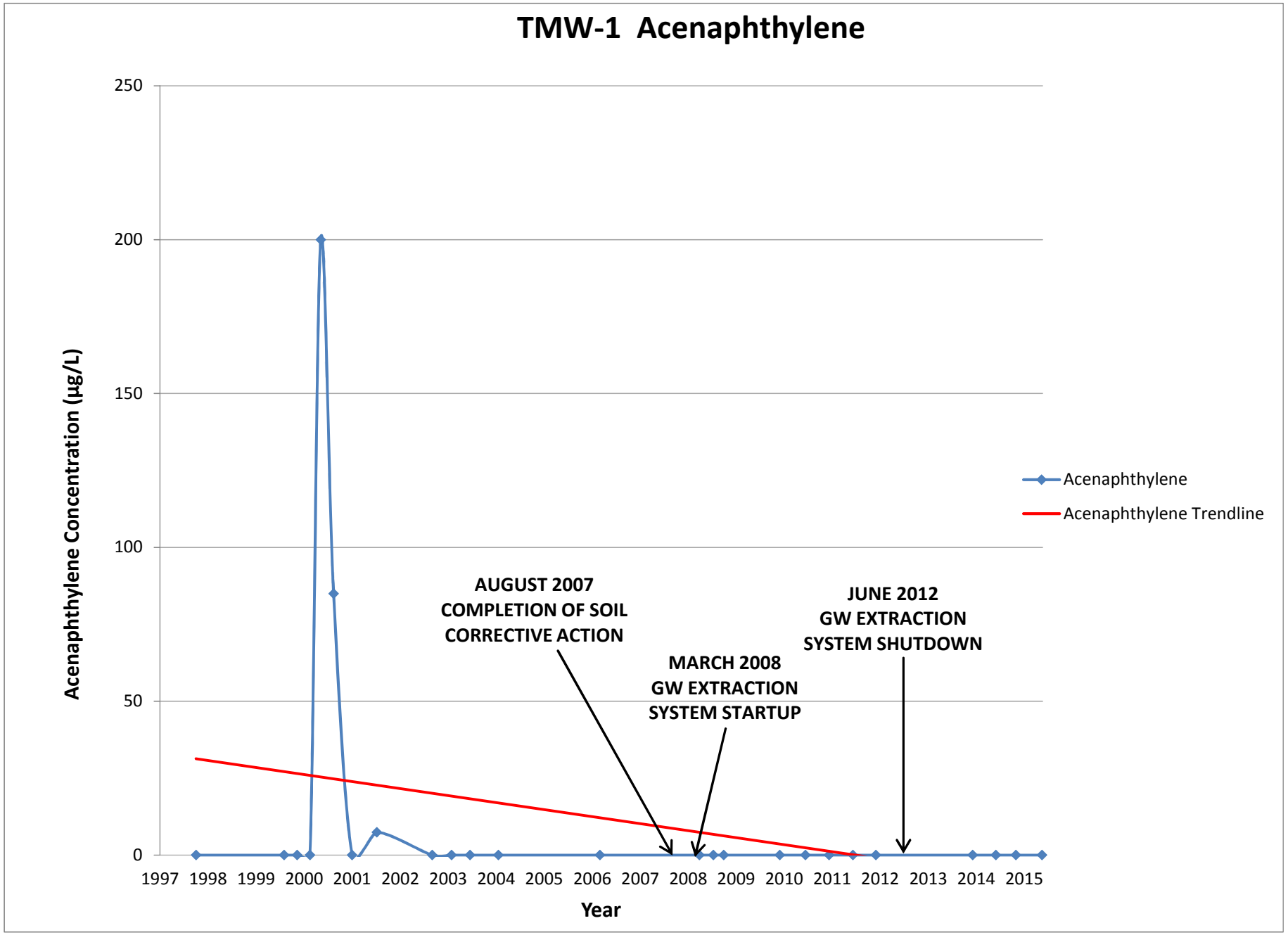

TMW-1 Chromium
Chromium Concentration (mg/L)
0.25
0.20
0.15
0.10
0.05
0.00
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
Chromium
Chromium Trendline

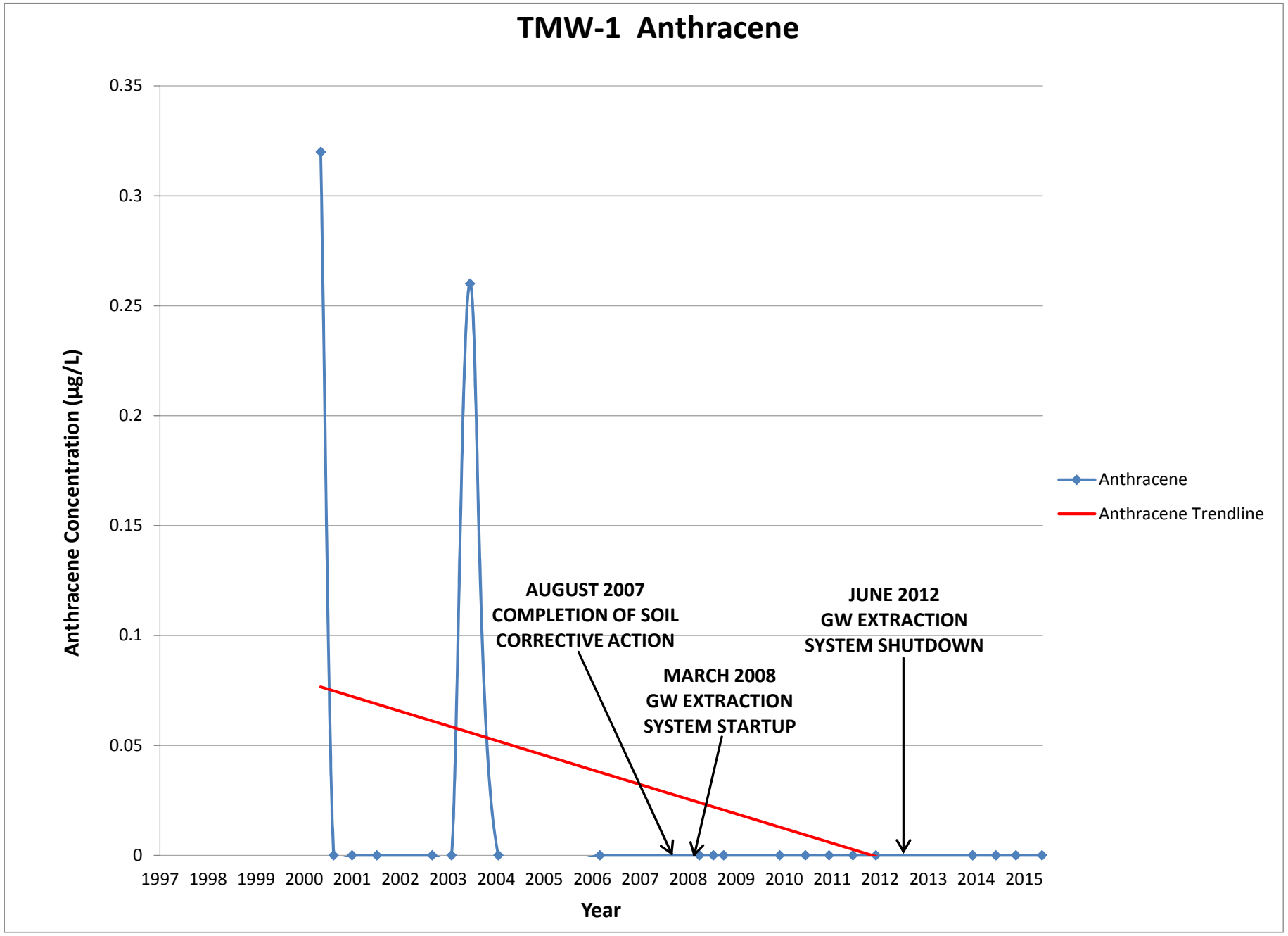

TMW-1 Lead
Lead Concentration (mg/L)
0.06
0.05
0.04
0.03
0.02
0.01
0.00
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Lead
Lead Trendline

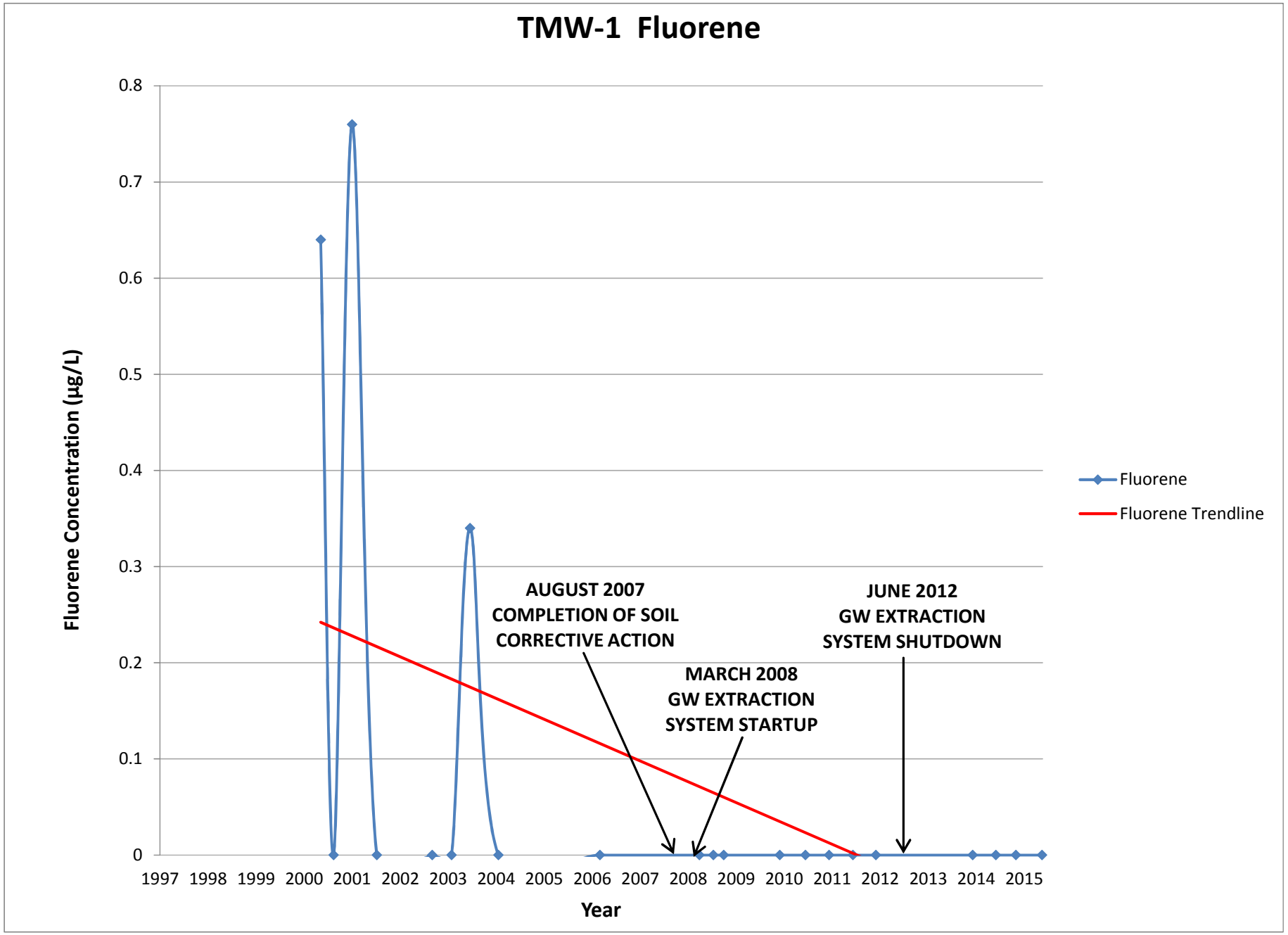

TMW-1 Nickel
Nickel Concentration (mg/L)
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Nickel
Nickel Trendline

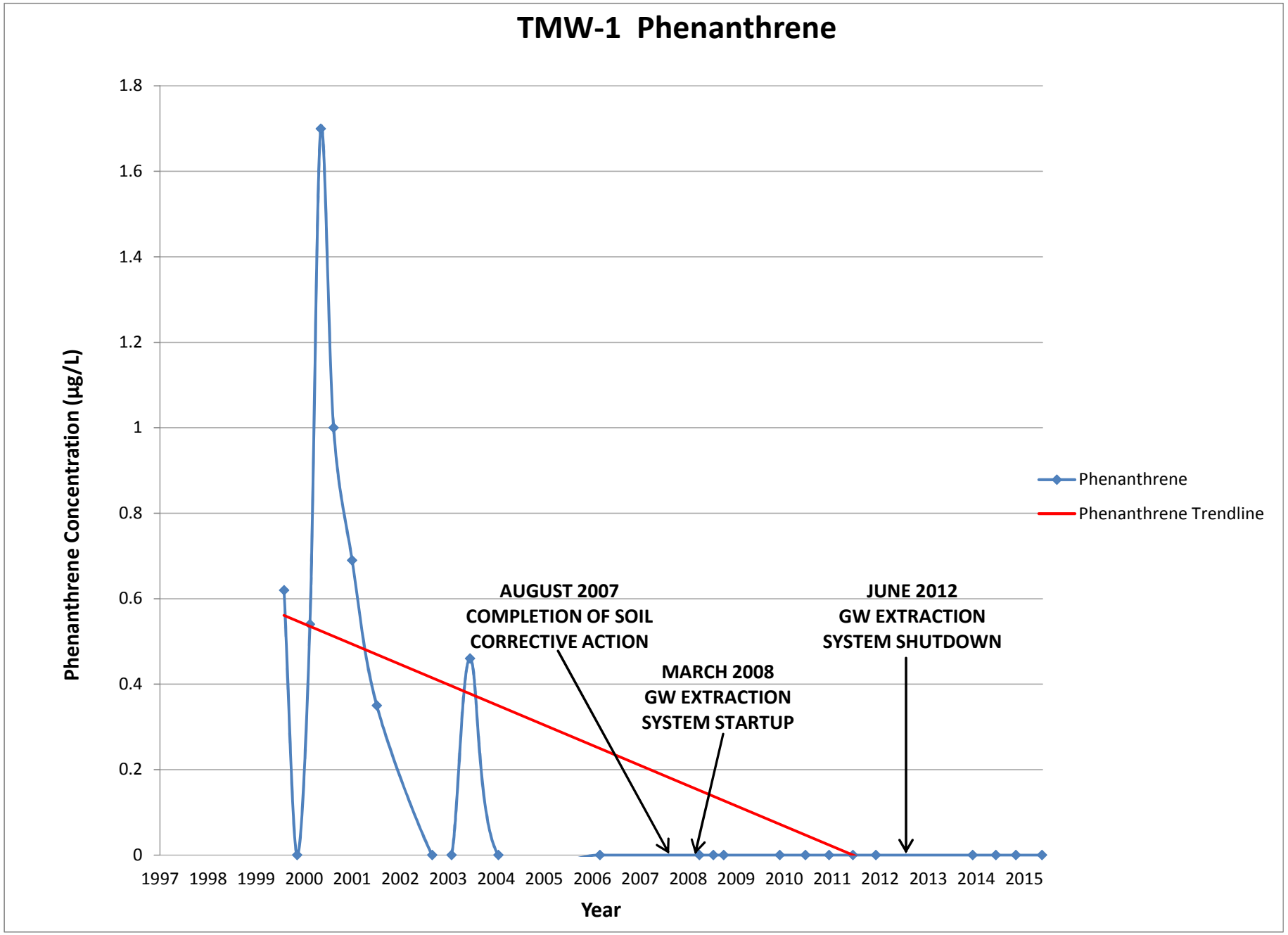

TMW-1 Zinc
Zinc Concentration (mg/L)
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
Zinc
Zinc Trendline

