PORTABLE DOCUMENT FORMAT CERTIFICATION

The electronic copy of the Voluntary Remediation Program Status Report No. 1 for the former Swift & Company Meat Processing Plant, Moultrie, Colquitt County, Georgia, HSI No 10509 as provided on this CD is complete and identical to the paper copy and free of viruses to the best of our knowledge.

Amec Foster Wheeler Environment & Infrastructure, Inc.

Shreek

David E. Smoak Project Manager



Voluntary Remediation Program Status Report No. 1

Former Swift & Company Meat Processing Plant Moultrie, Colquitt County, Georgia HSI Site No. 10509

Submitted to:

Georgia Department of Natural Resources Environmental Protection Division Hazardous Sites Response and Remediation Program Suite 1054, East Tower 2 Martin Luther King Jr. Drive SE Atlanta, Georgia 30334

Prepared ConAgra Foods, Inc.

for: 1 ConAgra Drive, Omaha, Nebraska 68102

Date: December 8, 2015

Prepared by: Amec Foster Wheeler Environment & Infrastructure, Inc. 1075 Big Shanty Road NW, Suite 100, Kennesaw, Georgia 30144

Project No.: 6122140220

December 8, 2015



Mr. Allan Nix Unit Coordinator Georgia Department of Natural Resources Response and Remediation Program Suite 1054 East 2 Martin Luther King Jr. Drive SE Atlanta, Georgia 30334

Subject: Voluntary Remediation Program Status Report No. 1 Former Swift & Company Meat Processing Plant 1189 North Main Street Moultrie, Colquitt County, Georgia HSI Site No. 10509

Dear Mr. Nix:

On behalf of ConAgra Foods, Inc. and Swift & Company, Inc., Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) respectfully submits the attached Voluntary Remediation Program (VRP) Status Report No. 1 for the above-referenced site. ConAgra submitted a Voluntary Investigation and Remediation Plan (VIRP) to the Georgia Environmental Protection Division (EPD) on February 27, 2015. EPD accepted Swift & Company as a participant as defined in the Georgia Voluntary Remediation Program Act in its letter dated May 29, 2015. This VRP Status Report No. 1 is submitted as a semiannual progress report in accordance with the schedule contained in the May 29, 2015 letter.

Please contact us at 770-421-3400 with any questions you may have regarding this submittal. Thank you for your assistance with this project.

Sincerely,

Amec Foster Wheeler Environment & Infrastructure, Inc.

John Quinn, P.G. Senior Geologist

David E. Smoak, P.G. Associate Geologist/Project Manager

cc: Mr. Chris Aupperle, ConAgra Foods Ella Fast, City of Moultrie Mr. Billy Fallin

Attachments: VRP Status Report No. 1

Environment & Infrastructure 1075 BIG SHANTY ROAD NW SUITE 100 KENNESAW. GA 30144 USA 0 (770) 421 3400 F (770) 421 3486 amecfw.com

TABLE OF CONTENTS

			Page
1.0	PG C	ERTIFICATION	I
2.0	INTR	ODUCTION AND BACKGROUND	2-1
3.0	WOR	K PERFORMED DURING REPORTING PERIOD	3-1
	3.1	MONITORING WELL REPAIRS	3-1
	3.2	ANNUAL GROUNDWATER SAMPLING AND ANALYSIS	3-2
		 3.2.1 Groundwater Elevation and Flow Direction 3.2.2 Groundwater Velocity 3.2.3 Groundwater Quality 3.2.4 Comparison to Prior Analytical Data 	3-3 3-4
	3.3	UPDATED SOURCEDK MODELING RESULTS 3.3.1 Data Preparation 3.3.2 Analyses 3.3.3 Results	3-9 3-10
	3.4	UPDATED FATE AND TRANSPORT MODELING	3-12
4.0	CON	CLUSIONS AND RECOMMENDATIONS	4-1
5.0	NEXT	SUBMITTAL	5-1

TABLES

Table 1	Summary of Groundwater Elevations
Table 2	Summary of Groundwater Analytical Results
Table 3	Summary of SourceDK Model Input

FIGURES

Figure 1	Site Location Map
Figure 2	Site Map
Figure 3	Potentiometric Surface – Shallow Zone A – September 21, 2015
Figure 4	Potentiometric Surface – Shallow Zone B – September 21, 2015
Figure 5	Groundwater Quality Map – pH – September 2015
Figure 6	Groundwater Quality Map – Barium – September 2015
Figure 7	Groundwater Quality Map – Lead – September 2015

APPENDICES

Appendix A:	September 2015 Laboratory Data Reports, Chain of Custody, and Field
	Sampling Reports

- Appendix B:
- Appendix C:
- SourceDK Modeling Results Fate and Transport Modeling Registered Professional Supporting Documentation Appendix D:

1.0 PG CERTIFICATION

"I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et seq.). I am a professional engineer/professional geologist who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors/Georgia State Board of Registration for Professional Geologists and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances.

Furthermore, to document my direct oversight of the Voluntary Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division.

The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

2.0 INTRODUCTION AND BACKGROUND

This Voluntary Remediation Program Semi-Annual Status Report No. 1 (Status Report) was prepared in accordance with the Voluntary Remediation Program (VRP) for the former Swift & Company former meat processing facility site, Hazardous Site Inventory (HSI) No.10509. The Georgia Environmental Protection Division (EPD) letter, dated May 29, 2015, accepted the site into the VRP and requested submittal of semi-annual VRP status reports. As required by EPD's letter dated May 29, 2015, semiannual progress reports are to submitted November 29th and May 29th annually, beginning November 2015 and ending in 2020, unless a compliance status report (CSR) is submitted and approved prior to 2020. This first Status Report covers the activities conducted subsequent to EPD's May 29, 2015 VRP acceptance letter. The goals of this Status Report are to comply with the status report submittal schedule, update EPD on the progress of activities at the site, and respond to comments provided by EPD in a June 4, 2015 comment letter. This Status Report is submitted under a extension request communicated to EPD via telephone and electronic mail on November 17, 2015.

The site is comprised of three qualifying properties located at 1189 North Main Street (U.S. Highway 319 Business, Georgia Highway 33) the northern part of Moultrie, Georgia, in Colquitt County. A site location map is shown on Figure 1. The qualifying properties include:

- A 2.53 acre tract currently owned by the City of Moultrie (Tax ID Parcel M022A 005), which represents the southernmost portion of the former 14-acre Swift & Company meat processing facility property.
- A 2.52 acre parcel owned by the Rennie A. Tumlin Estate (Tax ID Parcel M022A 004).
- The easternmost portion of an adjoining 50.23 acre tract (Tax ID Parcel M022A 002) which formerly contained the Former Boiler and Engine House. This tract is owned by the Joint Development Authority (JDA) of Brooks, Colquitt, Grady, Mitchell, and Thomas Counties

A site map is provided in Figure 2. The western and southern boundaries of the site are bordered by an active railroad right of way owned by Georgia & Florida RailNet, Inc. North Main Street borders the subject properties on the east. The northern boundary of the subject properties are bounded by property that was part of the former Swift facility. Railroad tracks and retention ponds used by Farmland National Beef are located to the west.

While operational, the Swift & Company plant was a stockyard and meat-processing facility where hogs, cattle, and sheep were slaughtered, butchered, and packaged for the consumer market. The meat-processing plant was originally constructed in 1914, and operated until 1970. After 1970, Swift & Company constructed a new facility to the west now referred to as Farmland National Beef.

After meat processing operations ceased, the buildings remained on the property for about 30 years and were believed to have been used for storage by other property owners, among other things. The buildings on the 2.53-acre City of Moultrie tract were demolished in 2001, and the surface was subsequently graded and grassed. Information contained in a CSR prepared by Advanced Environmental Technologies, LLC (AET), and information provided by City of Moultrie representatives report the demolition debris was removed and properly disposed offsite. The

Former Boiler and Engine House were demolished in 2011. There are no activities currently conducted on the subject properties, and the subject properties are currently located on an open tract.

Previous investigations of the property detected volatile organic compounds (VOCs), and metals in groundwater. A few of the constituents exceeded the Hazardous Site Response Act (HSRA) notification concentrations. The environmental history of the site is summarized as follows:

- Assessments including soil and groundwater sampling were conducted in 1997.
- The site was listed on the Hazardous Site Inventory (HSI) on June 6, 1998 as Site No. 10509.
- A a HSRA Compliance Status Report (CSR) Assessment was conducted in 2001-2002 that included soil and groundwater sampling and submittal of a CSR. Buildings on the property were demolished in 2001 before the HSRA CSR investigations.
- Further CSR assessment was performed in 2003 (including submittal of a Revised CSR).
- Additional field investigation was conducted in 2004-2005.
- The available 2004-2005 data were included in the September 30, 2008, Revised CSR, which also included details for the 2007 and 2008 investigations conducted by MACTEC.
- The January 29, 2010 Revised CSR responded to the subsequent EPD comments on the September 30, 2008, Revised CSR, and included information from 2009 field investigations by MACTEC.
- A Corrective Action Plan (CAP) was submitted on May 13, 2011. The proposed remedy in the CAP for the former Swift site was monitored natural attenuation (MNA).
- EPD gave Conditional Approval of the CAP In a letter dated December 12, 2011.
- The First Semiannual Corrective Action Effectiveness Report (CAER) was submitted to EPD on June 12, 2012.
- The Second Semiannual CAER was submitted to EPD on December 11, 2012.
- The Third Semiannual CAER was submitted to EPD on May 24, 2013.
- The Fourth Semiannual CAER was submitted to EPD on December 11, 2013.
- The First Annual CAER (ACAER) was submitted to EPD on February 27, 2015 as Appendix B to the Voluntary Remediation Program Application and Plan. Based on the results of the monitoring and the updated SourceDK models presented in the ACAER, and after discussions with EPD, Swift had made the decision to proceed with entering the site into the VRP.
- The EPD letter dated May 29, 2015 accepted the site into the VRP and requested submittal of semi-annual VRP status reports.

The EPD letter dated June 4, 2015 put forth comments to be addressed during implementation of the VRP. A response to the EPD Comments dated August 31, 2015 was submitted to EPD and is pending review.

3.0 WORK PERFORMED DURING REPORTING PERIOD

The activities currently identified to be conducted at the Swift site under the VRP are outlined in the VRP Application and Plan, dated February 27, 2015, and the EPD VRP approval and comment letters dated May 29 and June 4, 2015. The activities that have been conducted subsequent to EPD's acceptance of the site into the VRP include repair of monitoring wells MW-16, MW-18, MW-29 and MW-31, annual groundwater sampling and analysis, update of SourceDK modeling results, and updated fate and transport modeling. These activities are described in the following sections.

3.1 MONITORING WELL REPAIRS

As reported in the First ACAER, monitoring wells MW-A, MW-23, MW-24 and MW-25 could not be located for measurement of groundwater elevation in September 2014, due to grading which was found to have been performed at the northern portion of the site. MW-A and MW-23 were located in an area where fill had been deposited, and had apparently been covered with several feet of soil. MW-18 was also located in a "fill" area, but was found and measured as plastic buckets had been used to mark the well location. Wells MW-24 and MW-25 were located in an area where the ground surface had been lowered (or "cut"), and could not be found. Wells MW-16, MW-29 and MW-31 were also located in a "cut" area, but the wells were left in place and the ground surface was removed around these wells, leaving pinnacles of soil at the well locations.

On July 20-21, 2015, work was performed at the site in an attempt to locate and repair wells MW-A, MW-23, MW-24 and MW-25. The former locations of the wells were located and flagged by Amec Foster Wheeler personnel using the previous survey coordinates and a Trimble GeoXH 6000 series GNSS (Global Navigation Satellite System) unit, after which a utility locating subcontractor (One Vision Utility Services) utilized ground-penetrating radar (GPR) and a magnetometer to investigate the former well locations. The target locations identified by these methods were investigated by using a backhoe and manual tools to excavate to a depth of approximately four feet. MW-A, MW-23, MW-24 and MW-25 could not be located using these techniques, and must be presumed to have been destroyed during the grading activities.

Also on July 20-21, 2015, work was performed to repair wells MW-16, MW-29 and MW-31 (left as pinnacles of soil in a "cut" area), and well MW-18 (left several feet below grade in a "fill" area). Geo Lab Drilling (Geo Lab), a drilling subcontractor, performed the repair work to the wells under the observation of Amec Foster Wheeler personnel. Geo Lab removed the soil pinnacle, protective steel cover, damaged concrete pad, and grout collar from wells MW-16, MW-29, and MW-31, and the monitoring wells were then cut flush with the ground surface and completed with a new flush-mount steel protective cover and 2 foot (ft) by 2 ft by 4 inch (in) concrete pad. MW-18 was excavated by Geo Lab and the existing concrete pad and protective steel cover were removed. Additional PVC riser casing was added to MW-18 to bring the monitoring well up to ground surface, and the well was fitted with a new flush-mount steel cover and a 2 ft by 2 ft by 4-in concrete pad. Well development was determined to be unnecessary, as all existing well caps were found to be intact, and therefore no cave-in material is believed to have entered the monitoring wells during the site grading. After well repair was completed, the

top of casing and ground surface elevations of the wells were surveyed by a Georgia-registered land surveyor. These revised elevations are shown on Table 1.

3.2 ANNUAL GROUNDWATER SAMPLING AND ANALYSIS

The continued monitoring plan consists of annual groundwater sampling for up to five years of six site monitoring wells for site constituents of concern (COCs) arsenic, barium, cadmium, chromium, lead, nitrates and chlorides. These six wells include MW-6, MW-9, MW-13D, MW-15, MW-16, and MW-27DDDD, and are shown on Figure 2. In September 2015, eight additional wells (MW-1, MW-4, MW-7, MW-12, MW-18, MW-20, MW-29 and MW-31) were also sampled to address comments included in EPD's letter dated June 4, 2015. Additionally, the field pH of every groundwater sample is monitored during the sampling events. Water level measurements are collected in all site monitoring wells prior to sampling to evaluate groundwater flow direction. The metals sampling is conducted under low-flow methodologies to reduce potential turbidity in the samples. The procedures used to collect groundwater samples are wereconducted in general accordance with USEPA Region 4 SESD procedure SESDPROC-301-R3 (USEPA, 2013).

The scope of services performed during the September 2015 annual groundwater sampling and analysis event included the following:

- Determined the depth to groundwater in accessible site wells (September 21, 2015) and calculated groundwater elevations.
- Obtained groundwater samples on September 22 through 23, 2015 from 14 site monitoring wells (MW-1, MW-4, MW-6, MW-7, MW-9, MW-12, MW-13D, MW-15, MW-16, MW-18, MW-20, MW-27DDDD, MW-29 and MW-31). Sampling was attempted at MW-21, but no sample could be obtained due to lack of recharge.
- The samples were analyzed for the site COCs arsenic, barium, cadmium, chromium and lead. The COCs nitrates and chlorides were inadvertently omitted from the analyte list for this first annual VRP groundwater sampling event. These COCs will be analyzed during the subsequent sampling events. Additionally, the field pH of every groundwater sample was monitored during the sampling event.
- Prepared potentiometric surface maps using the September 21, 2015 groundwater elevation data showing groundwater flow directions in Shallow Zones A and B and determination of the groundwater flow rate.
- Preparation of an updated pH map based upon the September 22-23, 2015 pH values.
- Preparation of lead and barium isoconcentration maps based upon the September 22-23, 2015 concentrations.
- Updating of the SourceDK models submitted in the First ACAER with the data obtained in September 2015.
- Updating of the fate and transport modeling (BioScreen-AT) submitted in the VRP Application and Plan.
- Data evaluation and preparation of this summary of annual groundwater sampling and analysis.

The following sections describe the services listed above.

3.2.1 Groundwater Elevation and Flow Direction

Groundwater elevations were calculated from depth to groundwater measurements made in site monitoring wells on September 21, 2015 (Table 1). Table 1 also summarizes groundwater elevations measured at the site since 2001.

Potentiometric surface maps for the two shallow aquifers at the site, Shallow Zone A and Shallow Zone B, were developed from the groundwater elevation data obtained on September 21, 2015 and are presented as Figures 3 and 4, respectively. The Shallow Zone A potentiometric map appears similar to those presented in the second and third Semi-Annual CAERs, while the Shallow Zone B potentiometric map appears similar to the map presented in the first and second Semi-Annual CAERs, due to a component of northward flow at the northern end of the site, as described below. The direction of flow in Shallow Zone A (Figure 3) is to the north and northwest, while the flow direction in Shallow Zone B shows a northeastward component in the southern portion of the site, an eastward component in the central portion of the site, and a westerly and southerly component in the northern portion of the site, due to higher groundwater elevations in MW-1 and MW-29 as compared to MW-3 and MW-16 (Figure 4). Note that the interpretation of groundwater flow direction in Shallow Zone B for the September 2015 measurement event was made more difficult because of the inability to measure the groundwater elevations at MW-A, MW-23, MW-24 and MW-25, which are presumed to have been destroyed due to the grading which has been performed at the site, as mentioned above. Additional action/well replacement may be warrented to address this situation and will be addressed with EPD.

In addition, an evaluation of the vertical hydraulic gradient at the site was performed. Based on the groundwater elevation data obtained on September 21, 2015 from the cluster of wells that includes MW-8, MW-13D, MW-22DD and MW-26DDD, there was a downward vertical gradient of about 0.337 foot per foot at well pair MW-8 (screened in Shallow Zone A) and MW-26DDD, and of about 0.220 foot per foot at well pair MW-13D (screened in Shallow Zone B) and MW-26DDD. Additionally, a comparison of groundwater elevations at this well cluster to nearby deep well MW-27DDDD shows a downward vertical gradient from each well (MW-8, MW-13D, and MW-26DDD) toward the interval screened by MW-27DDDD.

3.2.2 Groundwater Velocity

Based on the potentiometric surface maps, the horizontal gradient in the ground water in Shallow Zone A was about 0.0121 feet per foot across the site on September 21, 2015. The horizontal gradient in the ground water in Shallow Zone B ranged from 0.0040 to 0.0138 feet per foot on September 21, 2015. An effective porosity for the saturated soil was estimated to be 20 percent for a clayey sand/sandy clay (Driscoll, 1986). The horizontal ground-water flow velocity was calculated using the Darcy equation:

V = Ki/ne Where: K = hydraulic conductivity (feet/day) i = hydraulic gradient (feet/foot) ne = effective porosity The gradients given above, the geometric mean of the Shallow Zone A and B hydraulic conductivity testing results obtained in May 2012 (4.1544 ft./day and 2.8046 ft./day, respectively), and the estimated effective porosity of 0.2 were used to calculate a groundwater flow velocity of approximately 92 ft./year for Shallow Zone A, and a groundwater flow velocity of approximately 20 to 71 ft./year for Shallow Zone B. The Shallow Zone A velocity is within the range of the values reported in the previous CAERs, and slightly higher than the range of previous values reported in the Revised CSR, while the minimum Shallow Zone B velocity is within the range previously reported in the Revised CSR and the maximum Shallow Zone B velocity is within the range reported in the Revised CSR and the previous CAERs.

3.2.3 Groundwater Quality

For the groundwater quality sampling conducted on September 22 through 24, 2015 in 14 site monitoring wells, the wells sampled were as follows:

Upgradient wells:

MW-12 Shallow Zone A

Interior wells:

- MW-6 Shallow Zone B
- MW-7 Shallow Zone B
- MW-13D Shallow Zone B
- MW-16 Shallow Zone B
- MW-18 Shallow Zone B

Perimeter wells:

- MW-4 Shallow Zone A
- MW-29 Shallow Zone B
- MW-31 Shallow Zone B

Downgradient wells:

- MW-1 Shallow Zone B
- MW-9 Shallow Zone B
- MW-15 Shallow Zone B
- MW-20 Shallow Zone B

Deep well:

MW-27DDDD Deep well

The groundwater sampling procedure was conducted as follows. Before the purging and sampling of each well, the depth to water and total well depth were measured. Each well has been marked with a permanent reference survey point. The total depth of the well was measured from this survey point to the well bottom using a measuring tape. The depth to groundwater was measured from the reference survey point to the groundwater surface in the well using an electrical water-level indicator. The water level probe was lowered down the well until the meter's tone sounded, indicating the probe had encountered water. The measured depth to groundwater from the surveyed datum point on the well casing was recorded on the sampling form and in the field logbook to the nearest 0.01 foot. The depth to the groundwater was then subtracted from the surveyed elevation of the casing reference point to determine the groundwater elevation. Depth to groundwater data and groundwater elevations are shown on Table 1.

A low-flow method of purging and sampling was used. The wells were purged using a peristaltic pump for low-flow purging. At each well, new polyethylene tubing was inserted into the wells into the water column of the well. The wells were purged at a rate of 500 milliliters (mL) per minute or less until the pH, temperature, and specific conductance (SC) readings stabilized to within 10% of the previous reading, and a minimum of 3 well volumes were purged from each well, with the exception of deep well MW-27DDDD, in which 1 well volume was purged due to the large volume of water in the well.

The groundwater turbidity readings were measured with an electronic turbidity meter and documented before collecting samples in laboratory-provided preserved containers for analysis. At MW-1, MW-18, and MW-20, both total and dissolved metals samples were collected, as turbidity could not be reduced below 7,800 (was reduced to 390 NTU during purging, but went dry), 17.9, and 51.3 NTU, respectively.

The samples were delivered to Analytical Environmental Services, Inc. (AES) under chain-ofcustody protocol for analysis by EPA Method 6020A for the site COCs arsenic, barium, cadmium, chromium and lead. As mentioned above, the COCs nitrates and chlorides were inadvertently omitted from the analyte list for this first annual VRP groundwater sampling event. These COCs will be analyzed during the subsequent sampling events.

The field pH measurements are reported in Table 2, along with a summary of the results of the analyses of the September 2015 samples. The laboratory analytical reports and field sampling reports for the September 2015 sampling event are provided in Appendix A.

A review of the results of the analyses of the September 2015 samples (Table 2) indicates that arsenic was detected in seven of the well samples (MW-1, MW-6, MW-7, MW-9, MW-13D, MW-15 and MW-18). Arsenic was not detected in September 2014 in any of the well samples collected. Additionally, the arsenic detection in MW-1 was in a total metals samples with elevated turbidity, and arsenic was not detected in the dissolved metals sample collected from MW-1. Arsenic had never before been reported in six of these wells (MW-1, MW-6, MW-7, MW-9, MW-15 and MW-18), and had only been reported once before at MW-13D. The arsenic concentrations in four of the wells (MW-6, MW-13D, MW-15 and MW-18) exceeded the Type 1 RRS of 0.01 mg/L. The only previous arsenic exceedances of the Type 1 RRS were isolated occurences; once at MW-12 (0.0126 mg/L in September 2013), and once at MW-28 (0.017 mg/L in November 2004). Also, while arsenic was reported at MW-9 during the September 2015 sampling event, arsenic was not detected in the duplicate sample (DUP-1) collected at MW-9. For the reasons given above (only two previous Type 1 RRS exceedances, reports of arsenic in multiple wells in which it had never before been reported, and an arsenic detection in a parent sample but not the associated duplicate sample), the arsenic detections are considered anomalous and may not reflect actual site conditions. The trend of arsenic detections will be assessed using the results of subsequent sampling events.

Cadmium was reported only in the samples from DUP-1 (0.00135 mg/L), MW-15 (0.00249 mg/L), MW-18 (total metals sample at 0.00742 mg/L and dissolved metals sample at 0.00507 mg/L) and MW-27DDDD (0.00228 mg/L), all below the Type 1 RRS of 0.005 mg/L except for MW-18 Cadmium was not reported in the parent sample (MW-9) of DUP-1. The cadmium

concentrations at MW-18 (total and dissolved samples) only slightly exceed the Type 1 RRS of 0.005 mg/L, and meet the Type 2 RRS of 0.0078 mg/L.

Chromium was detected only in the samples from MW-1 (0.0499 mg/L), DUP-1 (0.00135 mg/L) and MW-15 (0.00643 mg/L). The chromium detection in MW-1 was in a total metals sample with elevated turbidity Chromium was not detected in the dissolved metals sample collected from this well. Also, chromium was not reported in the parent sample (MW-9) of DUP-1. None of the chromium detections exceeded the Type 1 RRS of 0.1 mg/L

Barium was detected in the samples from 13 of the 14 of the monitoring wells, with concentrations ranging from 0.0159 mg/L (dissolved sample from MW-1) to 4.95 mg/L (MW-27DDDD). All of the concentrations were below the barium Type 1 RRS of 2 mg/L except for the MW-27DDDD value (4.95 mg/L). The MW-27DDDD concentration of 4.95 mg/L represents a noticeable decrease from the September 2014 barium value of 6.72 mg/L. The MW-6 concentration of 0.449 mg/L is a substantial decrease from the barium value of 10.3 mg/L reported in September 2014, which is now believed to have been anomalous.

Lead was reported in 11 of the 14 well samples in which it was analyzed (MW-1, MW-6, MW-7, MW-9, MW-13D, MW-15, MW-16, MW-18, MW-20, MW-29 and MW-31) at concentrations ranging from 0.00347 mg/L (MW-20) to 0.258 mg/L (MW-18). The lead detections in MW-1 and MW-20 were in total metals samples with elevated turbidity. Lead was not detected in the dissolved metals samples collected in these wells. The lead detections in six of the wells (MW-1, MW-6, MW-9, MW-13D, MW-15 and MW-18) exceeded the Type 1 RRS of 0.015 mg/L. Of these wells, as mentioned above, lead was not detected in the dissolved metals sample collected from MW-1.

3.2.4 Comparison to Prior Analytical Data

Updated SourceDK models have been prepared, following an additional year of monitoring. However, as part of preparation of this first Status Report, a comparison of the September 2015 data to the most recent comparable prior data was performed for the analyzed COCs. This comparison is described below.

The September 2015 arsenic results indicate that arsenic was detected in seven of the well samples (MW-1, MW-6, MW-7, MW-9, MW-13D, MW-15 and MW-18), whereas arsenic was not detected in any of the samples collected in September 2014. Arsenic had never before been reported in six of these wells (MW-1, MW-6, MW-7, MW-9, MW-15 and MW-18), and had only been reported once before at MW-13D. The arsenic detection in MW-1 was in a total metals samples with elevated turbidity, and arsenic was not detected in the dissolved metals sample collected from MW-1. Also, while arsenic was reported at MW-9, arsenic was not detected in the duplicate sample (DUP-1) collected at MW-9. The arsenic concentrations in four of the wells (MW-6, MW-13D, MW-15 and MW-18) exceeded the Type 1 RRS of 0.01 mg/L. The only previous arsenic exceedances of the Type 1 RRS were isolated occurrences; once at MW-12 (0.0126 mg/L in September 2013), and once at MW-28 (0.017 mg/L in November 2004). As mentioned previously, for the reasons given above (only two previous Type 1 RRS exceedances, reports of arsenic in multiple wells in which it had never before been reported, and an arsenic detection in a parent sample but not the associated duplicate sample), the

arsenic detections are considered anomalous and may not reflect actual site conditions. The trend of arsenic detections will be assessed using the results of subsequent sampling events.

The only detections of cadmium in September 2015 were in wells where it had previously been reported in September 2014 (the duplicate sample [DUP-1) from MW-9, MW-18 and MW-27DDDD), with the exception of the detection at MW-15, which had never before had a detection of cadmium (although cadmium had only been analyzed at MW-15 once before, in September 2014. Cadmium was detected in DUP-1 at 0.00135 mg/L, above the September 2014 detection of 0.000898 mg/L at MW-9. This detection is below the Type 1 RRS of 0.005 mg/L. Cadmium at MW-15 increased from <0.0007 mg/L in September 2014 to 0.00249 mg/L, complying with the Type 1 RRS. Cadmium at MW-18 increased from 0.00175 mg/l in September 2014 to 0.00742 mg/L (total metals sample) and 0.00507 mg/L (dissolved metals sample). These MW-18 concentrations are slightly above the Type 1 RRS of 0.005 mg/L, but comply with the Type 2 RRS of 0.0078 mg/L. Cadmium at MW-27DDDD decreased slightly from 0.00246 mg/L in September 2014 to 0.00228 mg/L in September 2014. All of the September 2015 cadmium values were below the Type 1 RRS of 0.005 mg/L, except for the slight exceedances (total and dissolved sampes) at MW-18, which complied with the Type 2 RRS.

Chromium was detected at three wells (MW-1, DUP-1 [duplicate sample at MW-9] and MW-15). Chromium had never before been detected at MW-1, and the chromium detection in MW-1 was in a total metals sample with elevated turbidity; chromium was not detected in the dissolved metals sample. At MW-9, chromium was not detected in the parent sample (MW-9) of DUP-1, and there have been no previous detections of chromium at MW-9. The detection at MW-15 decreased from the detections in September 2014, with chromium at MW-15 decreasing from 0.0437 mg/L in September 2014 to 0.00643 mg/L in September 2015. All three of the September 2015 chromium values (MW-1 [0.0499 mg/L], DUP-1 [0.00135 mg/L] and MW-15 [0.00643 mg/L]) were below the Type 1 RRS of 0.1 mg/L.