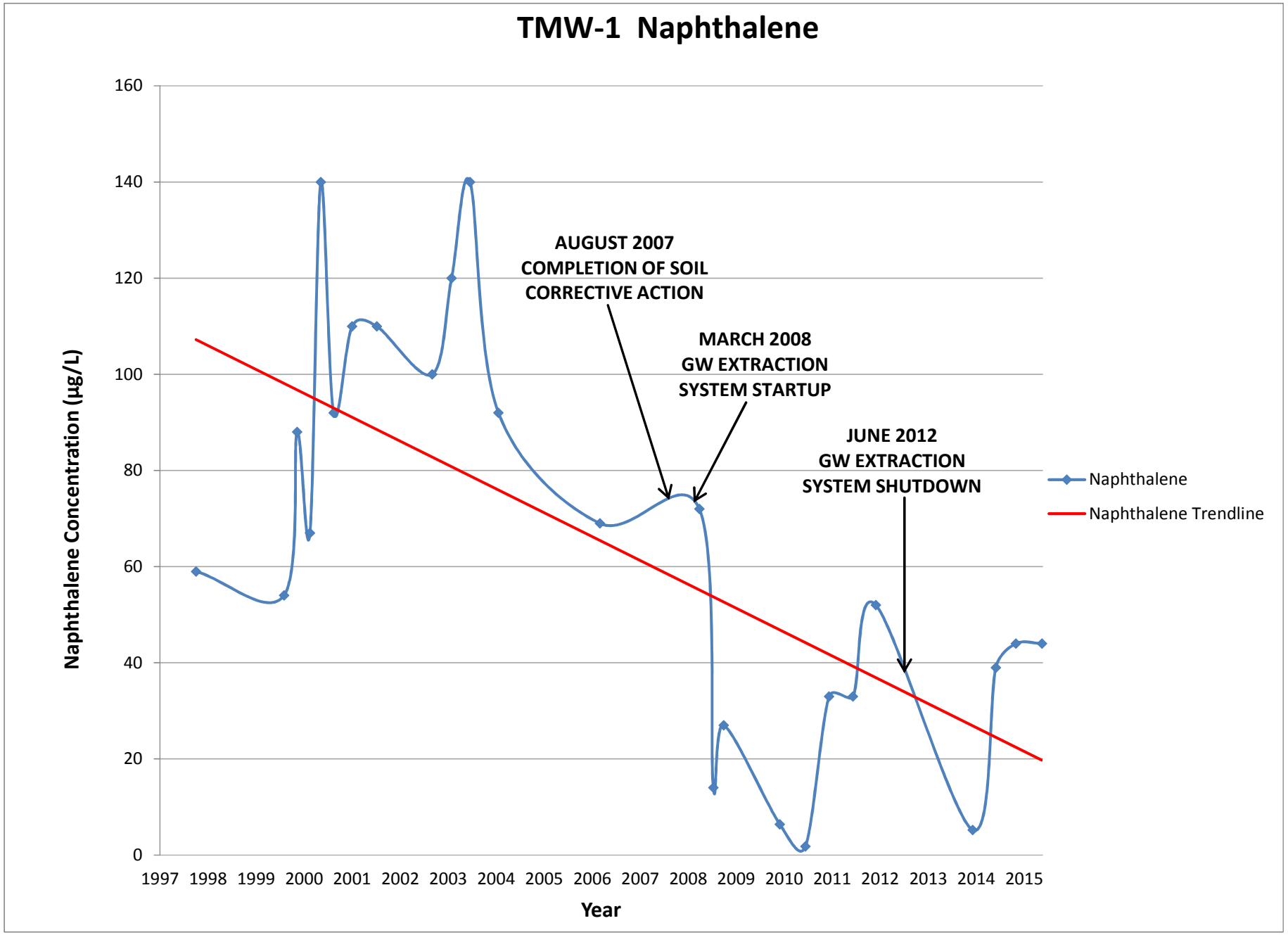

TMW-1 Acenaphthene
Acenaphthene Concentration (µg/L)
4
3.5
3
2.5
2
1.5
1
0.5
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Acenaphthene
Acenaphthene Trendline

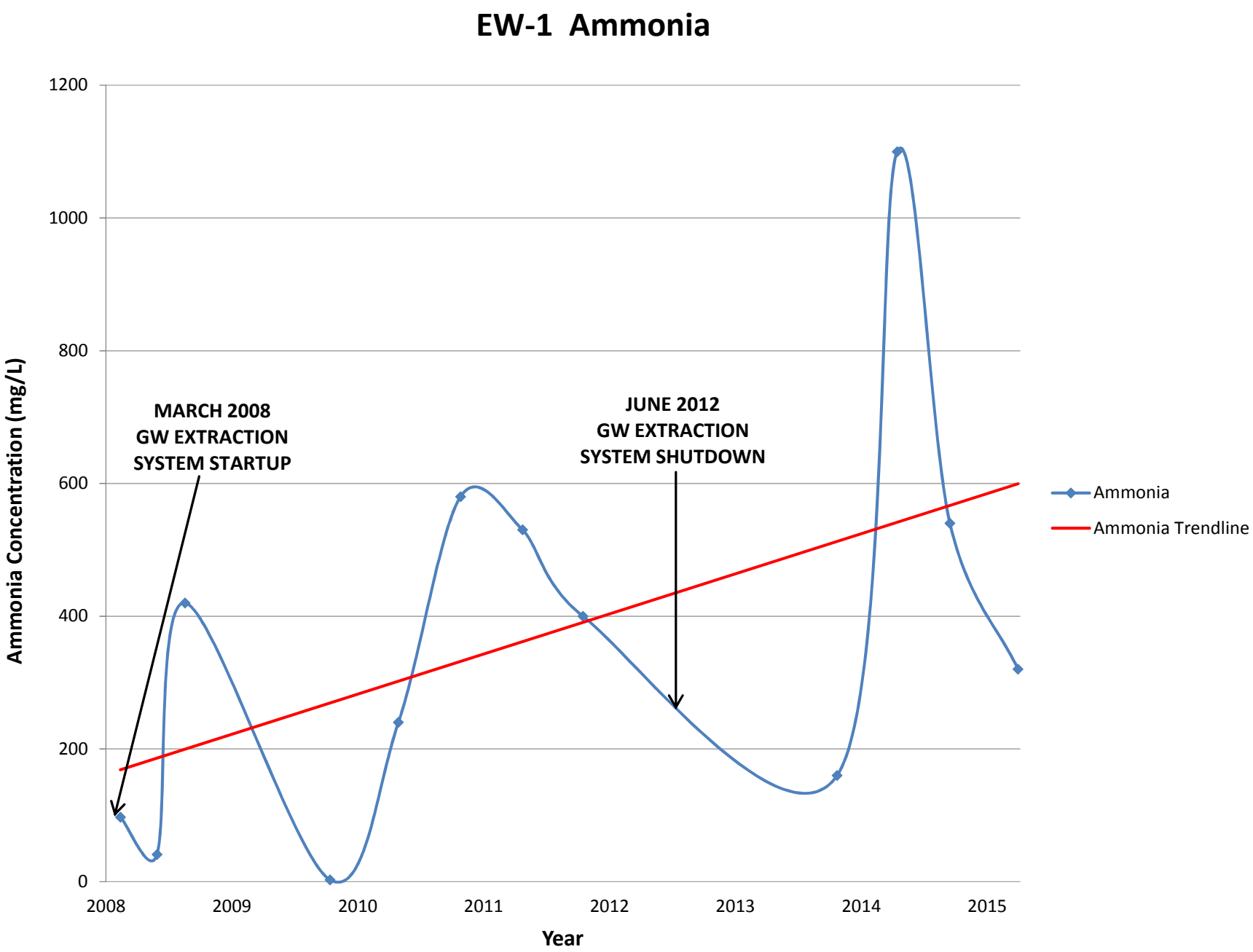

TMW-1 Acenaphthylene
Acenaphthylene Concentration (µg/L)
250
200
150
100
50
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Acenaphthylene
Acenaphthylene Trendline

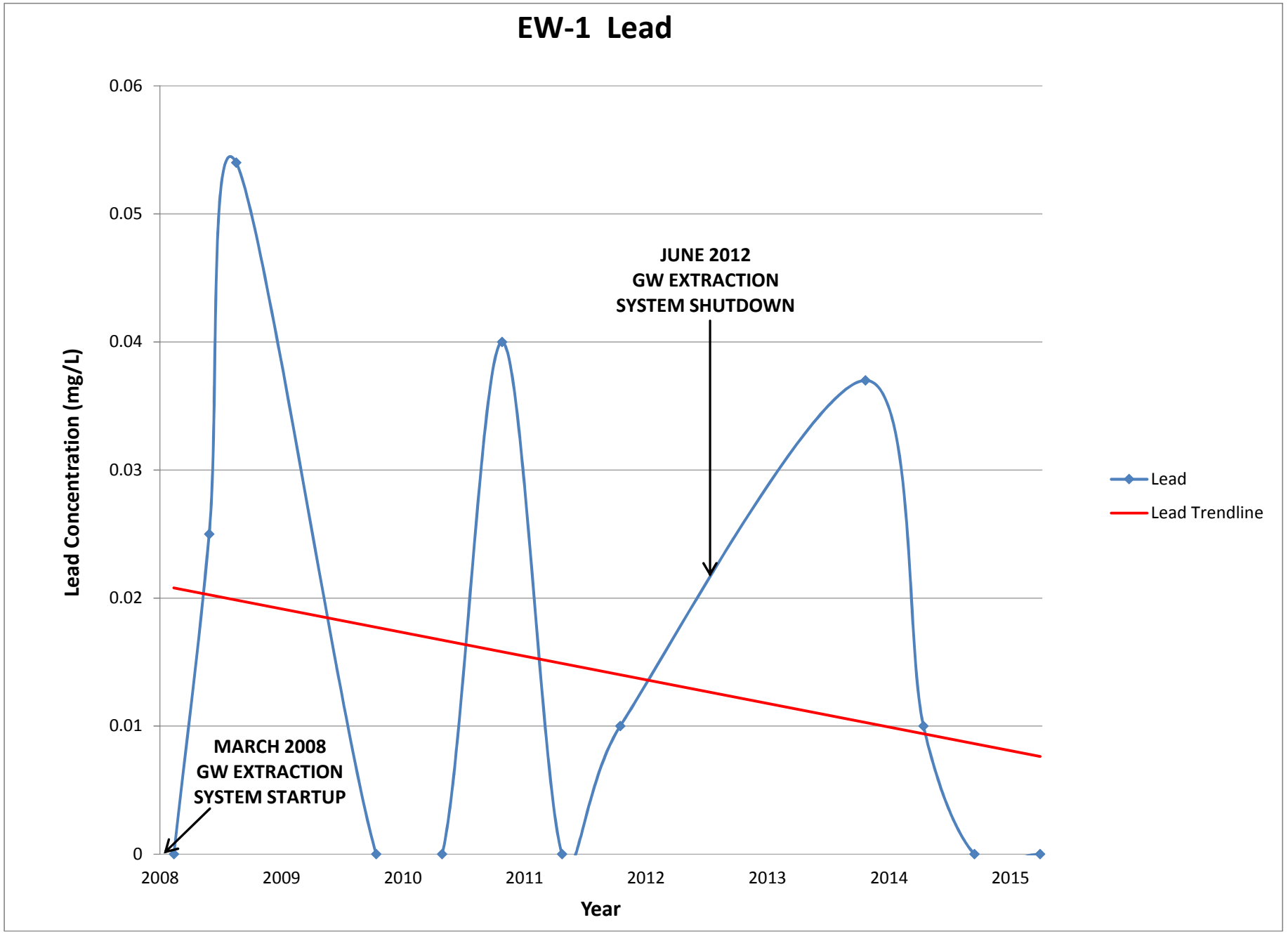

TMW-1 Anthracene
Anthracene Concentration (µg/L)
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Anthracene
Anthracene Trendline

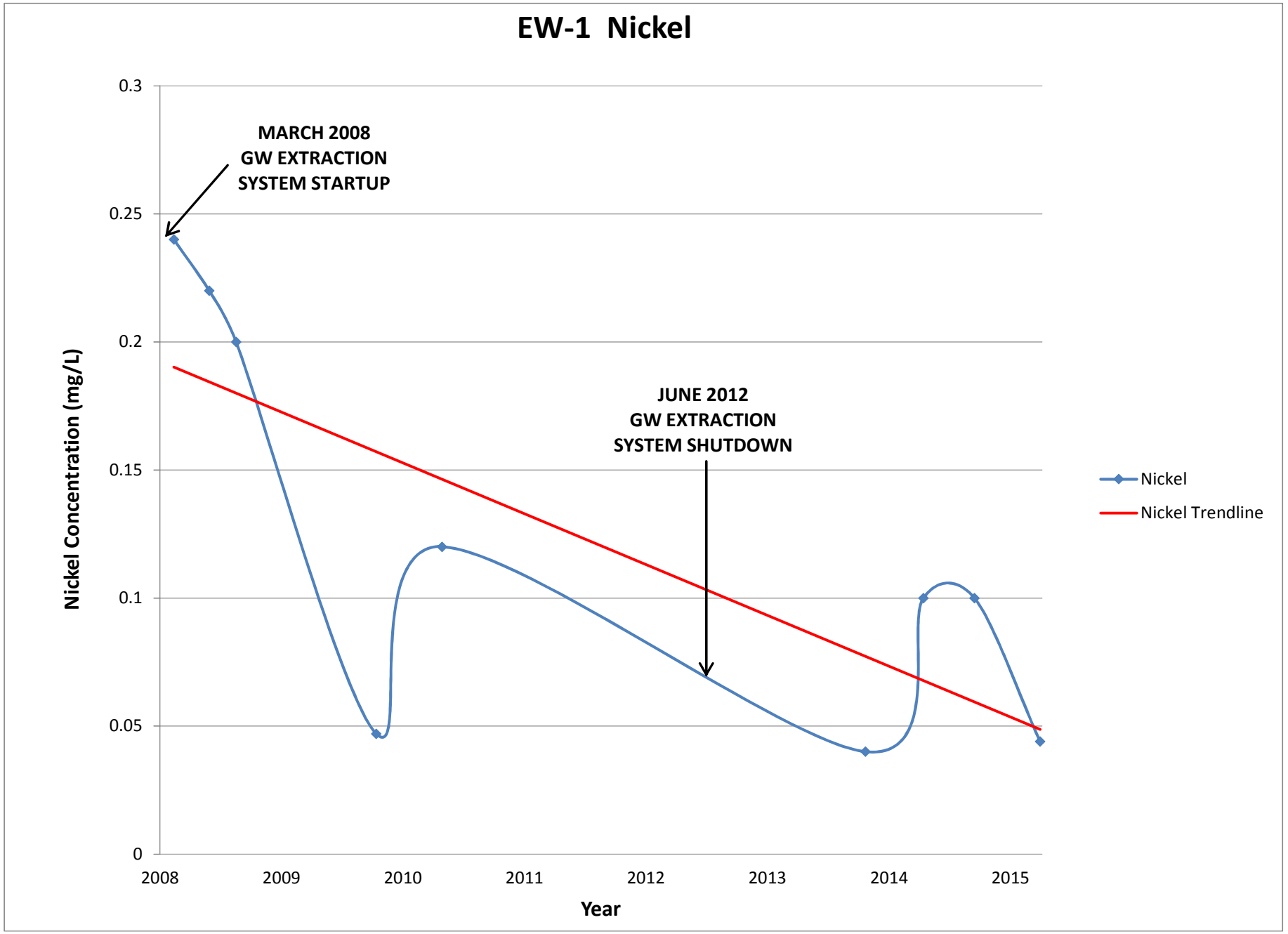

TMW-1 Fluorene
Fluorene Concentration (µg/L)
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Fluorene
Fluorene Trendline