For barium, there were four instances of an increase in concentration as compared to the previous data. In three of those wells where an increase was noted (MW-7, MW-9, and MW-16), the concentrations were both within the range of values obtained during 2012, 2013 and 2014 monitoring, and were well below values measured during previous historical site monitoring. At one of the wells (MW-1) where an increase was noted, the increase was in a total metals samples with elevated turbidity, as compared to the most recent barium result (0.042 mg/L in January 2003); the dissolved metals sample concentration was 0.0159 mg/L, a decrease from the January 2003 value. The MW-6 concentration of 0.449 mg/L is a substantial decrease from the barium value of 10.3 mg/L reported in September 2014, which is now believed to have been anomalous. The September 2015 value is similar to the barium value of 0.420 mg/L reported at MW-6 in September 2013, further confirming the September 2014 value of 10.3 mg/L as anomalous. The MW-27DDDD concentration of 4.95 mg/L represents a noticeable decrease from the September 2014 barium value of 6.72 mg/L, and is the lowest barium value observed at MW-27DDDD since May 2012. Only the MW-27DDDD value (4.95 mg/L) is above the barium Type 1 RRS of 2 mg/L. As mentioned in the First ACAER, the anomalously high barium values observed at MW-6 and MW-27DDDD in September 2014 may possibly have been due to the redevelopment performed in September 2014 the day prior to

both MW-6 and MW-27DDDD being sampled. For both MW-6 and MW-27DDDD, the September 2015 barium values represent a return to concentrations more representative of the previous years prior to September 2014. In the case of MW-27DDDD, the barium concentration is lower than any barium value reported since May 2012.

The barium detections were further evaluated using the updated SourceDK model, as described in Section 4.0. As noted above, none of the September 2015 barium concentrations exceeded the barium Type 1 RRS of 2 mg/L except for the MW-27DDDD value (4.95 mg/L). While the MW-27DDDD value exceeded the Type 1 RRS, it was well below the Type 4 RRS of 20 mg/L.

Assuming the concentrations of barium at MW-27DDDD have reached a plateau and are beginning to decrease (which may be the case based on the September 2015 results, and acknowledging the September 2014 result as anomalously high), it is reasonable to project that barium concentrations at this location may begin to show significant reductions in the next few years similar to what was observed in MW-13D.

For lead, of 14 wells analyzed, there were five instances of an increase in concentration as compared to the most recent data (at MW-1 [0.077 mg/l vs. <0.005 mg/L in January 2003], MW-7 [0.00995 mg/L vs. 0.00913 mg/L in September 2014], MW-9 [0.0898 mg/L vs. 0.0678 mg/L in September 2014], MW-18 [0.258 mg/L vs. 0.216 mg/L in September 2014], and MW-31 [0.00894 mg/L vs. 0.0055 mg/L in September 2012]). In three of those wells where an increase in lead concentration was noted (MW-7, MW-9 and MW-18), the concentrations were either within, or only slightly above, the range of values obtained during 2012 through 2014 monitoring, or were well below values measured during previous historical site monitoring. At one of the wells (MW-1), lead was reported for the first time, at a level (0.077 mg/L) exceeding the Type 1 RRS. As mentioned above, the lead detection in MW-1 was in a total metals sample with elevated turbidity, and lead was not detected in the dissolved metals samples collected in MW-1. At MW-31, while the September 2015 lead result was an increase above the previous (September 2012) result, this previous result was the only other time MW-31 has been sampled, and neither sample has exceeded the Type 1 RRS

The lead detections were further evaluated using the updated SourceDK model, as described in Section 4.0. As noted above, the lead detections in six of the wells (MW-1, MW-6, MW-9, MW-13D, MW-15 and MW-18) exceeded the Type 1 RRS of 0.015 mg/L. Of these wells, as also mentioned above, lead was not detected in the dissolved metals sample collected from MW-1.

The September 2015 measured field pH values were also compared to the September 2014 data. Of the 11 wells that had been sampled in both September 2014 and September 2015, 7 of the measured pH values decreased (becoming more acidic), and four of the wells exhibited an increase in pH (becoming more neutral). In general, the changes in pH were minor, with the maxiumum decrease of pH being 0.21 standard units at MW-29.

The September 2015 pH values were used to prepare an updated pH contour map. A comparison to the pH map presented in the First ACAER shows that the area of low pH appears to have become smaller, based on the September 2015 data.

3.3 UPDATED SOURCEDK MODELING RESULTS

As discussed in Section 3.0, the results of the September 2015 first annual sampling event were used to prepare updated SourceDK models. The results of the updated modeling are discussed below.

Monitored natural attenuation (MNA) was evaluated as a corrective action measure in the May 13, 2011 CAP to address groundwater impacts at the site. As described in the CAP, the U. S. Environmental Protection Agency's (USEPA) MNA Directive (USEPA, 1999) was used as guidance, in conjunction with the SourceDK computer spreadsheet. SourceDK is designed for use in evaluating the potential efficacy of MNA as a remedial alternative. This evaluation involves collection of site-specific data sufficient to estimate with an acceptable level of confidence both the rate of attenuation processes and the anticipated time required to achieve remediation objectives (AFCEE, 2004).

This evaluation requires statistical tools to assess the data collected in the site characterization and determine if natural attenuation (decreasing trends) is occurring. The SourceDK Microsoft Excel computer spreadsheet program is a planning-level screening model for estimating groundwater remediation timeframes and the uncertainties associated with the estimated timeframe. In this evaluation, "remediation timeframe" is the time required for the high-concentration source zones at a site to reach a certain target concentration (AFCEE, 2004).

3.3.1 Data Preparation

The updated dataset to be analyzed was generated from groundwater samples taken from August 2001 to September 2015, and included the following wells monitored semi-annually in 2012 and 2013, and annually in 2014 and 2015: Monitoring well MW-1 was included in the dataset for the SourceDK evaluation, as it was sampled in September 2015 for the first time since January 2003, and MW-31 was also included, as it was sampled for the first time since May 2012. Monitoring wells MW-2, MW-3, MW-19 and MW-23 were not sampled in September 2015, and were not included in the updated dataset.

Well ID						
MW-01	MW-16					
MW-06	MW-18					
MW-07	MW-20					
MW-09	MW-27DDDD					
MW-12	MW-29					
MW-13D	MW-31					
MW-15						

Since the methods used in the SourceDK package do not accommodate data below the reporting limit, all data reported as "below reporting limit" were converted to a detection at the reporting limit. Since these wells have had a record of at least one COC detection (barium, lead), this is considered to be a conservative substitution.

Only total metals results were used for the evaluation; dissolved metals results were not used. Both barium and lead were used for the evaluation; the final dataset is listed in Table 3.

3.3.2 Analyses

The SourceDK assessment is based on a slope determined from a regression model of existing groundwater data. As described in the SourceDK documentation, this model predicts remediation timeframe by determining the trend in measured concentration vs. time data from source-zone monitoring wells (or wells in other parts of the plume) and then extrapolating this trend to determine how long it will take to reach a cleanup objective entered by the user. The trend is based on an analysis of log-concentration vs. time data for any constituent in groundwater (AFCEE, 2004).

For each well of interest, a SourceDK spreadsheet model was constructed by adding sitespecific sample dates, analytical concentrations, and the proposed regulatory limit (Type 1 RRS) into the spreadsheet. The model then takes the log of concentration and plots that against the sample date and calculates the slope of the resulting regression line. A negative slope (corresponding to a positive decay constant) suggests a downward trend in concentration and the likelihood of attenuation occurring. The model presents a graph of the resulting regression analysis along with a dotted line representing the regulatory limit, the regressions coefficient of determination (r2), a predicted year to attain cleanup (along with confidence limits on the estimate, if possible), and an estimated decay constant derived from the regression slope.

3.3.3 Results

A total of 24 different well/COC models were run. The results of each model run are included in Appendix B. A summary of the results is presented in the following tables. The majority of the updated models present decreasing trends in concentration (negative slopes and positive decay rates), with 84.6 percent of the barium trends and 63.6 percent of the lead trends decreasing. The direction of trend appears well defined in all cases with the exception of MW-13D (lead), MW-18 (barium), MW-20 (barium and lead) and MW-29 (lead) where the slope is essentially flat.

	Barium	Lead
Decreases	11	7
Total	13	11
Percent	84.6%	63.6%

Summary of SourceDK Trend Results

SourceDK Trend Results by COC

Well	Barium	Lead	Comments
MW-01	Increasing	Increasing	2015 barium concentration below Type 1 RRS; 2015 lead concentration (total metals) above Type 1 RRS; dissolved metals sample non-detect for lead; all previous lead analyses non- detect
MW-06	Decreasing	Decreasing	2015 barium concentration below Type 1 RRS; 2012, 2013, 2014 and 2015 lead concentrations both above and below Type 1 RRS
MW-07	Decreasing	Decreasing	Attained Type 1 RRS
MW-09	Decreasing	Decreasing	Barium Type 1 RRS attained; lead Type 1 RRS not yet attained
MW-12	Decreasing	NA	Attained Type 1 RRS
MW-13D	Decreasing	Decreasing	Barium Type 1 RRS attained; lead Type 1 RRS not yet attained
MW-15	Decreasing	Increasing	Barium Type 1 RRS attained; lead Type 1 RRS not yet attained. Only three data points (2003, 2014, 2015)
MW-16	Decreasing	Decreasing	· · · · · · · · · · · · · · · · · · ·
MW-18	Decreasing	Decreasing	Attained Type 1 RRS Barium Type 1 RRS attained; lead Type 1 RRS not yet attained
MW-20	Decreasing	Increasing	Barium and lead Type 1 RRS attained. Although total lead values show slight increasing trend, all 2012, 2013, 2014 and 2015 dissolved lead values were not detectable, and the lead concentration decreased from September 2014 to September 2015.
MW-27DDDD	Increasing	NA	Barium above Type 1 RRS, but below Type 4 RRS. 2015 concentration lowest value since September 2012.
MW-29	Decreasing	Decreasing	Attained Type 1 RRS
MW-31	Decreasing	Increasing	Attained Type 1 RRS; only 2 data points.

NA- not applicable; either all, or all except one, concentrations below detection limit

3.4 UPDATED FATE AND TRANSPORT MODELING

The contaminant fate and transport modeling completed using the Bioscreen-AT model, and included in the VRP Application and Plan, was updated with September 2015 data to assess theoretical downgradient migration of dissolved lead and determine if the distance would fall within acceptable point of compliance requirements under the VRP. In accordance with ConAgra's August 31, 2015 responses to EPD's comments dated June 4, 2015, the site point of exposure (POE) was designated as a location approximately 1051 feet east of the eastern property line of the site. The associated Point of Demonstration (POD) well was designated as MW-9, pursuant to any clarification resulting from additional potentiometric data that may be obtained in the future from across U.S Highway 319, as stated in the comment responses. Additionally, MW-13D, the "source area" monitoring well previously used, was replaced with MW-18 based on more current data. Also, a secondary source at MW-15 was incorporated into the Bioscreen model pursuant to EPD Comments of June 4, 2015.

BioScreen-AT is an enhanced version of BioScreen (Neewell et al, 1996) with an exact solution for the transport of a contaminant (Karanovic et al, 2007). The model uses the Domenico equation which describes one-dimensional transport of a solute (inorganic or organic, decaying or nondecaying). The model simulates advection, adsorption and three-dimensional dispersion of any dissolved constituent (inorganic or organic), and has the ability to simulate constant or decaying sources, and contaminant degradation using degradation constants. Features within the model designed to account for processes specific to natural attenuation of organic constituents were not applicable. The use of BioScreen-AT was limited for this site-specific application to model only advection, dispersion, and adsorption onto porous media since lead is not known to degrade at notable rates.

The results of the BioScreen-AT modeling were favorable, indicating that under a theoretical worst-case scenario lead would meet compliance standards within approximately 220 feet to 380 feet downgradient of the property boundary (425 feet to 590 feet from "source" monitoring well MW-18) based on 44 year and 100 year plume durations, respectively. For the MW-15 second source scenario, the lead concentration (for the modeled travel time of 100 additional years) would not exceed the GWPS of 0.015 mg/l between approximately 450 to 620 feet from MW-15, or approximately 270 to 320 feet beyond the eastern boundary along the prevalent groundwater flow direction. However, the actual downgradient extent of the dissolved lead plume would likely be much less since its mobility is diminished as pH level becomes more neutral. This decreased mobility with increased pH is not simulated by BioScreen-AT. Also, the BioScreen-AT model assumes a constant source, which does not apply to the Swift site as operations have ceased and there is no known source. The Georgia VRP permits a Point of Compliance up to 1,000 feet from a contaminant source provided there is no exposure risk. The full BioScreen-AT modeling discussion, site data, results and aerial depiction of the modeled potential offsite plume limit are provided in Appendix C.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The number of monitoring well locations sampled that exceeded the lead Type 1 RRS in September 2015 is one more than exceeded at the start of the corrective action effectiveness monitoring, which commenced in March 2012. In March 2012, a total of five well locations (MW-7, MW-9, MW-13D, MW-16, and MW-18) exceeded the lead Type 1 RRS, while in September 2015, six well locations exceeded the lead Type 1 RRS (MW-1, MW-6, MW-9, MW-13D, MW-15 and MW-18). While the lead concentration in MW-1 in September 2015 exceeded the Type 1 RRS, this exceedance was in a total metals sample with elevated turbidity, and lead was not detected in the dissolved metals samples collected in MW-1.

The September 2015 arsenic results in four of the wells (MW-6, MW-13D, MW-15 and MW-18) exceeded the Type 1 RRS of 0.01 mg/L. The only previous arsenic exceedances of the Type 1 RRS were isolated occurences; once at MW-12 (0.0126 mg/L in September 2013), and once at MW-28 (0.017 mg/L in November 2004). Arsenic was detected in September 2015 in seven of the well samples (MW-1, MW-6, MW-7, MW-9, MW-13D, MW-15 and MW-18), whereas there were no arsenic detections in any of the samples collected in September 2014. Arsenic had never before been reported in six of these wells (MW-1, MW-6, MW-7, MW-9, MW-15 and MW-18), and had been reported only once before at MW-13D. The arsenic detection in MW-1 was in a total metals samples with elevated turbidity, and arsenic was not detected in the dissolved metals sample collected from MW-1. While arsenic was reported at MW-9, arsenic was not detected in the duplicate sample (DUP-1) collected at MW-9. As mentioned previously, for the reasons given above (only two previous arsenic Type 1 RRS exceedances, reports of arsenic in multiple wells in which it had never before been reported, and an arsenic detection in a parent sample but not the associated duplicate sample), the September 2015 arsenic detections are considered anomalous and may not reflect actual site conditions. The trend of arsenic detections will be assessed using the results of subsequent sampling events.

Barium meets the Type 4 RRS of 20 mg/L at all sampling locations, and also meets the Type 1 RRS of 2 mg/L at all locations except MW-27DDDD. The barium values reported at MW-6 and MW-27DDDD (which both exceeded Type 1 RRS in September 2014) have decreased to values more consistent with historical values. The barium value at MW-6 decreased from 10.3 mg/L in September 2014 to 0.449 mg/L in September 2015, and the barium value at MW-27DDDD decreased from 6.72 mg/L to 4.95 mg/L (the lowest value observed since September 2012). The increased barium values in MW-6 and MW-27DDDD in September 2014 are now believed to have been anomalous, possibly due to the redevelopment performed the day prior to both MW-6 and MW-27DDDD being sampled in September 2014, as discussed in the ACAER.

Annual groundwater sampling will continue (unless an alternative frequency is subsequently approved by EPD) until the data demonstrate that human health and the environment are adequately protected and EPD concurs. If the data demonstrates that a reduced frequency is warranted, modifications will be proposed in subsequent status reports.

5.0 **NEXT SUBMITTAL**

As required by EPD's letter dated May 29, 2015, semiannual progress reports are to submitted to EPD November 29th and May 29th annually, beginning November 2015 and ending in 2020, unless a CSR is submitted and approved prior to 2020. A report for the second semiannual period is planned to be submitted by May 29th, 2016, and is planned to include the following activities:

- Results from completed additional investigation activities, if any
- Activity, as required, related to EPD review and comments to the previous Responses to EPD comments submitted by Amec Foster Wheeler on behalf of ConAgra dated August 31, 2015.

TABLES

Well Number	Date Measured	Ground Suface Elevation (ft, NAVD)	Top of Casing Elevation (ft, NAVD)	Depth of Screened Interval (ft btoc)	Depth to Water (ft, btoc)	Groundwate Elevation (ft, NAVD)
	8/30/01	308.30	308.00	2.59-17.59	12.91	295.09
	12/18/01	308.30	308.00	2.59-17.59	13.82	294.18
	1/30/03	308.30	308.00	2.59-17.59	10.23	294.10
	2/14/03	308.30	308.00	2.59-17.59	11.58	296.42
	4/8/03	308.30	308.00	2.59-17.59	9.44	298.56
	6/9/04	308.30	308.00	2.59-17.59	10.55	297.45
	11/5/04	308.30	308.00	2.59-17.59	9.46	298.54
	1/25/2005 ¹	306.91	306.50	1.09-16.09	6.88	299.62
	2/15/05	306.91	306.50	1.09-16.09	6.46	300.04
MW-1	5/15/2007 ²	306.47	306.06	0.65-15.66	10.35	295.71
	7/16/2008 ²	306.47	306.06	0.65-15.66	11.86	294.20
	10/19/09	306.47	306.06	0.65-15.66	10.47	295.59
	3/28/12	306.47	306.06	0.65-15.66	4.38	301.68
	9/26/12	306.47	306.06	0.65-15.66	3.37	302.69
	3/26/13	306.47	306.06	0.65-15.67	1.68	304.38
	9/9/13	306.47	306.06	0.65-15.67	2.98	303.08
	9/22/14	306.47	306.06	0.65-15.67	9.78	296.28
	9/21/15	306.47	306.06	0.65-15.68	10.50	295.56
	8/30/01	309.66	309.38	2.35-17.35	12.15	297.23
	12/18/01	309.66	309.38	2.35-17.35	15.16	294.22
	1/30/03	309.66	309.38	2.35-17.35	11.75	297.63
	2/14/03	309.66	309.38	2.35-17.35	11.60	297.78
	4/8/03	309.66	309.38	2.35-17.35	10.96	298.42
	6/9/04	309.66	309.38	2.35-17.35	12.77	296.61
	11/5/04	309.66	309.38	2.35-17.35	11.46	297.92
	1/25/2005 ¹	308.25	307.96	0.93-15.93	8.90	299.06
MW-2	2/15/05	308.25	307.96	0.93-15.93	8.56	299.40
	5/16/2007 ²	307.77	307.48	0.45-15.45	Dry	Dry
	7/16/2008 ²	307.77	307.48	0.45-15.45	Dry	Dry
	10/19/09	307.77	307.48	0.45-15.45	0.21	307.27
	3/28/12	307.77	307.48	0.45-15.45	Dry	Dry
	9/26/12	307.77	307.48	0.45-15.45	4.86	302.62
	3/26/13 9/9/13	307.77 307.77	307.48 307.48	0.45-15.46 0.45-15.46	1.31 3.12	306.17 304.36
	9/22/14	307.77	307.48	0.45-15.46	Dry	Dry
	9/21/15	307.77	307.48	0.45-15.47	Dry	Dry
	8/30/01	307.31	306.91	2.07-21.67	10.22	296.69
	12/18/01	307.31	306.91	2.07-21.67	13.02	293.89
	1/30/03	307.31	306.91	2.07-21.67	9.53	297.38
	2/14/03	307.31	306.91	2.07-21.67	9.35	297.56
	4/8/03	307.31	306.91	2.07-21.67	8.76	298.15
	6/9/04	307.31	306.91	2.07-21.67	10.49	296.42
	11/5/04	307.31	306.91	2.07-21.67	9.75	297.16
	1/25/2005 ¹	307.10	306.79	1.95-21.55	8.92	297.87
MW-3	2/15/05	307.10	306.79	1.95-21.55	8.52	298.27
10100-3	5/15/2007 ²	306.63	306.32	1.48-21.08	11.85	294.47
	7/16/2008 ²	306.63	306.32	1.48-21.08	12.92	293.40
	10/19/09	306.63	306.32	1.48-21.08	NM	NM
	3/28/12	306.63	306.32	1.48-21.08	10.44	295.88
	9/26/12	306.63	306.32	1.48-21.08	9.89	296.43
	3/26/13	306.63	306.32	1.48-21.09	8.31	298.01
	9/9/13	306.63	306.32	1.48-21.09	8.41	297.91
	9/22/14	306.63	306.32	1.48-21.09	10.35	295.97
	9/21/15	306.63	306.32	1.48-21.10	13.32	293.00
	8/30/01	310.02	309.73	3.39-13.39	1.99	307.74
	12/18/01	310.02	309.73	3.39-13.39	4.28	305.45
	1/30/03	310.02	309.73	3.39-13.39	2.39	307.34
	2/14/03	310.02	309.73	3.39-13.39	1.45	308.28
	4/8/03	310.02	309.73	3.39-13.39	1.62	308.11
	6/9/04 11/5/04	310.02 310.02	309.73 309.73	3.39-13.39 3.39-13.39	3.07 2.82	306.66 306.91
	1/25/05	310.02	309.73	3.39-13.39	1.45	306.91
	2/15/05	310.02	309.73	3.39-13.39	0.19	308.28
MW-4	5/15/2007 ²	309.68	309.73	3.05-13.05	NL	309.54 NL
	5/15/2007 7/16/2008 ²	309.68	309.39	3.05-13.05	NL	NL
	10/19/09	309.68	309.39	3.05-13.05	1.16	308.23
	3/28/12	309.68	309.39	3.05-13.05	2.42	308.23
	3/28/12 9/26/12	309.68	309.39	3.05-13.05	1.35	306.97
	3/26/12	309.68	309.39	3.05-13.05	0.74	308.04
	9/9/13	309.68	309.39	3.05-13.06	1.34	308.65
	9/22/14	309.68	309.39	3.05-13.06	1.47	307.92
	0, 22, 14	309.68	309.39	0.00 10.00	4.01	001.32