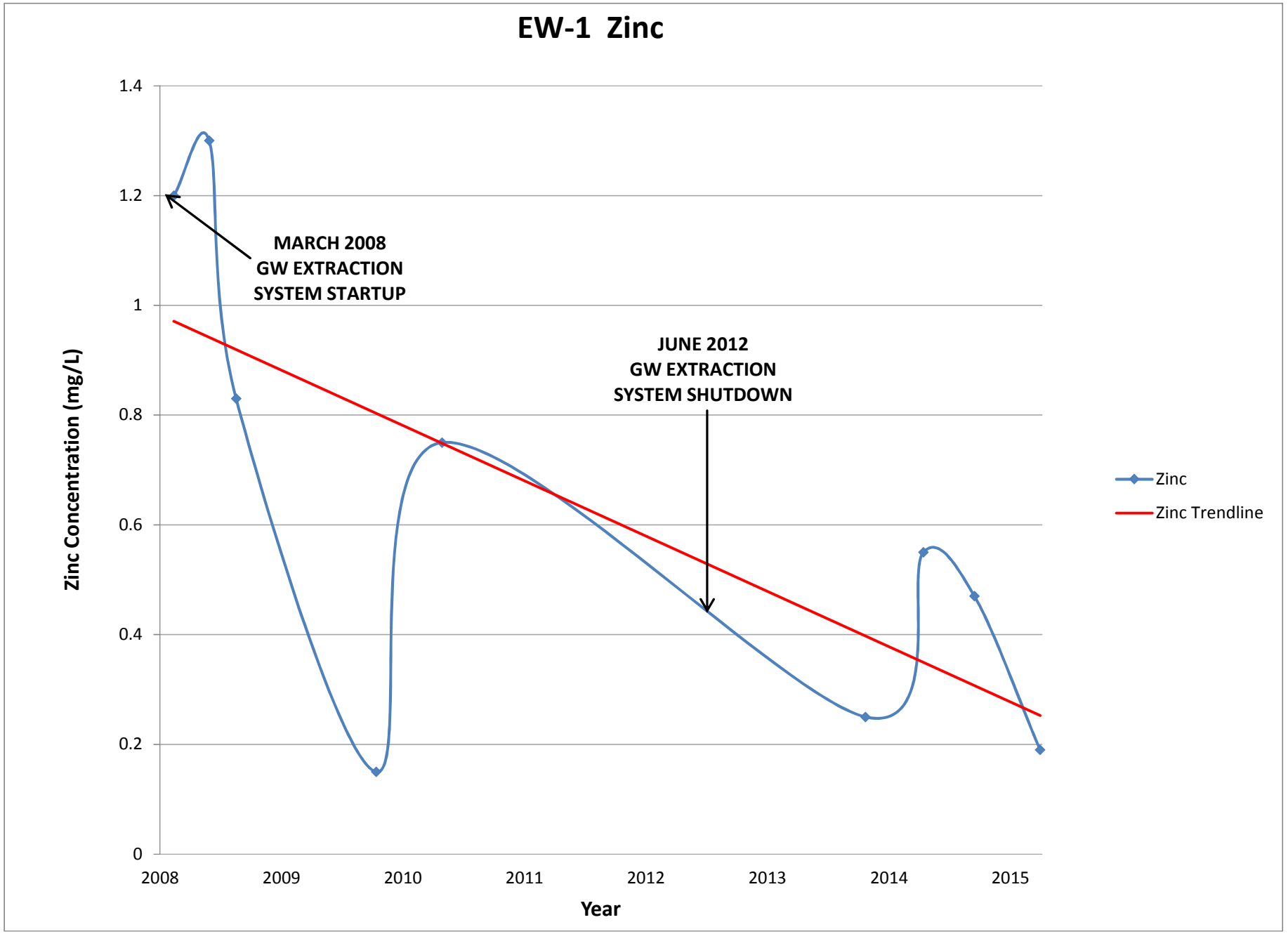

TMW-1 Phenanthrene
Phenanthrene Concentration (µg/L)
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Phenanthrene
Phenanthrene Trendline

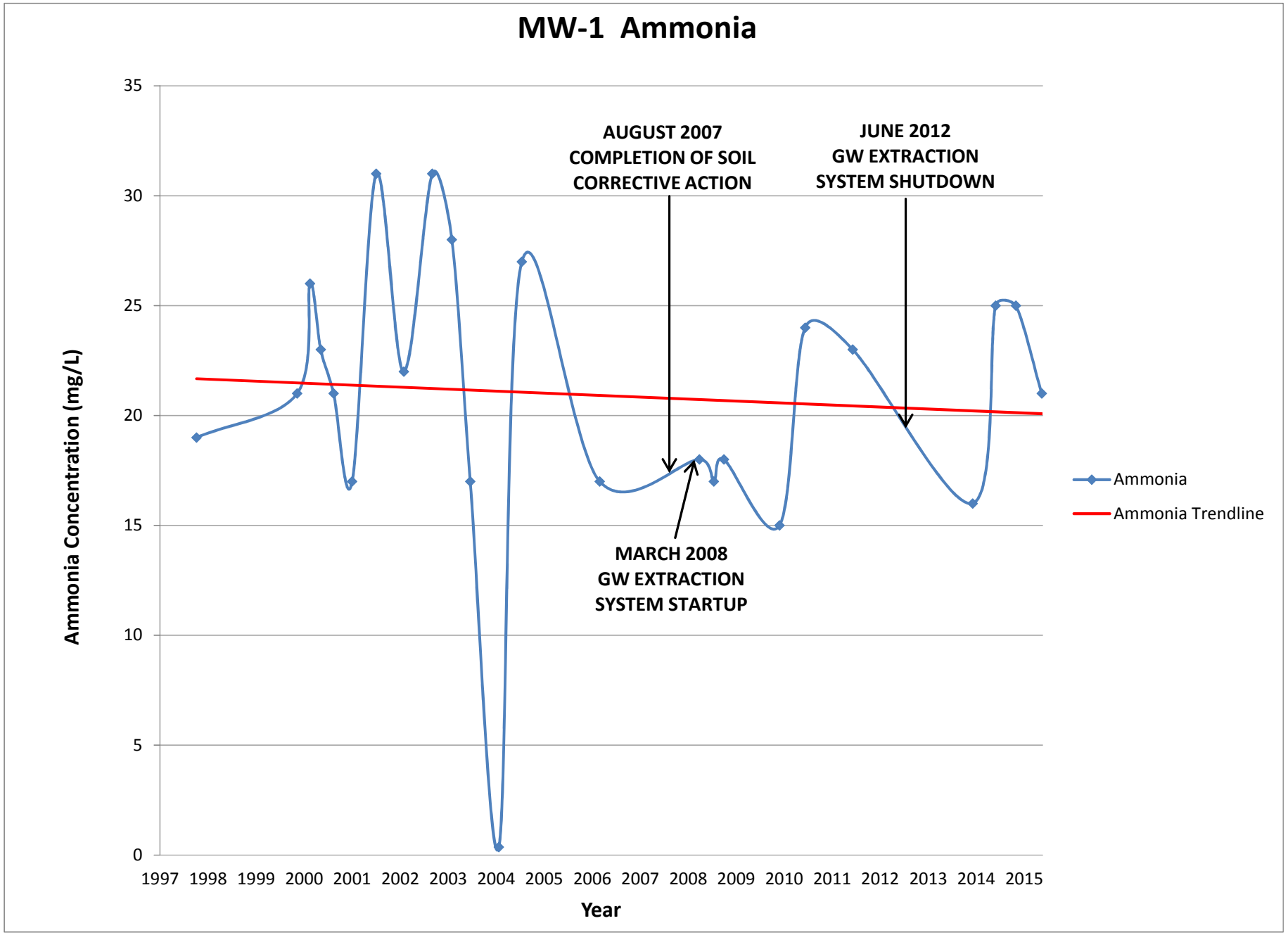

TMW-1 Naphthalene
Naphthalene Concentration (µg/L)
160
140
120
100
80
60
40
20
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Naphthalene
Naphthalene Trendline

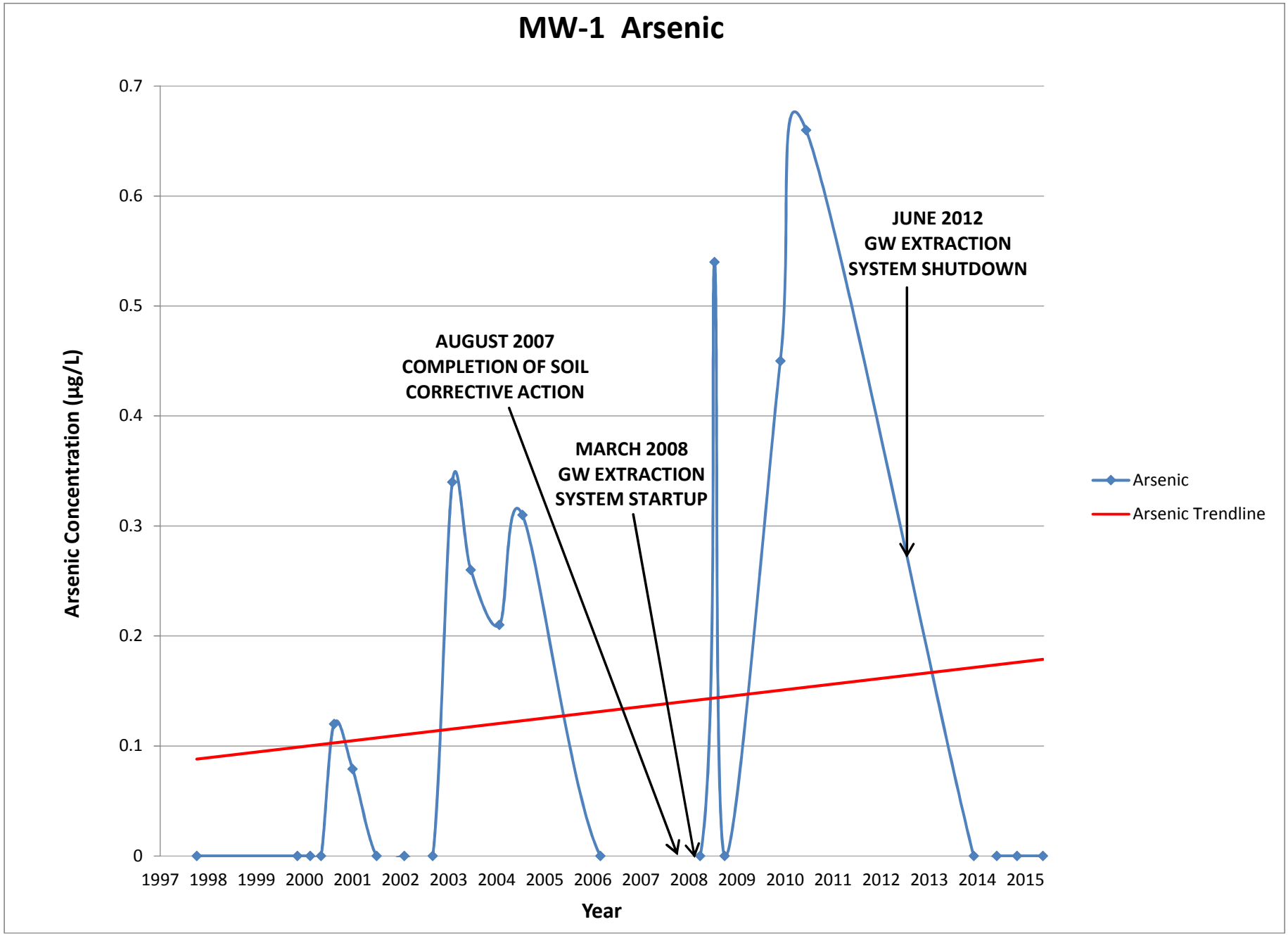

EW-1 Ammonia
1200
1000
800
600
400
200
0
Ammonia Concentration (mg/L)
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
2008
2009
2010
2011
2012
2013
2014
2015
Year
Ammonia
Ammonia Trendline

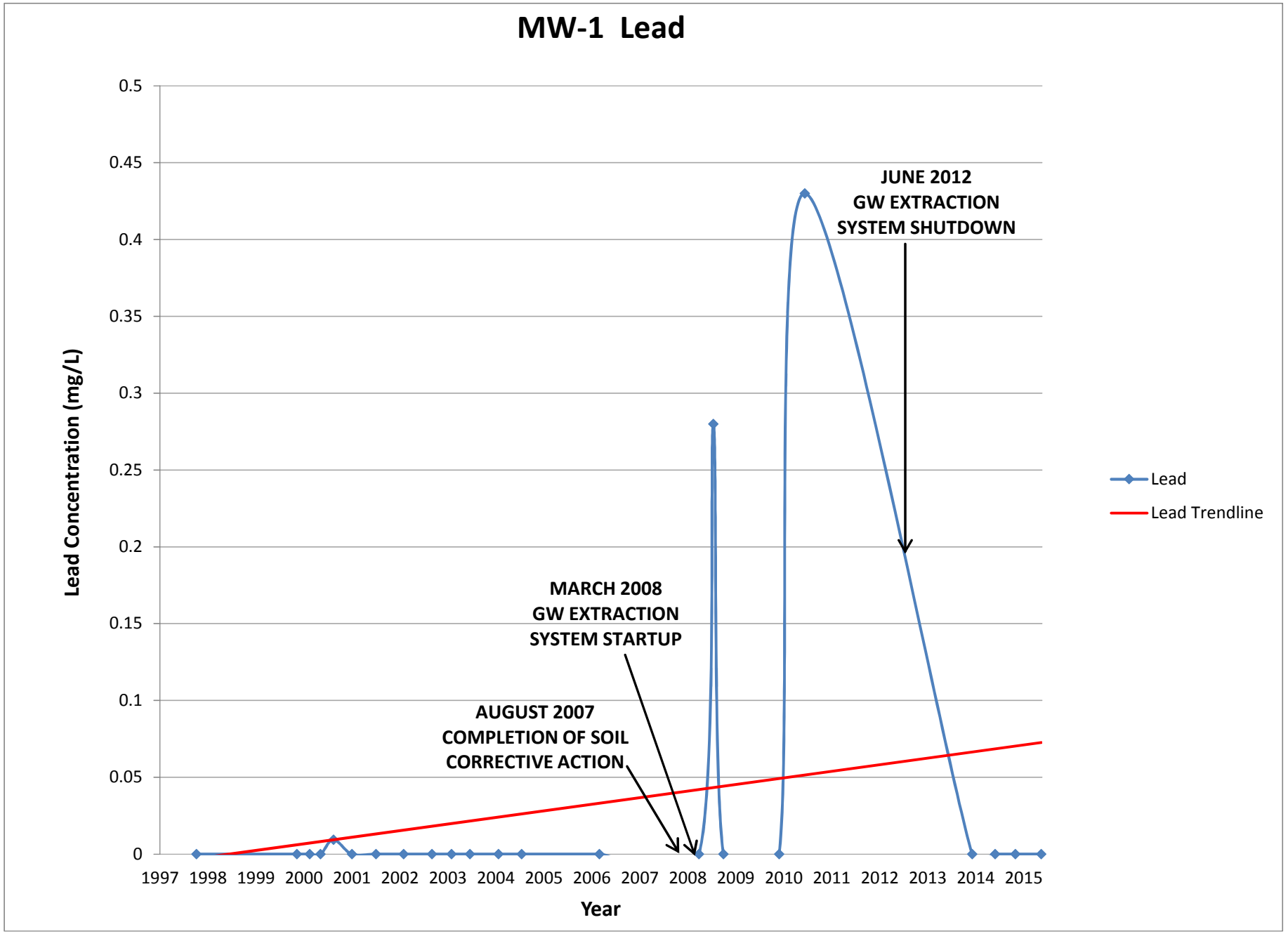

EW-1 Lead
0.06
0.05
0.04
0.03
0.02
0.01
0
Lead Concentration (mg/L)
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
2008
2009
2010
2011
2012
2013
2014
2015
Year
Lead
Lead Trendline

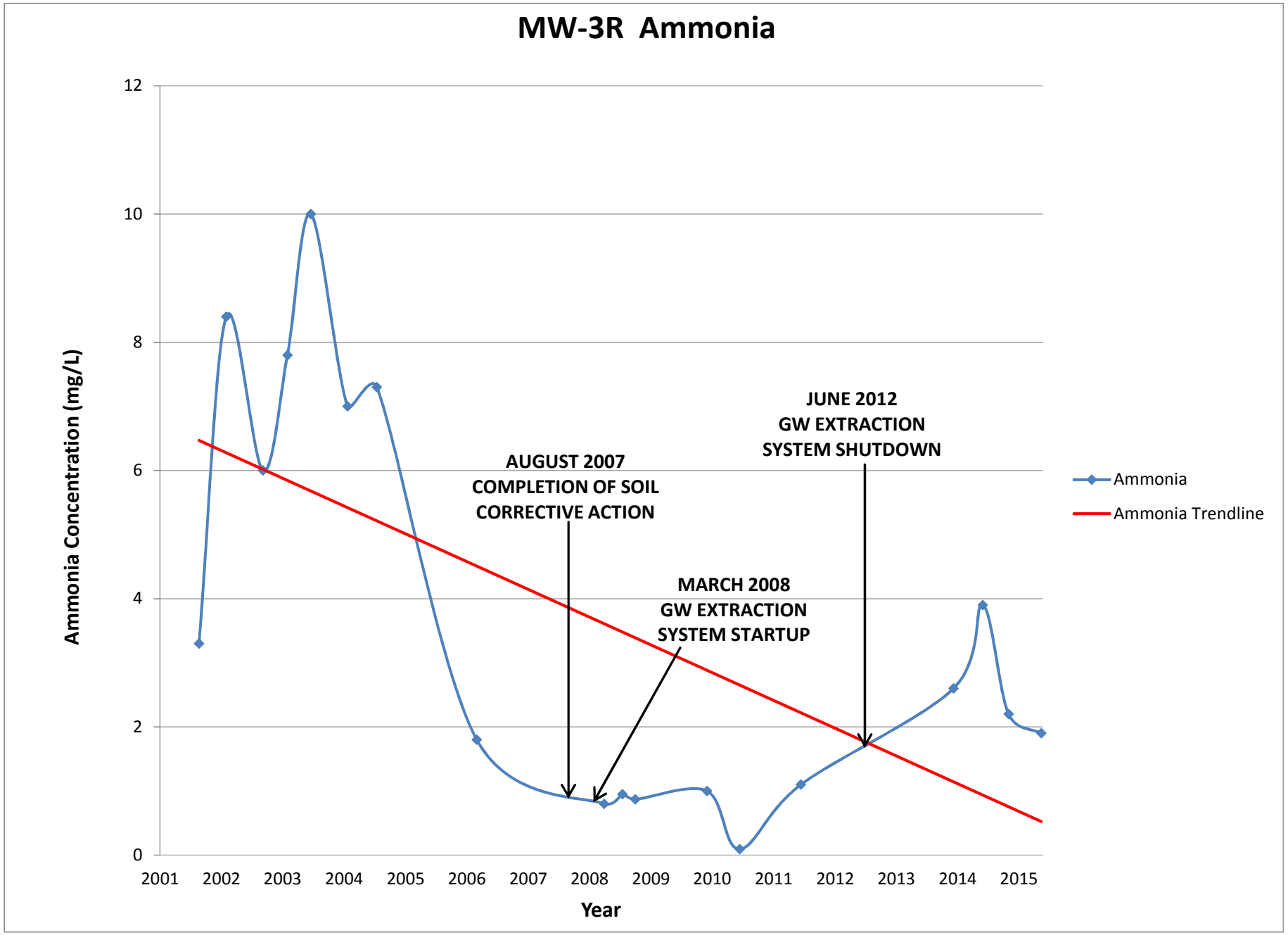

EW-1 Nickel
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Nickel Concentration (mg/L)
0.3
0.25
0.2
0.15
0.1
0.05
0
2008
2009
2010
2011
2012
2013
2014
2015
Year
Nickel
Nickel Trendline