8/30/01 308.09 307.83 1.55.11.55 1.70 306.13 1/20/03 308.09 307.83 1.55.11.55 3.64 301.33 1/30/03 308.09 307.83 1.55.11.55 3.23 304.60 6.90/04 300.09 307.83 1.55.11.55 2.43 304.41 1/25.05 308.09 307.83 1.55.11.55 2.43 304.43 1/25.05 308.09 307.83 1.55.11.55 N.L N.L 1/25.05 308.09 307.83 1.55.11.55 N.L N.L 1/21.05 308.09 307.83 1.55.11.55 N.L N.L 1/21.017 308.09 307.83 1.55.11.55 N.L N.L 1/21.017 308.09 307.83 1.55.11.55 N.L N.L 9/22.14 308.09 307.83 1.55.11.55 N.L N.L 9/22.14 308.09 307.83 1.55.11.55 N.L N.L 9/22.14 308.09 307.83 </th <th>Well Number</th> <th>Date Measured</th> <th>Ground Suface Elevation (ft, NAVD)</th> <th>Top of Casing Elevation (ft, NAVD)</th> <th>Depth of Screened Interval (ft btoc)</th> <th>Depth to Water (ft, btoc)</th> <th>Groundwate Elevation (ft, NAVD)</th>	Well Number	Date Measured	Ground Suface Elevation (ft, NAVD)	Top of Casing Elevation (ft, NAVD)	Depth of Screened Interval (ft btoc)	Depth to Water (ft, btoc)	Groundwate Elevation (ft, NAVD)
IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII		8/30/01		307.83	1.55-11.55	1.70	306.13
21/4/03 308.09 307.83 1.55-11.55 3.23 305.40 6/0/04 308.09 307.83 1.55-11.55 2.43 305.40 11/5/04 308.09 307.83 1.55-11.55 2.43 304.43 11/5/05 308.09 307.83 1.55-11.55 2.82 305.40 21/5/05 308.09 307.83 1.55-11.55 NL NL 11/15/04 308.09 307.83 1.55-11.55 NL NL 11/19/09 308.09 307.83 1.55-11.55 NL NL NL 3/26/12 308.09 307.83 1.55-11.55 NL NL NL 3/26/13 308.09 307.83 1.55-11.55 NL NL NL 3/21/13 308.09 307.83 1.55-11.55 NL NL NL 3/21/14 308.09 307.83 1.55-11.55 NL NL NL 3/21/15 308.44 307.98 2.12-12.12 8.01 305.5			308.09		1.55-11.55		301.38
44/803 308.09 307.83 1.55.11.55 2.43 306.49 11/5/04 308.09 307.83 1.55.11.55 2.48 306.34 12/5/05 308.09 307.83 1.55.11.55 2.82 305.34 12/15/05 308.09 307.83 1.55.11.55 NL NL 10/15/09 308.09 307.83 1.55.11.55 NL NL 10/19/09 308.09 307.83 1.55.11.55 NL NL 9/26/12 308.09 307.83 1.55.11.55 NL NL NL 9/22/14 308.09 307.83 1.55.11.55 NL NL NL 9/21/15 308.09 307.83 1.55.11.55 NL NL NL		1/30/03		307.83		3.66	304.17
6/904 308.09 307.83 1.55.11.55 2.96 304.34 11/25(05 308.09 307.83 1.55.11.55 2.82 305.01 11/25(05 308.09 307.83 1.55.11.55 2.81 305.52 11/25(06 308.09 307.83 1.55.11.55 NL NL 11/25(06 308.09 307.83 1.55.11.55 NL NL 11/17(10) 308.09 307.83 1.55.11.55 NL NL 31/26/13 308.09 307.83 1.55.11.55 NL NL 91/21.3 308.09 307.83 1.55.11.56 NL NL 91/21.4 308.09 307.98 2.12.12.12 2.40 305.4 11/21.401 308.24 307.98		2/14/03	308.09	307.83	1.55-11.55	3.23	304.60
MW-5 11:504 300:89 307:83 1.55:11.55 3.49 304:43 MW-5 21:505 300:09 307:83 1.55:11.55 2.23 305:52 51:507 308:09 307:83 1.55:11.55 N.L N.L N.L 10:19:09 300:09 307:83 1.55:11.55 N.L N.L N.L 32/212 308:09 307:83 1.55:11.55 N.L N.L N.L 92/214 308:09 307:83 1.55:11.56 N.L N.L N.L 92/214 308:09 307:83 1.55:11.56 N.L N.L N.L 92/214 308:09 307:83 1.55:11.57 N.L N.L N.L 92/214 308:24 307:98 2.12:12.12 8.09 299:97 12/18/01 308:24 307:98 2.12:12.12 8.06 304:53 11/504 308:24 307:98 2.12:12.12 3.66 304:24 11/5004 308:24 307:98 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>305.40</td>							305.40
MW-5 1/25/05 308.09 307.83 1.55/11.55 2.82 305.52 S/15/07 308.09 307.83 1.55/11.55 NL NL 10/19/09 306.09 307.83 1.55/11.55 NL NL 3/26/12 308.09 307.83 1.55/11.55 NL NL 3/26/13 308.09 307.83 1.55/11.56 NL NL 9/21/15 308.09 307.83 1.55/11.56 NL NL 9/21/15 308.09 307.83 1.55/11.57 NL NL 9/21/15 308.09 307.83 1.55/11.57 NL NL 1/26/01 308.24 307.98 2.12/12.12 8.61 299.29 1/3003 308.24 307.98 2.12/12.12 2.40 305.54 1/15/04 308.24 307.98 2.12/12.12 3.66 304.22 1/15/04 308.24 307.98 2.12/12.12 3.66 304.22 1/15/04 308.24 30							
MW-5 2/1505 308.09 307.83 1.55:11.55 2.31 305.52 5/1507 308.09 307.83 1.55:11.55 NL NL NL 10/19/09 308.09 307.83 1.55:11.55 NL NL NL 3/28/12 308.09 307.83 1.55:11.55 NL NL NL 9/26/12 308.09 307.83 1.55:11.56 NL NL NL 9/22/14 308.09 307.83 1.55:11.56 NL NL NL 9/21/15 308.09 307.83 1.55:11.56 NL NL NL 9/21/16 308.24 307.98 2.12:12.12 8.61 299.97 12/16/01 308.24 307.98 2.12:12.12 2.44 305.54 11/50/4 308.24 307.98 2.12:12.12 2.44 305.78 11/50/4 308.24 307.98 2.12:12.12 3.65 304.44 11/50/4 309.95 3.69:13.69 7.35							
MW-5 Sr1507 308.09 307.83 1.55-11.55 NL NL 716.08 308.09 307.83 1.55-11.55 NL NL 3128/12 308.09 307.83 1.55-11.55 NL NL 3128/12 308.09 307.83 1.55-11.56 NL NL 3126/13 308.09 307.83 1.55-11.56 NL NL 9/21/15 308.09 307.83 1.55-11.56 NL NL 9/21/15 308.09 307.83 1.55-11.57 NL NL 1/2/16/01 308.24 307.98 2.12-12.12 8.69 299.97 1/2/16/01 308.24 307.98 2.12-12.12 2.40 305.44 1/30/03 308.24 307.98 2.12-12.12 2.40 305.44 1/15/04 308.24 307.98 2.12-12.12 3.52 304.42 1/15/05 310.24 309.96 4.10-14.10 5.45 304.22 1/15/05 310.24							
17/16/08 308.09 307.83 1.55:11.55 N.L N.L 3/28/12 308.09 307.83 1.55:11.55 N.L N.L 9/26/12 308.09 307.83 1.55:11.55 N.L N.L 9/26/13 308.09 307.83 1.55:11.56 N.L N.L 9/21/14 308.09 307.83 1.55:11.56 N.L N.L 9/21/14 308.09 307.83 1.55:11.57 N.L N.L 9/21/15 308.24 307.98 2.12:12.12 8.69 299.29 1/3/003 308.24 307.98 2.12:12.12 2.40 305.56 1/4/03 308.24 307.98 2.12:12.12 2.44 305.56 4/9/03 308.24 307.98 2.12:12.12 3.66 304.20 1/15/04 308.24 307.98 2.12:12.12 3.66 304.20 1/15/04 309.85 3.69:13.89 7.75 302.20 302.20 1/16/109 309.85 3.69:1	MW-5						
10/19/09 308.09 307.83 1.55/11.55 NL NL 3/28/12 308.09 307.83 1.55/11.55 NL NL 3/26/13 308.09 307.83 1.55/11.56 NL NL 3/26/13 308.09 307.83 1.55/11.56 NL NL 9/21/15 308.09 307.83 1.55/11.57 NL NL 9/21/15 308.09 307.83 1.55/11.57 NL NL 8/30011 308.24 307.98 2.12/12.12 8.69 299.29 12/18/01 308.24 307.98 2.12/12.12 2.40 305.54 1/30/03 308.24 307.98 2.12/12.12 3.66 304.32 1/15/04 308.24 307.98 2.12/12.12 3.66 304.32 1/15/04 308.24 307.98 2.12/12.12 3.66 304.32 1/15/04 308.24 307.98 2.12/12.12 3.66 304.32 1/15/04 308.24 307.98							
3/22/12 308.09 307.83 1.55-11.55 NL NL 9/26/12 308.09 307.83 1.55-11.56 NL NL 9/9/13 306.09 307.83 1.55-11.56 NL NL 9/9/13 306.09 307.83 1.55-11.56 NL NL 9/22/14 308.09 307.83 1.55-11.57 NL NL 9/21/15 308.09 307.98 2.12-12.12 8.69 299.29 1/3003 308.24 307.98 2.12-12.12 2.04 305.74 6/9/04 308.24 307.98 2.12-12.12 3.66 304.32 1/25/2005 ¹ 310.24 309.96 4.10-14.10 5.46 304.51 1/25/2005 ¹ 310.24 309.95 3.69-13.69 2.7.95 ¹³ 302.20 7/16/2007 ² 309.83 309.55 3.69-13.69 2.7.95 ¹³ 302.20 7/16/2007 ² 309.83 309.55 3.69-13.69 2.7.95 ¹³ 302.20 1/15/04 30							
9/26/12 308.09 307.83 1.55-11.55 NL NL 9/9/13 308.09 307.83 1.55-11.56 NL NL 9/22/14 308.09 307.83 1.55-11.56 NL NL 9/22/15 308.09 307.83 1.55-11.57 NL NL 8/3001 308.24 307.98 2.12-12.12 8.01 299.97 12/18/01 308.24 307.98 2.12-12.12 2.40 305.58 4/8/03 308.24 307.98 2.12-12.12 2.24 305.58 11/5/04 308.24 307.98 2.12-12.12 3.66 304.32 11/5/04 308.24 307.98 2.12-12.12 3.66 304.46 11/5/04 308.24 307.98 2.12-12.12 3.66 304.46 11/5/04/308.24 309.95 3.69-13.69 7.35 302.20 11/5/04/308.24 309.95 3.69-13.69 7.5 302.20 11/5/04/309.83 309.55 3.69-13.69 307.43 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
99/13 308.09 307.83 1.55-11.56 NL NL 9/22/14 308.09 307.83 1.55-11.56 NL NL NL 9/21/15 308.04 307.98 2.12-12.12 8.01 299.97 12/18/01 308.24 307.98 2.12-12.12 8.09 299.97 1/30/03 308.24 307.98 2.12-12.12 2.40 305.56 4/8/03 306.24 307.98 2.12-12.12 2.44 305.56 4/8/03 308.24 307.98 2.12-12.12 3.52 304.46 11/5/04 308.24 307.98 2.12-12.12 3.56 304.45 11/5/04 308.24 307.98 2.12-12.12 3.56 304.20 5/15/2007 309.83 309.55 3.69-13.69 7.35 302.20 7/16/2008 ⁴ 309.83 309.55 3.69-13.69 3.75 305.80 3/26/13 309.83 309.55 3.69-13.70 3.28 306.77 3/26/13						NL	NL
9/22/14 308.09 307.83 1.55-11.56 NL NL 9/21/15 308.24 307.98 2.12-12.12 8.01 299.29 1/21/80/1 308.24 307.98 2.12-12.12 8.01 299.29 1/30/03 308.24 307.98 2.12-12.12 Covered with fill dift 2/14/03 308.24 307.98 2.12-12.12 2.24 305.74 6/9/04 308.24 307.98 2.12-12.12 3.66 304.32 1/25/20051 310.24 309.96 4.10-14.10 5.45 304.51 1/25/20072 309.83 309.55 3.69-13.69 7.35 302.20 7/16/20087 309.83 309.55 3.69-13.69 6.06 303.49 9/26/12 309.83 309.55 3.69-13.69 6.06 30.49 9/26/12 309.83 309.55 3.69-13.69 6.06 30.49 9/26/12 309.83 309.55 3.69-13.70 3.28 306.37 9/26/13 309.83 <td></td> <td>3/26/13</td> <td>308.09</td> <td>307.83</td> <td>1.55-11.56</td> <td>NL</td> <td>NL</td>		3/26/13	308.09	307.83	1.55-11.56	NL	NL
9/21/15 308.09 307.83 1.55-11.57 NL NL 8/30/01 308.24 307.98 2.12-12.12 8.01 299.97 1/30/03 308.24 307.98 2.12-12.12 8.01 299.97 1/30/03 308.24 307.98 2.12-12.12 Covered with fill dift 2/14/03 308.24 307.98 2.12-12.12 2.44 305.74 6/9/04 308.24 307.98 2.12-12.12 3.66 304.32 11/5/04 308.24 307.98 2.12-12.12 3.66 304.32 12/25/2005 310.24 309.96 4.10-14.10 5.45 304.20 51/15/2007 309.83 309.55 3.69-13.69 7.75 305.20 1/16/2008 309.83 309.55 3.69-13.69 7.75 305.20 3/26/12 309.83 309.55 3.69-13.69 7.80 301.70 3/26/12 309.83 309.55 3.69-13.70 3.28 306.27 3/26/13 309.83			308.09		1.55-11.56		
8/30/01 308.24 307.96 2.12-12.12 8.01 299.29 12/18/01 308.24 307.98 2.12-12.12 Covered with fill dirth 1/30/03 308.24 307.98 2.12-12.12 Covered with fill dirth 2/14/03 308.24 307.98 2.12-12.12 2.24 305.74 6/9/04 308.24 307.98 2.12-12.12 3.52 304.46 11/5/04 308.24 307.98 2.12-12.12 3.66 304.32 12/25/2005 ¹ 310.24 309.96 4.10-14.10 5.76 304.20 5/15/2007 ² 309.83 309.55 3.69-13.69 7.35 302.20 7/16/2008 ² 309.83 309.55 3.69-13.69 5.18 303.74 9/26/12 309.83 309.55 3.69-13.69 5.06 303.47 9/26/13 309.83 309.55 3.69-13.70 3.28 306.27 9/21/15 309.83 309.55 3.69-13.70 3.28 306.27 9/221/15 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>							
12/18/01 308.24 307.98 2.12-12.12 Covered with fill dirt 1/30/03 308.24 307.98 2.12-12.12 Covered with fill dirt 1/4/03 308.24 307.98 2.12-12.12 2.24 305.74 6/8/04 308.24 307.98 2.12-12.12 3.52 304.46 11/5/04 308.24 307.98 2.12-12.12 3.66 304.32 2/15/05 310.24 309.96 4.10-14.10 5.45 304.51 5/15/2007 ² 309.83 309.55 3.69-13.69 3.75 305.80 10/19/09 309.83 309.55 3.69-13.69 3.75 305.80 3/28/12 309.83 309.55 3.69-13.69 3.75 305.80 3/28/13 309.83 309.55 3.69-13.70 3.28 306.27 9/22/14 309.83 309.55 3.69-13.70 3.28 306.27 9/22/14 309.83 309.55 3.69-13.70 3.28 306.27 9/21/15 309.817							
1/30/03 308.24 307.96 2.12-12.12 Covered with fill dirit 2/14/03 308.24 307.98 2.12-12.12 2.40 305.58 4/8/03 308.24 307.98 2.12-12.12 2.24 305.74 6/9/04 308.24 307.98 2.12-12.12 3.52 304.46 11/5/0 310.24 309.96 4.10-14.10 5.45 304.20 11/5/05 310.24 309.96 4.10-14.10 5.76 302.20 7/16/2008 ² 309.83 309.55 3.69-13.69 7.35 302.20 7/16/2008 ² 309.83 309.55 3.69-13.69 5.81 303.49 3/26/12 309.83 309.55 3.69-13.70 3.28 306.30 9/21/13 309.83 309.55 3.69-13.70 3.28 306.30 9/21/14 309.83 309.55 3.69-13.70 3.28 306.30 9/21/14 309.83 309.55 3.69-13.70 3.28 306.30 9/21/15 309.							
2/14/03 308.24 307.96 2.12-12.12 2.40 305.58 4/8/03 308.24 307.98 2.12-12.12 2.24 305.44 11/5/04 308.24 307.98 2.12-12.12 3.52 304.46 11/5/5/01 310.24 309.96 4.10-14.10 5.45 304.52 12/5/2007 ² 309.83 309.55 3.69-13.69 7.75 305.20 7/16/2008 ² 309.83 309.55 3.69-13.69 3.75 305.80 3/26/12 309.83 309.55 3.69-13.69 5.81 303.74 9/26/12 309.83 309.55 3.69-13.69 3.25 306.30 9/21/15 309.83 309.55 3.69-13.70 3.28 306.27 9/21/15 309.83 309.55 3.69-13.70 3.28 301.65 9/21/15 309.83 309.55 3.69-13.70 3.28 306.27 9/21/15 309.83 309.55 3.69-13.70 3.28 301.76 9/22/14							
MW-6 4/8/03 308.24 307.98 2.12-12.12 2.24 305.74 6/9/04 308.24 307.98 2.12-12.12 3.52 304.46 11/5/04 308.24 307.98 2.12-12.12 3.56 304.32 1/25/2005 ¹ 310.24 309.96 4.10-14.10 5.45 304.51 2/15/05 310.24 309.95 3.69-13.69 27.95 ⁽⁹⁾ 281.60 5/15/2007 ² 309.83 309.55 3.69-13.69 3.75 305.80 3/26/12 309.83 309.55 3.69-13.70 3.28 306.27 9/22/14 309.83 309.55 3.69-13.70 3.28 306.27 9/21/15 309.83 309.55 3.69-13.70 3.28 306.77 9/21/15 309.83 309.55 3.69-13.70 7.85 301.70 12/18/01 308.72 308.17 5.49-25.49 9.99 294.87 1/3/003 308.72 308.17 5.49-25.49 9.39 298.78							
MW-6 69/04 308.24 307.98 2.12-12.12 3.52 304.46 11/5/04 3008.24 307.96 4.10-14.10 5.45 304.51 125/2005 310.24 309.96 4.10-14.10 5.45 304.20 7/16/2008 309.83 309.55 3.69-13.69 7.35 302.20 10/19/09 309.83 309.55 3.69-13.69 3.75 305.80 3/28/12 309.83 309.55 3.69-13.69 5.81 303.49 9/26/12 309.83 309.55 3.69-13.70 3.28 306.27 9/21/14 309.83 309.55 3.69-13.70 3.28 306.27 9/21/15 309.83 309.55 3.69-13.70 7.80 301.65 9/21/15 308.33 309.55 3.69-13.70 7.80 301.65 9/21/15 308.72 308.17 5.49-25.49 9.39 298.78 6/9/04 308.72 308.17 5.49-25.49 9.39 298.78 6/9/04<							
MW-6 11/5/04 308.24 307.98 2.12-12.12 3.66 304.32 MW-6 1/25/2005 ¹ 310.24 309.96 4.10-14.10 5.45 304.51 5/15/2007 ² 309.83 309.55 3.69-13.69 7.35 302.20 7/16/2008 ² 309.83 309.55 3.69-13.69 27.95 ⁽³⁾ 281.60 10/19/09 309.83 309.55 3.69-13.69 5.81 303.74 3/28/12 309.83 309.55 3.69-13.69 5.81 306.37 3/28/12 309.83 309.55 3.69-13.70 3.28 306.27 9/22/14 309.83 309.55 3.69-13.70 7.85 301.70 12/18/01 308.72 308.17 5.49-25.49 9.99 298.18 1/200/3 308.72 308.17 5.49-25.49 9.99 298.78 6/9/04 308.72 308.17 5.49-25.49 9.99 298.78 6/9/04 308.72 308.17 5.49-25.49 9.57 298.60 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
MW-6 1/25/2005 ¹ 310.24 309.96 4.10-14.10 5.45 304.51 MW-6 5/15/2007 ² 309.83 309.55 3.69-13.69 7.35 302.20 716/2008 ² 309.83 309.55 3.69-13.69 3.73 305.50 3/28/12 309.83 309.55 3.69-13.69 3.73 305.50 3/28/12 309.83 309.55 3.69-13.69 6.66 303.47 9/26/13 309.83 309.55 3.69-13.70 3.28 306.27 9/22/14 309.83 309.55 3.69-13.70 3.28 306.27 9/22/14 309.83 309.55 3.69-13.70 7.80 301.65 9/22/14 309.83 309.55 3.69-13.70 7.80 301.62 9/22/14 308.72 308.17 5.49-25.49 13.87 294.30 1/30/03 308.72 308.17 5.49-25.49 9.39 298.78 6/9/04 308.72 308.17 5.49-25.49 9.39 298.78							
MW-6 2/15/05 310.24 309.96 4.10.14.10 5.76 304.20 7/16/2008 ² 309.83 309.55 3.69.13.69 7.35 302.20 7/16/2008 ² 309.83 309.55 3.69.13.69 27.95 ^[3] 281.60 10/19/09 309.83 309.55 3.69.13.69 5.81 303.4 9/26/12 309.83 309.55 3.69.13.69 6.06 303.4 9/26/13 309.83 309.55 3.69.13.70 3.25 306.30 9/9/13 309.83 309.55 3.69.13.70 3.28 306.27 9/22/14 309.83 309.55 3.69.13.71 7.85 301.70 1/3/003 308.72 308.17 5.49-25.49 13.87 294.30 1/3/03 308.72 308.17 5.49-25.49 9.99 298.18 4/8/03 308.72 308.17 5.49-25.49 9.39 298.78 4/8/04 308.72 308.17 5.49-25.49 9.39 298.18 <							
MW-6 5/15/2007 ² 309.83 309.55 3.69-13.69 7.35 302.20 10/19/09 309.83 309.55 3.69-13.69 27.95 ¹³⁾ 281.60 10/19/09 309.83 309.55 3.69-13.69 3.75 305.80 3/28/12 309.83 309.55 3.69-13.69 6.06 303.44 9/26/12 309.83 309.55 3.69-13.70 3.25 306.30 9/9/13 309.83 309.55 3.69-13.70 3.28 306.27 9/22/14 309.83 309.55 3.69-13.70 7.90 301.70 9/21/15 309.83 309.55 3.69-13.71 7.85 301.70 12/18/01 308.72 308.17 5.49-25.49 9.99 298.78 6/9/04 308.72 308.17 5.49-25.49 9.97 298.60 1/25/2005 ¹ 309.99 309.63 6.95-26.95 11.1 298.63 1/25/2005 ¹ 309.97 309.21 6.53-26.53 14.81 294.40 <tr< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr<>							
MW-7 7/16/2008 ² 309.83 309.55 3.69-13.69 27.95 ⁽³⁾ 281.60 3/28/12 309.83 309.55 3.69-13.69 3.75 305.80 3/28/12 309.83 309.55 3.69-13.69 6.06 303.49 3/28/13 309.83 309.55 3.69-13.70 3.22 306.37 9/9/13 309.83 309.55 3.69-13.70 3.28 306.27 9/22/14 309.83 309.55 3.69-13.70 3.28 306.27 9/21/15 309.83 309.55 3.69-13.71 7.85 301.70 1/3/03 308.72 308.17 5.49-25.49 13.87 294.30 1/3/04 308.72 308.17 5.49-25.49 9.39 298.78 6/9/04 308.72 308.17 5.49-25.49 9.39 298.63 1/25/2005 ¹ 309.99 309.63 6.95-26.95 11.1 298.63 1/25/2005 ¹ 309.57 309.21 6.53-26.53 14.32 294.49	MW-6						
MW-7 10/19/09 309.83 309.55 3.69-13.69 3.75 305.80 3/28/12 309.83 309.55 3.69-13.69 6.06 303.4 9/26/13 309.83 309.55 3.69-13.70 3.25 306.30 9/9/13 309.83 309.55 3.69-13.70 3.25 306.30 9/21/15 309.83 309.55 3.69-13.70 7.90 301.65 9/21/15 309.83 309.55 3.69-13.70 7.90 301.65 9/21/15 309.83 309.55 3.69-13.70 7.90 301.65 9/21/15 309.83 309.55 3.69-13.70 7.85 301.70 1/30/03 308.72 308.17 5.49-25.49 13.87 294.30 1/30/03 308.72 308.17 5.49-25.49 9.39 298.78 6/9/04 308.72 308.17 5.49-25.49 9.57 298.60 1/15/04 308.72 308.17 5.49-25.49 9.57 298.61 1/25/20051							
3/28/12 309.83 309.55 3.69-13.69 5.81 303.74 9/26/12 309.83 309.55 3.69-13.69 6.06 303.49 3/26/13 309.83 309.55 3.69-13.70 3.25 306.30 9/9/13 309.83 309.55 3.69-13.70 3.28 306.27 9/22/14 309.83 309.55 3.69-13.70 7.90 301.65 9/21/15 309.83 309.55 3.69-13.70 7.90 301.65 9/21/16 308.72 308.17 5.49-25.49 13.87 294.30 1/30/03 308.72 308.17 5.49-25.49 9.39 298.78 6/9/04 308.72 308.17 5.49-25.49 9.39 298.60 1/25/005 309.99 309.63 6.95-26.95 11.1 295.84 2/15/05 309.99 309.63 6.95-26.53 14.32 294.80 7/16/2008 ² 309.57 309.21 6.53-26.53 14.31 294.40 3/26/13 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>							
9/26/12 309.83 309.55 3.69-13.69 6.06 303.49 3/26/13 309.83 309.55 3.69-13.70 3.28 306.30 9/9/14 309.83 309.55 3.69-13.70 3.28 306.27 9/22/14 309.83 309.55 3.69-13.70 7.90 301.65 9/21/15 309.87 308.17 5.49-25.49 13.87 294.30 1/30/03 308.72 308.17 5.49-25.49 0.387 294.30 1/4/03 308.72 308.17 5.49-25.49 9.39 298.78 6/9/04 308.72 308.17 5.49-25.49 9.39 298.78 6/9/04 308.72 308.17 5.49-25.49 9.57 298.60 11/5/04 308.72 308.17 5.49-25.49 9.57 298.61 11/5/04 308.72 309.17 5.49-25.49 9.57 298.61 11/25/2005 ¹ 309.57 309.21 6.53-26.53 11.42 294.89 7/16/2008 ²							
9/9/13 309.83 309.55 3.69-13.70 3.28 306.27 9/22/14 309.83 309.55 3.69-13.70 7.90 301.65 9/21/15 309.83 309.55 3.69-13.70 7.85 301.70 12/18/01 308.72 308.17 5.49-25.49 13.87 294.30 1/30/03 308.72 308.17 5.49-25.49 9.99 298.18 4/8/03 308.72 308.17 5.49-25.49 9.39 298.78 6/9/04 308.72 308.17 5.49-25.49 9.57 298.60 11/25/2005 ¹ 309.99 309.63 6.95-26.95 11.1 298.53 12/15/05 309.99 309.63 6.95-26.53 14.32 294.69 7/16/2007 ² 309.57 309.21 6.53-26.53 14.81 294.40 3/28/12 309.57 309.21 6.53-26.53 14.81 294.40 3/28/13 309.57 309.21 6.53-26.54 15.65 299.65 9/21/15							303.49
9/22/14 309.83 309.55 3.69-13.70 7.90 301.65 9/21/15 309.83 309.55 3.69-13.71 7.85 301.70 12/18/01 308.72 308.17 5.49-25.49 Covered with fill dirt 1/30/03 308.72 308.17 5.49-25.49 9.99 298.18 4/8/03 308.72 308.17 5.49-25.49 9.39 298.78 6/9/04 308.72 308.17 5.49-25.49 9.57 298.60 1/25/2005 ¹ 309.99 309.63 6.95-26.95 11.22 298.41 2/15/05 309.99 309.63 6.95-26.95 11.1 298.53 7/16/2007 ² 309.57 309.21 6.53-26.53 14.32 294.49 7/16/2008 ² 309.57 309.21 6.53-26.53 14.81 294.40 3/28/12 309.57 309.21 6.53-26.53 12.73 296.48 9/26/12 309.57 309.21 6.53-26.54 10.68 298.53 9/22/14		3/26/13	309.83	309.55	3.69-13.70	3.25	306.30
9/21/15 309.83 309.55 3.69-13.71 7.85 301.70 12/18/01 308.72 308.17 5.49-25.49 13.87 294.30 1/30/03 308.72 308.17 5.49-25.49 9.99 298.18 4/8/03 308.72 308.17 5.49-25.49 9.39 298.78 6/9/04 308.72 308.17 5.49-25.49 9.39 298.78 6/9/04 308.72 308.17 5.49-25.49 9.57 298.60 11/5/04 308.72 308.17 5.49-25.49 9.57 298.60 11/25/2005 ¹ 309.99 309.63 6.95-26.95 11.22 298.41 2/15/05 309.99 309.63 6.95-26.53 14.32 294.89 7/16/2008 ² 309.57 309.21 6.53-26.53 14.32 294.49 3/26/13 309.57 309.21 6.53-26.53 12.73 296.48 9/26/12 309.57 309.21 6.53-26.54 10.68 298.53 9/21/15		9/9/13	309.83	309.55	3.69-13.70	3.28	306.27
Image: Micro State					3.69-13.70		301.65
MW-8 1/30/03 308.72 308.17 5.49-25.49 Covered with fill dirt 2/14/03 308.72 308.17 5.49-25.49 9.99 298.18 4/8/03 308.72 308.17 5.49-25.49 9.39 298.78 6/9/04 308.72 308.17 5.49-25.49 9.57 298.60 11/5/04 308.72 308.17 5.49-25.49 9.57 298.60 1/25/2005 ¹ 309.99 309.63 6.95-26.95 11.22 298.41 2/15/05 309.91 6.53-26.53 14.32 294.89 7/16/2002 ² 309.57 309.21 6.53-26.53 14.81 294.40 3/28/12 309.57 309.21 6.53-26.53 14.81 294.40 3/28/12 309.57 309.21 6.53-26.53 11.98 297.23 3/26/13 309.57 309.21 6.53-26.54 10.68 298.65 9/21/14 309.57 309.21 6.53-26.54 10.68 293.65 9/22/14 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>							
MW-7 2/14/03 308.72 308.17 5.49-25.49 9.99 298.18 4/8/03 308.72 308.17 5.49-25.49 9.39 298.78 6/9/04 308.72 308.17 5.49-25.49 9.57 298.60 11/5/2005 ¹ 309.99 309.63 6.95-26.95 11.22 298.41 2/15/2007 ² 309.57 309.21 6.53-26.53 14.32 294.89 7/16/2008 ² 309.57 309.21 6.53-26.53 14.31 294.40 3/28/12 309.57 309.21 6.53-26.53 12.73 296.44 9/26/12 309.57 309.21 6.53-26.53 12.73 296.44 9/26/12 309.57 309.21 6.53-26.54 10.68 298.53 9/21/15 309.57 309.21 6.53-26.54 10.68 298.53 9/21/15 309.57 309.21 6.53-26.54 13.76 295.45 9/21/15 309.57 309.21 6.53-26.55 15.85 293.66							
4/8/03 308.72 308.17 5.49-25.49 9.39 298.78 6/9/04 308.72 308.17 5.49-25.49 11.01 297.16 11/5/04 308.72 308.17 5.49-25.49 9.57 298.60 1/25/2005 ¹ 309.99 309.63 6.95-26.95 11.22 298.41 2/15/05 309.99 309.61 6.53-26.53 14.32 294.89 7/16/2008 ² 309.57 309.21 6.53-26.53 14.31 294.40 3/28/12 309.57 309.21 6.53-26.53 12.73 296.48 9/26/12 309.57 309.21 6.53-26.53 11.98 297.23 3/26/13 309.57 309.21 6.53-26.54 9.56 299.65 9/9/13 309.57 309.21 6.53-26.54 10.68 298.53 9/22/14 309.57 309.21 6.53-26.54 10.68 298.53 9/21/15 309.57 309.21 6.53-26.54 10.68 298.53 9/21/14							
MW-7 6/9/04 308.72 308.17 5.49-25.49 11.01 297.16 11/5/04 308.72 308.17 5.49-25.49 9.57 298.60 1/25/2005 ¹ 309.99 309.63 6.95-26.95 11.22 298.41 2/15/05 309.99 309.63 6.95-26.95 11.1 298.53 5/16/2007 ² 309.57 309.21 6.53-26.53 14.32 294.89 7/16/2008 ² 309.57 309.21 6.53-26.53 14.81 294.40 3/28/12 309.57 309.21 6.53-26.53 12.73 296.48 9/26/12 309.57 309.21 6.53-26.53 11.98 297.23 3/26/13 309.57 309.21 6.53-26.54 10.68 298.53 9/21/15 309.57 309.21 6.53-26.54 13.76 295.45 9/21/15 309.57 309.21 6.53-26.54 13.76 295.45 9/21/15 309.57 309.21 6.53-26.55 15.85 293.36 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
MW-7 11/5/04 308.72 308.17 5.49-25.49 9.57 298.60 1/25/2005 ¹ 309.99 309.63 6.95-26.95 11.22 298.41 2/15/05 309.99 309.63 6.95-26.95 11.1 298.53 5/16/2007 ² 309.57 309.21 6.53-26.53 14.32 294.89 7/16/2008 ² 309.57 309.21 6.53-26.53 14.81 294.40 3/28/12 309.57 309.21 6.53-26.53 12.73 296.48 9/26/12 309.57 309.21 6.53-26.53 11.98 297.23 3/26/13 309.57 309.21 6.53-26.54 9.56 299.65 9/9/13 309.57 309.21 6.53-26.54 10.68 298.53 9/21/15 309.57 309.21 6.53-26.55 15.85 293.36 9/21/15 309.57 309.21 6.53-26.55 15.85 293.36 9/21/15 309.57 309.21 6.53-26.55 15.85 293.36 <tr< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr<>							
MW-7 1/25/2005 ¹ 309.99 309.63 6.95-26.95 11.22 298.41 2/15/05 309.99 309.63 6.95-26.95 11.1 298.53 5/16/2007 ² 309.57 309.21 6.53-26.53 14.32 294.89 7/16/2008 ² 309.57 309.21 6.53-26.53 14.81 294.40 3/28/12 309.57 309.21 6.53-26.53 12.73 296.48 9/26/12 309.57 309.21 6.53-26.53 12.73 296.48 9/26/13 309.57 309.21 6.53-26.54 9.56 299.65 9/9/13 309.57 309.21 6.53-26.54 10.68 298.53 9/22/14 309.57 309.21 6.53-26.54 13.76 295.45 9/21/15 309.57 309.21 6.53-26.55 15.85 293.66 9/21/14 309.57 309.21 6.53-26.55 15.85 293.62 1/17/01 308.84 308.61 2.20-12.20 11.10 297.60 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
MW-7 12/15/05 309.99 309.63 6.95-26.95 11.1 298.53 MW-7 5/16/2007 ² 309.57 309.21 6.53-26.53 14.32 294.89 7/16/2008 ² 309.57 309.21 6.53-26.53 14.81 294.40 3/28/12 309.57 309.21 6.53-26.53 14.81 294.40 3/28/12 309.57 309.21 6.53-26.53 12.73 296.48 9/26/13 309.57 309.21 6.53-26.53 12.73 296.48 9/26/13 309.57 309.21 6.53-26.54 9.56 299.65 9/9/13 309.57 309.21 6.53-26.54 10.68 298.53 9/22/14 309.57 309.21 6.53-26.55 15.85 293.36 9/21/15 309.57 309.21 6.53-26.55 15.85 293.65 9/21/14 309.57 309.21 6.53-26.55 15.85 293.66 9/21/15 309.57 309.21 6.53-26.55 15.85 293.66 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
MW-7 5/16/2007 ² 309.57 309.21 6.53-26.53 14.32 294.89 7/16/2008 ² 309.57 309.21 6.53-26.53 NM NM 10/19/09 309.57 309.21 6.53-26.53 14.81 294.40 3/28/12 309.57 309.21 6.53-26.53 12.73 296.48 9/26/12 309.57 309.21 6.53-26.53 11.98 297.23 3/26/13 309.57 309.21 6.53-26.54 9.56 299.65 9/91/13 309.57 309.21 6.53-26.54 10.68 298.65 9/21/14 309.57 309.21 6.53-26.54 13.76 295.45 9/21/15 309.57 309.21 6.53-26.55 15.85 293.36 1/30/01 308.84 308.61 2.20-12.20 11.01 297.60 12/18/01 308.84 308.61 2.20-12.20 10.20 207.51 1/30/03 308.84 308.61 2.20-12.20 3.667 301.94							
MW-8 0.002002 0.00201 0.00211 0.002015 0.00211 0.00215 0.00211 <th< td=""><td>MW-7</td><td>-</td><td></td><td></td><td></td><td></td><td></td></th<>	MW-7	-					
MW-8 10/19/09 309.57 309.21 6.53-26.53 14.81 294.40 3/28/12 309.57 309.21 6.53-26.53 12.73 296.48 9/26/12 309.57 309.21 6.53-26.53 12.73 296.48 9/26/13 309.57 309.21 6.53-26.53 11.98 297.23 3/26/13 309.57 309.21 6.53-26.54 9.56 299.65 9/9/13 309.57 309.21 6.53-26.54 10.68 295.45 9/22/14 309.57 309.21 6.53-26.55 15.85 293.36 9/21/15 309.57 309.21 6.53-26.55 15.85 293.36 9/21/15 309.57 309.21 6.53-26.55 15.85 293.36 12/18/01 308.84 308.61 2.20-12.20 11.01 297.60 1/30/03 308.84 308.61 2.20-12.20 11.00 297.51 1/30/03 308.84 308.61 2.20-12.20 3.67 300.93 <t< td=""><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td></t<>		-					
3/28/12 309.57 309.21 6.53-26.53 12.73 296.48 9/26/12 309.57 309.21 6.53-26.53 11.98 297.23 3/26/13 309.57 309.21 6.53-26.54 9.56 299.65 9/9/13 309.57 309.21 6.53-26.54 10.68 298.53 9/22/14 309.57 309.21 6.53-26.54 13.76 295.45 9/21/15 309.57 309.21 6.53-26.54 13.76 295.45 9/21/15 309.57 309.21 6.53-26.55 15.85 293.36 9/21/15 309.57 309.21 6.53-26.55 15.85 293.36 12/18/01 308.84 308.61 2.20-12.20 11.01 297.60 1/3/03 308.84 308.61 2.20-12.20 4.66 303.95 4/8/03 308.84 308.61 2.20-12.20 4.66 303.95 4/8/03 308.84 308.61 2.20-12.02 3.72 304.71 1/25/2005 ¹							
9/26/12 309.57 309.21 6.53-26.53 11.98 297.23 3/26/13 309.57 309.21 6.53-26.54 9.56 299.65 9/9/13 309.57 309.21 6.53-26.54 10.68 298.53 9/22/14 309.57 309.21 6.53-26.54 13.76 295.45 9/21/15 309.57 309.21 6.53-26.55 15.85 293.36 9/21/15 309.57 309.21 6.53-26.55 15.85 293.65 9/21/15 309.57 309.21 6.53-26.55 15.85 293.62 12/18/01 308.84 308.61 2.20-12.20 11.01 297.60 12/18/01 308.84 308.61 2.20-12.20 4.66 303.95 2/14/03 308.84 308.61 2.20-12.20 4.66 303.95 4/8/03 308.84 308.61 2.20-12.20 7.68 300.93 11/5/04 308.73 308.43 2.02-12.02 7.72 304.71 12/5/005 ¹							296.48
3/26/13 309.57 309.21 6.53-26.54 9.56 299.65 9/9/13 309.57 309.21 6.53-26.54 10.68 298.53 9/22/14 309.57 309.21 6.53-26.54 13.76 295.45 9/21/15 309.57 309.21 6.53-26.55 15.85 293.36 8/30/01 308.84 308.61 2.20-12.20 11.01 297.60 12/18/01 308.84 308.61 2.20-12.20 11.10 297.51 1/30/03 308.84 308.61 2.20-12.20 6.29 302.32 2/14/03 308.84 308.61 2.20-12.20 4.66 303.95 4/8/03 308.84 308.61 2.20-12.20 6.67 301.94 11/5/04 308.84 308.61 2.20-12.20 7.68 300.93 11/5/2005 ¹ 308.73 308.43 2.02-12.02 3.72 304.71 2/15/2007 ² 308.33 308.03 1.62-11.62 6.43 301.60 10/19/09							297.23
9/22/14 309.57 309.21 6.53-26.54 13.76 295.45 9/21/15 309.57 309.21 6.53-26.55 15.85 293.36 9/21/15 309.84 308.61 2.20-12.20 11.01 297.60 12/18/01 308.84 308.61 2.20-12.20 11.10 297.61 1/30/03 308.84 308.61 2.20-12.20 6.29 302.32 2/14/03 308.84 308.61 2.20-12.20 4.66 303.95 4/8/03 308.84 308.61 2.20-12.20 4.66 303.93 4/8/03 308.84 308.61 2.20-12.20 3.67 301.94 11/5/04 308.84 308.61 2.20-12.02 3.72 304.71 11/5/04 308.84 308.61 2.20-12.02 3.72 304.71 11/5/04 308.83 308.43 2.02-12.02 3.72 304.71 2/15/05 308.73 308.43 2.02-12.02 4.14 304.29 5/15/2007 ² <t< td=""><td></td><td></td><td>309.57</td><td></td><td></td><td>9.56</td><td>299.65</td></t<>			309.57			9.56	299.65
9/21/15 309.57 309.21 6.53-26.55 15.85 293.36 8/30/01 308.84 308.61 2.20-12.20 11.01 297.60 12/18/01 308.84 308.61 2.20-12.20 11.01 297.60 12/18/01 308.84 308.61 2.20-12.20 11.01 297.60 1/30/03 308.84 308.61 2.20-12.20 6.29 302.32 2/14/03 308.84 308.61 2.20-12.20 4.66 303.95 4/8/03 308.84 308.61 2.20-12.20 3.97 304.64 6/9/04 308.84 308.61 2.20-12.20 3.67 301.94 11/5/04 308.84 308.61 2.20-12.02 3.72 304.71 12/5/05 308.73 308.43 2.02-12.02 3.72 304.71 2/15/05 308.73 308.43 2.02-12.02 4.14 304.29 5/15/2007 ² 308.33 308.03 1.62-11.62 6.43 301.60 10/19/09							298.53
8/30/01 308.84 308.61 2.20-12.20 11.01 297.60 12/18/01 308.84 308.61 2.20-12.20 11.10 297.61 1/30/03 308.84 308.61 2.20-12.20 11.10 297.51 1/30/03 308.84 308.61 2.20-12.20 6.29 302.32 2/14/03 308.84 308.61 2.20-12.20 4.66 303.95 4/8/03 308.84 308.61 2.20-12.20 4.66 303.95 4/8/03 308.84 308.61 2.20-12.20 3.97 304.64 6/9/04 308.84 308.61 2.20-12.20 7.68 300.93 11/5/04 308.73 308.43 2.02-12.02 3.72 304.71 2/15/05 308.73 308.43 2.02-12.02 4.14 304.29 5/15/2007 ² 308.33 308.03 1.62-11.62 6.43 301.60 10/19/09 308.33 308.03 1.62-11.62 4.41 306.62 3/28/12 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>295.45</td></td<>							295.45
MW-8 12/18/01 308.84 308.61 2.20-12.20 11.10 297.51 1/30/03 308.84 308.61 2.20-12.20 6.29 302.32 2/14/03 308.84 308.61 2.20-12.20 4.66 303.95 4/8/03 308.84 308.61 2.20-12.20 4.66 303.95 1/15/04 308.84 308.61 2.20-12.20 3.97 304.64 1/15/04 308.84 308.61 2.20-12.20 7.68 300.93 1/25/2005 ¹ 308.73 308.43 2.02-12.02 3.72 304.71 2/15/05 308.73 308.43 2.02-12.02 4.14 304.29 5/15/2007 ² 308.33 308.03 1.62-11.62 6.43 301.60 10/19/09 308.33 308.03 1.62-11.62 1.41 306.62 3/28/12 308.33 308.03 1.62-11.62 4.44 305.59 9/26/12 308.33 308.03 1.62-11.62 2.44 305.59 <							293.36
1/30/03 308.84 308.61 2.20-12.20 6.29 302.32 2/14/03 308.84 308.61 2.20-12.20 4.66 303.95 4/8/03 308.84 308.61 2.20-12.20 4.66 303.95 4/8/03 308.84 308.61 2.20-12.20 3.97 304.64 6/9/04 308.84 308.61 2.20-12.20 6.67 301.94 11/5/04 308.84 308.61 2.20-12.20 7.68 300.93 11/5/2005 ¹ 308.73 308.43 2.02-12.02 3.72 304.71 2/15/2007 ² 308.33 308.43 2.02-12.02 4.14 304.29 5/15/2007 ² 308.33 308.03 1.62-11.62 6.43 301.60 10/19/09 308.33 308.03 1.62-11.62 1.41 306.62 3/28/12 308.33 308.03 1.62-11.62 4.14 303.87 9/26/12 308.33 308.03 1.62-11.62 4.46 303.87 9/26/13							
MW-8 2/14/03 308.84 308.61 2.20-12.20 4.66 303.95 4/8/03 308.84 308.61 2.20-12.20 3.97 304.64 6/9/04 308.84 308.61 2.20-12.20 3.97 304.64 11/5/04 308.84 308.61 2.20-12.20 6.67 301.94 11/5/04 308.84 308.61 2.20-12.02 6.67 304.71 12/15/05 308.73 308.43 2.02-12.02 3.72 304.71 2/15/05 308.73 308.43 2.02-12.02 4.14 304.29 5/15/2007 ² 308.33 308.03 1.62-11.62 6.56 301.47 7/16/2008 ² 308.33 308.03 1.62-11.62 1.41 306.62 3/28/12 308.33 308.03 1.62-11.62 4.16 303.87 9/26/12 308.33 308.03 1.62-11.62 4.16 305.59 3/28/12 308.33 308.03 1.62-11.63 0.86 307.17							
4/8/03 308.84 308.61 2.20-12.20 3.97 304.64 6/9/04 308.84 308.61 2.20-12.20 6.67 301.94 11/5/04 308.84 308.61 2.20-12.20 6.67 301.94 11/5/04 308.84 308.61 2.20-12.20 7.68 300.93 1/25/2005 ¹ 308.73 308.43 2.02-12.02 3.72 304.71 2/15/05 308.73 308.43 2.02-12.02 4.14 304.29 5/15/2007 ² 308.33 308.03 1.62-11.62 6.56 301.47 7/16/2008 ² 308.33 308.03 1.62-11.62 1.41 306.62 3/28/12 308.33 308.03 1.62-11.62 4.16 303.87 9/26/12 308.33 308.03 1.62-11.62 4.16 303.87 9/26/13 308.33 308.03 1.62-11.62 2.44 305.59 3/26/13 308.33 308.03 1.62-11.63 0.86 307.17 9/9/13							
6/9/04 308.84 308.61 2.20-12.20 6.67 301.94 11/5/04 308.84 308.61 2.20-12.20 7.68 300.93 1/25/2005 ¹ 308.73 308.43 2.02-12.02 3.72 304.71 2/15/05 308.73 308.43 2.02-12.02 4.14 304.29 5/15/2007 ² 308.33 308.03 1.62-11.62 6.56 301.47 7/16/2008 ² 308.33 308.03 1.62-11.62 6.43 301.60 10/19/09 308.33 308.03 1.62-11.62 4.16 303.87 3/28/12 308.33 308.03 1.62-11.62 4.16 303.87 9/26/12 308.33 308.03 1.62-11.62 4.16 303.87 9/26/13 308.33 308.03 1.62-11.62 2.44 305.59 3/26/13 308.33 308.03 1.62-11.63 0.86 307.17 9/9/13 308.33 308.03 1.62-11.63 2.41 305.62							
MW-8 11/5/04 308.84 308.61 2.20-12.20 7.68 300.93 1/25/2005 ¹ 308.73 308.43 2.02-12.02 3.72 304.71 2/15/05 308.73 308.43 2.02-12.02 4.14 304.29 5/15/2007 ² 308.33 308.03 1.62-11.62 6.56 301.47 7/16/2008 ² 308.33 308.03 1.62-11.62 6.43 301.60 10/19/09 308.33 308.03 1.62-11.62 1.41 306.62 3/28/12 308.33 308.03 1.62-11.62 2.44 303.87 9/26/12 308.33 308.03 1.62-11.62 2.44 305.59 3/26/13 308.33 308.03 1.62-11.63 0.86 307.17 9/9/13 308.33 308.03 1.62-11.63 2.41 305.62							
MW-8 1/25/2005 ¹ 308.73 308.43 2.02-12.02 3.72 304.71 2/15/05 308.73 308.43 2.02-12.02 4.14 304.29 5/15/2007 ² 308.33 308.03 1.62-11.62 6.56 301.47 7/16/2008 ² 308.33 308.03 1.62-11.62 6.43 301.60 10/19/09 308.33 308.03 1.62-11.62 1.41 306.62 3/28/12 308.33 308.03 1.62-11.62 4.16 303.87 9/26/12 308.33 308.03 1.62-11.62 4.16 305.59 3/28/12 308.33 308.03 1.62-11.62 2.44 305.59 9/26/13 308.33 308.03 1.62-11.63 0.86 307.17 9/9/13 308.33 308.03 1.62-11.63 2.41 305.62							
MW-8 $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$							
MW-8 5/15/2007 ² 308.33 308.03 1.62-11.62 6.56 301.47 7/16/2008 ² 308.33 308.03 1.62-11.62 6.43 301.60 10/19/09 308.33 308.03 1.62-11.62 1.41 306.62 3/28/12 308.33 308.03 1.62-11.62 4.16 303.87 9/26/12 308.33 308.03 1.62-11.62 2.44 305.59 3/26/13 308.33 308.03 1.62-11.63 0.86 307.17 9/9/13 308.33 308.03 1.62-11.63 2.41 305.62							
7/16/2008 ² 308.33 308.03 1.62-11.62 6.43 301.60 10/19/09 308.33 308.03 1.62-11.62 1.41 306.62 3/28/12 308.33 308.03 1.62-11.62 4.16 303.87 9/26/12 308.33 308.03 1.62-11.62 2.44 305.59 3/26/13 308.33 308.03 1.62-11.63 0.86 307.17 9/9/13 308.33 308.03 1.62-11.63 2.41 305.62	MW-8	0					
10/19/09 308.33 308.03 1.62-11.62 1.41 306.62 3/28/12 308.33 308.03 1.62-11.62 4.16 303.87 9/26/12 308.33 308.03 1.62-11.62 2.44 305.59 3/26/13 308.33 308.03 1.62-11.63 0.86 307.17 9/9/13 308.33 308.03 1.62-11.63 2.41 305.62		-					
3/28/12 308.33 308.03 1.62-11.62 4.16 303.87 9/26/12 308.33 308.03 1.62-11.62 2.44 305.59 3/26/13 308.33 308.03 1.62-11.63 0.86 307.17 9/9/13 308.33 308.03 1.62-11.63 2.41 305.62							
9/26/12 308.33 308.03 1.62-11.62 2.44 305.59 3/26/13 308.33 308.03 1.62-11.63 0.86 307.17 9/9/13 308.33 308.03 1.62-11.63 2.41 305.62							303.87
3/26/13 308.33 308.03 1.62-11.63 0.86 307.17 9/9/13 308.33 308.03 1.62-11.63 2.41 305.62							305.59
9/9/13 308.33 308.03 1.62-11.63 2.41 305.62							307.17
							305.62
		9/22/14	308.33	308.03	1.62-11.63	2.18	305.85 301.02