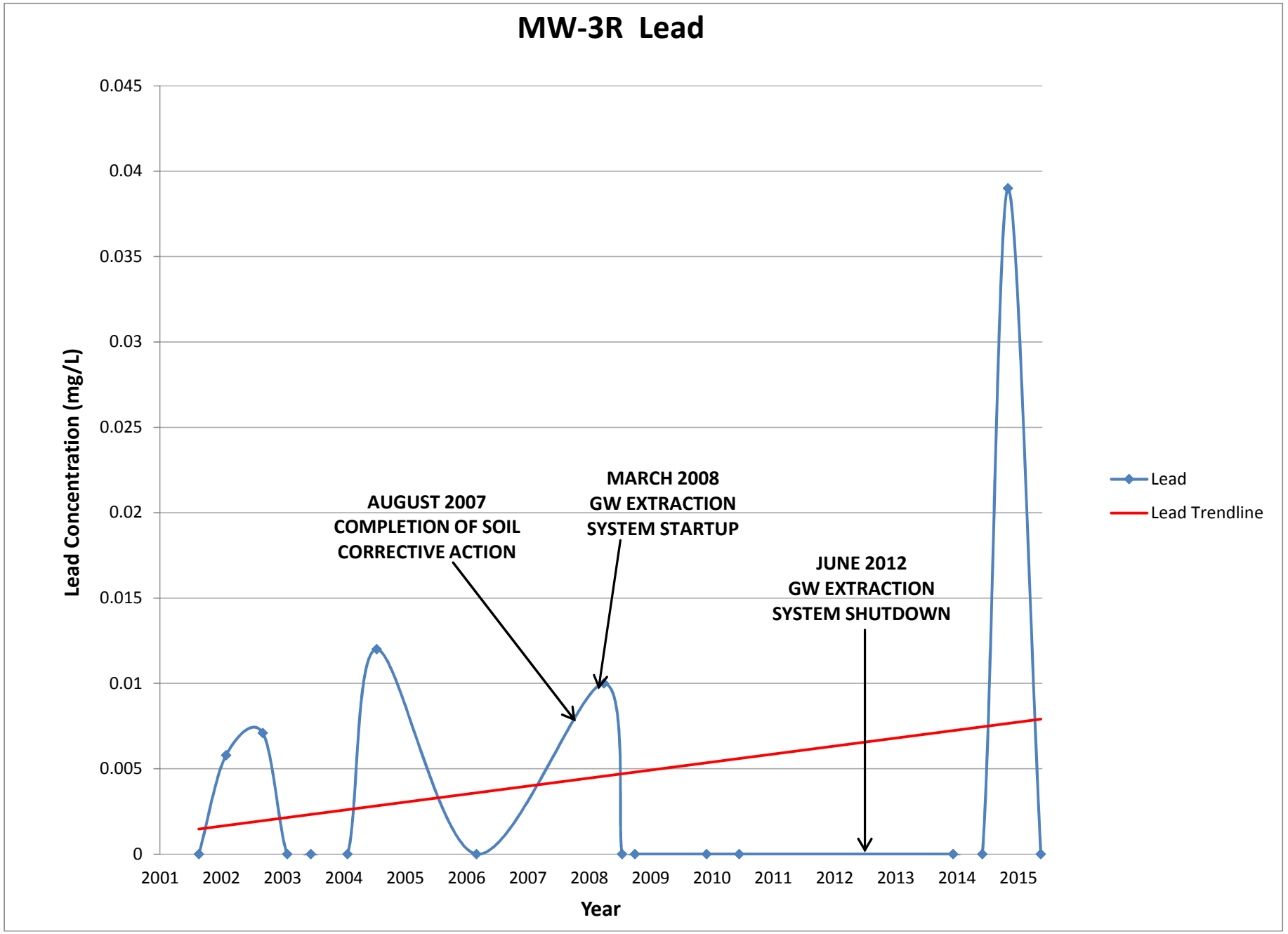

EW-1 Zinc
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Zinc Concentration (mg/L)
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
2008
2009
2010
2011
2012
2013
2014
2015
Year
Zinc
Zinc Trendline

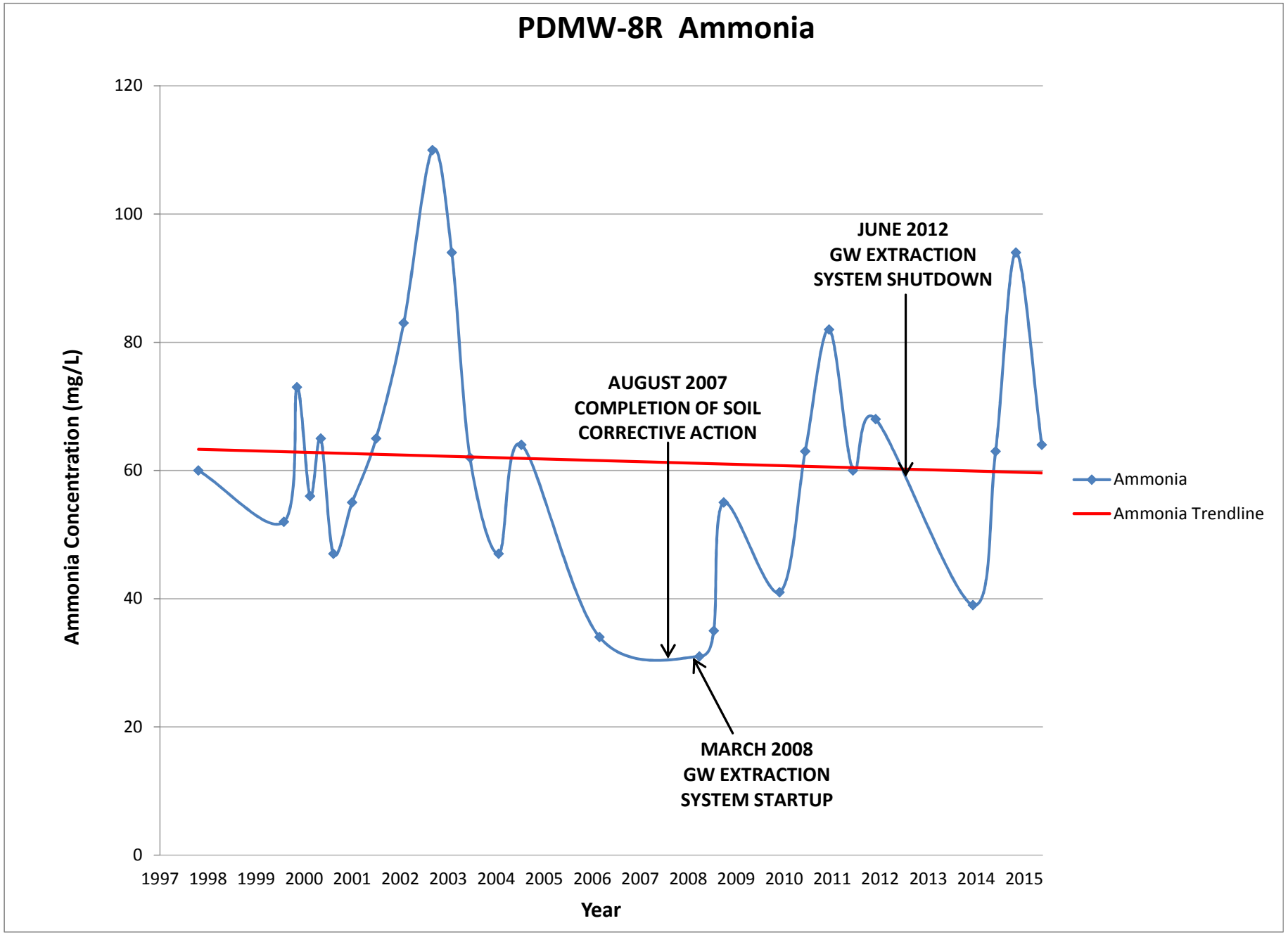

MW-1 Ammonia
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
Ammonia Concentration (mg/L)
Year
Ammonia
Ammonia Trendline
0
5
10
15
20
25
30
35
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

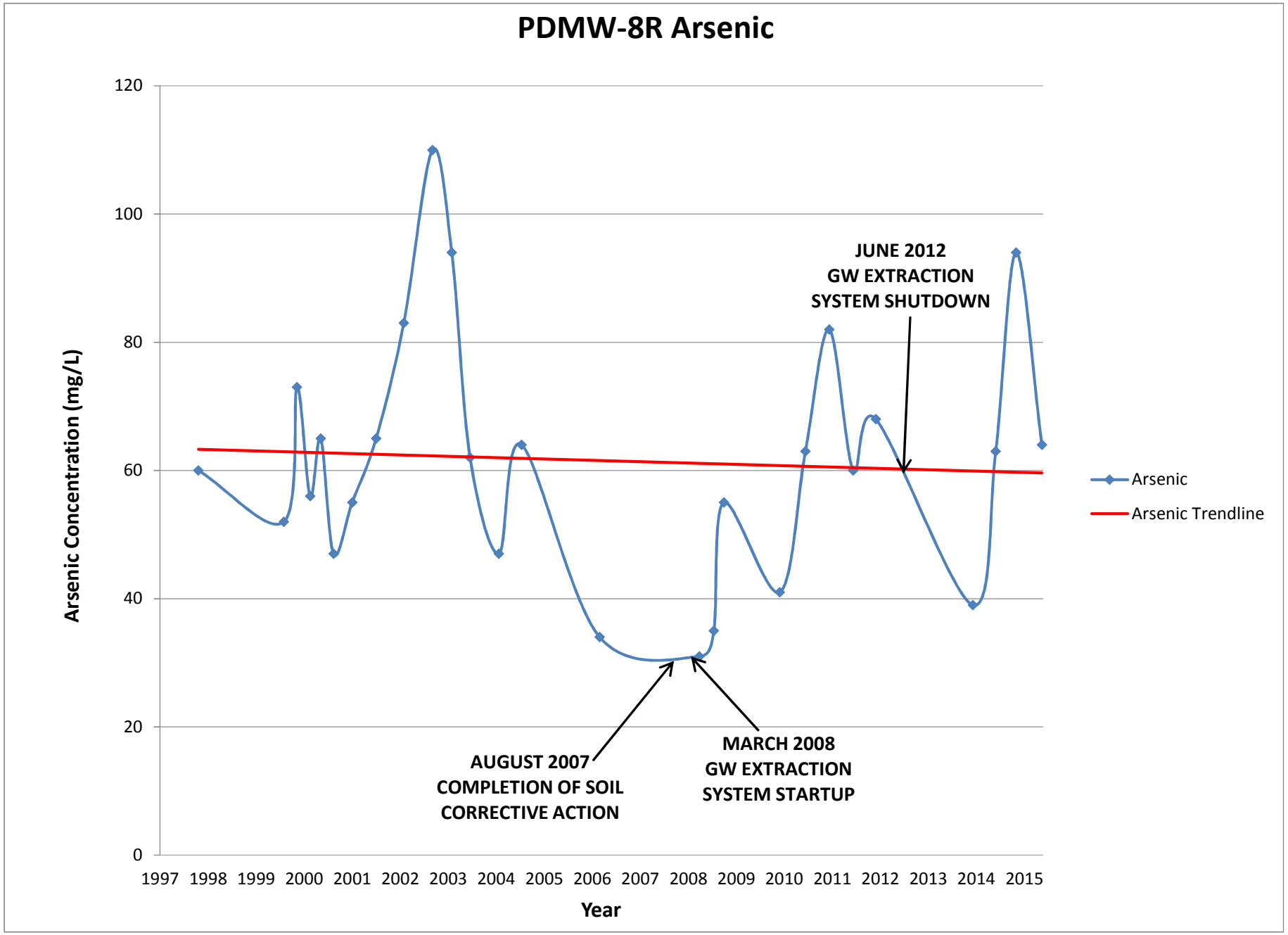

MW-1 Arsenic
Arsenic Concentration (µg/L)
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Arsenic
Arsenic Trendline

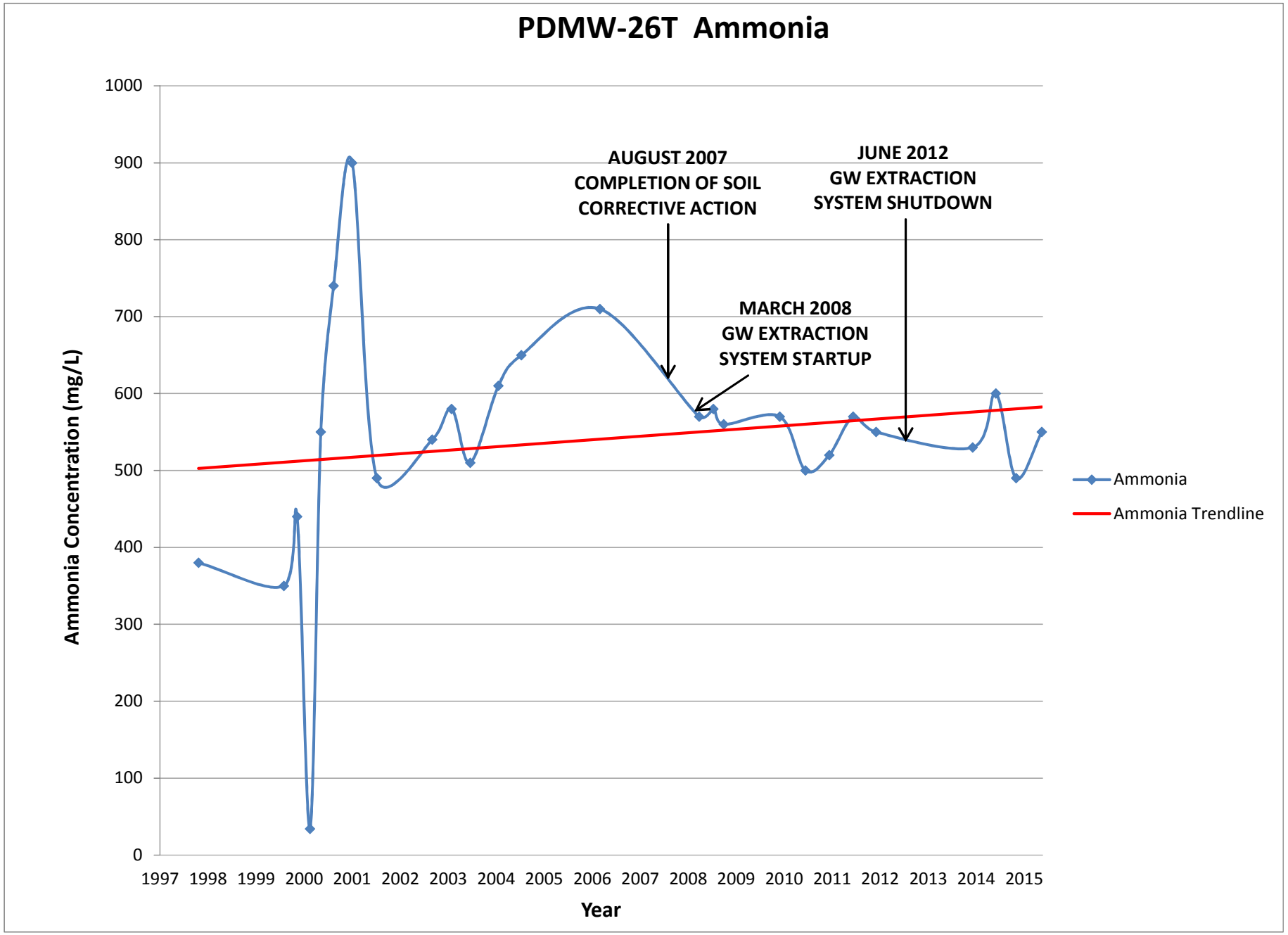

MW-1 Lead
Lead Concentration (mg/L)
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
Lead
Lead Trendline