Well Number	Date Measured	Ground Suface Elevation (ft, NAVD)	Top of Casing Elevation (ft, NAVD)	Depth of Screened Interval (ft btoc)	Depth to Water (ft, btoc)	Groundwate Elevation (ft, NAVD)
	8/30/01	307.30	307.12	2.43-22.43	10.92	296.20
	12/18/01	307.30	307.12	2.43-22.43	13.62	293.50
	1/30/03	307.30	307.12	2.43-22.43	9.97	297.15
	2/14/03	307.30	307.12	2.43-22.43	9.80	297.32
	4/8/03	307.30	307.12	2.43-22.43	9.27	297.85
	6/9/04	307.30	307.12	2.43-22.43	Covered	with fill dirt
	11/5/04	307.30	307.12	2.43-22.43	10.31	296.81
	1/25/2005 ¹	307.77	307.57	2.88-22.88	10.05	297.52
	2/15/05	307.77	307.57	2.88-22.88	9.92	297.65
MW-9	5/15/2007 ²	307.32	307.12	2.43-22.43	13.06	294.06
	7/16/2008 ²	307.32	307.12	2.43-22.43	14.15	292.97
	10/19/09	307.32	307.12	2.43-22.43	13.46	293.66
	3/28/12	307.32	307.12	2.43-22.43	11.65	295.47
	9/26/12	307.32	307.12	2.43-22.43	11.14	295.98
	3/26/13	307.32	307.12	2.43-22.44	9.49	297.63
	9/9/13	307.32	307.12	2.43-22.44	9.51	297.61
	9/22/14	307.32	307.12	2.43-22.44	12.51	294.61
	9/21/15	307.32	307.12	2.43-22.45	14.43	292.69
	8/30/01	308.41	308.20	1.65-11.65	3.25	304.95
	12/18/01	308.41	308.20	1.65-11.65	5.58	302.62
	1/30/03	308.41	308.20	1.65-11.65		with fill dirt
	2/14/03	308.41	308.20	1.65-11.65	2.50	305.70
	4/8/03	308.41	308.20	1.65-11.65	1.89	306.31
	6/9/04	308.41	308.20	1.65-11.65	2.87	305.33
	11/5/04	308.41	308.20	1.65-11.65	3.30	304.90
	1/25/2005 ¹	309.51	309.29	2.74-12.74	3.90	305.39
104/ 10	2/15/05	309.51	309.29	2.74-12.74	4.15	305.14
MW-10	5/15/2007 ²	309.16	308.94	2.39-12.39	5.82	303.12
	7/16/2008 ²	309.16	308.94	2.39-12.39	5.43	303.51
	10/19/09	309.16	308.94	2.39-12.39	3.74	305.20
	3/28/12	309.16	308.94	2.39-12.39	NL	NL
	9/26/12	309.16	308.94	2.39-12.39	NL	NL
	3/26/13	309.16	308.94	2.39-12.40	NL	NL
	9/9/13	309.16	308.94	2.39-12.40	NL	NL
	9/22/14	309.16	308.94	2.39-12.40	NL	NL
	9/21/15	309.16	308.94	2.39-12.41	NL	NL
	8/30/01	309.15	308.92	1.84-11.84	10.80	298.12
	12/18/01	309.15	308.92	1.84-11.84	5.73	303.19
	1/30/03	309.15	308.92	1.84-11.84	2.89	306.03
	2/14/03	309.15	308.92	1.84-11.84	2.78	306.14
	4/8/03	309.15	308.92	1.84-11.84	3.16	305.76
	6/9/04	309.15	308.92	1.84-11.84	5.56	303.36
	11/5/04	309.15	308.92	1.84-11.84	4.99	303.93
	1/25/05	309.15	308.92	1.84-11.84	4.15	304.77
MW-11	2/15/05	309.15	308.92	1.84-11.84	3.96	304.96
	5/15/2007 ²	308.7	308.47	1.39-11.39	6.17	302.30
	7/16/2008 ²	308.7	308.47	1.39-11.39	3.60	304.87
	10/19/09	308.7	308.47	1.39-11.39	2.05	306.42
	3/28/12	308.7	308.47	1.39-11.39	NL	NL
	9/26/12	308.7	308.47	1.39-11.39	NL	NL
	3/26/13	308.7	308.47	1.39-11.40	NL	NL
	9/9/13	308.7	308.47	1.39-11.40	NL	NL
	9/22/14	308.7	308.47	1.39-11.40	NL	NL
	9/21/15	308.7	308.47	1.39-11.41	NL	NL
	8/30/01	311.32	311.10	1.76-11.76	4.63	306.47
	12/18/01	311.32	311.10	1.76-11.76	5.73	305.37
	1/30/03	311.32	311.10	1.76-11.76	7.80	303.30
	2/14/03	311.32	311.10	1.76-11.76	4.63	306.47
	4/8/03	311.32	311.10	1.76-11.76	3.95	307.15
	6/9/04	311.32	311.10	1.76-11.76	6.12	304.98
	11/5/04	311.32	311.10	1.76-11.76	6.35	304.75
	1/25/05	311.32	311.10	1.76-11.76	4.35	306.75
MM/ 10	2/15/05	311.32	311.10	1.76-11.76	4.4	306.70
MW-12	5/15/2007 ²	310.99	310.77	1.43-11.43	6.60	304.17
MW-12			310.77	1.43-11.43	6.47	304.30
MW-12	7/16/2008 ²	310.99				007.00
MW-12		310.99 310.99	310.77	1.43-11.43	3.55	307.22
MW-12	7/16/2008 ² 10/19/09 3/28/12	310.99 310.99	310.77 310.77	1.43-11.43	4.53	306.24
MW-12	7/16/2008 ² 10/19/09 3/28/12 9/26/12	310.99 310.99 310.99	310.77 310.77 310.77	1.43-11.43 1.43-11.43	4.53 3.48	306.24 307.29
MW-12	7/16/2008 ² 10/19/09 3/28/12 9/26/12 3/26/13	310.99 310.99 310.99 310.99 310.99	310.77 310.77 310.77 310.77	1.43-11.43 1.43-11.43 1.43-11.44	4.53 3.48 2.10	306.24 307.29 308.67
MW-12	7/16/2008 ² 10/19/09 3/28/12 9/26/12	310.99 310.99 310.99	310.77 310.77 310.77	1.43-11.43 1.43-11.43	4.53 3.48	306.24 307.29

	Date	Ground Suface Elevation	Top of Casing Elevation	Depth of Screened Interval	Depth to Water	Groundwate Elevation
Nell Number	Measured	(ft, NAVD)	(ft, NAVD)	(ft btoc)	(ft, btoc)	(ft, NAVD)
	8/30/01	309.03	308.78	19.58-24.58	12.35	296.43
	12/18/01 1/30/03	309.03 309.03	308.78 308.78	19.58-24.58 19.58-24.58	15.23 11.50	293.55 297.28
	2/14/03	309.03	308.78	19.58-24.58	11.34	297.20
	4/8/03	309.03	308.78	19.58-24.58	11.80	296.98
	6/9/04	309.03	308.78	19.58-24.58	12.58	296.20
	11/5/04	309.09	308.78	19.58-24.58	11.81	296.97
	1/25/2005 ¹	308.81	308.58	19.38-24.38	10.92	297.66
MW-13D	2/15/05	308.81	308.58	19.38-24.38	10.85	297.73
	5/15/2007 ²	308.38	308.15	18.95-23.95	13.99	294.16
	7/16/2008 ²	308.38	308.15	18.95-23.95	15.16	292.99
	10/19/09	308.38 308.38	308.15 308.15	18.95-23.95	14.51 12.67	293.64 295.48
	3/28/12 9/26/12	308.38	308.15	18.95-23.95 18.95-23.95	12.07	295.48
	3/26/13	308.38	308.15	18.95-23.96	10.46	297.69
	9/9/13	308.38	308.15	18.95-23.96	10.44	297.71
	9/22/14	308.38	308.15	18.95-23.96	13.52	294.63
	9/21/15	308.38	308.15	18.95-23.97	15.45	292.70
	8/30/01	307.26	306.92	1.19-6.19	DRY	DRY
	12/18/01	307.26	306.92	1.19-6.19	DRY	DRY
	1/30/03	307.26	306.92	1.19-6.19	2.98	303.94
	2/14/03 4/8/03	307.26 307.26	306.92 306.92	1.19-6.19 1.19-6.19	2.20 2.67	304.72 304.25
	4/8/03 6/9/04	307.26	306.92	1.19-6.19	3.20	304.25
	11/5/04	307.26	306.92	1.19-6.19	3.24	303.68
	1/25/2005 ¹	307.10	306.81	1.08-6.08	2.80	304.01
	2/15/05	307.10	306.81	1.08-6.08	2.31	304.50
MW-14	5/15/2007 ²	306.74	306.45	0.72-5.72	4.12	302.33
	7/16/2008 ²	306.74	306.45	0.72-5.72	3.65	302.80
	10/19/09	306.74	306.45	0.72-5.72	NM	NM
	3/28/12	306.74	306.45	0.72-5.72	2.86	303.59
	9/26/12	306.74	306.45	0.72-5.72	2.66	303.79
	3/26/13	306.74 306.74	306.45 306.45	0.72-5.73	1.93 2.54	304.52 303.91
	9/9/13 9/22/14	306.74	306.45	0.72-5.73 0.72-5.73	2.34	303.91
	9/21/15	306.74	306.45	0.72-5.74	3.70	302.75
	1/30/03	306.11	305.82	5.18-15.18	14.94	290.88
	2/14/03	306.11	305.82	5.18-15.18	13.77	292.05
	4/8/03	306.11	305.82	5.18-15.18	9.53	296.29
	6/9/04	306.11	305.82	5.18-15.18	6.58	299.24
	11/5/04	306.11	305.82	5.18-15.18	5.75	300.07
	1/25/20051	306.13	305.88	5.24-15.24	5.25	300.63
	2/15/05	306.13	305.88	5.24-15.24	4.79	301.09
MW-15	5/16/2007 ²	305.73	305.48	4.84-14.84 4.84-14.84	7.61	297.87 297.46
	7/16/2008 ² 10/19/09	305.73 305.73	305.48 305.48	4.84-14.84	8.02 5.66	297.46
	3/28/12	305.73	305.48	4.84-14.84	4.92	300.56
	9/26/12	305.73	305.48	4.84-14.84	4.62	300.86
	3/26/13	305.73	305.48	4.84-14.85	4.02	301.46
	9/9/13	305.73	305.48	4.84-14.85	4.14	301.34
	9/22/14	305.73	305.48	4.84-14.85	4.97	300.51
	9/21/15	305.73	305.48	4.84-14.86	8.00	297.48
	1/30/03	310.39	309.95	5.40-20.40	NM	NM
	2/14/03	310.39	309.95	5.40-20.40 5.40-20.40	11.91	298.04
	4/8/03 6/9/04	310.39 310.39	309.95 309.95	5.40-20.40	11.31 12.99	298.64 296.96
	11/5/04	310.39	309.95	5.40-20.40	12.99	296.96
	1/25/2005 ¹	310.54	310.00	5.45-20.45	11.69	298.31
	2/15/05	310.54	310.00	5.45-20.45	11.53	298.47
MW-16	5/16/2007 ²	310.09	309.55	5.00-20.00	14.55	295.00
01-44141	7/16/2008 ²	310.09	309.55	5.00-20.00	15.67	293.88
	10/19/09	310.09	309.55	5.00-20.00	14.49	295.06
	3/28/12	310.09	309.55	5.00-20.00	12.98	296.57
	9/26/12	310.09	309.55	5.00-20.00	12.38	297.17
	3/26/13	310.09	309.55	5.00-20.01	10.78	298.77
	9/9/13 9/22/14	310.09 310.09	309.55 309.55	5.00-20.01 5.00-20.01	10.96 14.17	298.59 295.38
	9/22/14 9/21/15	307.70	309.55	5.00-20.01	14.17	295.38
	1/30/03	308.04	307.53	4.90-14.90	2.70	304.83
	2/14/03	308.04	307.53	4.90-14.90	2.27	305.26
	4/8/03	308.04	307.53	4.90-14.90	2.42	305.11
	6/9/04	308.04	307.53	4.90-14.90	4.10	303.43
	11/5/04	308.04	307.53	4.90-14.90	3.82	303.71
	1/25/05	308.04	307.53	4.90-14.90		with fill dirt
	2/15/05	308.04	307.53	4.90-14.90	3.38	304.15
MW-17	5/16/07	308.04	307.53	4.90-14.90	NL	NL
	7/16/08 10/19/09	308.04 308.04	307.53 307.53	4.90-14.90 4.90-14.90	NL Destroyed	NL Destroyed
	3/28/12	308.04	307.53	4.90-14.90	Destroyed	Destroyed
	9/26/12	308.04	307.53	4.90-14.90	Destroyed	Destroyed
	0, 20, TE	308.04	307.53	4.90-14.91	Destroyed	Destroyed

Page 4 of 8

		Ground	Top of			
		Suface	Casing	Depth of	Depth to	Groundwater
	Date	Elevation	Elevation	Screened Interval	Water	Elevation
Well Number	Measured	(ft, NAVD)	(ft, NAVD)	(ft btoc)	(ft, btoc)	(ft, NAVD)
	9/9/13	308.04	307.53	4.90-14.91	Destroyed	Destroyed
	9/22/14	308.04	307.53	4.90-14.91	Destroyed	Destroyed
	9/21/15	308.04	307.53	4.90-14.92	Destroyed	Destroyed

	Date	Ground Suface Elevation	Top of Casing Elevation	Depth of Screened Interval	Depth to Water	Groundwate Elevation
Well Number	Measured	(ft, NAVD)	(ft, NAVD)	(ft btoc)	(ft, btoc)	(ft, NAVD)
	1/30/03	307.77	307.43	5.38-20.38	8.50	298.93
	2/14/03	307.77	307.43	5.38-20.38	9.23	298.2
	4/8/03	307.77	307.43	5.38-20.38	8.74	298.69
	6/9/04	307.77	307.43	5.38-20.38 5.38-20.38	10.13	297.3
	11/5/04	307.77 308.57	307.43 308.12	6.07-21.07	8.86 9.13	298.57 298.99
	1/25/2005 ¹ 2/15/05	308.57	308.12	6.07-21.07	9.13	298.99
	5/15/2007 ²	308.14	307.69	5.64-20.64	13.09	294.6045
MW-18	7/16/2008 ²	308.14	307.69	5.64-20.64	14.46	293.23
	10/19/09	308.14	307.69	5.64-20.64	13.37	294.32
	3/28/12	308.14	307.69	5.64-20.64	11.11	296.58
	9/26/12	308.14	307.69	5.64-20.64	10.13	297.56
	3/26/13	308.14	307.69	5.64-20.65	6.12	301.57
	9/9/13	308.14	307.69	5.64-20.65	8.46	299.23
	9/22/14	308.14	307.69	5.64-20.65	12.41	295.28
	9/21/15 1/30/03	309.20 305.30	309.03	5.64-20.66	15.91 5.10	293.12
	2/14/03	305.30	308.66 308.66	5.42-15.42 5.42-15.42	5.94	303.56 302.72
	4/8/03	305.30	308.66	5.42-15.42	6.08	302.72
	6/9/04	305.30	308.66	5.42-15.42	7.31	301.35
	11/5/04	305.30	308.66	5.42-15.42	6.67	301.99
	1/25/2005 ¹	305.30	308.89	5.65-15.65	8.60	300.29
	2/15/05	305.30	308.89	5.65-15.65	5.43	303.46
MW-19	5/16/2007 ²	304.88	308.47	5.23-15.23	8.68	299.794
	7/16/2008 ²	304.88	308.47	5.23-15.23	9.78	298.69
	10/19/09	304.88	308.47	5.23-15.23	5.96	302.51
	3/28/12	304.88	308.47	5.23-15.23	6.50	301.97
	9/26/12 3/26/13	304.88 304.88	308.47 308.47	5.23-15.23 5.23-15.24	6.35 4.83	302.12 303.64
	9/9/13	304.88	308.47	5.23-15.24	6.13	302.34
	9/22/14	304.88	308.47	5.23-15.24	10.71	297.76
	9/21/15	304.88	308.47	5.23-15.25	10.78	297.69
	1/30/03	305.86	305.63	5.21-15.21	8.20	297.43
	2/14/03	305.86	305.63	5.21-15.21	7.69	297.94
	4/8/03	305.86	305.63	5.21-15.21	6.98	298.65
	6/9/04	305.86	305.63	5.21-15.21	8.72	296.91
	11/5/04	305.86	305.63	5.21-15.21	8.09	297.54
	1/25/2005 ¹ 2/15/05	306.00 306.00	305.67 305.67	5.25-15.25 5.25-15.25	7.50 7.46	298.17 298.21
	5/15/2007 ²	305.63	305.30	4.88-14.88	10.30	295.0002
MW-20	7/16/2008 ²	305.63	305.30	4.88-14.88	6.57	298.73
	10/19/09	305.63	305.30	4.88-14.88	2.57	302.73
	3/28/12	305.63	305.30	4.88-14.88	4.88	300.42
	9/26/12	305.63	305.30	4.88-14.88	2.68	302.62
	3/26/13	305.63	305.30	4.88-14.89	1.81	303.49
	9/9/13	305.63	305.30	4.88-14.89	3.91	301.39
	9/22/14	305.63	305.30	4.88-14.89	3.72	301.58
	9/21/15	305.63	305.30	4.88-14.90	8.99	296.31
	1/30/03	306.81 306.81	306.12 306.12	5.18-15.18 5.18-15.18	9.60	296.52
	2/14/03 4/8/03	306.81	306.12	5.18-15.18	6.90 6.72	299.22 299.40
	6/9/04	306.81	306.12	5.18-15.18	7.91	299.40
	11/5/04	306.81	306.12	5.18-15.18	8.13	297.99
	1/25/2005 ¹	306.77	306.16	5.22-15.22	7.66	298.50
	2/15/05	306.77	306.16	5.22-15.22	7.53	298.63
MW-21	5/15/2007 ²	306.43	305.82	4.88-14.88	9.08	296.74
	7/16/2008 ²	306.43	305.82	4.88-14.88	9.12	296.70
	10/19/09	306.43	305.82	4.88-14.88	1.75	304.07
	3/28/12	306.43	305.82	4.88-14.88	4.3	301.52
	9/26/12	306.43 306.43	305.82 305.82	4.88-14.88	2.85 0.46	302.97
	3/26/13 9/9/13	306.43	305.82	4.88-14.89 4.88-14.89	1.39	305.36 304.43
	9/22/14	306.43	305.82	4.88-14.89	5.21	300.61
	9/21/15	306.43	305.82	4.88-14.90	5.98	299.84
	1/30/03	308.75	308.72	40.34-45.34	16.61	292.11
	2/14/03	308.75	308.72	40.34-45.34	16.51	292.21
	4/8/03	308.75	308.72	40.34-45.34	16.11	292.61
	6/9/04	308.75	308.72	40.34-45.34	17.90	290.82
	11/5/04	308.75	308.72	40.34-45.34	17.13	291.59
	1/25/2005 ¹	308.79	308.55	40.17-45.17	16.11	292.44
	2/15/05	308.79 308.3	308.55	40.17-45.17 39.68-44.68	15.95 18.85	292.60
MW-22DD	5/15/2007 ² 7/16/2008 ²	308.3	308.06 308.06	39.68-44.68 39.68-44.68	18.85	289.2084 288.49
	10/19/09	308.3	308.06	39.68-44.68	19.57	288.49
	3/28/12	308.3	308.06	39.68-44.68	19.22	288.84
	9/26/12	308.3	308.06	39.68-44.68	17.50	290.50
	3/26/13	308.3	308.06	39.68-44.69	15.86	292.20
	9/9/13	308.3	308.06	39.68-44.69	15.94	292.12
	9/22/14	308.3	308.06	39.68-44.69	18.46	289.60
	9/21/15	308.3	308.06	39.68-44.70	19.95	288.11

Page 6 of 8

	Date	Ground Suface Elevation	Top of Casing Elevation	Depth of Screened Interval	Depth to Water	Groundwate Elevation
Well Number	Measured	(ft, NAVD)	(ft, NAVD)	(ft btoc)	(ft, btoc)	(ft, NAVD)
	4/8/03	307.09	306.78	5.41-20.41	7.75	299.03
	6/9/04	307.09	306.78	5.41-20.41	9.07	297.71
	11/5/04	307.09	306.78	5.41-20.41	8.23	298.55
	1/25/2005 ¹ 2/15/05	307.12 307.12	306.83 306.83	5.46-20.46 5.46-20.46	7.90 8.04	298.93 298.79
	5/16/2007 ²	306.71	306.42	5.05-20.05	11.60	294.8207
MW-23	7/16/2008 ²	306.71	306.42	5.05-20.05	13.18	293.24
10100-23	10/19/09	306.71	306.42	5.05-20.05	12.55	293.87
	3/28/12	306.71	306.42	5.05-20.05	9.62	296.80
	9/26/12	306.71	306.42	5.05-20.05	9.00	297.42
	3/26/13 9/9/13	306.71 306.71	306.42 306.42	5.05-20.06 5.05-20.06	7.14 7.51	299.28 298.91
	9/22/14	306.71	306.42	5.05-20.06	NL	NL
	9/21/15	306.71	306.42	5.05-20.07	NL	NL
	4/8/03	310.15	309.81	5.43-20.43	10.57	299.24
	6/9/04	310.15	309.81	5.43-20.43	12.31	297.5
	11/5/04 1/25/2005 ¹	310.15 310.18	309.81 309.85	5.43-20.43 5.47-20.47	11.46 11.10	298.35 298.75
	2/15/05	310.18	309.85	5.47-20.47	10.77	298.75
	5/16/2007 ²	309.75	309.42	5.04-20.04	13.95	295.4728
MW-24	7/16/2008 ²	309.75	309.42	5.04-20.04	15.19	294.23
	10/19/09	309.75	309.42	5.04-20.04	13.56	295.86
	3/28/12	309.75	309.42	5.04-20.04	12.15	297.27
	9/26/12 3/26/13	309.75 309.75	309.42 309.42	5.04-20.04 5.04-20.05	11.49 9.22	297.93 300.20
	9/9/13	309.75	309.42	5.04-20.05	9.83	299.59
	9/22/14	309.75	309.42	5.04-20.05	NL	NL
	9/21/15	309.75	309.42	5.04-20.06	NL	NL
	4/8/03	311.50	311.02	5.30-20.30	11.83	299.19
	6/9/04 11/5/04	311.50 311.50	311.02 311.02	5.30-20.30 5.30-20.30	13.61 12.78	297.41 298.24
	1/25/2005 ²	311.52	311.02	5.34-20.34	12.25	298.81
	1/25/2005 ¹	311.52	311.06	5.34-20.34	12.05	299.01
MW-25	5/15/2007 ²	311.22	310.76	5.04-20.04	15.21	295.5463
	7/16/2008 ²	311.22	310.76	5.04-20.04	16.45	294.31
	10/19/09	311.22	310.76	5.04-20.04	14.95	295.81
	3/28/12	311.22	310.76	5.04-20.04	13.44	297.32
	9/26/12 3/26/13	311.22 311.22	310.76 310.76	5.04-20.04 5.04-20.05	12.82 10.54	297.94 300.22
	9/10/13	311.22	310.76	5.04-20.05	11.28	299.48
	9/22/14	311.22	310.76	5.04-20.05	NL	NL
	9/21/15	311.22	310.76	5.04-20.06	NL	NL
	4/8/03	308.75	308.35	55.43-60.43	19.99	288.36 286.78
	6/9/04 11/5/04	308.75 308.75	308.35 308.35	55.43-60.43 55.43-60.43	21.57 20.87	287.48
	1/25/2005 ¹	308.71	308.57	55.65-60.65	20.36	288.21
	2/15/05	308.71	308.57	55.65-60.65	20.15	288.42
	5/15/2007 ²	308.28	308.14	55.22-60.22	22.51	285.63
MW-26DDD	7/16/2008 ²	308.28	308.14	55.22-60.22	23.57	284.57
	10/19/09	308.28 308.28	308.14 308.14	55.22-60.22	22.89 21.87	285.25
	3/28/12 9/26/12	308.28	308.14	55.22-60.22 55.22-60.22	22.06	286.27 286.08
	3/26/13	308.28	308.14	55.22-60.23	20.65	287.49
	9/9/13	308.28	308.14	55.22-60.23	21.28	286.86
	9/22/14	308.28	308.14	55.22-60.23	22.93	285.21
	9/21/15 11/5/04	308.28 308.64	308.14	55.22-60.24	23.41 24.47	284.73 283.88
	1/25/2005 ¹	308.64	308.35 309.32	71.23-91.19 72.20-92.16	24.47	283.88
	2/15/05	309.61	309.32	72.20-92.16	24.33	284.84
	5/15/2007 ²	309.14	308.85	71.73-91.69	23.50	285.35
	7/16/2008 ²	309.14	308.85	71.73-91.69	18.71 ⁽³⁾	290.14
MW-27DDDD	10/19/09	309.14	308.85	71.73-91.69	27.89	280.96
	3/28/12	309.14	308.85	71.73-91.69	27.32	281.53
	9/26/12 3/26/13	309.14 309.14	308.85 308.85	71.73-91.69 71.73-91.70	25.72 24.13	283.13 284.72
	9/11/13	309.14	308.85	71.73-91.70	24.06	284.72
	9/22/14	309.14	308.85	71.73-91.70	26.52	282.33
	9/21/15	309.14	308.85	71.73-91.71	27.69	281.16
	11/5/04	306.14	305.83	9.30-24.30	15.62	290.21
	1/25/05 2/15/05	306.14 306.14	305.83 305.83	9.30-24.30 9.30-24.30	14.75 14.82	291.08 291.01
	5/15/05	306.14	305.83	9.30-24.30	17.45	288.38
	7/16/08	306.14	305.83	9.30-24.30	Damaged	Damaged
MW-28	10/19/09	306.14	305.83	9.30-24.30	Damaged	Damaged
=0	3/28/12	306.14	305.83	9.30-24.30	Damaged	Damaged
	9/26/12 3/26/13	306.14 306.14	305.83 305.83	9.30-24.30 9.30-24.30	Damaged Damaged	Damaged Damaged
	9/9/13	306.137	305.83	9.30-24.30	Damaged	Damaged
	9/22/14	306.137	305.83	9.30-24.30	Damaged	Damaged
	9/21/15	306.137	305.83	9.30-24.30	Damaged	Damaged

Page 7 of 8

		Ground Suface	Top of Casing	Depth of	Depth to	Groundwater
	Date	Elevation	Elevation	Screened Interval	Water	Elevation
Well Number	Measured	(ft, NAVD)	(ft, NAVD)	(ft btoc)	(ft, btoc)	(ft, NAVD)
	12/18/01	307.87	307.07	15.54-19.54	12.60	294.47
	4/8/03	307.87	307.07	15.54-19.54	7.61	299.46
	6/9/04	307.87	307.07	15.54-19.54	8.64	298.43
	11/5/04	307.87	307.07	15.54-19.54	7.79	299.28
	1/25/2005 ¹	307.87	307.07	15.54-19.54	7.71	299.36
	2/15/05	307.87	307.07	15.54-19.54	7.81	299.26
	5/15/2007 ²	307.53	306.73	15.20-19.20	11.46	295.27
MW-A	7/16/2008 ²	307.53	306.73	15.20-19.20	NM	NM
	10/19/09	307.53	306.73	15.20-19.20	12.23	294.50
	3/28/12	307.53	306.73	15.20-19.20	9.4	297.33
	9/26/12	307.53	306.73	15.20-19.20	8.37	298.36
	3/26/13	307.53	306.73	15.20-19.20	6.53	300.20
	9/9/13	307.53	306.73	15.20-19.20	7.72	299.01
	9/22/14	307.53	306.73	15.20-19.20	NL	NL
	9/21/15	307.53	306.73	15.20-19.20	NL	NL
	7/17/08	NM	310.49	14.00-24.00	15.95	294.54
	10/19/09	NM	310.49	14.00-24.00	13.95	296.54
	3/28/12	NM	310.49	14.00-24.00	12.08	298.41
MW-29	9/26/12	NM	310.49	14.00-24.00	12.03	298.46
10100-29	3/26/13	NM	310.49	14.00-24.00	12.78	297.71
	9/9/13	NM	310.49	14.00-24.00	11.92	298.57
	9/22/14	NM	310.49	14.00-24.00	14.47	296.02
	9/21/15	307.00	306.85	14.00-24.00	12.59	294.26
	7/17/08	NM	305.51	10.00-20.00	10.84	294.67
	10/19/09	NM	305.51	10.00-20.00	9.41	296.10
	3/28/12	NM	305.51	10.00-20.00	NL	NL
MW-30	3/28/12	NM	305.51	10.00-20.00	NL	NL
	3/26/13	NM	305.51	10.00-20.00	NL	NL
	9/9/13	NM	305.51	10.00-20.00	NL	NL
	9/22/14	NM	305.51	10.00-20.00	NL	NL
	9/21/15	NM	305.51	10.00-20.00	NL	NL
	5/2/12	Not Surveyed	Not Surveyed	14.6-24.6 ⁴	13.69	N/A
	9/26/12	Not Surveyed	Not Surveyed	14.6-24.6 ⁴	11.43	N/A
MW-31	3/26/13	Not Surveyed	Not Surveyed	14.6-24.6 ⁴	9.59	N/A
10100-31	9/9/13	Not Surveyed	Not Surveyed	14.6-24.6 ⁴	9.96	N/A
	9/22/14	· · · ·	Not Surveyed	14.6-24.6 ⁴	13.44	N/A
	9/21/15	307.50	306.32	14.6-24.6 ⁴	12.23	294.09

Notes: NAVD = North American Vertical Datum

Prepared by/Date: Checked by/Date:

JMQ 11/9/15 NM 12/2/15

btoc = Below top of casing

N/A=Not Applicable NL = Not Located NM = Not Measured

¹ Indicates top of casing elevation was revised due to site grading.

² Indicates a revised top of casing elevation based on a site topographic survey.

³ Possible measurement error.

⁴ Below ground surface

Sample ID	Sample Date	Sampling Method	pH (pH units)	Turbidity (NTU)	Sample Type	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Lead (mg/L)	Chloride (mg/L)	Nitrate (mg/L)
MW-1	8/30/2001	Bailer	5.32	70	Total	< 0.05	< 0.5	< 0.005	< 0.05	< 0.05	NA	NA
MW-1	9/6/2001	Bailer	NM	NM	Total	< 0.05	< 0.5	< 0.005	< 0.05	< 0.01	NA	NA
MW-1	9/18/2001	Bailer	5.47	NM	Total	NA	NA	NA	NA	NA	NA	< 0.01
MW-1	12/18/2001	Peristaltic Pump	5.35	1.99	Total	NA	0.33	NA	NA	< 0.005	NA	< 0.01
MW-1	10/4/2002	-	NM	NM	Total	NA	NA	NA	NA	NA	NA	NA
MW-1	1/31/2003	Peristaltic Pump	5.17	10.3	Total	NA	0.042	NA	NA	< 0.005	NA	NA
MW-1	11/9/2004	-	NM	NM	Total	NA	NA	NA	NA	NA	NA	NA
MW-1	9/23/2015	Peristaltic Pump	5.38	7800	Total	0.00676	0.191	< 0.0007	0.0499	0.077	NA	NA
MW-1	9/23/2015	Peristaltic Pump	NM	NM	Dissolved	<0.005	0.0159	<0.0007	<0.005	<0.001	NA	NA
MW-2	8/30/2001	Bailer	4.21	75	Total	< 0.05	3.5	< 0.005	< 0.05	0.11	NA	NA
MW-2	9/6/2001	Bailer	NM	NM	Dissolved	NA	5	NA	NA	0.19	NA	NA
MW-2	9/6/2001	Bailer	NM	NM	Total	< 0.05	4.9	< 0.005	< 0.05	0.21	NA	NA
MW-2	9/18/2001	Bailer	4.14	NM	Total	NA	NA	NA	NA	NA	NA	2.16
MW-2 MW-2 **	12/18/2001 10/4/2002	Peristaltic Pump	4.18	1.11 NM	Total	NA	12	NA NA	NA NA	0.55 NA	NA NA	1.1 NA
MW-2 **	9/28/2012	Peristaltic Pump	NM 6.22	27.8	Total Total	NA NA	NA NA	NA	NA	NA	NA	NA
MW-2	3/28/2012	Peristaltic Pump	5.99	140.0	Total	< 0.005	0.0409	< 0.0007	< 0.005	0.00236	300	0.66 J
MW-2	3/28/2013	Peristaltic Pump	5.99 NM	NM	Dissolved	< 0.005	0.0409	< 0.0007	< 0.005	<0.001	NA	0.00 J NA
MW-2	9/12/2013	Peristaltic Pump	6.04	39.8	Total	< 0.005	0.0332	<0.0007	< 0.005	0.00146	360	<2.5
MW-2	9/12/2013	Peristaltic Pump	NM	NM	Dissolved	< 0.005	0.0453	<0.0007	< 0.005	< 0.001	NA	NA
MW-3	8/30/2001	Bailer	4.72	180000	Total	< 0.05	3.4	< 0.005	< 0.05	0.12	NA	NA
MW-3	9/6/2001	Bailer	NM	NM	Dissolved	< 0.05	0.6	< 0.005	< 0.05	0.022	NA	NA
MW-3	9/6/2001	Bailer	NM	NM	Total	< 0.05	0.56	< 0.005	< 0.05	0.02	NA	NA
MW-3	9/18/2001	Bailer	4.61	NM	Total	NA	NA	NA	NA	NA	NA	12.7
MW-3	12/18/2001	Peristaltic Pump	4.5	1.16	Total	NA	0.89	NA	NA	0.044	NA	12
MW-3	10/4/2002		NM	NM	Total	NA	NA	NA	NA	NA	NA	NA
MW-3	11/10/2004	Peristaltic Pump	5.71	0.31	Total	NA	2.3	NA	NA	0.019	NA	NA
MW-3	2/15/2011	Peristaltic Pump	5.95	51.1	Total	<0.005	0.0848	< 0.0007	<0.005	0.00347	NA	NA
MW-3	2/15/2011	Peristaltic Pump	NM	0.24	Dissolved	<0.005	0.0801	< 0.0007	<0.005	<0.001	NA	NA
MW-3	3/29/2012	Peristaltic Pump	5.64	9.2	Total	<0.005	0.179	< 0.0007	<0.005	0.00123	140	0.63
MW-3	9/27/2012	Peristaltic Pump	5.57	9.5	Total	< 0.005	0.120	< 0.0007	< 0.005	0.00136	120	<2.5
MW-3	3/26/2013	Peristaltic Pump	5.60	89.7	Total	< 0.005	0.0275	< 0.0007	< 0.005	0.00501	5.4	0.16 J
MW-3	3/26/2013	Peristaltic Pump	NM	NM	Dissolved	< 0.005	0.0234	< 0.0007	< 0.005	0.00229	NA	NA
MW-3	9/10/2013	Peristaltic Pump	5.75	9.96	Total	< 0.005	0.127	< 0.0007	< 0.005	0.00108	130	0.75
MW-3	9/23/2014	Peristaltic Pump	5.26	16.1	Total	< 0.005	0.168	< 0.0007	< 0.005	0.00166	120	0.28
MW-3	9/23/2014	Peristaltic Pump	NM	NM	Dissolved	< 0.005	0.166	< 0.0007	< 0.005	< 0.001	NA	NA
MW-4	8/30/2001	Bailer	6.45	72	Total	< 0.05	< 0.5	< 0.005	< 0.05	< 0.05	NA	NA
MW-4 MW-4	9/6/2001	Bailer Bailer	NM 6.35	NM NM	Total Total	< 0.05 NA	< 0.5 NA	< 0.005 NA	< 0.05 NA	< 0.01 NA	NA NA	NA < 0.01
MW-4	9/18/2001 12/18/2001	Peristaltic Pump	6.3	37.2	Total	NA	0.081	NA	NA	< 0.005	NA	< 0.01
MW-4	1/31/2003	Peristaltic Pump	5.75	2.86	Total	NA	NA	NA	NA	< 0.005 NA	NA	< 0.01 NA
MW-4	4/8/2003	Peristaltic Pump	NM	NM	Total	NA	NA	NA	NA	NA	NA	NA
MW-4	10/20/2009	Peristaltic Pump	NM	NM	Dissolved	< 0.005	0.106	< 0.0007	< 0.025	< 0.001	NA	NA
MW-4	10/20/2009	Peristaltic Pump	6.55	0.47	Total	< 0.005	0.107	< 0.0007	< 0.005	< 0.001	4.3	4
MW-4	9/22/2015	Peristaltic Pump	6.19	0.37	Total	< 0.005	0.0948	< 0.0007	< 0.005	<0.001	NA	NA
MW-5	8/30/2001	Bailer	6.96	2900	Total	< 0.05	< 0.5	< 0.005	< 0.05	< 0.05	NA	NA
MW-5	9/6/2001	Bailer	NM	NM	Total	< 0.05	< 0.5	< 0.005	< 0.05	< 0.01	NA	NA
MW-5	9/18/2001	Bailer	6.55	NM	Total	NA	NA	NA	NA	NA	NA	0.25
MW-5	12/18/2001	Peristaltic Pump	6.76	0.67	Total	NA	0.11	NA	NA	< 0.005	NA	0.12
MW-6	8/30/2001	Bailer	4.09	75	Total	< 0.05	2	< 0.005	< 0.05	0.19	NA	NA
MW-6	9/6/2001	Bailer	NM	NM	Dissolved	NA	2.2	NA	NA	0.26	NA	NA
MW-6	9/6/2001	Bailer	NM	NM	Total	< 0.05	2.1	< 0.005	< 0.05	0.27	NA	NA
MW-6	9/18/2001	Bailer	4.21	NM	Total	NA	NA	NA	NA	NA	NA	13.8
MW-6	12/18/2001	Peristaltic Pump	4.12	1.58	Total	NA	5.3	NA	NA	0.55	NA	16
MW-6	5/16/2007	- Dorioteltia Duran	4.23	6.72	Total	NA	NA	NA	NA	NA 10.001	2400	0.33
MW-6 MW-6	3/30/2012	Peristaltic Pump Peristaltic Pump	6.05 6.34	9.17 8.7	Total Total	<0.005 <0.025	0.0746	< 0.0007 < 0.0035	<0.005 <0.025	<0.001 0.0322	2000 1800	<2.5 <25
MW-6	9/27/2012 3/27/2013	1		4.37	Total	< 0.025	0.296	< 0.0035 0.00082		< 0.001	210	<25
MW-6 MW-6	3/27/2013 9/10/2013	Peristaltic Pump Peristaltic Pump	6.65 5.57	4.37	Total	< 0.005	0.039	0.00082	< 0.005 0.00547	< 0.001 0.0534	1400	<2.7
MW-6	9/10/2013	Peristaltic Pump	5.57 NM	69.1 NM	Dissolved	< 0.005	0.420	< 0.00078	< 0.00547	0.0534	NA	<2.5 NA
MW-6	9/25/2013	Peristaltic Pump	4.10	21.4	Total	< 0.005	10.3	< 0.0007 0.00146	< 0.005 0.0106	1.16	6300	<25
MW-6	9/25/2014	Peristaltic Pump	NM	NM	Dissolved	< 0.005	9.29	0.00158	< 0.005	0.994	NA	NA
MW-6	9/23/2015	Peristaltic Pump	4.55	1.88	Total	0.0159	0.449	< 0.002	< 0.005	0.132	NA	NA
MW-7	12/18/2001	Peristaltic Pump	4.31	1.66	Total	NA	13	NA	NA	0.32	NA	4.2
MW-7	5/16/2007	-	3.54	5.02	Total	NA	NA	NA	NA	NA	3900	3.2
DUP-03	5/16/2007	-	3.54	5.02	Total	NA	NA	NA	NA	NA	4000	3.6
MW-7	3/30/2012	Peristaltic Pump	5.14	1.41	Total	<0.005	0.577	< 0.0007	<0.005	0.026	1500	3.4
MW-7	9/28/2012	Peristaltic Pump	5.94	3.93	Total	<0.005	0.384	< 0.0007	<0.005	0.00666	900	<12 UJ
DUP-1	9/28/2012	Peristaltic Pump	NM	NM	Total	<0.005	0.320	< 0.0007	<0.005	0.00483	890	<12 UJ
MW-7	3/27/2013	Peristaltic Pump	6.34	2.00	Total	<0.005	0.127	<0.0007	<0.005	<0.001	260	3.8 J
MW-7	9/11/2013	Peristaltic Pump	5.91	3.71	Total	<0.005	0.216	<0.0007	< 0.005	<0.001	660	<2.5
MW-7	9/23/2014	Peristaltic Pump	5.65	1.39	Total	< 0.005	0.315	< 0.0007	< 0.005	0.00913	1200	4.0
MW-7	9/22/2015	Peristaltic Pump	5.57	1.47	Total	0.00533	0.493	<0.001	<0.005	0.00995	NA	NA
MW-8	8/30/2001	-	NM	NM	Total	NA	NA	NA	NA	NA	NA	NA
MW-8	9/6/2001	Bailer	NM	NM	Total	< 0.05	< 0.5	< 0.005	< 0.05	< 0.01	NA	NA
MW-8	9/18/2001	Bailer	5.03	NM	Total	NA	NA	NA	NA	NA	NA	33.3
	andards: HSR	A Type 1/3 Groundwa	ater RRS or	USEPA MC	LS	0.01	2	0.005	0.1	0.015	250*	10
Background						< 0.005	0.125	<0.0007	<0.005	<0.001	12	2.4
Highest RRS						0.01	20	0.051	0.1	0.015		
Corrective Ac						0.01	20	0.051	0.1	0.015		