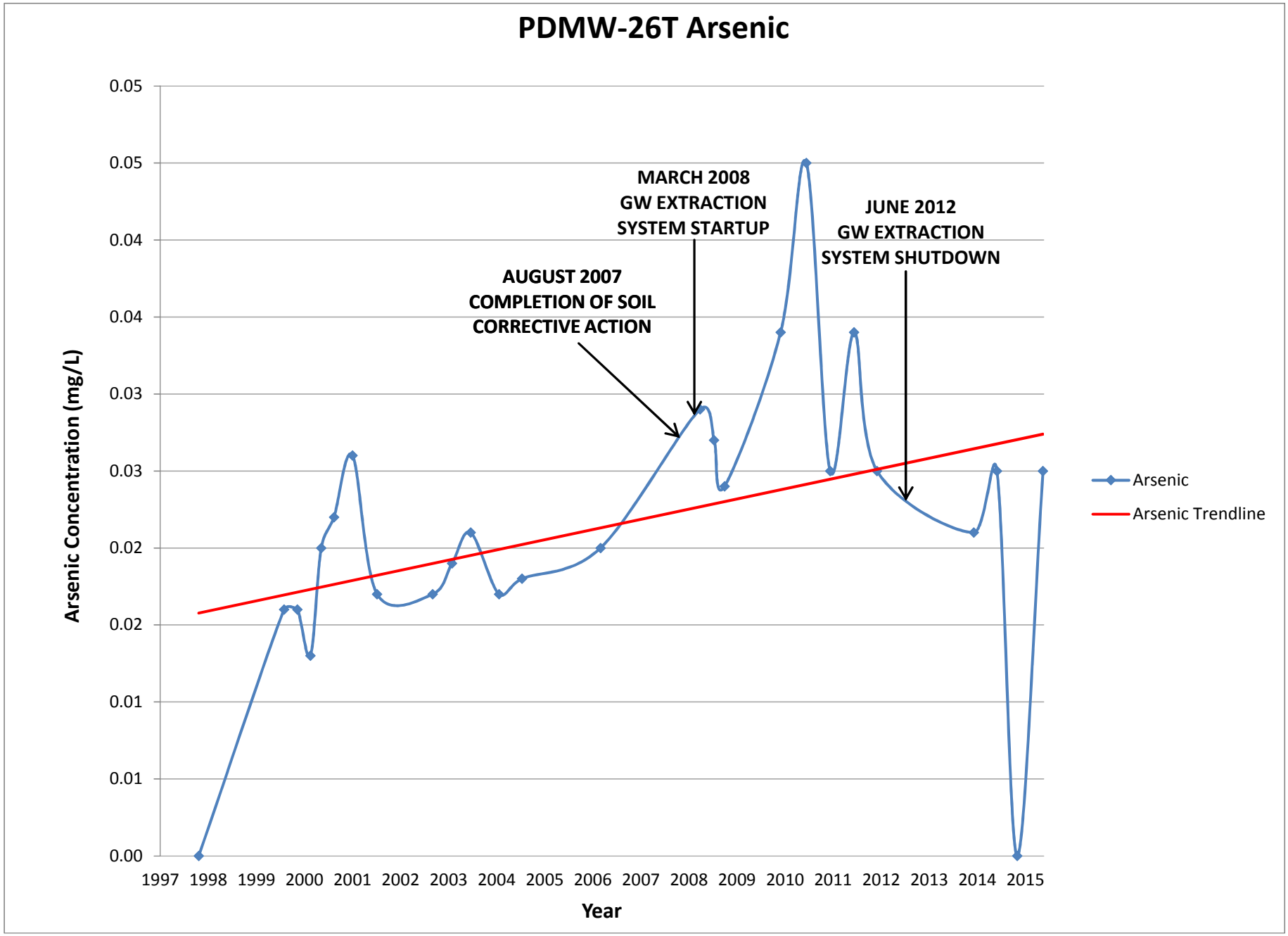

MW-3R Ammonia
Ammonia Concentration (mg/L)
12
10
8
6
4
2
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Ammonia
Ammonia Trendline

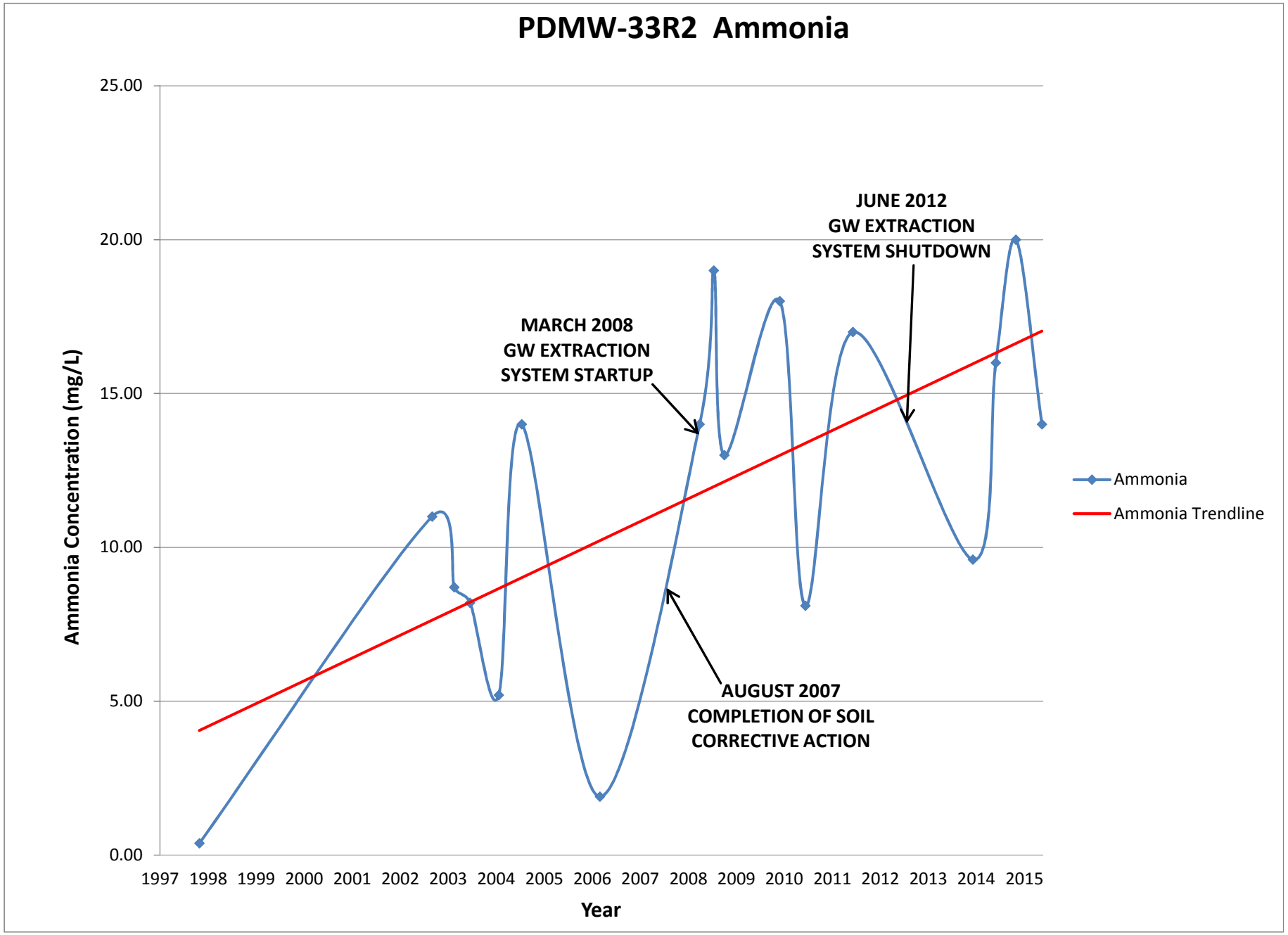

MW-3R Lead
Lead Concentration (mg/L)
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Lead
Lead Trendline

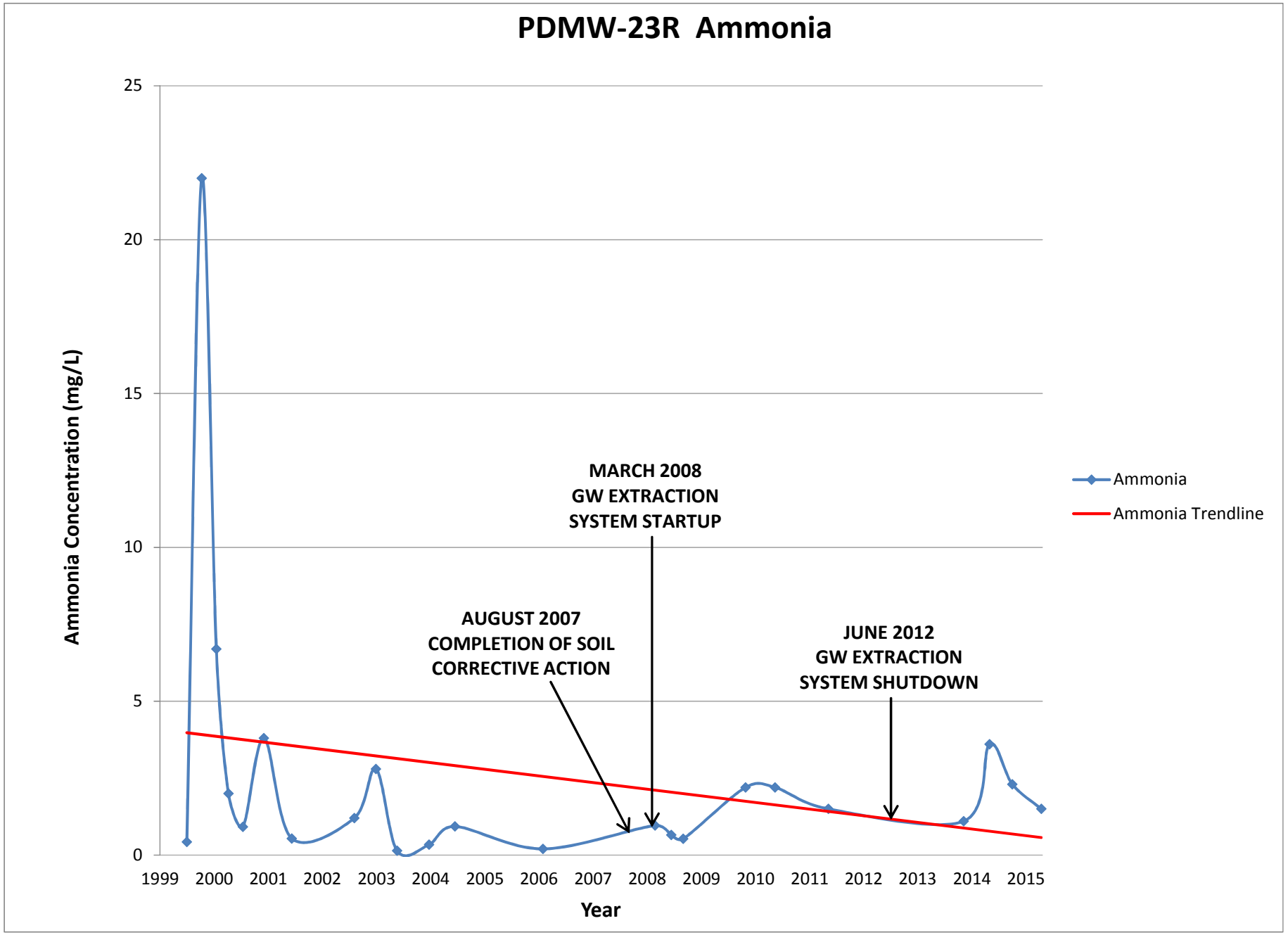

PDMW-8R Ammonia
Ammonia Concentration (mg/L)
120
100
80
60
40
20
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
Ammonia
Ammonia Trendline

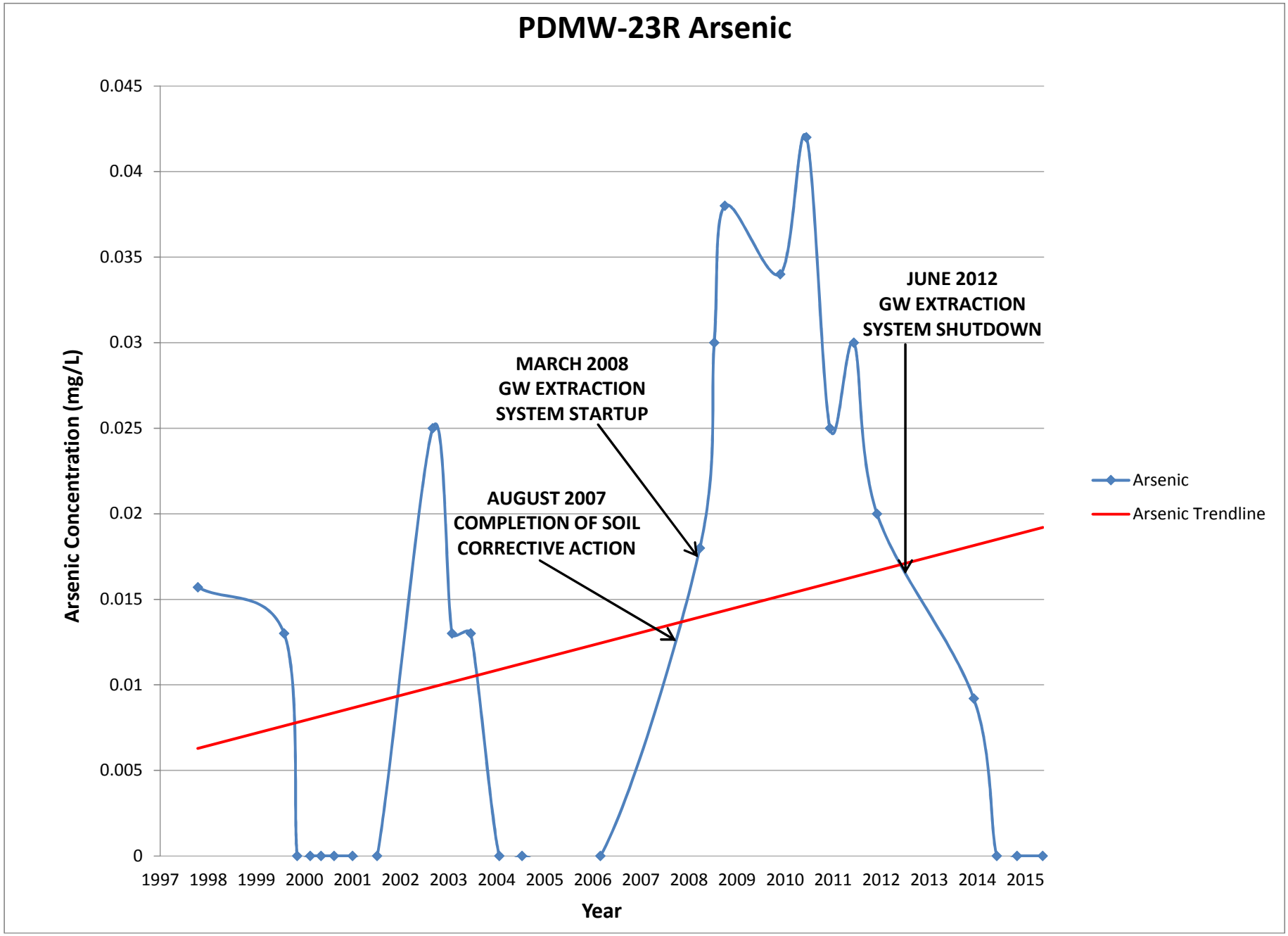

PDMW-8R Arsenic
Arsenic Concentration (mg/L)
120
100
80
60
40
20
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
Arsenic
Arsenic Trendline