Sample ID	Sample Date	Sampling Method	pH (pH units)	Turbidity (NTU)	Sample Type	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Lead (mg/L)	Chloride (mg/L)	Nitrate (mg/L)
MW-9	8/30/2001	Bailer	4.43	550	Total	< 0.05	1.6	< 0.005	< 0.05	0.08	NA	NA
MW-9	9/6/2001	Bailer	NM	NM	Dissolved	NA	4.7	NA	NA	0.17	NA	NA
MW-9	9/6/2001	Bailer	NM	NM	Total	< 0.05	2	< 0.005	< 0.05	0.077	NA	NA
MW-9	9/18/2001	Bailer	4.33	NM	Total	NA	NA	NA	NA	NA	NA	5.38
MW-9 MW-9	12/18/2001 10/21/2009	Peristaltic Pump Peristaltic Pump	4.3 NM	4.74 NM	Total Dissolved	NA < 0.005	5.3 1.1	NA 0.00177	NA < 0.005	0.26 0.108	NA NA	5.8 NA
MW-9	10/21/2009	Peristaltic Pump	4.2	2.38	Total	< 0.005	1.22	0.00177	< 0.005	0.100	940	2.4 J
MW-9	3/30/2012	Peristaltic Pump	4.13	3.35	Total	< 0.005	0.18	< 0.0007	< 0.005	0.0437	490	2.6
MW-9	9/28/2012	Peristaltic Pump	4.13	0.56	Total	<0.005	0.118	< 0.0007	<0.005	0.0472	490	<2.5 UJ
MW-9	3/27/2013	Peristaltic Pump	4.22	4.53	Total	<0.005	0.232	0.000745	<0.005	0.0483	640	2.4 J
MW-9	9/11/2013	Peristaltic Pump	4.48	0.81	Total	<0.005	0.225	0.000881	<0.005	0.0613	760	<2.5
MW-9	9/24/2014	Peristaltic Pump	4.51	0.49	Total	< 0.005	0.338	0.000898	< 0.005	0.0678	860	<25
DUP-1 MW-9	9/24/2014 9/22/2015	Peristaltic Pump Peristaltic Pump	4.51 4.31	0.49 2.59	Total	<0.005 0.00509	0.333	0.000896 <0.00150	<0.005 <0.005	0.0677	900 NA	<25 NA
DUP-1	9/22/2015	Peristaltic Pump	4.31	2.59	Total Total	< 0.00509	0.375	<0.00150 0.00135	<0.005 0.0441	0.0898	NA	NA
MW-10	8/30/2001	Bailer	5.81	42	Total	< 0.005	< 0.5	< 0.005	< 0.05	< 0.05	NA	NA
MW-10	9/6/2001	Bailer	NM	NM	Total	< 0.05	< 0.5	< 0.005	< 0.05	< 0.00	NA	NA
MW-10	9/18/2001	Bailer	6.11	NM	Total	NA	NA	NA	NA	NA	NA	< 0.01
MW-10	12/18/2001	Peristaltic Pump	5.72	1.75	Total	NA	0.39	NA	NA	< 0.005	NA	< 0.01
MW-10	10/21/2009	Peristaltic Pump	NM	NM	Dissolved	< 0.005	0.103	< 0.0007	< 0.005	< 0.001	NA	NA
MW-10	10/21/2009	Peristaltic Pump	5.53	0	Total	< 0.005	0.112	< 0.0007	< 0.005	< 0.001	23	< 0.25
MW-11	8/30/2001	Bailer	6.11	110	Total	< 0.05	< 0.5	< 0.005	< 0.05	< 0.05	NA	NA
MW-11	9/6/2001	Bailer	NM	NM	Total	< 0.05	< 0.5	< 0.005	< 0.05	< 0.01	NA	NA 0.50
MW-11 MW-11	9/18/2001 12/18/2001	Bailer Peristaltic Pump	5.89 5.62	NM 0.59	Total Total	NA NA	NA 0.11	NA NA	NA NA	NA < 0.005	NA NA	0.58 < 0.01
MW-11	10/21/2009	Peristaltic Pump	5.62 NM	0.59 NM	Dissolved	< 0.005	0.0278	< 0.0007	< 0.005	< 0.005	NA	< 0.01 NA
MW-11	10/21/2009	Peristaltic Pump	4.61	0.31	Total	< 0.005	0.0270	< 0.0007	< 0.005	< 0.001	5.9	< 0.25
MW-12	8/30/2001	Bailer	5.98	1800	Total	< 0.05	< 0.5	< 0.005	< 0.05	< 0.05	NA	NA
MW-12	9/6/2001	Bailer	NM	NM	Total	< 0.05	< 0.5	< 0.005	< 0.05	< 0.01	NA	NA
MW-12	9/18/2001	Bailer	5.85	NM	Total	NA	NA	NA	NA	NA	NA	< 0.01
MW-12	12/19/2001	Peristaltic Pump	5.72	4.26	Total	NA	0.13	NA	NA	< 0.005	NA	< 0.01
MW-12	10/20/2009	Peristaltic Pump	NM	NM	Dissolved	< 0.005	0.123	< 0.0007	< 0.025	< 0.001	NA	NA
MW-12	10/20/2009	Peristaltic Pump	5.71	0.57	Total	< 0.005	0.12	< 0.0007	< 0.005	< 0.001	6.2	2.4
MW-12	3/29/2012	Peristaltic Pump	6.01	4.04	Total	< 0.005	0.182	< 0.0007	< 0.005	< 0.001	3.1	<0.25
MW-12	9/27/2012	Peristaltic Pump	6.31	3.72	Total	<0.005	0.134	0.000843	< 0.005	< 0.001	2.9	5.4
MW-12	3/26/2013	Peristaltic Pump	5.75	1.01	Total	< 0.005	0.102	< 0.0007	< 0.005	< 0.001	2.1 2.1	4.8
MW-12 MW-12	9/10/2013 9/23/2014	Peristaltic Pump Peristaltic Pump	5.86 5.86	2.58 0.12	Total Total	0.0126 <0.005	0.124	<0.0007 <0.0007	<0.005 <0.005	<0.001 <0.001	2.1	0.25 <0.25
MW-12 MW-12	9/22/2014	Peristaltic Pump	5.85	0.12	Total	< 0.005	0.134	< 0.0007	< 0.005	<0.001	NA	<0.25 NA
MW-13D	8/30/2001	Bailer	5	3.2	Total	< 0.05	3.2	< 0.005	< 0.05	0.16	NA	NA
MW-13D	9/6/2001	Bailer	NM	NM	Dissolved	NA	2.7	< 0.000 NA	NA	0.14	NA	NA
MW-13D	9/6/2001	Bailer	NM	NM	Total	< 0.05	2.4	< 0.005	< 0.05	0.14	NA	NA
MW-13D	9/18/2001	Bailer	4.22	NM	Total	NA	NA	NA	NA	NA	NA	3.16
MW-13D	12/18/2001	Peristaltic Pump	4.04	1.29	Total	NA	1.7	NA	NA	0.19	NA	3.4
MW-13D	11/10/2004	Peristaltic Pump	5.1	0.57	Total	NA	NA	NA	NA	NA	NA	NA
MW-13D	3/30/2012	Peristaltic Pump	3.72	2.62	Total	< 0.005	0.273	0.00333	< 0.005	0.168	1600	5.5
MW-13D	9/28/2012	Peristaltic Pump	3.98	1.30	Total	<0.005	0.295	0.00132	< 0.005	0.128	1400	<12 UJ
MW-13D	3/28/2013	Peristaltic Pump	3.02	0.51	Total	< 0.005	0.383	0.00203	< 0.005	0.143	1600	4.0 J
DUP-1	3/28/2013	Peristaltic Pump	NM	NM	Total	< 0.005	0.386	0.00202	< 0.005	0.143	1600	4.0 J
MW-13D	9/12/2013	Peristaltic Pump	3.95	0.73	Total	0.00699	0.338	0.0049	< 0.005	0.139	1500	3.4
MW-13D	9/25/2014	Peristaltic Pump	3.82	0.61	Total	< 0.005	0.254	0.00508	< 0.005	0.176	1600	<25
MW-13D	9/22/2015	Peristaltic Pump	3.83	2.41	Total	0.0269	0.169	<0.00450	< 0.005	0.129	NA	NA
MW-15	4/8/2003	Peristaltic Pump	3.58	43.2	Total	NA	0.412	NA	NA	0.124	NA	NA
MW-15 MW-15	9/25/2014 9/23/2015	Peristaltic Pump Peristaltic Pump	3.75 4.18	0.95 7.84	Total Total	<0.005 0.0264	0.0628 <0.075	<0.0007 0.00249	0.0437 0.00643	0.311 0.243	1900 NA	<25 NA
MW-15	2/14/2003	Peristaltic Pump	3.98		Total	0.0204 NA	<0.075 2.34	0.00249 NA	0.00043 NA	0.243	NA	NA
MW-16	4/8/2003	Peristaltic Pump	3.96 NM	0.6 NM	Total	NA	2.34 NA	NA	NA	NA	NA	NA
MW-16	3/29/2012	Peristaltic Pump	4.5	0.5	Total	<0.005	0.542	< 0.0007	<0.005	0.0239	530	4
MW-16	9/28/2012	Peristaltic Pump	4.60	1.25	Total	< 0.005	0.642	< 0.0007	< 0.005	0.0220	490	<12 UJ
MW-16	3/27/2013	Peristaltic Pump	5.44	3.06	Total	<0.005	0.495	<0.0007	< 0.005	0.00914	640	5.9 J
MW-16	9/11/2013	Peristaltic Pump	5.02	0.0	Total	<0.005	0.631	<0.0007	<0.005	0.01290	470	5.2
MW-16	9/24/2014	Peristaltic Pump	4.36	4.86	Total	< 0.005	<0.01	<0.0007	< 0.005	0.0244	570	<25
MW-16	9/22/2015	Peristaltic Pump	4.20	8.22	Total	<0.005	0.531	<0.0007	< 0.005	0.0121	NA	NA
MW-17	1/30/2003	Peristaltic Pump	5.42	0.79	Total	NA	0.06	NA	NA	< 0.005	NA	NA
MW-17	11/9/2004	Bailer	6.88	5.39	Total	NA	NA	NA	NA	NA	NA	NA
MW-18	1/30/2003	Peristaltic Pump	3.64	1.51	Total	NA	0.285	NA	NA	0.382	NA	NA
	1/30/2003 11/10/2004	Peristaltic Pump Peristaltic Pump	3.64	1.51	Total	NA NA	0.282	NA NA	NA NA	0.351	NA	NA NA
MW-18 MW-18	11/10/2004	Peristaltic Pump Peristaltic Pump	6.07 NM	1.17 NM	Total Dissolved	< 0.005	NA 0.312	0.00881	< 0.005	NA 0.287	NA NA	NA NA
MW-18	10/21/2009	Peristaltic Pump	4.44	4	Total	< 0.005	0.345	0.00849	< 0.005	0.207	3000	1.1 J
MW-18	3/30/2012	Peristaltic Pump	5.49	5.06	Total	< 0.005	0.148	< 0.0007	< 0.005	0.0211	1200	<2.5
DUP-1	3/30/2012	Peristaltic Pump	5.49	5.06	Total	< 0.005	0.148	< 0.0007	< 0.005	0.022	1100	<2.5
MW-18	9/28/2012	Peristaltic Pump	6.11	2.10	Total	<0.005	0.0934	< 0.0007	<0.005	0.00288	800	<12 UJ
MW-18	3/27/2013	Peristaltic Pump	6.91	35.4	Total	<0.005	0.0531	< 0.0007	<0.005	0.00329	200	<0.14
MW-18	3/27/2013	Peristaltic Pump	NM	NM	Dissolved	<0.005	0.0529	<0.0007	<0.005	<0.001	NA	NA
MW-18	9/10/2013	Peristaltic Pump	6.19	5.29	Total	<0.005	0.124	0.00214	<0.005	0.00166	610	<2.5
		Peristaltic Pump	4.71	8.83	Total	< 0.005	0.254	0.00175	< 0.005	0.216	260	<50
MW-18	9/24/2014				Total	0.0708	0.173	0.00742	< 0.005	0.258	NA	NA
MW-18	9/23/2015	Peristaltic Pump	4.51	17.9								
MW-18 MW-18	9/23/2015 9/23/2015	Peristaltic Pump Peristaltic Pump	NM	NM	Dissolved	0.0747	0.0185	0.00507	<0.005	0.176	NA	NA
MW-18 MW-18 Applicable Sta	9/23/2015 9/23/2015	Peristaltic Pump	NM	NM	Dissolved	0.0747 0.01	0.0185 2	0.00507 0.005	<0.005 0.1	0.176 0.015	NA 250*	NA 10
MW-18 MW-18 Applicable Sta Background	9/23/2015 9/23/2015	Peristaltic Pump Peristaltic Pump	NM	NM	Dissolved	0.0747 0.01 <0.005	0.0185 2 0.125	0.00507 0.005 <0.0007	<0.005 0.1 <0.005	0.176 0.015 <0.001	NA 250* 12	NA
MW-18 MW-18 Applicable Sta	9/23/2015 9/23/2015 andards: HSR/	Peristaltic Pump Peristaltic Pump	NM	NM	Dissolved	0.0747 0.01	0.0185 2	0.00507 0.005	<0.005 0.1	0.176 0.015	NA 250*	NA 10

Page 2 of 4

Sample ID	Sample Date	Sampling Method	pH (pH units)	Turbidity (NTU)	Sample Type	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Lead (mg/L)	Chloride (mg/L)	Nitrate (mg/L)
MW-19	1/30/2003	Peristaltic Pump	NM	NM	Total	NA NA	NA NA	NA	NA NA	NA NA	NA NA	NA NA
MW-19	10/23/2009	Peristaltic Pump	NM	NM	Dissolved	< 0.005	0.12	< 0.0007	< 0.025	< 0.001	NA	NA
MW-19	10/23/2009	Peristaltic Pump	6.3	0.19	Total	< 0.005	0.125	< 0.0007	< 0.005	< 0.001	12	< 0.25
MW-19	3/29/2012	Peristaltic Pump	5.78	7.1	Total	<0.005	0.252	< 0.0007	<0.005	<0.001	11	0.58
MW-19	9/28/2012	Peristaltic Pump	6.20	1.03	Total	<0.005	0.231	< 0.0007	<0.005	<0.001	7.8	<0.25 UJ
MW-19	3/26/2013	Peristaltic Pump	6.46	4.40	Total	<0.005	0.143	<0.0007	<0.005	<0.001	3.6	<0.25
MW-19	9/11/2013	Peristaltic Pump	5.95	4.39	Total	< 0.005	0.147	< 0.0007	< 0.005	< 0.001	6.6	< 0.25
MW-19	9/23/2014	Peristaltic Pump	5.45	1.08	Total	<0.005	0.131	<0.0007	<0.005	0.00287	5.5	<0.25
MW-20 DUP-2	1/30/2003	Peristaltic Pump	5.44 5.44	3.03	Total Total	NA NA	0.045 NA	NA NA	NA NA	< 0.005	NA NA	NA NA
MW-20	1/30/2003 10/22/2009	Peristaltic Pump Peristaltic Pump	5.44 NM	3.03 NM	Dissolved	< 0.005	0.0161	< 0.0007	< 0.025	NA < 0.001	NA	NA
MW-20	10/22/2009	Peristaltic Pump	5.37	30.9	Total	< 0.005	0.0224	< 0.0007	< 0.025	0.00344	11	0.81
MW-20	3/30/2012	Peristaltic Pump	5.51	21.1	Total	< 0.005	0.0447	< 0.0007	< 0.005	0.00549	9.6	<0.25
MW-20	3/30/2012	Peristaltic Pump	NM	NM	Dissolved	< 0.005	0.0331	< 0.0007	< 0.005	< 0.001	NA	NA
MW-20	9/27/2012	Peristaltic Pump	5.96	73.9	Total	< 0.005	0.0325	< 0.0007	< 0.005	0.00490	9.3	<0.25
MW-20	9/27/2012	Peristaltic Pump	NM	NM	Dissolved	<0.005	0.0243	< 0.0007	<0.005	<0.001	NA	NA
MW-20	3/27/2013	Peristaltic Pump	5.88	33.4	Total	<0.005	0.0333	< 0.0007	<0.005	0.00689	12	0.24 J
MW-20	3/27/2013	Peristaltic Pump	NM	NM	Dissolved	<0.005	0.0209	<0.0007	<0.005	<0.001	NA	NA
MW-20	9/10/2013	Peristaltic Pump	5.75	158	Total	< 0.005	0.0413	< 0.0007	0.00808	0.0101	11	<0.25
MW-20	9/10/2013	Peristaltic Pump	NM	NM	Dissolved	< 0.005	0.0146	< 0.0007	< 0.005	< 0.001	NA	NA
MW-20 MW-20	9/24/2014 9/24/2014	Peristaltic Pump Peristaltic Pump	5.50 NM	96.7 NM	Total Dissolved	<0.005 <0.005	0.0334	<0.0007 <0.0007	0.00822 <0.005	0.0038 <0.001	15 NA	<0.25 NA
MW-20	9/22/2014	Peristaltic Pump	5.46	51.3	Total	<0.005	0.0188	<0.0007	<0.005	<0.001 0.00347	NA	NA
MW-20	9/22/2015	Peristaltic Pump	5.46 NM	NM	Dissolved	< 0.005	0.0221	<0.0007	< 0.005	<0.001	NA	NA
MW-21	1/31/2003	Peristaltic Pump	4.96	9.7	Total	NA	0.324	NA	NA	< 0.005	NA	NA
MW-21	11/10/2004	-	NM	NM	Total	NA	NA	NA	NA	NA	NA	NA
MW-21	10/21/2009	Peristaltic Pump	5.67	> 1000	Total	NA	NA	NA	NA	NA	NA	NA
MW-22DD	1/31/2003	Peristaltic Pump	4.37	3.36	Total	NA	7.012	NA	NA	< 0.005	NA	NA
MW-23	4/8/2003	Peristaltic Pump	5.63	44.8	Total	NA	0.072	NA	NA	< 0.005	NA	NA
MW-23	11/10/2004	Peristaltic Pump	7.24	9.95	Total	NA	NA	NA	NA	NA	NA	NA
MW-23	5/16/2007	-	NM	NM	Total	NA	NA	NA	NA	NA	110	< 0.05
MW-23	10/21/2009	Peristaltic Pump	NM	NM	Dissolved	< 0.005	0.0479	< 0.0007	< 0.025	< 0.001	NA	NA
MW-23	10/21/2009	Peristaltic Pump	5.82	0.78	Total	< 0.005	0.0517	< 0.0007	< 0.005	< 0.001	110	< 0.25
MW-23	3/29/2012	Peristaltic Pump	6.18	1.48	Total	< 0.005	0.064	< 0.0007	< 0.005	< 0.001	87	<0.25
MW-23	9/27/2012	Peristaltic Pump	6.75	2.06	Total	<0.005	0.0912	< 0.0007	< 0.005	<0.001	62	2.8
MW-23	3/26/2013	Peristaltic Pump	6.04	3.00	Total	< 0.005	0.0689	< 0.0007	< 0.005	< 0.001	31	0.14 J
MW-23	9/10/2013	Peristaltic Pump	6.17	1.91	Total	<0.005	0.0679	<0.0007	<0.005	< 0.001	37	0.98
MW-24 DUPLICATE	4/8/2003	Peristaltic Pump	4.73	0.34	Total Total	NA NA	0.051 NA	NA NA	NA NA	< 0.005 NA	NA NA	NA NA
MW-24	4/8/2003 10/22/2009	Peristaltic Pump Peristaltic Pump	4.73 NM	0.34 NM	Dissolved	< 0.005	0.0416	< 0.0007	< 0.025	< 0.001	NA	NA
MW-24	10/22/2009	Peristaltic Pump	5.7	0.14	Total	< 0.005	0.0410	< 0.0007	< 0.025	< 0.001	130	< 0.25
MW-25	4/8/2003	Peristaltic Pump	4.93	2.46	Total	NA	2.8	NA	NA	0.008	NA	NA
DUPLICATE	4/8/2003	Peristaltic Pump	4.93	2.46	Total	NA	2.76	NA	NA	0.011	NA	NA
MW-25	11/9/2004	Bailer	4.47	6.11	Total	NA	3.2	NA	NA	0.031	NA	NA
MW-25	10/22/2009	Peristaltic Pump	NM	NM	Dissolved	< 0.005	0.365	< 0.0007	< 0.005	0.00508	NA	NA
MW-25	10/22/2009	Peristaltic Pump	4.32	0.32	Total	< 0.005	0.402	< 0.0007	< 0.005	0.00568	270	2.7
MW-26DDD	4/8/2003	Peristaltic Pump	5.8	2	Total	NA	4.78	NA	NA	< 0.005	NA	NA
MW-26DDD	4/9/2004	Bladder Pump	NM	NM	Total	NA	NA	NA	NA	NA	NA	NA
MW-26DDD	6/9/2004	Bladder Pump	NM	2.05	Total	NA	16	NA	NA	< 0.005	NA	NA
MW-27DDDD	11/10/2004	Bailer	6.6	7.66	Total	NA	< 0.5	NA	NA	NA	NA	NA
MW-27DDDD	2/15/2011	Peristaltic Pump	5.36	5.01	Total	< 0.005	4.34	0.00178	< 0.005	< 0.001	NA	NA
MW-27DDDD MW-27DDDD	5/3/2012	Submersible Pump Submersible Pump	5.07 4.88	2.02 1.59	Total Total	<0.005 <0.005	4.91 5.15	0.00187	<0.005 <0.005	<0.001 <0.001	490 530	2.5 2.6
	9/27/2012											
MW-27DDDD MW-27DDDD	3/28/2013 9/12/2013	Submersible Pump Peristaltic Pump	4.93 4.93	5.78 12.9	Total Total	<0.005 <0.005	5.55 5.11	0.00216	<0.005 <0.005	<0.001 <0.001	530 610	3.7 J <5.0
MW-27DDDD	9/12/2013	Peristaltic Pump	4.93 NM	12.9 NM	Dissolved	< 0.005	4.9	0.00243	< 0.005	<0.001	NA	<5.0 NA
MW-27DDDD	9/25/2014	Peristaltic Pump	4.74	0.72	Total	< 0.005	6.72	0.00235	< 0.005	<0.001	610	<2.5
MW-27DDDD	9/23/2015	Peristaltic Pump	4.9	3.84	Total	< 0.005	4.95	0.00228	< 0.005	< 0.001	NA	NA
MW-28	11/9/2004	Bailer	6.06	6.34	Total	0.017	2.6	< 0.01	< 0.01	< 0.005	NA	NA
MW-28	5/16/2007	Peristaltic Pump	5.25	1.16	Total	< 0.01	0.16	NA	NA	NA	NA	NA
MW-29	7/17/2008	Bailer	4.42	1.7	Total	NA	1	NA	NA	< 0.01	NA	NA
MW-29	10/22/2009	Peristaltic Pump	NM	NM	Dissolved	< 0.005	0.965	< 0.0007	< 0.005	0.00886	NA	NA
MW-29	10/22/2009	Peristaltic Pump	4.21	0	Total	< 0.005	0.985	< 0.0007	< 0.005	0.00899	160	3.5
MW-29	3/30/2012	Peristaltic Pump	4.08	0.32	Total	< 0.005	0.819	< 0.0007	< 0.005	0.00733	140	1.4
MW-29	9/27/2012	Peristaltic Pump	4.45	0.0	Total	< 0.005	0.765	< 0.0007	< 0.005	0.00692	120	<2.5
MW-29	3/28/2013	Peristaltic Pump	4.33	0.23	Total	< 0.005	0.764	< 0.0007	< 0.005	0.00780	120	1.8
MW-29	9/11/2013	Peristaltic Pump	4.30	0.0	Total	< 0.005	0.712	< 0.0007	< 0.005	0.00721	120	<2.5
DUP-1 MW-29	9/11/2013 9/24/2014	Peristaltic Pump Peristaltic Pump	4.30 4.28	0.0 0.75	Total Total	< 0.005 < 0.005	0.704 0.682	< 0.0007 < 0.0007	< 0.005 < 0.005	0.00729 0.00718	150 130	<2.5 <25
MW-29 MW-29	9/24/2014 9/23/2015	Peristaltic Pump	4.28	0.75	Total	< 0.005	0.682	< 0.0007	< 0.005	0.00718	NA	<25 NA
MW-30	7/17/2008	Bailer	4.07 NM	NM	Total	< 0.005 NA	0.569 NA	< 0.0007 NA	< 0.005 NA	NA	NA	NA
MW-30	10/23/2009	Peristaltic Pump	NM	NM	Dissolved	< 0.005	0.0127	< 0.0007	< 0.025	0.0112	NA	NA
MW-30	10/23/2009	Peristaltic Pump	4.21	0.06	Total	< 0.005	0.0127	< 0.0007	< 0.025	0.0112	440	0.29
MW-30	5/2/2012	Peristaltic Pump	4.92	1.52	Total	< 0.005	1.09	< 0.0007	< 0.005	0.0055	140	6.8
MW-31	9/23/2012	Peristaltic Pump	4.19	0.66	Total	<0.005	0.837	<0.0007	< 0.005	0.00894	NA	NA
		A Type 1/3 Groundwa				<0.005	2	<0.0007 0.005	<0.005	0.00894	250*	10
	anuarus: HSK	A Type 1/3 GroundWa	ater ABS OF	USEPA MC	-L9							
Background						< 0.005	0.125	<0.0007	<0.005	<0.001	12	2.4
Highest RRS Corrective Act	tion Co-l					0.01	20	0.051	0.1	0.015		
	non Goal					0.01	20	0.051	0.1	0.015		

Sample ID	Sample	Sampling	рН	Turbidity	Sample	Arsenic	Barium	Cadmium	Chromium	Lead	Chloride	Nitrate
	Date	Method	(pH units)	(NTU)	Туре	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
MW-A	12/18/2001	Peristaltic Pump	6.75	1.41	Total	< 0.005	0.036	< 0.002	< 0.002	< 0.005	NA	0.74
MW-A	5/15/2007	Peristaltic Pump	6.77	2.36	Total	NA	NA	NA	NA	NA	NA	NA
MW-A	10/22/2009	Peristaltic Pump	NM	NM	Dissolved	< 0.005	0.0775	< 0.0007	< 0.025	< 0.001	NA	NA
MW-DUP01	10/22/2009	Peristaltic Pump	NM	NM	Dissolved	< 0.005	0.0762	< 0.0007	< 0.025	< 0.001	NA	NA
MW-A	10/22/2009	Peristaltic Pump	6.21	0	Total	< 0.005	0.0886	< 0.0007	< 0.005	< 0.001	120	< 0.25
MW-DUP01	10/22/2009	Peristaltic Pump	6.21	0	Total	< 0.005	0.0839	< 0.0007	< 0.005	< 0.001	130	< 0.25
TMW-1	7/14/1997	-	NM	NM	Total	< 0.005	5.38	0.028	0.028	0.028	NA	NA
Applicable Sta	andards: HSR/	A Type 1/3 Groundwa	ater RRS or	USEPA MC	Ls	0.01	2	0.005	0.1	0.015	250*	10
Background				<0.005	0.125	<0.0007	<0.005	<0.001	12	2.4		
Highest RRS				0.01	20	0.051	0.1	0.015				
Corrective Action Goal				0.01	20	0.051	0.1	0.015				

Notes:

RRS = Risk Reduction Standard

Total Metals are field preserved, unfiltered

Dissolved Metals are not preserved, laboratory filtered

USEPA MCLs = United States Environmental Protection Agency Maximum Contaminant Levels HSRA Type 1/3 GW RRS from Appendix III

* = USEPA Secondary Maximum Contaminant Levels are used for Chloride

** insufficient water column for sample collection

- = Data unavailable

-- = No Applicable Standard has been established for this constituent

Bolded result represents a positive value

Bolded/Shaded result exceeds the groundwater standard Bolded/Shaded result exceeds the RRS

Data Qualifiers:

J = Estimated value based on QC data

NA = Not Analyzed

NM = Not Measured

Prepared by RMB 12/21/09 Checked by/JAH 12/21/09 Revised by: JMQ 10/21/14 Revised by: JAH 10/29/15 Checked by: NM 12/2/15

Table 3: Summary of SourceDK Model Input

Well ID	Sample Date	Barium (mg/L)	Lead (mg/L)	Number Of Samples
	8/30/2001	< 0.05	<0.05	1
	9/6/2001	< 0.05	<0.01	1
MW-1	12/18/2001	0.33	<0.005	1
	1/31/2003	0.042	<0.005	1
	9/23/2015	0.191	0.077	1
	8/30/2001	2	0.19	1
	9/6/2001	2.1	0.27	1
	12/18/2001	5.3	0.55	1
	3/30/2012	0.0746	<0.001	1
MW-6	9/27/2012	0.296	0.0322	1
	3/27/2013	0.039	<0.001	1
	9/10/2013	0.42	0.0534	1
	9/25/2014	10.3	1.16	1
	9/23/2015	0.449	0.132	1
	12/18/2001	13	0.32	1
	3/30/2012	0.577	0.026	1
	9/28/2012	0.384	0.00666	1
MW-7	3/27/2013	0.127	<0.001	1
	9/11/2013	0.216	<0.001	1
	9/23/2014	0.315	0.00913	1
	9/22/2015	0.493	0.00995	1
	8/30/2001	1.6	0.08	1
	9/6/2001	2	0.077	1
	12/18/2001	5.3	0.26	1
	10/21/2009	1.22	0.12	1
MW-9	3/30/2012	0.18	0.0437	1
10100-9	9/28/2012	0.118	0.0472	1
	3/27/2013	0.232	0.0483	1
	9/11/2013	0.225	0.0613	1
	9/24/2014	0.338	0.0678	1
	9/22/2015	0.375	0.0898	1
	8/30/2001	0.5		1
	9/6/2001	0.5		1
	12/19/2001	0.13		1
	10/20/2009	0.12		1
MIN/ 10	3/29/2012	0.182	<0.001	1
MW-12	9/27/2012	0.134	<0.001	1
	3/26/2013	0.102	<0.001	1
	9/10/2013	0.124	<0.001	1
	9/23/2014	0.154	<0.001	1
	9/22/2015	0.130	<0.001	1
	8/30/2001	3.2	0.16	1
	9/6/2001	2.4	0.14	1
	12/18/2001	1.7	0.19	1
	3/30/2012	0.273	0.168	1
MW-13D	9/28/2012	0.295	0.128	1
	3/28/2013	0.383	0.143	1
	9/12/2013	0.338	0.139	1
	9/25/2014	0.254	0.176	1
	9/22/2015	0.169	0.129	1