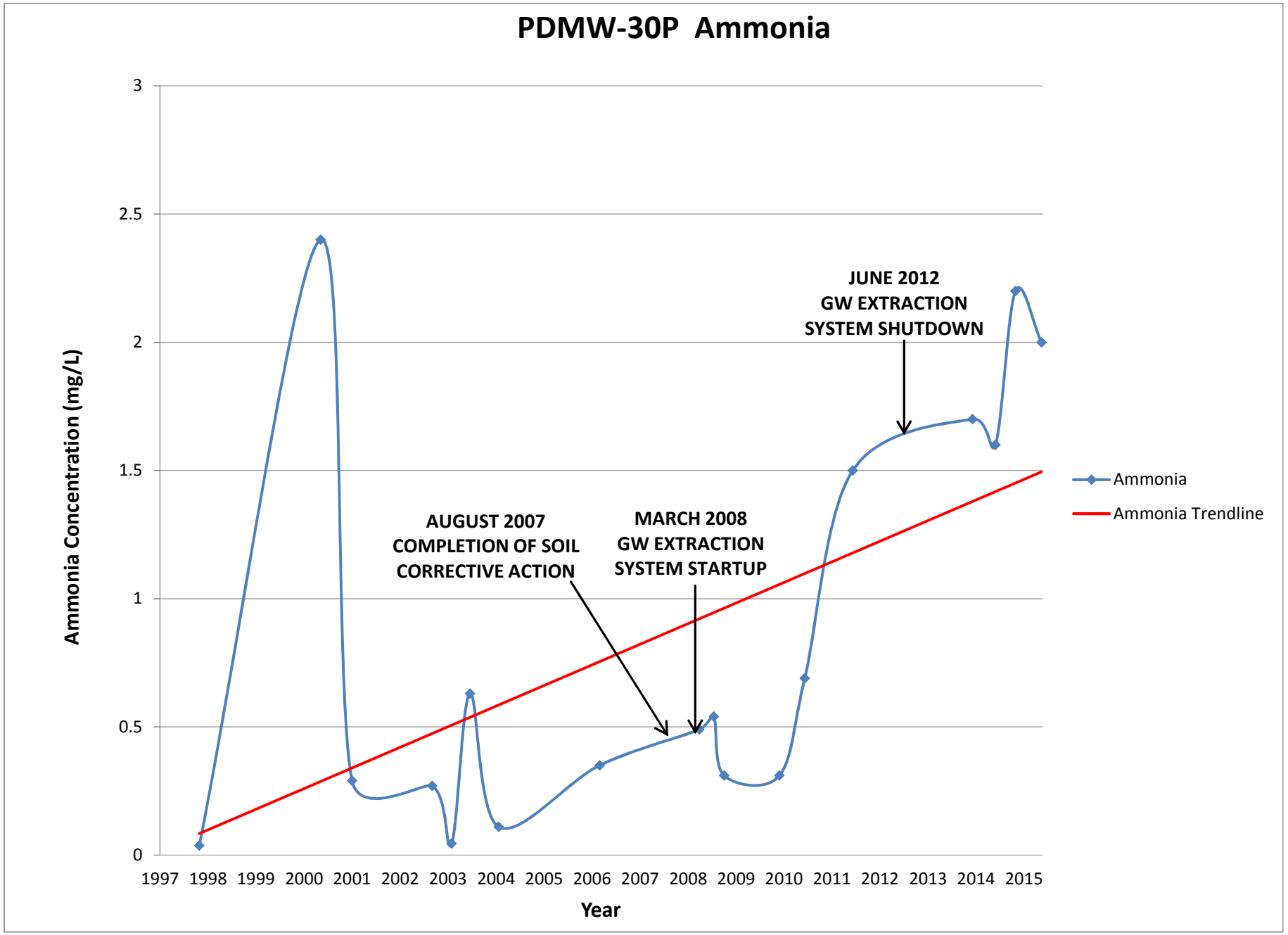

PDMW-26T Ammonia
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
Ammonia Concentration (mg/L)
Year
Ammonia
Ammonia Trendline
0
100
200
300
400
500
600
700
800
900
1000
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015

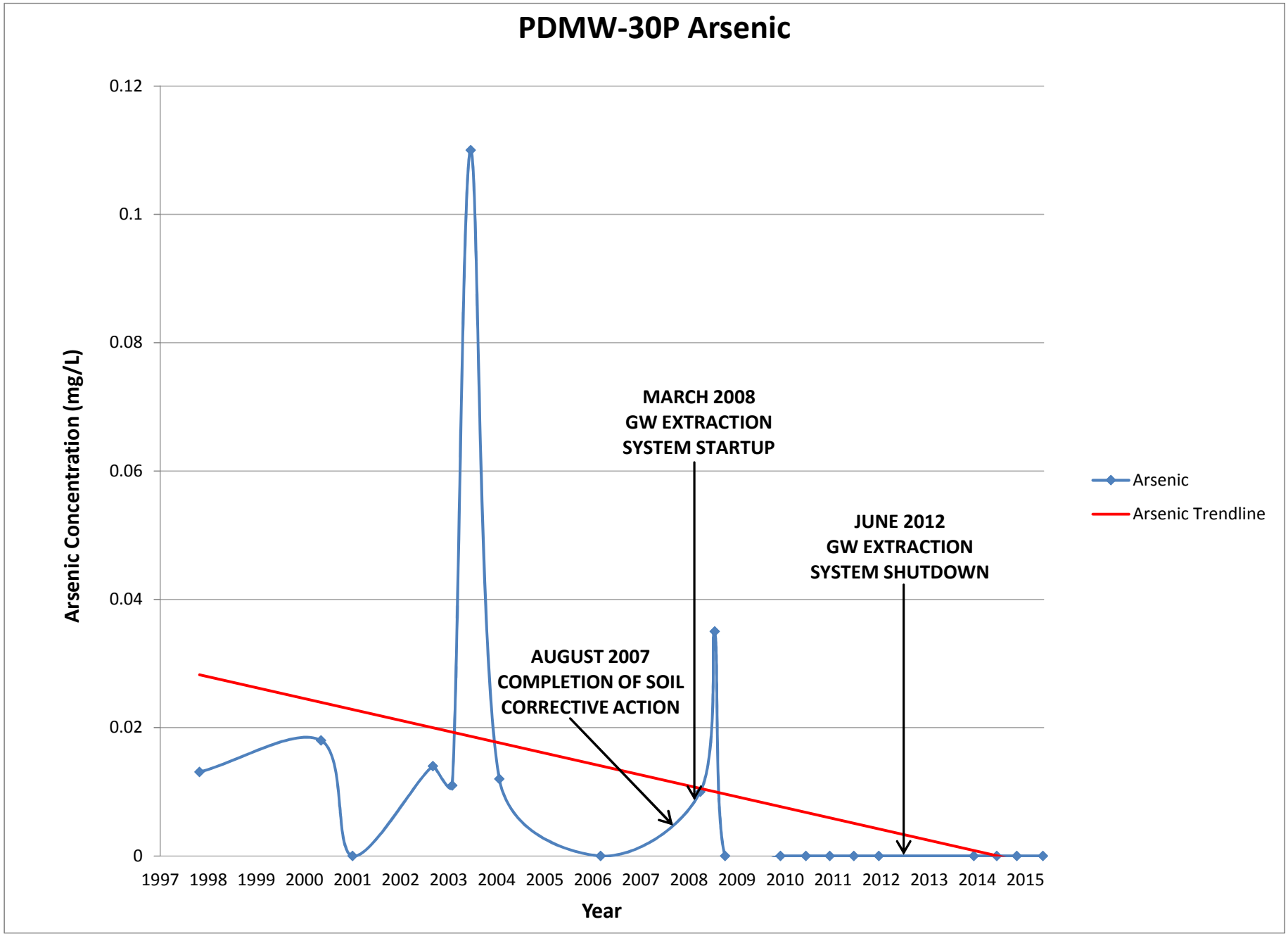

PDMW-26T Arsenic
Arsenic Concentration (mg/L)
0.05
0.05
0.04
0.04
0.03
0.03
0.02
0.02
0.01
0.01
0.00
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Arsenic
Arsenic Trendline

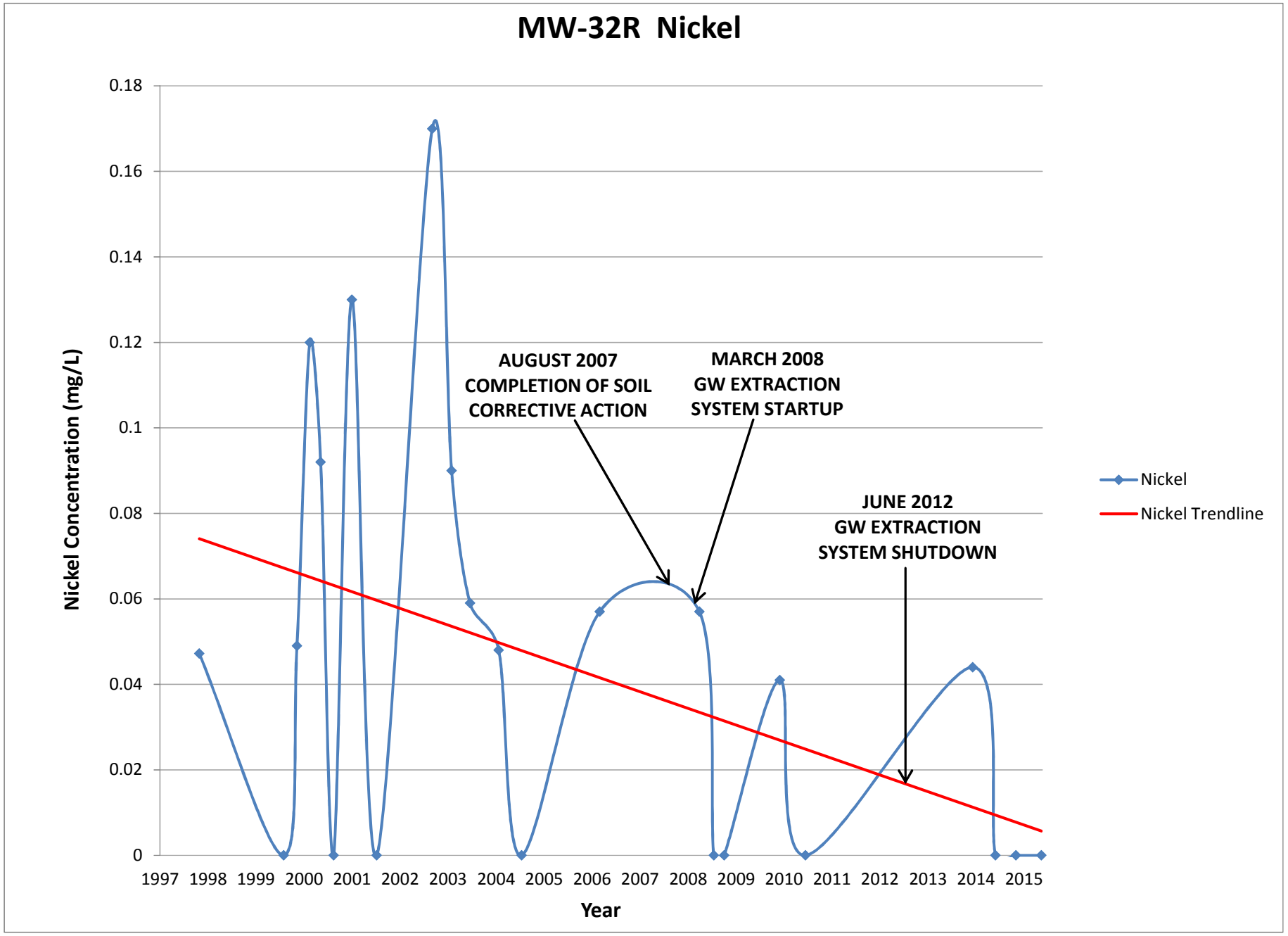

PDMW-33R2 Ammonia
25.00
20.00
15.00
10.00
5.00
0.00
Ammonia Concentration (mg/L)
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
Ammonia
Ammonia Trendline

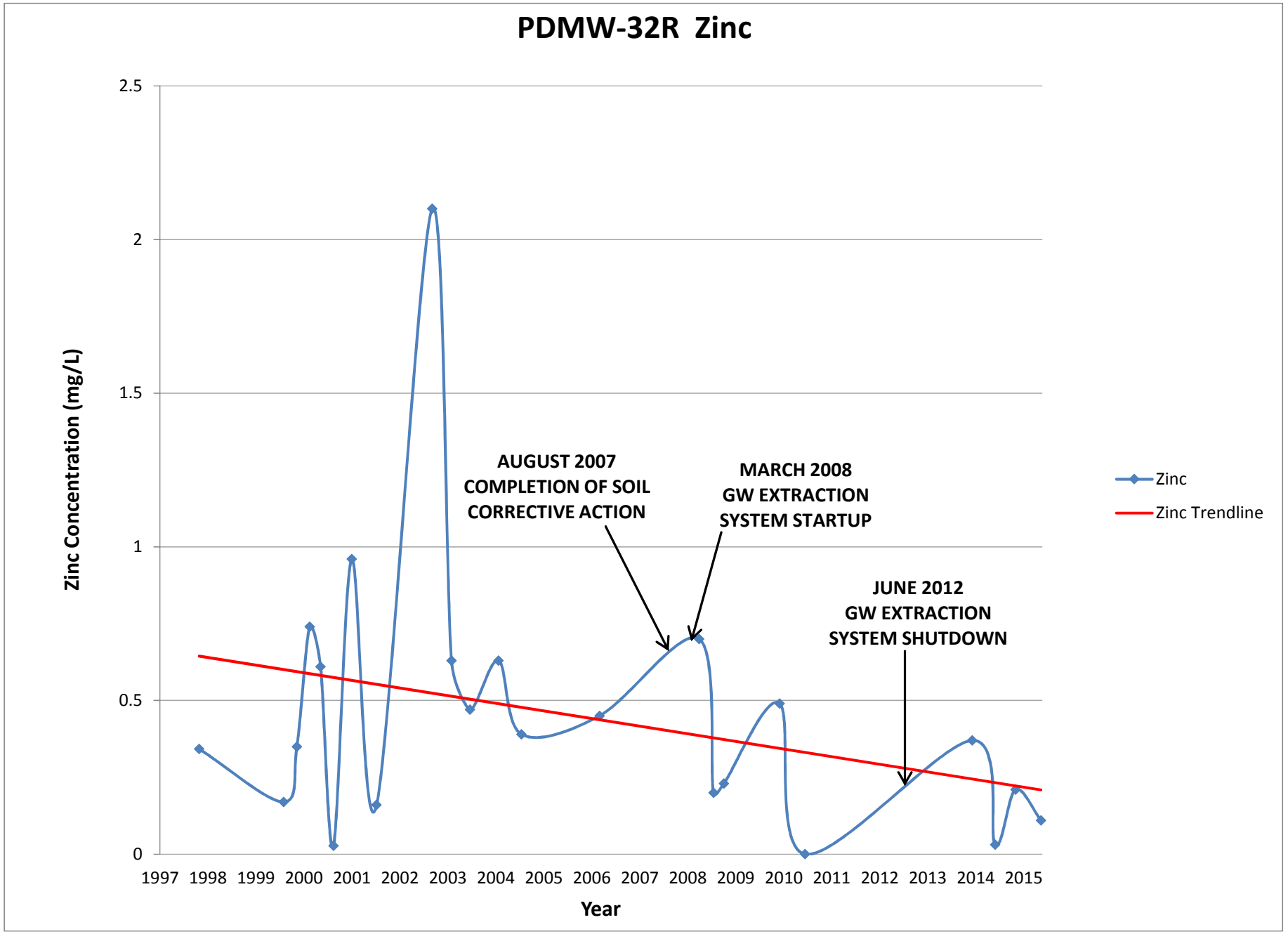

PDMW-23R Ammonia
Ammonia Concentration (mg/L)
25
20
15
10
5
0
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
Year
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Ammonia
Ammonia Trendline