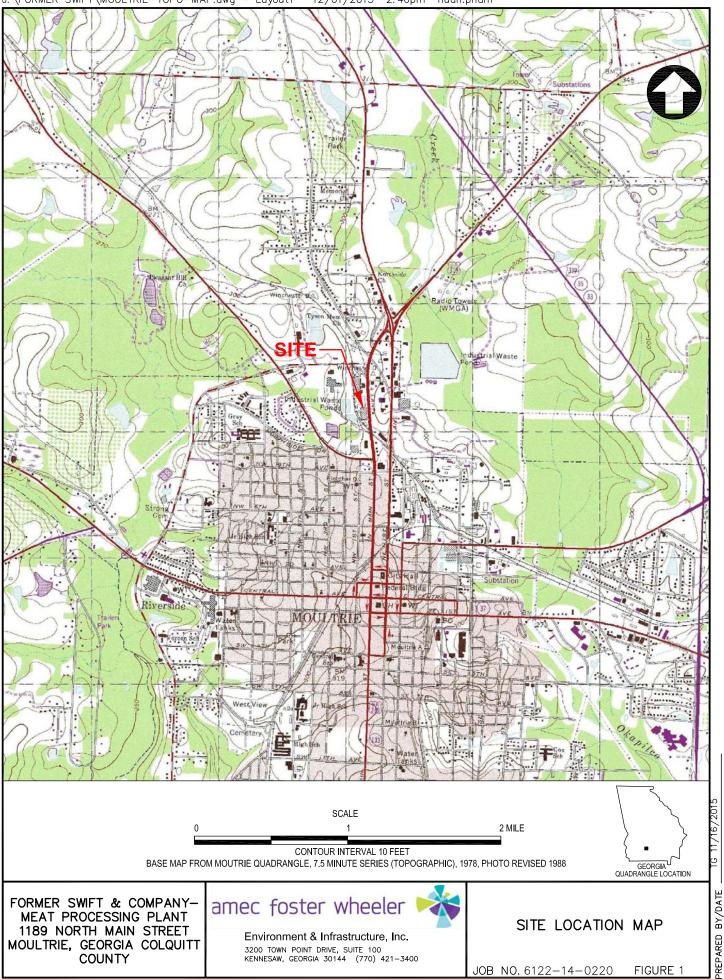
Well ID	Sample Date	Barium (mg/L)	Lead (ma/L)	Number O Samples
	4/8/2003	0.412	0.124	1
MW-15	9/25/2014	0.0628	0.311	1
	9/23/2015	< 0.075	0.243	1
	2/14/2003	2.34	0.1	1
	3/29/2012	0.542	0.0239	1
	9/28/2012	0.642	0.022	1
MW-16	3/27/2013	0.495	0.00914	1
	9/11/2013	0.631	0.0129	1
	9/24/2014	<0.01	0.0244	1
	9/22/2015	0.531	0.0121	1
	1/30/2003	0.2835	0.3665	2
	10/21/2009	0.345	0.318	1
	3/30/2012	0.148	0.0211	1
	9/28/2012	0.093	0.00288	1
MW-18	3/27/2013	0.0531	0.00329	1
	9/10/2013	0.124	0.00166	1
	9/24/2014	0.254	0.216	1
	9/23/2015	0.173	0.258	1
	1/30/2003	0.045	0.005	1
	10/22/2009	0.0224	0.00344	1
	3/30/2012	0.0447	0.00549	1
	9/27/2012	0.0325	0.0049	1
MW-20	3/27/2013	0.0333	0.00689	1
	9/10/2013	0.0413	0.0101	1
	9/24/2014	0.0334	0.0038	1
	9/22/2015	0.0221	0.00347	1
	11/10/2004	<0.5		1
	2/15/2011	4.34	<0.001	1
	5/3/2012	4.91	<0.001	1
	9/27/2012	5.15	< 0.001	1
MW-27DDDD	3/28/2013	5.55	< 0.001	1
	9/12/2013	5.11	<0.001	1
	9/25/2014	6.72	< 0.001	1
	9/23/2015	4.95	<0.001	1
	10/22/2009	0.985	0.00899	1
	3/30/2012	0.819	0.00733	1
	9/27/2012	0.765	0.00692	1
MW-29	3/28/2013	0.764	0.0078	1
	9/11/2013	0.7120	0.00721	1
	9/24/2014	0.682	0.00718	1
	9/23/2015	0.589	0.00715	1
	5/2/2012	1.09	0.0055	1
MW-31	9/23/2012	0.837	0.00894	1

Notes:

mg/L = milligrams per Liter

-- = not analyzed or not used as input

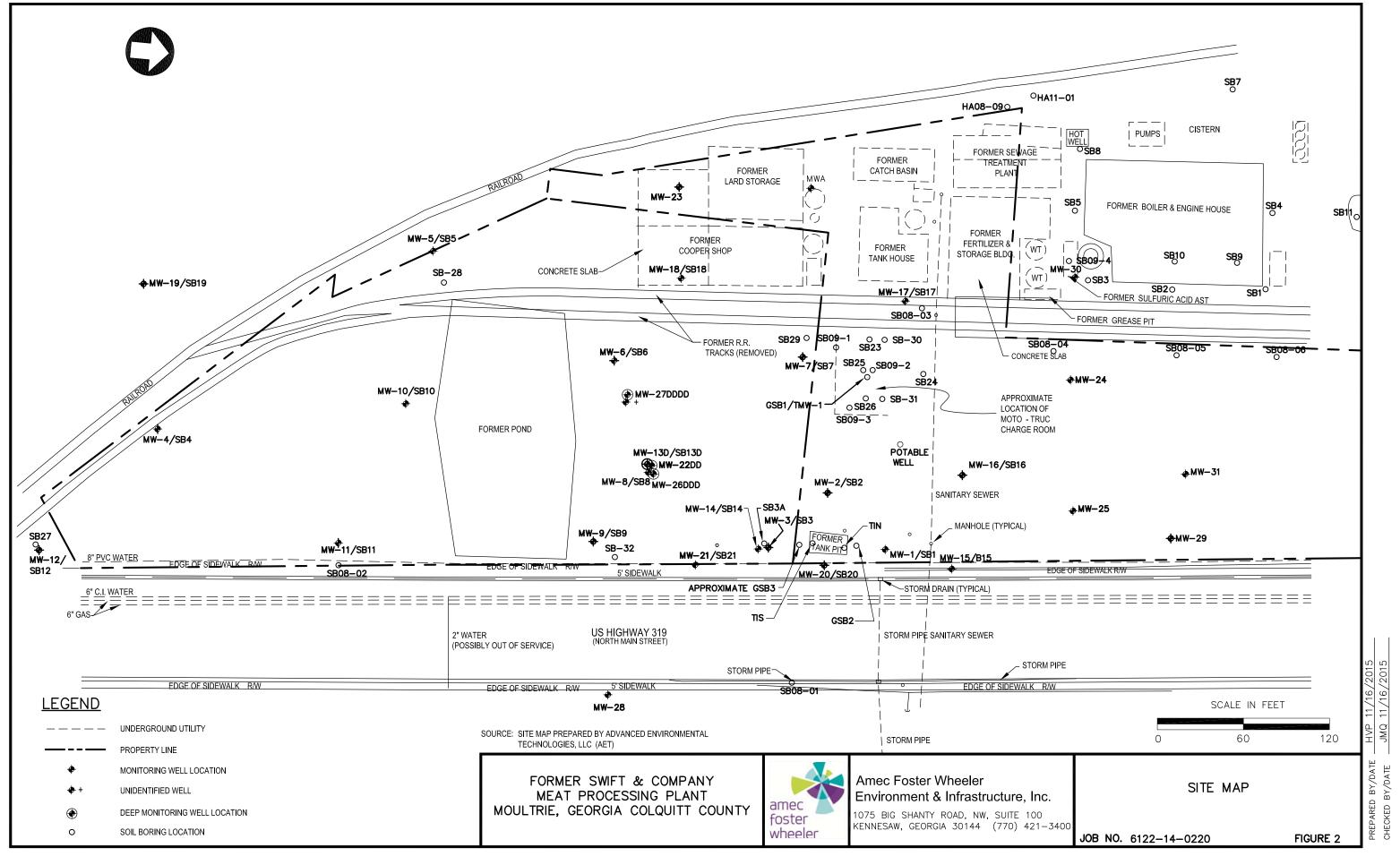
Prepared by/Date: JMQ 11/1/2013 Checked by/Date: JDD 11/5/2013 Revised by: JMQ 12/8/14 Revised by: JMQ 11/9/15 Checked by: NM 12/2/15 FIGURES

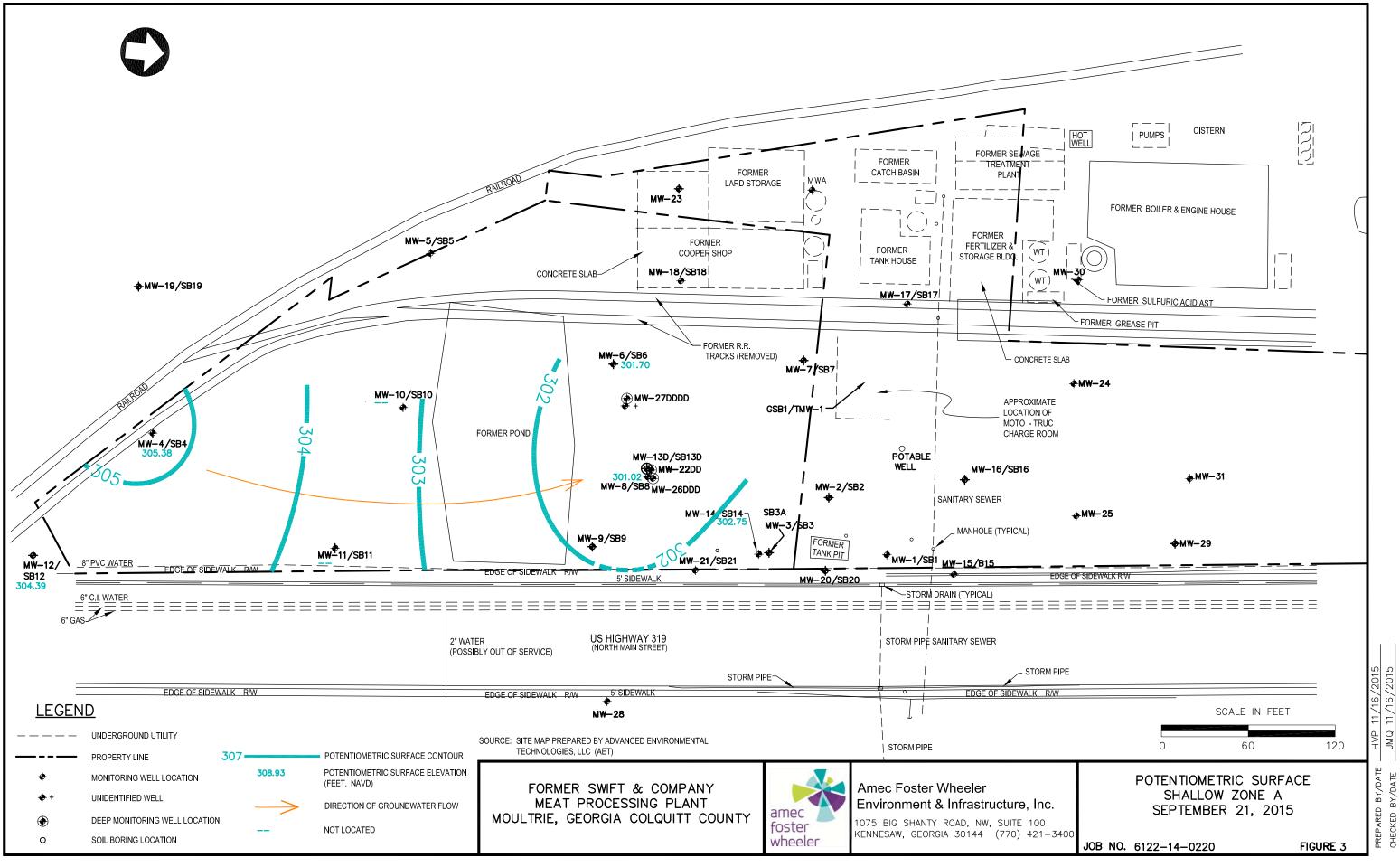


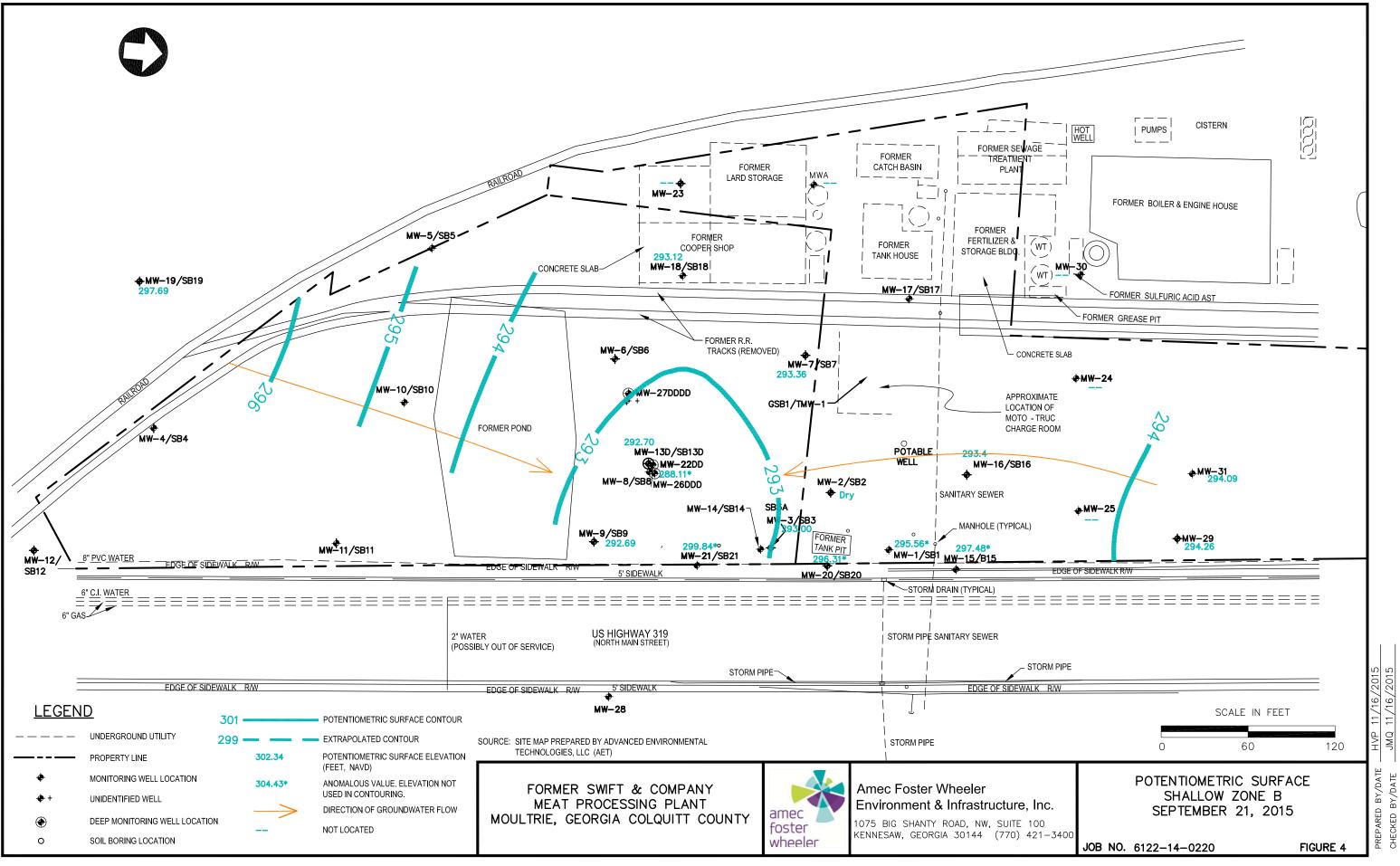
RNQ 11/16/2015

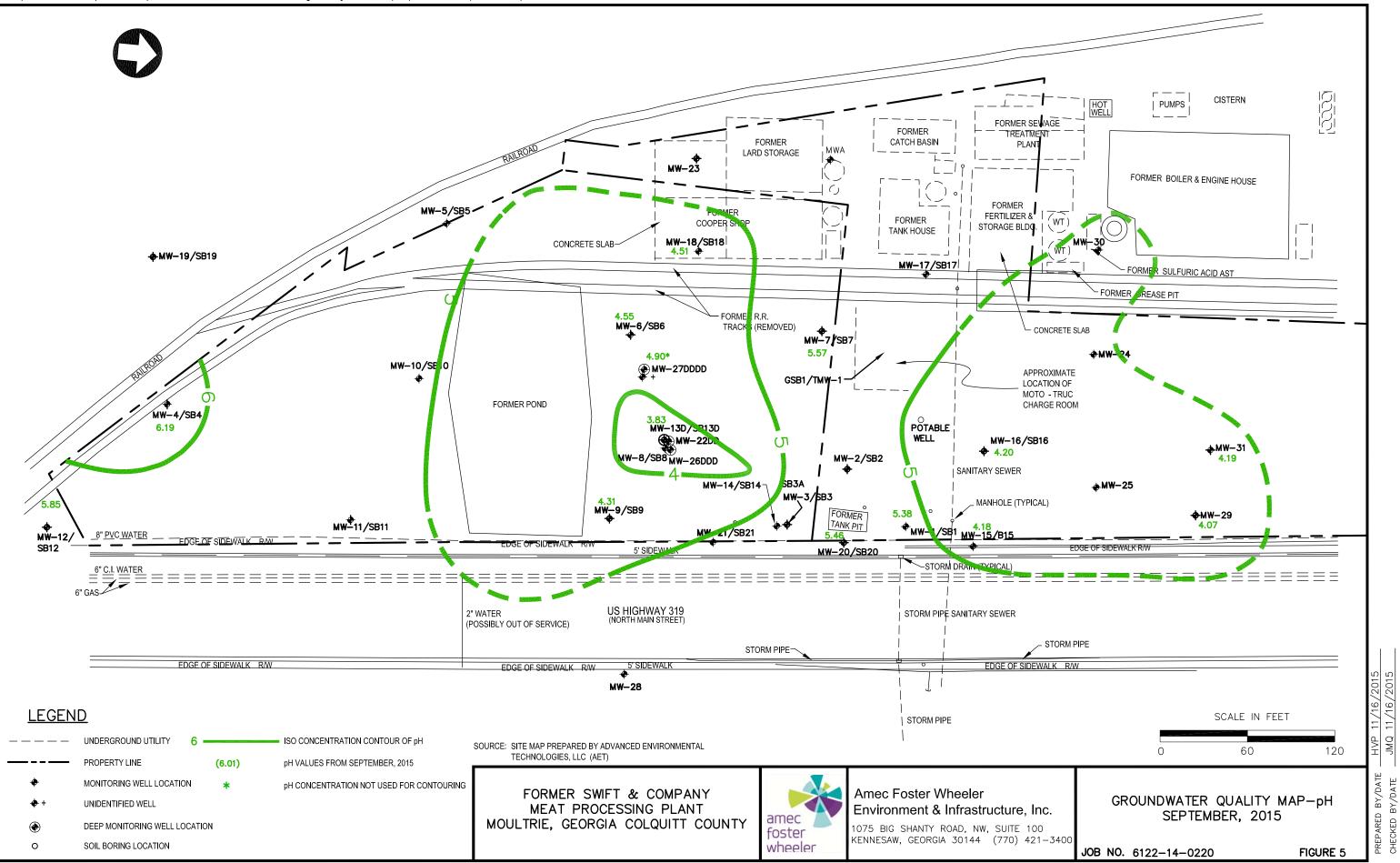
CHECKED BY/DATE

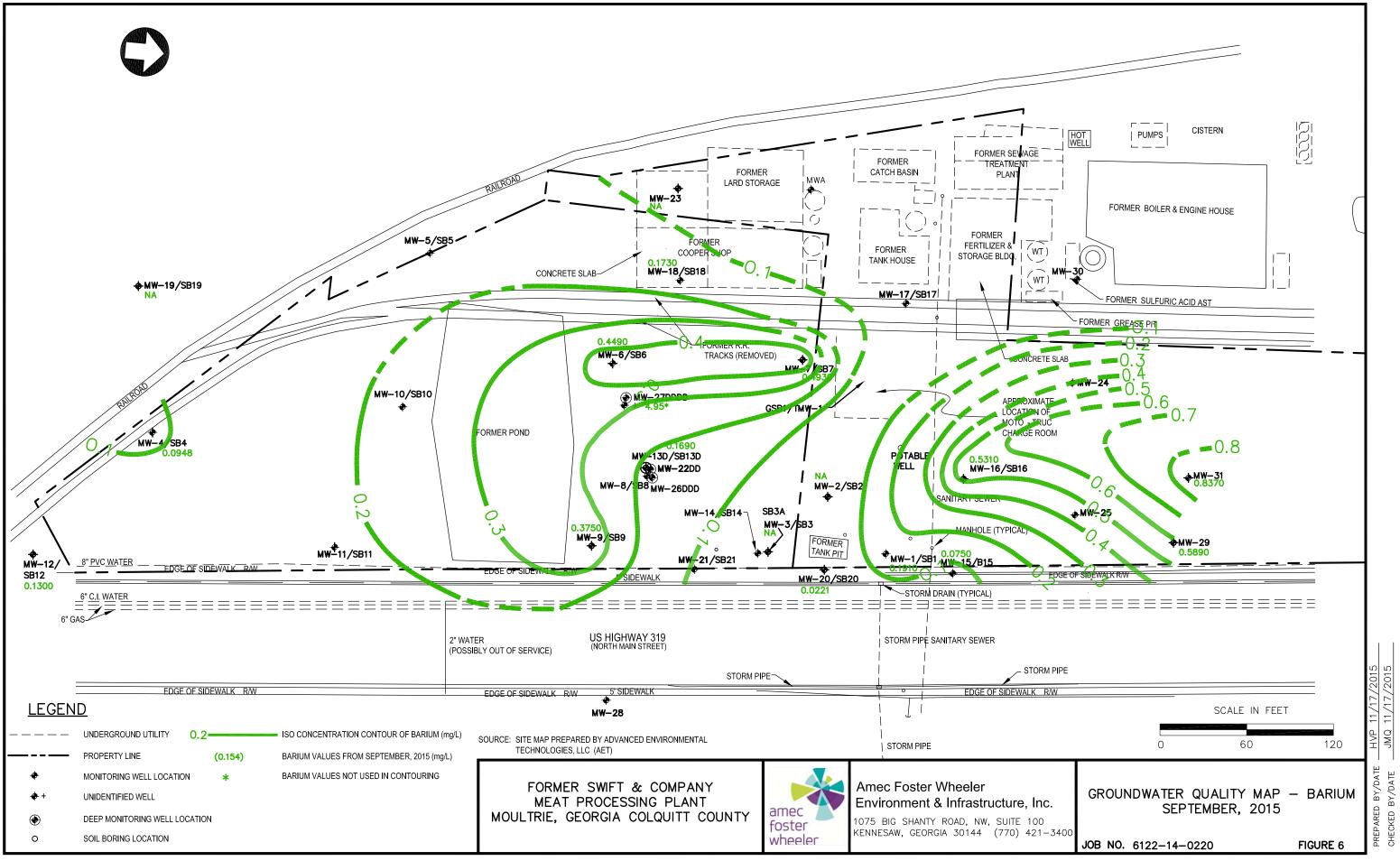
J: \FORMER SWIFT\MOULTRIE-TOPO-MAP.dwg - Layout1 12/01/2015 2:46pm huan.pham

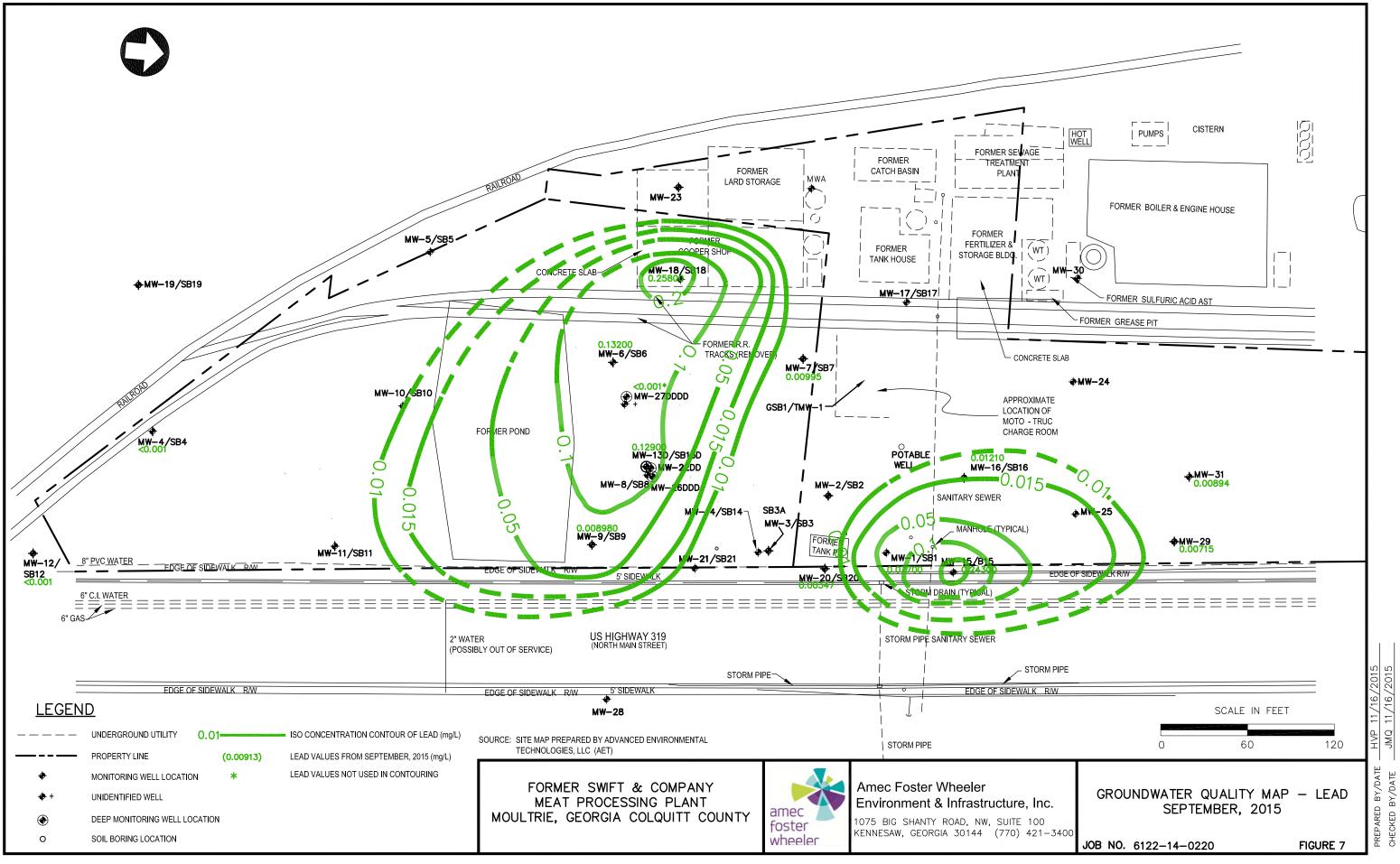












APPENDIX A

September 2015 Laboratory Data Reports, Chain Of Custody, And Field Sampling Reports

Laboratory Reports for September 2015 Groundwater Sampling Event

ANALYTICAL ENVIRONMENTAL SERVICES, INC.



November 17, 2015

David Smoak AMEC E&I, Inc. -Kennesaw 1075 Big Shanty Rd NW Kennesaw GA 30144

TEL: FAX:

RE: Swift - Moultrie

Dear David Smoak:

Order No: 1509L11

Analytical Environmental Services, Inc. received 16sa for the analyses presented in following report.