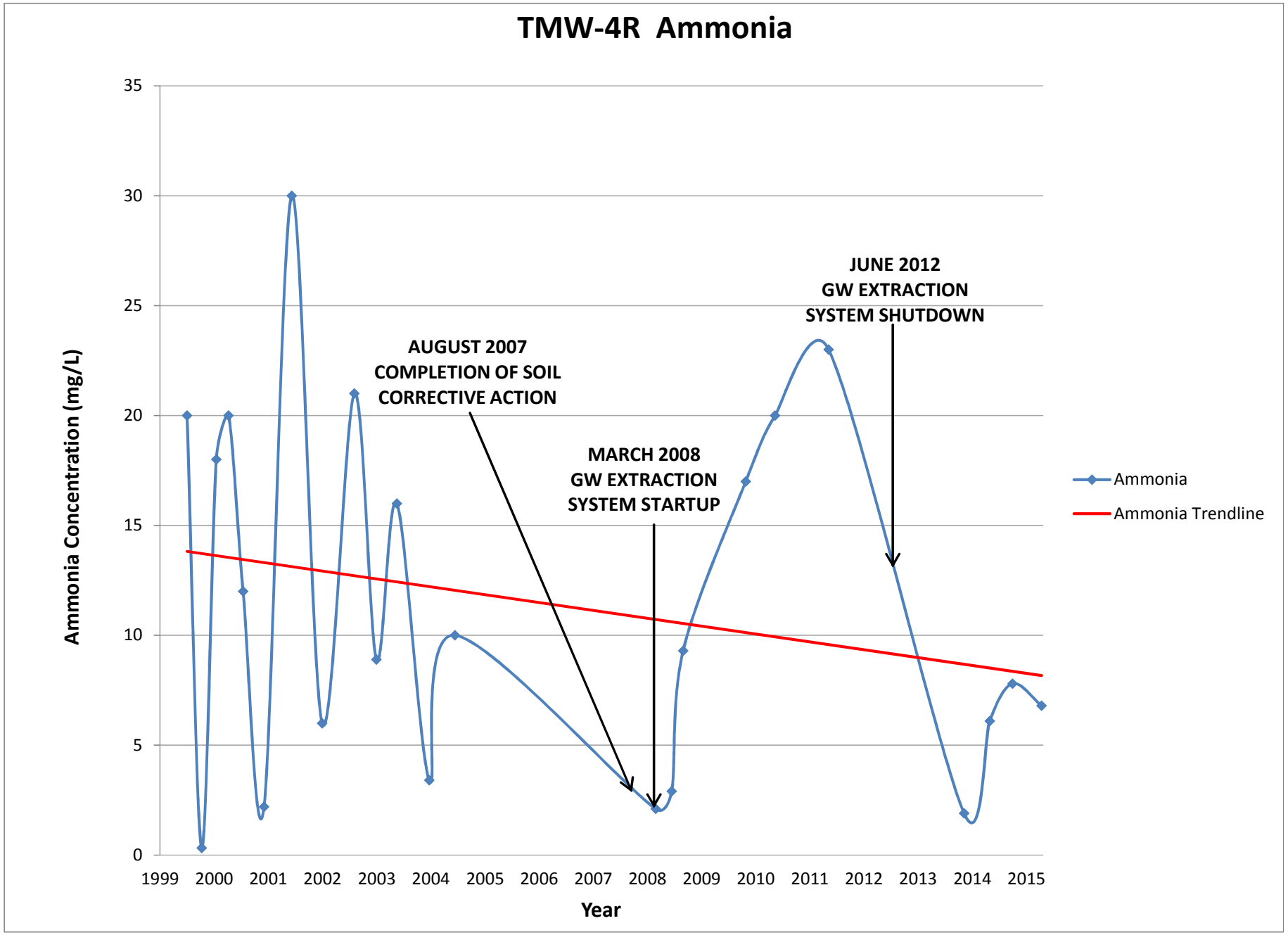

PDMW-23R Arsenic
Arsenic Concentration (mg/L)
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
Arsenic
Arsenic Trendline

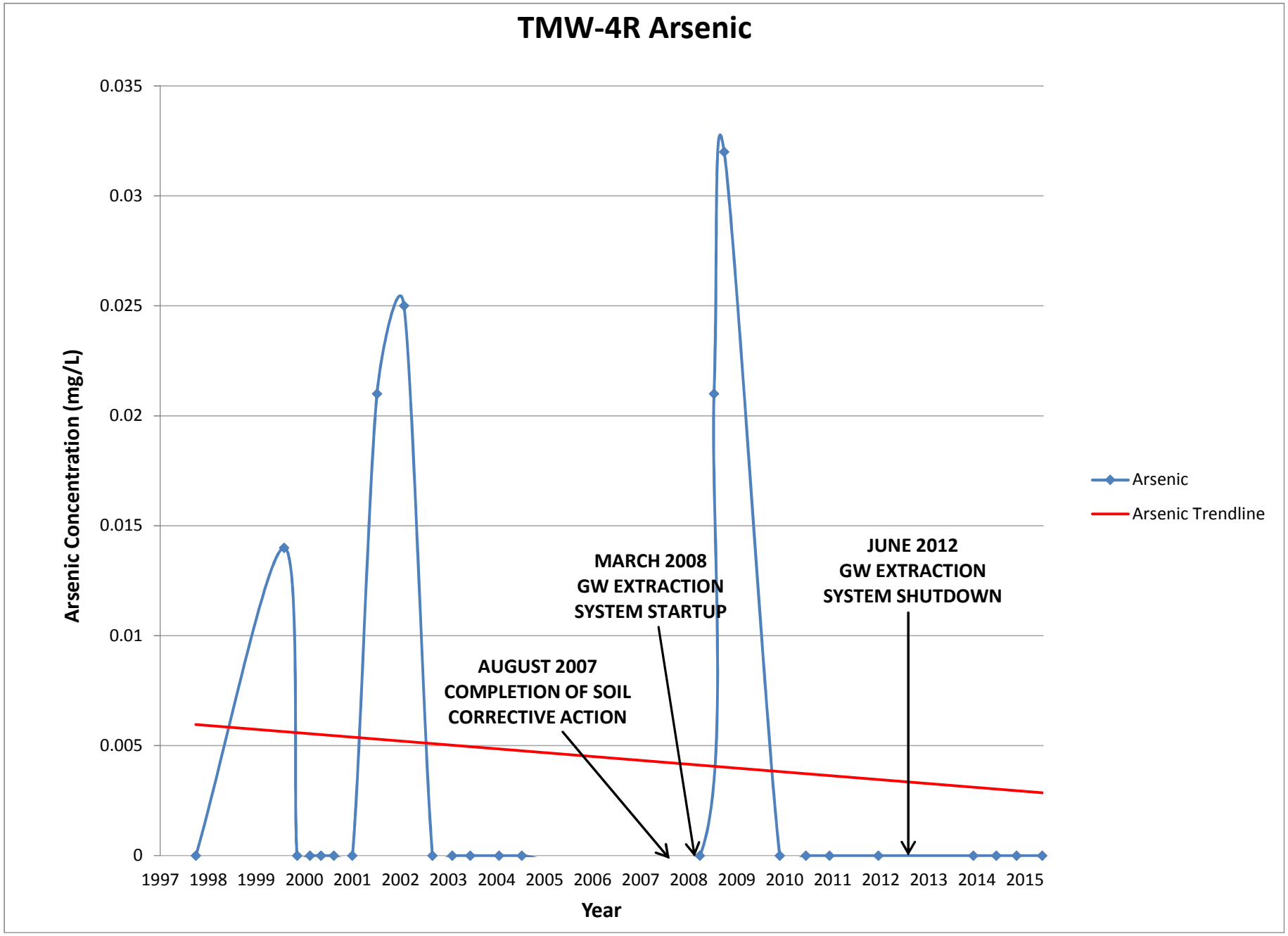

PDMW-30P Ammonia
Ammonia Concentration (mg/L)
3
2.5
2
1.5
1
0.5
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
Ammonia
Ammonia Trendline


PDMW-30P Arsenic
Arsenic Concentration (mg/L)
0.12
0.1
0.08
0.06
0.04
0.02
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
Arsenic
Arsenic Trendline

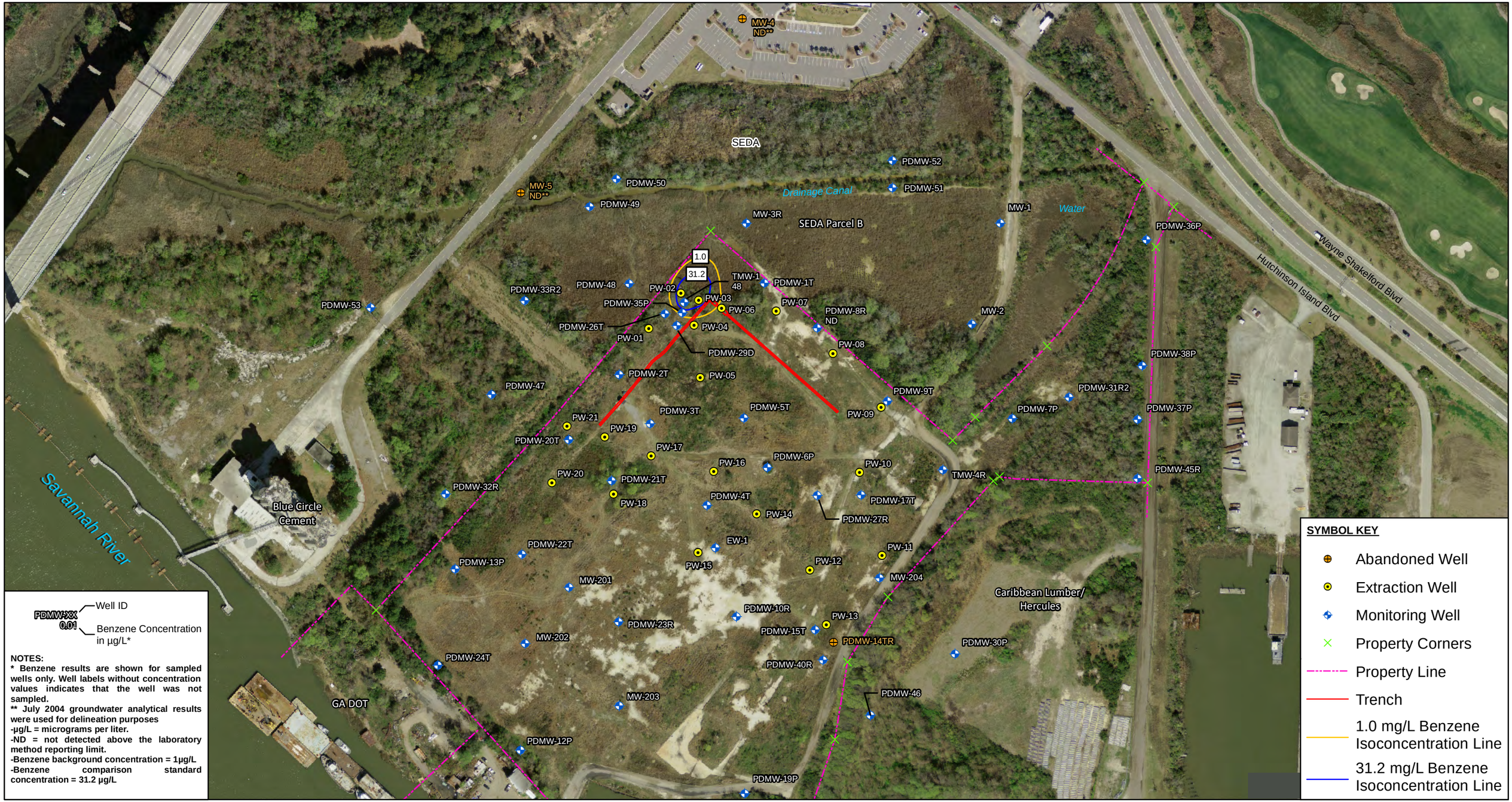

MW-32R Nickel
Nickel Concentration (mg/L)
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Nickel
Nickel Trendline


PDMW-32R Zinc
Zinc Concentration (mg/L)
2.5
2
1.5
1
0.5
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Zinc
Zinc Trendline


TMW-4R Ammonia
Ammonia Concentration (mg/L)
35
30
25
20
15
10
5
0
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Ammonia
Ammonia Trendline


TMW-4R Arsenic
Arsenic Concentration (mg/L)
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015
Year
AUGUST 2007
COMPLETION OF SOIL
CORRECTIVE ACTION
MARCH 2008
GW EXTRACTION
SYSTEM STARTUP
JUNE 2012
GW EXTRACTION
SYSTEM SHUTDOWN
Arsenic
Arsenic Trendline

APPENDIX E
ISOCONCENTRATION DRAWINGS



NOTES:
*** Benzene results are shown for sampled wells only. Well labels without concentration values indicates that the well was not sampled.**
**** July 2004 groundwater analytical results were used for delineation purposes**
-µg/L = micrograms per liter.
-ND = not detected above the laboratory method reporting limit.
-Benzene background concentration = 1µg/L
-Benzene comparison standard concentration = 31.2 µg/L

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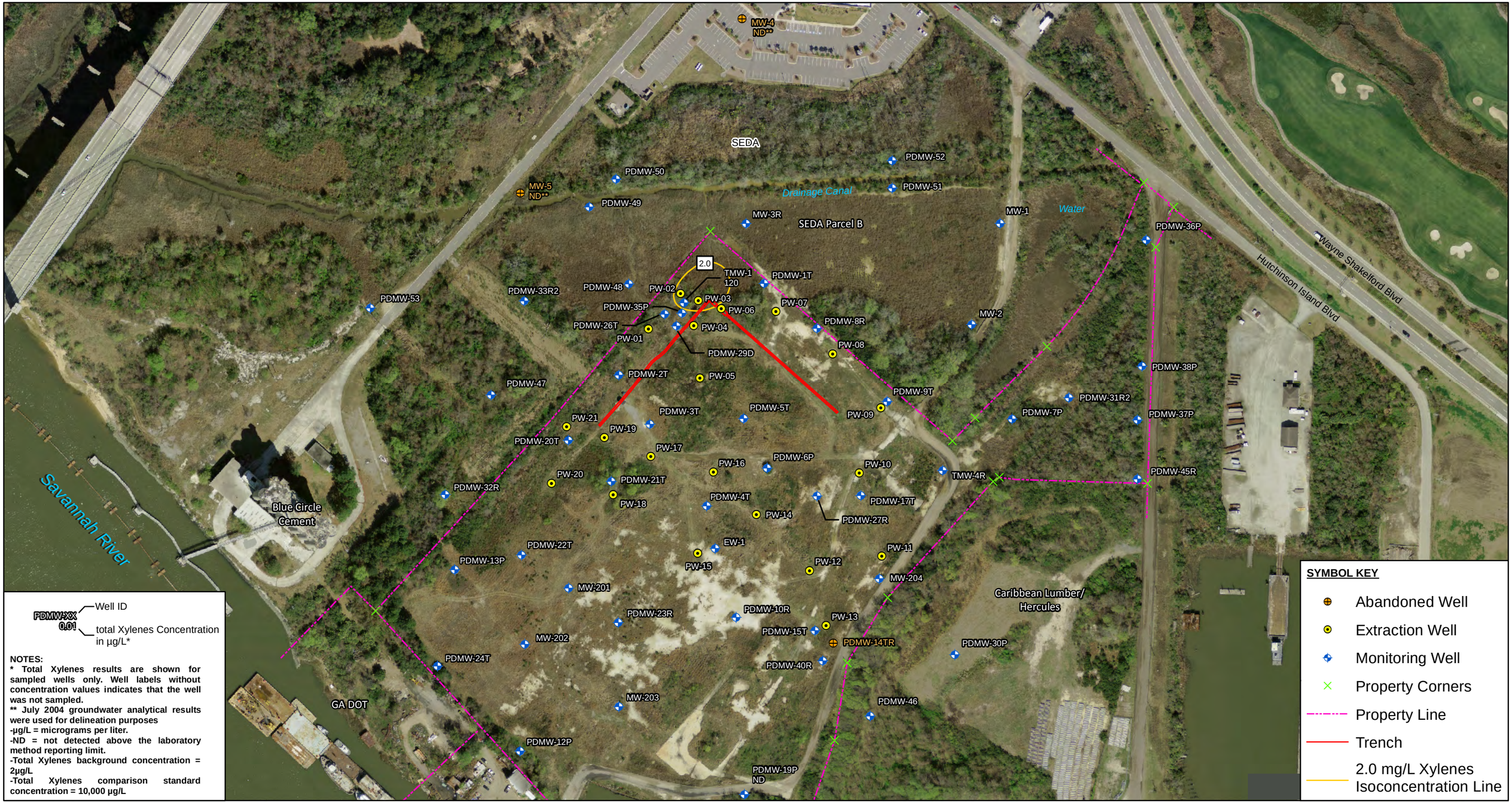
FIGURE E-1

Benzene Isoconcentration Map - May 2015
Hutchinson Island HSI - 10101 - Savannah, Georgia

0 200 400 800 1,200 1,600 Feet

07/20/2015	REV:	CSXT_Hutch_Is_Benzene_Conc_May2015.mxd
Drawn: JNR	PROJ: 6-4300-5245	Aerial data source: USGS



PDMW-XX
0.01

Well ID

total Xylenes Concentration in µg/L*

NOTES:
*** Total Xylenes results are shown for sampled wells only. Well labels without concentration values indicates that the well was not sampled.**
**** July 2004 groundwater analytical results were used for delineation purposes**
-µg/L = micrograms per liter.
-ND = not detected above the laboratory method reporting limit.
-Total Xylenes background concentration = 2µg/L
-Total Xylenes comparison standard concentration = 10,000 µg/L

SYMBOL KEY

- Abandoned Well
- Extraction Well
- Monitoring Well
- Property Corners
- Property Line
- Trench
- 2.0 mg/L Xylenes Isoconcentration Line

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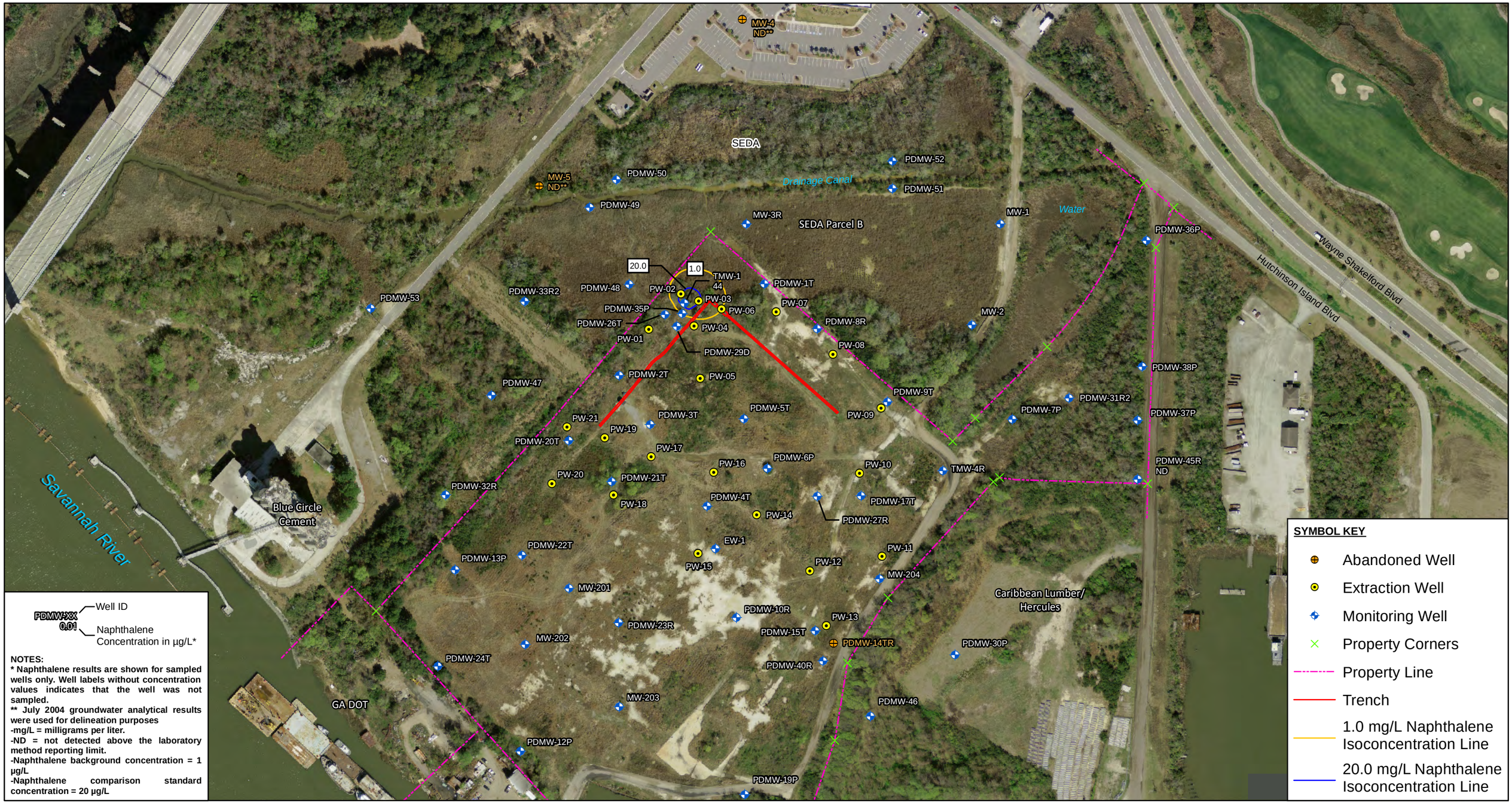
FIGURE E-2

Total Xylenes Isoconcentration Map - May 2015
Hutchinson Island HSI - 10101 - Savannah, Georgia

0 200 400 800 1,200 1,600 Feet

07/20/2015	REV:	CSXT_Hutch_Is_Xylenes_Conc_ May 2015.mxd
Drawn: JNR	PROJ: 6-4300-5245	Aerial data source: USGS



NOTES:
*** Naphthalene results are shown for sampled wells only. Well labels without concentration values indicates that the well was not sampled.**
**** July 2004 groundwater analytical results were used for delineation purposes**
-mg/L = milligrams per liter.
-ND = not detected above the laboratory method reporting limit.
-Naphthalene background concentration = 1 µg/L
-Naphthalene comparison standard concentration = 20 µg/L

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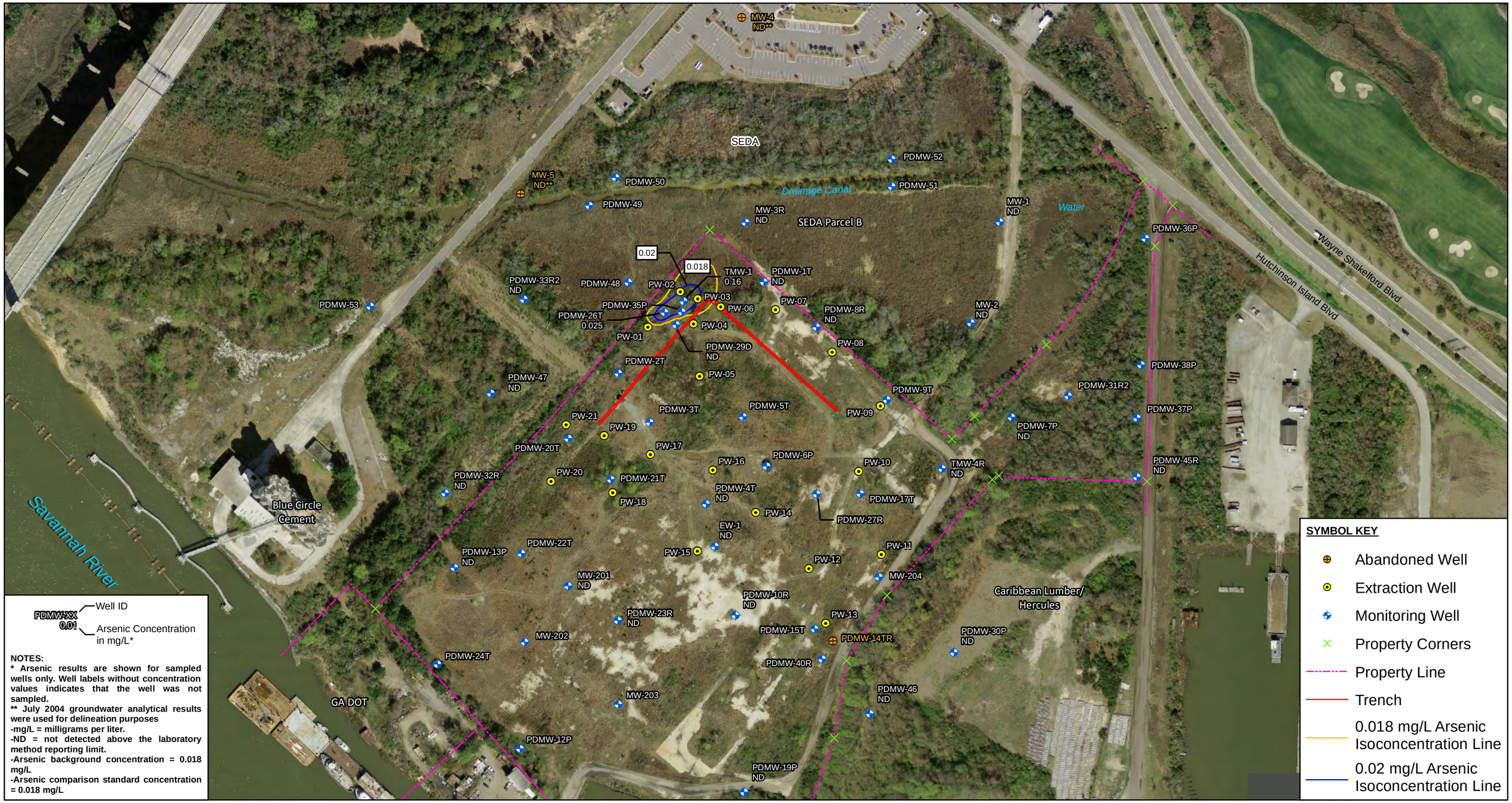
FIGURE E-3

Naphthalene Isoconcentration Map - May 2015
Hutchinson Island HSI - 10101 - Savannah, Georgia

0 200 400 800 1,200 1,600 Feet

07/20/2015	REV:	CSXT_Hutch_Is_Naphthalene_Conc_May 2015.mxd
Drawn: JNR	PROJ: 6-4300-5245	Aerial data source: USGS



PDMW-XX
0.01
Well ID
Arsenic Concentration in mg/L*

NOTES:
*** Arsenic results are shown for sampled wells only. Well labels without concentration values indicates that the well was not sampled.**
**** July 2004 groundwater analytical results were used for delineation purposes**
-mg/L = milligrams per liter.
-ND = not detected above the laboratory method reporting limit.
-Arsenic background concentration = 0.018 mg/L
-Arsenic comparison standard concentration = 0.018 mg/L

SYMBOL KEY

- Abandoned Well
- Extraction Well
- Monitoring Well
- Property Corners
- Property Line
- Trench
- 0.018 mg/L Arsenic Isoconcentration Line
- 0.02 mg/L Arsenic Isoconcentration Line

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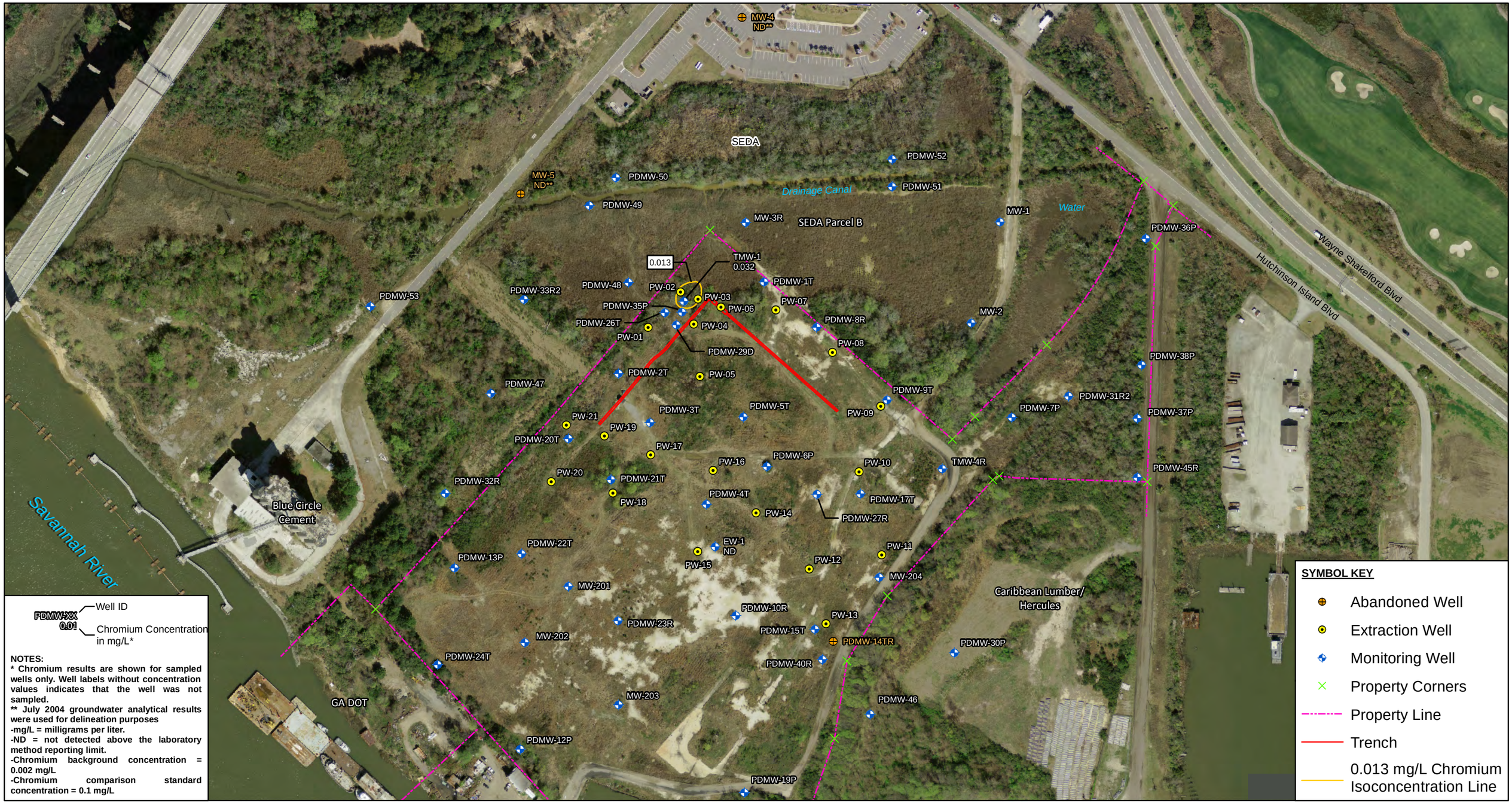
FIGURE E-4

Arsenic Isoconcentration Map - May 2015
Hutchinson Island HSI - 10101 - Savannah, Georgia

0 200 400 800 1,200 1,600 Feet

07/20/2015	REV:	CSXT_Hutch_Is_Arenic_Conc_March2015.mxd
Drawn: JNR	PROJ: 6-4300-5245	Aerial data source: USGS



NOTES:
*** Chromium results are shown for sampled wells only. Well labels without concentration values indicates that the well was not sampled.**
**** July 2004 groundwater analytical results were used for delineation purposes**
-mg/L = milligrams per liter.
-ND = not detected above the laboratory method reporting limit.
-Chromium background concentration = 0.002 mg/L
-Chromium comparison standard concentration = 0.1 mg/L

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N

CSX Transportation, Inc.

FIGURE E-5

Chromium Isoconcentration Map - May 2015
Hutchinson Island HSI - 10101 - Savannah, Georgia

0 200 400 800 1,200 1,600 Feet

07/20/2015	REV:	CSXT_Hutch_Is_Chromium_Conc_May2015.mxd
Drawn: JNR	PROJ: 6-4300-5245	Aerial data source: USGS

APPENDIX F

REGISTERED PROFESSIONAL SUPPORTING DOCUMENTATION

Stephen R. Foley, P.G.

Summary of Hours and Services

CSX Hutchinson Island

HSI Site No. 10101

Amec Foster Wheeler Project No. 6-4300-5245

Hours for post-approval Voluntary Remediation Plan implementation

1) Completion of May 2015 groundwater monitoring event and evaluation of groundwater monitoring data

   71 hours invoiced between May 20, 2015 and June 25, 2015

2) Preparation of July 2015 Semi-Annual VRP Progress Report

   81.5 hours invoiced between June 30, 2015 and July 31, 2015