16samples on 9/24/2015 1:35:00 PM

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/15-06/30/16. -AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

IDana) Pacurar

Ioana Pacurar Project Manager **Revision** 11/17/2015 AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1509L11 Date: <u>9/23/15</u> Page 1 of <u>2</u>

AMEC Foster Wheeler	ADDRESS: 1075 019 51	Kasty RL	5	0	()	ANALYSIS REQUESTED						Visit our website	
PHONE: 770-421-3400 SAMPLED BY: EVER G. 2- Mark A.	FAX: SIGNATURE:			-Ond (TOtal	Barium (To	550100 Lend						www.aesatlanta.com to check on the status of your results, place bottle orders, etc.	0
# SAMPLE ID	SAMPLED	site	odes)	-	2	9	PRESE	RVATIO	DN (See co	des)	- 5. ⁴	The second	No #
Provide August States and	DATE TIME	Grab	Matrix (See codes)		Π							REMARKS	
1 MW - 20	9/22/15 1143	V	GW	X		X				5 - S - M		Same States and	7
2 MW-4	9/22/15 1328	V	GW	X								1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1
3 MW-12	9/22/15 1505	V	GW	×			1 20			a lar			1
+ MW-270000	9/23/15 1045	V	6w	1.10	X						2	7 10 10 10 10 10	1
5 MW-1	9/23/15 1250	V	GW	X		X							2
6 MW-31	9/23/15 1515	V	GW	X				-					1
7 MW-29	7/23/15 1635	V	GW	X		1							1
8 MW-7	9/22/15 1120	V	GW	X	1	1		1913					1
· Mw-16	9/22/15 1230	V	GW	X									1
10 Mw-9	9/22/15 1445		GW	X									1
11 MW-13D	9/22/15 1655	2	GW	X									1
12 MW-18	9/23/15 1010	V	GW	X		X		14					2
13 MW-15	9/23/15 1225	4	GW	X	_							S. Dan S. M.	1
14 MW-6	7/23/15 1440	V	GW	X	X	-							1
1.	TIME RECEIVED BY		DATE/TIM	DDOJ	ECT N	AME:	PROJI	CT INF	ORMATI	ON	-	RECEIPT	1
9-24-15/1	335 Tangaeeliz	2 9124/1	5-1335	-	50	Nit	st m	out	i'e			Total # of Containers	17
3:	3:			PROJ	ECT #:	CI.	12214 HAVIE	022	.0	e fr		 Turnaround Time Request Standard 5 Business Days 2 Business Day Rush 	
	and the second	Sec. Co	1	SENI	O REPC	RT TO	DAVI	de	mon	K		O Next Business Day Rush	
SPECIAL INSTRUCTIONS/COMMENTS: Disselfed Samples were field filtered	SHIPMEN OUT / /	T METHOD VIA:		INVO	DICE TO	D:	om abov					Same Day Rush (auth req.) Other	•
field filtered	IN T FedEx U. GREYHOUND O		DURIER	QUO'	TE #:				PO#:			STATE PROGRAM (if any): E-mail? Y / N; Fax? Y / N DATA PACKAGE: I II III	11/
SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY A SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT CO	RE CONSIDERED RECEIVED THE	NEXT BUSINE	ESS DAY. IF T) TIME	IS NOT I	NDICAT		WILL PROCE	ED WITH	STANDARD TAT OF SAMPLES.	IV
MATRIX CODES: A = Air GW = Groundwater SE = Se	ediment SO = Soil SW = Surface W I = Ice only N = Nitric acid S+I = S	ater W = Wat	ter (Blanks) D)W = Di odium B	rinking isulfate/	Water (Methan	Blanks) C ol + ice) = Other O = Othe	(specify)	WW = Waste NA = None	Water	Page 2 of 26	

ANALYTICAL ENVIRONMENTAL SERVICES, INC

CHAIN OF CUSTODY

Work Order: <u>1509L11</u> Date: <u>9/23/15</u> Page <u>2</u> of <u>2</u>

3080 Presidential Drive, Atlanta GA 30340-3704

AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

COMP.	MEL Foster Wheeler	ADDRESS:	- Bis 5	hent	Y RI	RONW S ANALYSIS REQUESTED				ANALYSIS REQUESTED						ANALYSIS REQUESTED Visit our website					
PHONE		SIGNATURE Charl and			"Um (Tot	(CTOHU)			S 1						www.aesatlanta.com to check on the status of your results, place bottle orders, etc.	ontainers					
	EVERG. & Mark H.	/	nacc				Bar	Pad				24		2				# of C			
ц.	SAMPLE ID	SAM	IPLED		site	des)	2	7		DRES	SEDVA	TION	See code			1		No			
	SAMPLE ID	DATE	TIME	Grab	Composite	Matrix (See codes)		<u> </u>			JER VF			(a)			REMARKS				
1	MW-16 MS	9/22/15	1230	V	-	GW		*			1.36		1.1	· · · · · ·		1	A 1 1 1 1 1 1 1 1 1 1 1	1			
2	MIN-16MSD	9/22/15	1230	V	1.25	GW		*				1		1		s. 102		1			
3	MW-16M5D EB-1	9/23/15	0850	V	2. 1	W	X											1			
4	NUP-1	9/22/15	1200	1		GW	1	X					A Par	1.1	167		2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1			
5		11.11				and the	122				12					4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N.			
6						- Ca	100		-10							E 24					
7				中央								ы. <mark>-</mark>									
8			14. 75				$ \langle \cdot \rangle _{1}$						1								
9					1. 10	12.123						all g	1								
10		S. Sec. 1	2		19.25		- 20										Contraction of the				
11		1997				100	1														
12			17					2					1								
13				100					1	100	-		105					2			
14	all a second				2	Sec. 1	1		2.						16.	10	A to a				
RELIN	QUISHED BY DATE/TIME	RECEIVED B	Y	-		DATE/TIM		ECT NA	AME	PRO	JECT	INFOF	MATIO	N	14		RECEIPT				
	9-29-15/1335	Rink	Delles	9/2	415	1335		54	jif	+	mo	,H	1'e				Total # of Containers	4			
2:		2:		1p2	10.3	11.5	PROJ	ECT #:	61	221	40	22	0	1.1			Turnaround Time Request				
2.		2.	and the second		- de		SITE	ADDRI	ESS: N	(un)	tote	. 6	A				Standard 5 Business Days				
5.		э.					SENT	REPO	RT TO	Day	141	50	H	1		-	2 Business Day Rush Next Business Day Rush				
SPECL	L INSTRUCTIONS/COMMENTS:		SHIPMEN	T METHO	DD			ICE TO		27.0	10	5/1	011				Same Day Rush (auth req.)				
		OUT /	1	VIA:			(IF D	FFERE	NT FR	OM ABO	OVE)						O Other				
		IN CLIER	T FedEx U	VIA:		DIED											STATE PROGRAM (if any):				
		GRE		THER			QUO	ΓE #:			_	I	PO#:				E-mail? Y/N; Fax? Y/N DATA PACKAGE: I II III	IV			
	LES RECEIVED AFTER 3PM OR ON SATURDAY ARE CO LES ARE DISPOSED 30 DAYS AFTER REPORT COMPLE						-	_) TIME	IS NOT	r indi	_	and in the second	VILL PR	OCEED	WITH	STANDARD TAT OF SAMPLES.				
and the second se	X CODES: $A = Air$ GW = Groundwater SE = Sedimen						DW = Dr	inking	Water (1	Blanks)	0=0)ther (sj	pecify)	WW = V	Waste Wa	iter	Page 3 of 26				

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

Analytical Environmental Services, Inc

Client: AMEC E&I, Inc. -Kennesaw Project: Swift - Moultrie Lab ID: 1509L11

Case Narrative

Metals Analysis by Method 6020:

Due to sample matrix, samples 1509L11-008A, -010A, -011A, -013A, and -014A required dilution during analysis resulting in elevated reporting limits.

Percent recovery for the internal standard compound Terbium on sample 1509L11-012B was outside control limits biased high due to suspected matrix interference. Due to this, barium result was reported as estimated.

Percent recovery for the internal standard compound Terbium No Gas on sample 1509L11-005A was outside control limits biased high due to suspected matrix interference. Due to this, cadmium result was reported as estimated.

Sample 1509L11-005B barium result was reported as estimated due to suspected matrix interference with sample QC criteria below 10 μ g/L. All associated batch QC were within limits.

Analytical Environmental Services, Inc						Date:	17-Nov-15	
Client:AMEC E&I, IncKennesawProject Name:Swift - MoultrieLab ID:1509L11-001	Client Sample ID: Collection Date: Matrix:				MW-20 9/22/201 Groundw	5 11:43:00 AM vater		
Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020A				(SV	V3005A)			
Arsenic	BRL	5.00		ug/L	213518	1	09/29/2015 21:21	JS
Barium	22.1	10.0		ug/L	213518	1	09/29/2015 21:21	JS
Cadmium	BRL	0.700		ug/L	213518	1	09/29/2015 21:21	JS
Chromium	BRL	5.00		ug/L	213518	1	09/29/2015 21:21	JS
Lead	3.47	1.00		ug/L	213518	1	09/29/2015 21:21	JS
Dissolved Metals by ICP/MS SW6020A				(SV	V3005A)			
Arsenic	BRL	5.00		ug/L	213601	1	09/30/2015 20:24	JS
Barium	19.1	10.0		ug/L	213601	1	09/30/2015 20:24	JS
Cadmium	BRL	0.700		ug/L	213601	1	09/30/2015 20:24	JS
Chromium	BRL	5.00		ug/L	213601	1	09/30/2015 20:24	JS
Lead	BRL	1.00		ug/L	213601	1	09/30/2015 20:24	JS

* Value exceeds maximum contaminant level

- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc						Date:	17-Nov-15	
Client: AMEC E&I, IncKennesaw				Client San	-	MW-4		
Project Name: Swift - Moultrie				Collection	Date:	9/22/2015	5 1:28:00 PM	
Lab ID: 1509L11-002				Matrix:		Groundw	ater	
Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020A				(SV	V3005A)			
Arsenic	BRL	5.00		ug/L	213518	1	09/29/2015 21:47	JS
Barium	94.8	10.0		ug/L	213518	1	09/29/2015 21:47	JS
Cadmium	BRL	0.700		ug/L	213518	1	09/29/2015 21:47	JS
Chromium	BRL	5.00		ug/L	213518	1	09/29/2015 21:47	JS
Lead	BRL	1.00		ug/L	213518	1	09/29/2015 21:47	JS

* Value exceeds maximum contaminant level

- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc						Date:	17-Nov-15	
Client:AMEC E&I, IncKennesawProject Name:Swift - MoultrieLab ID:1509L11-003				Client San Collection Matrix:	•	MW-12 9/22/2015 Groundw	5 3:05:00 PM ater	
Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020A				(SV	V3005A)			
Arsenic	BRL	5.00		ug/L	213518	1	09/29/2015 21:52	JS
Barium	130	10.0		ug/L	213518	1	09/29/2015 21:52	JS
Cadmium	BRL	0.700		ug/L	213518	1	09/29/2015 21:52	JS
Chromium	BRL	5.00		ug/L	213518	1	09/29/2015 21:52	JS
Lead	BRL	1.00		ug/L	213518	1	09/29/2015 21:52	JS

* Value exceeds maximum contaminant level

- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc						Date:	17-Nov-15	
Client: AMEC E&I, IncKennesaw				Client San	nple ID:	MW-27D	DDD	
Project Name: Swift - Moultrie				Collection	Date:	9/23/2015	5 10:45:00 AM	
Lab ID: 1509L11-004				Matrix:		Groundw	ater	
Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020A				(SV	V3005A)			
Arsenic	BRL	5.00		ug/L	213518	1	09/29/2015 22:08	JS
Barium	4950	10.0		ug/L	213518	1	09/29/2015 22:08	JS
Cadmium	2.28	0.700		ug/L	213518	1	09/29/2015 22:08	JS
Chromium	BRL	5.00		ug/L	213518	1	09/29/2015 22:08	JS
Lead	BRL	1.00		ug/L	213518	1	09/29/2015 22:08	JS

* Value exceeds maximum contaminant level

- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc						Date:	17-Nov-15	
Client:AMEC E&I, IncKennesawProject Name:Swift - MoultrieLab ID:1509L11-005			(Client Sar Collection Matrix:	•	MW-1 9/23/201: Groundw	5 12:50:00 PM rater	
Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020A				(SV	V3005A)			
Arsenic	6.76	5.00		ug/L	213518	1	09/29/2015 22:13	JS
Barium	191	10.0		ug/L	213518	5	09/30/2015 18:10	JS
Cadmium	BRL	0.700	Narr	ug/L	213518	1	09/29/2015 22:13	JS
Chromium	49.9	5.00		ug/L	213518	1	09/29/2015 22:13	JS
Lead	77.0	2.00		ug/L	213518	5	09/30/2015 18:10	JS
Dissolved Metals by ICP/MS SW6020A				(SV	V3005A)			
Arsenic	BRL	5.00		ug/L	213601	1	09/30/2015 20:49	JS
Barium	15.9	10.0	Narr	ug/L	213601	1	09/30/2015 20:49	JS
Cadmium	BRL	0.700		ug/L	213601	1	09/30/2015 20:49	JS
Chromium	BRL	5.00		ug/L	213601	1	09/30/2015 20:49	JS
Lead	BRL	1.00		ug/L	213601	1	09/30/2015 20:49	JS

* Value exceeds maximum contaminant level

BRL Below reporting limit

- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Page 9 of 26

Analytical Environmental Services, Inc						Date:	17-Nov-15	
Client: AMEC E&I, IncKennesaw				Client San Collection		MW-31	5 3:15:00 PM	
Project Name:Swift - MoultrieLab ID:1509L11-006				Matrix:	Date:	Groundw		
Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020A				(SV	V3005A)			
Arsenic	BRL	5.00		ug/L	213518	1	09/29/2015 22:18	JS
Barium	837	10.0		ug/L	213518	1	09/30/2015 18:15	JS
Cadmium	BRL	0.700		ug/L	213518	1	09/29/2015 22:18	JS
Chromium	BRL	5.00		ug/L	213518	1	09/29/2015 22:18	JS
Lead	8.94	1.00		ug/L	213518	1	09/30/2015 18:15	JS

* Value exceeds maximum contaminant level

- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit
- Page 10 of 26

Analytical Environmental Services, Inc						Date:	17-Nov-15	
Client: AMEC E&I, IncKennesaw Project Name: Swift - Moultrie				Client San Collection		MW-29	5 4:35:00 PM	
Lab ID: 1509L11-007				Matrix:	Date.	Groundw		
Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020A				(SV	V3005A)			
Arsenic	BRL	5.00		ug/L	213518	1	09/29/2015 22:23	JS
Barium	589	10.0		ug/L	213518	1	09/29/2015 22:23	JS
Cadmium	BRL	0.700		ug/L	213518	1	09/29/2015 22:23	JS
Chromium	BRL	5.00		ug/L	213518	1	09/29/2015 22:23	JS
Lead	7.15	1.00		ug/L	213518	1	09/29/2015 22:23	JS

* Value exceeds maximum contaminant level

- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc						Date:	17-Nov-15	
Client:AMEC E&I, IncKennesawProject Name:Swift - MoultrieLab ID:1509L11-008				Client San Collection Matrix:		MW-7 9/22/2015 Groundw	5 11:20:00 AM ater	
Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020A				(SV	V3005A)			
Arsenic	5.33	5.00		ug/L	213518	1	09/29/2015 22:28	JS
Barium	493	10.0		ug/L	213518	5	09/30/2015 18:20	JS
Cadmium	BRL	1.00		ug/L	213518	5	09/30/2015 18:20	JS
Chromium	BRL	5.00		ug/L	213518	1	09/29/2015 22:28	JS
Lead	9.95	2.00		ug/L	213518	5	09/30/2015 18:20	JS

* Value exceeds maximum contaminant level

BRL Below reporting limit

- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Page 12 of 26

Analytical Environmental Services, Inc						Date:	17-Nov-15	
Client:AMEC E&I, IncKennesawProject Name:Swift - MoultrieLab ID:1509L11-009				Client San Collection Matrix:	•	MW-16 9/22/2015 Groundw	5 12:30:00 PM ater	
Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020A				(SV	V3005A)			
Arsenic	BRL	5.00		ug/L	213518	1	09/29/2015 22:34	JS
Barium	531	10.0		ug/L	213518	1	09/29/2015 22:34	JS
Cadmium	BRL	0.700		ug/L	213518	1	09/29/2015 22:34	JS
Chromium	BRL	5.00		ug/L	213518	1	09/29/2015 22:34	JS
Lead	12.1	1.00		ug/L	213518	1	09/29/2015 22:34	JS

* Value exceeds maximum contaminant level

BRL Below reporting limit

- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Page 13 of 26

Analytical Environmental Services, Inc						Date:	17-Nov-15	
Client: AMEC E&I, IncKennesaw				Client San	nple ID:	MW-9		
Project Name: Swift - Moultrie				Collection	Date:	9/22/2015	5 2:45:00 PM	
Lab ID: 1509L11-010				Matrix:		Groundw	ater	
Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020A				(SV	V3005A)			
Arsenic	5.09	5.00		ug/L	213518	1	09/29/2015 22:39	JS
Barium	375	10.0		ug/L	213518	5	10/01/2015 16:36	JS
Cadmium	BRL	1.50		ug/L	213518	5	09/30/2015 18:35	JS
Chromium	BRL	5.00		ug/L	213518	1	09/29/2015 22:39	JS
Lead	89.8	2.00		ug/L	213518	5	10/01/2015 16:36	JS

* Value exceeds maximum contaminant level

BRL Below reporting limit

- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Page 14 of 26

Analytical Environmental Services, Inc						Date:	17-Nov-15	
Client: AMEC E&I, IncKennesaw				Client San	nple ID:	MW-13D	1	
Project Name: Swift - Moultrie				Collection	Date:	9/22/2013	5 4:55:00 PM	
Lab ID: 1509L11-011					Groundw	ater		
Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020A				(SV	V3005A)			
Arsenic	26.9	5.00		ug/L	213518	1	09/29/2015 22:44	JS
Barium	169	10.0		ug/L	213518	10	09/30/2015 18:40	JS
Cadmium	BRL	4.50		ug/L	213518	10	09/30/2015 18:40	JS
Chromium	BRL	5.00		ug/L	213518	1	09/29/2015 22:44	JS
Lead	129	4.00		ug/L	213518	10	09/30/2015 18:40	JS

* Value exceeds maximum contaminant level

BRL Below reporting limit

- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Page 15 of 26

Analytical Environmental Services, Inc						Date:	17-Nov-15	
Client:AMEC E&I, IncKennesawProject Name:Swift - MoultrieLab ID:1509L11-012				Client Sar Collection Matrix:	-	MW-18 9/23/201: Groundw	5 10:10:00 AM rater	
Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020A				(SV	V3005A)			
Arsenic	70.8	5.00		ug/L	213518	1	09/29/2015 22:49	JS
Barium	173	10.0		ug/L	213518	50	09/30/2015 19:27	JS
Cadmium	7.42	7.00		ug/L	213518	50	09/30/2015 19:27	JS
Chromium	BRL	5.00		ug/L	213518	1	09/29/2015 22:49	JS
Lead	258	20.0		ug/L	213518	50	09/30/2015 19:27	JS
Dissolved Metals by ICP/MS SW6020A				(SV	V3005A)			
Arsenic	74.7	5.00		ug/L	213601	1	10/01/2015 16:52	JS
Barium	18.5	10.0	Narr	ug/L	213601	1	09/30/2015 20:54	JS
Cadmium	5.07	0.700		ug/L	213601	1	09/30/2015 20:54	JS
Chromium	BRL	5.00		ug/L	213601	1	09/30/2015 20:54	JS
Lead	176	1.00		ug/L	213601	1	10/01/2015 16:52	JS

* Value exceeds maximum contaminant level

BRL Below reporting limit

- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Page 16 of 26

Analytical Environmental Services, In	c					Date:	17-Nov-15	
Client:AMEC E&I, IncKennesawProject Name:Swift - MoultrieLab ID:1509L11-013				Client San Collection Matrix:	•	MW-15 9/23/2013 Groundw		
Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020A				(SV	V3005A)			
Arsenic	26.4	5.00		ug/L	213518	1	09/29/2015 22:55	JS
Barium	BRL	75.0		ug/L	213518	10	09/30/2015 19:37	JS
Cadmium	2.49	1.40		ug/L	213518	10	09/30/2015 19:37	JS
Chromium	6.43	5.00		ug/L	213518	1	09/29/2015 22:55	JS
Lead	243	4.00		ug/L	213518	10	10/01/2015 16:41	JS

* Value exceeds maximum contaminant level

- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc	c					Date:	17-Nov-15	
Client: AMEC E&I, IncKennesaw				Client San	-	MW-6		
Project Name: Swift - Moultrie				Collection	Date:	9/23/2013	5 2:40:00 PM	
Lab ID: 1509L11-014					Groundw	ater		
Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020A				(SV	V3005A)			
Arsenic	15.9	5.00		ug/L	213518	1	09/29/2015 23:10	JS
Barium	449	10.0		ug/L	213518	10	09/30/2015 19:47	JS
Cadmium	BRL	2.00		ug/L	213518	10	09/30/2015 19:47	JS
Chromium	BRL	5.00		ug/L	213518	1	09/29/2015 23:10	JS
Lead	132	4.00		ug/L	213518	10	09/30/2015 19:47	JS

* Value exceeds maximum contaminant level

- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc						Date:	17-Nov-15		
Client:AMEC E&I, IncKennesawProject Name:Swift - MoultrieLab ID:1509L11-015				Client San Collection Matrix:	1	EB-1 9/23/2015 8:50:00 AM Aqueous			
Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst	
Total Metals by ICP/MS SW6020A				(SV	V3005A)				
Arsenic	BRL	5.00		ug/L	213518	1	09/29/2015 23:15	JS	
Barium	BRL	10.0		ug/L	213518	1	09/29/2015 23:15	JS	
Cadmium	BRL	0.700		ug/L	213518	1	09/29/2015 23:15	JS	
Chromium	BRL	5.00		ug/L	213518	1	09/29/2015 23:15	JS	
Lead	BRL	1.00		ug/L	213518	1	09/29/2015 23:15	JS	

* Value exceeds maximum contaminant level

- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc						Date:	17-Nov-15	
Client: AMEC E&I, IncKennesaw Project Name: Swift - Moultrie				Client San Collection	•	DUP-1 9/22/2015	5 12:00:00 PM	
Lab ID: 1509L11-016					Groundw			
Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
Total Metals by ICP/MS SW6020A				(SV	V3005A)			
Arsenic	BRL	5.00		ug/L	213518	10	09/30/2015 19:53	JS
Barium	374	10.0		ug/L	213518	10	09/30/2015 19:53	JS
Cadmium	1.35	1.30		ug/L	213518	10	09/30/2015 19:53	JS
Chromium	44.1	20.0		ug/L	213518	10	09/30/2015 19:53	JS
Lead	91.2	4.00		ug/L	213518	10	09/30/2015 19:53	JS

* Value exceeds maximum contaminant level

- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value

- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit
- Page 20 of 26

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client AMEC/Kennesaw		Work Order Numbe	1509211
Checklist completed by <u>Urung Yii</u> Q/ Signature Da	24/15 te		
Carrier name: FedEx UPS Courier Client U	S Mail Othe	r	
Shipping container/cooler in good condition?	Yes _	No Not Pre	sent
Custody seals intact on shipping container/cooler?	Yes	No Not Pre	sent _/
Custody seals intact on sample bottles?	Yes	No Not Pre	sent _
Container/Temp Blank temperature in compliance? (0°≤6°C)	*Yes _√	No	· ·
Cooler #1 Cooler #2 Cooler #3	Cooler #4	Cooler#5	Cooler #6
Chain of custody present?	Yes 🟒	No	
Chain of custody signed when relinquished and received?	Yes 🦯	No	
Chain of custody agrees with sample labels?	Yes 🖌	No	
Samples in proper container/bottle?	Yes 🖌	No	
Sample containers intact?	Yes $$	No	
Sufficient sample volume for indicated test?	Yes 🖌	No	
All samples received within holding time?	Yes 🤳	No	
Was TAT marked on the COC?	Yes 🖌	No	
Proceed with Standard TAT as per project history?	Yes	No Not Ap	plicable
Water - VOA vials have zero headspace? No VOA vials so		Yes No	
Water - pH acceptable upon receipt?	Yes _	No Not Ap	plicable
Adjusted? Sample Condition: Good Other(Explain) (For diffusive samples or AIHA lead) Is a known blank includ	Chec	cked by <u>AD</u>	
(For diffusive samples or AIHA lead) Is a known blank includ	led? Yes	No	
See Case Narrative for resolution of the Non-Conformanc	e.		
* Samples do not have to comply with the given range for certain parameters.			
\Aes_server\l\Sample Receipt\My Documents\COCs and pH	Adjustment Shee	et\Sample Cooler Re	int Checklist RevLrtf

Client:AMEC E&I, Inc. -KennesawProject Name:Swift - MoultrieLab Order:1509L11

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1509L11-001A	MW-20	9/22/2015 11:43:00AM	Groundwater	Total Metals by ICP/MS		9/28/2015 11:15:00AM	09/29/2015
1509L11-001B	MW-20	9/22/2015 11:43:00AM	Groundwater	Dissolved Metals by ICP/MS		9/30/2015 12:14:00PM	09/30/2015
1509L11-002A	MW-4	9/22/2015 1:28:00PM	Groundwater	Total Metals by ICP/MS		9/28/2015 11:15:00AM	09/29/2015
1509L11-003A	MW-12	9/22/2015 3:05:00PM	Groundwater	Total Metals by ICP/MS		9/28/2015 11:15:00AM	09/29/2015
1509L11-004A	MW-27DDDD	9/23/2015 10:45:00AM	Groundwater	Total Metals by ICP/MS		9/28/2015 11:15:00AM	09/29/2015
1509L11-005A	MW-1	9/23/2015 12:50:00PM	Groundwater	Total Metals by ICP/MS		9/28/2015 11:15:00AM	09/30/2015
1509L11-005B	MW-1	9/23/2015 12:50:00PM	Groundwater	Dissolved Metals by ICP/MS		9/30/2015 12:14:00PM	09/30/2015
1509L11-006A	MW-31	9/23/2015 3:15:00PM	Groundwater	Total Metals by ICP/MS		9/28/2015 11:15:00AM	09/30/2015
1509L11-007A	MW-29	9/23/2015 4:35:00PM	Groundwater	Total Metals by ICP/MS		9/28/2015 11:15:00AM	09/29/2015
1509L11-008A	MW-7	9/22/2015 11:20:00AM	Groundwater	Total Metals by ICP/MS		9/28/2015 11:15:00AM	09/30/2015
1509L11-009A	MW-16	9/22/2015 12:30:00PM	Groundwater	Total Metals by ICP/MS		9/28/2015 11:15:00AM	09/29/2015
1509L11-010A	MW-9	9/22/2015 2:45:00PM	Groundwater	Total Metals by ICP/MS		9/28/2015 11:15:00AM	10/01/2015
1509L11-011A	MW-13D	9/22/2015 4:55:00PM	Groundwater	Total Metals by ICP/MS		9/28/2015 11:15:00AM	09/30/2015
1509L11-012A	MW-18	9/23/2015 10:10:00AM	Groundwater	Total Metals by ICP/MS		9/28/2015 11:15:00AM	09/30/2015
1509L11-012B	MW-18	9/23/2015 10:10:00AM	Groundwater	Dissolved Metals by ICP/MS		9/30/2015 12:14:00PM	10/01/2015
1509L11-013A	MW-15	9/23/2015 12:25:00PM	Groundwater	Total Metals by ICP/MS		9/28/2015 11:15:00AM	10/01/2015
1509L11-014A	MW-6	9/23/2015 2:40:00PM	Groundwater	Total Metals by ICP/MS		9/28/2015 11:15:00AM	09/30/2015
1509L11-015A	EB-1	9/23/2015 8:50:00AM	Aqueous	Total Metals by ICP/MS		9/28/2015 11:15:00AM	09/29/2015
1509L11-016A	DUP-1	9/22/2015 12:00:00PM	Groundwater	Total Metals by ICP/MS		9/28/2015 11:15:00AM	09/30/2015

Client: AMEC E&I, Inc. -Kennesaw Project Name: Swift - Moultrie Workorder: 1509L11

ANALYTICAL QC SUMMARY REPORT

BatchID: 213518

Sample ID: MB-213518 SampleType: MBLK	Client ID: TestCode:	Total Metals by ICP/MS	SW6020A		Unit Bate	ts: ug/L chID: 213518		o Date: Ilysis Date:	09/28/2 09/29/2		Run No: Seq No:	300958 6433855	;
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Re	f Val	%RPD	RPE	Limit Q	Qual
Arsenic	BRL	5.00											
Barium	BRL	10.0											
Cadmium	BRL	0.700											
Chromium	BRL	5.00											
Lead	BRL	1.00											
Sample ID: LCS-213518 SampleType: LCS	Client ID: TestCode:	Total Metals by ICP/MS	SW6020A		Uni Bate	ts: ug/L chID: 213518		o Date: Ilysis Date:	09/28/2 09/29/2		Run No: Seq No:	300958 6433854	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Re	f Val	%RPD	RPE	Limit Ç	Qual
Arsenic	101.1	5.00	100.0		101	80	120						
Barium	94.79	10.0	100.0		94.8	80	120						
Cadmium	107.7	0.700	100.0		108	80	120						
Chromium	104.4	5.00	100.0		104	80	120						
Lead	99.75	1.00	100.0		99.7	80	120						
Sample ID: 1509L11-001AMS SampleType: MS	Client ID: TestCode:	MW-20 Total Metals by ICP/MS	SW6020A		Unit Bate	ts: ug/L chID: 213518		o Date: Ilysis Date:	09/28/20 09/29/20		Run No: Seq No:	300958 6433857	1
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Re	f Val	%RPD	RPE	Limit Q	Qual
Arsenic	94.59	5.00	100.0	0.8527	93.7	75	125						
Barium	108.5	10.0	100.0	22.10	86.4	75	125						
Cadmium	94.41	0.700	100.0	0.1648	94.2	75	125						
Chromium	99.28	5.00	100.0	3.551	95.7	75	125						
Lead	95.30	1.00	100.0	3.467	91.8	75	125						

Qualifiers: >

> Greater than Result value

BRL Below reporting limit

J Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

< Less than Result value

E Estimated (value above quantitation range)

N Analyte not NELAC certified

S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

H Holding times for preparation or analysis exceeded

R RPD outside limits due to matrix

Page 23 of 26

Date: 17-Nov-15

Client: AMEC E&I, Inc. -Kennesaw Project Name: Swift - Moultrie Workorder: 1509L11

ANALYTICAL QC SUMMARY REPORT

BatchID: 213518

					8	•			Run No: 30095	
TestCode:	Total Metals by ICP/MS	SW6020A		Bat	chID: 213518	Ana	lysis Date: 10/02	2/2015	Seq No: 64440	49
Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
79.66	5.00	100.0	1.687	78.0	75	125				
570.2	10.0	100.0	530.9	39.3	75	125				S
78.36	0.700	100.0	0.1903	78.2	75	125				
111.6	5.00	100.0	3.882	108	75	125				
105.5	1.00	100.0	12.10	93.4	75	125				
		SW6020A			6	•			Run No: 30095 Seq No: 64338	
Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
101.6	5.00	100.0	0.8527	101	75	125	94.59	7.15	20	
115.8	10.0	100.0	22.10	93.7	75	125	108.5	6.51	20	
83.96	0.700	100.0	0.1648	83.8	75	125	94.41	11.7	20	
106.6	5.00	100.0	3.551	103	75	125	99.28	7.10	20	
101.6	1.00	100.0	3.467	98.1	75	125	95.30	6.36	20	
		SW6020A			8	•			Run No: 30095 Seq No: 64440	
Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
80.81	5.00	100.0	1.687	79.1	75	125	79.66	1.43	20	
573.2	10.0	100.0	530.9	42.3	75	125	570.2	0.529	20	S
54.23	0.700	100.0	0.1903	54.0	75	125	78.36	36.4	20	SR
111.4	5.00	100.0	3.882	108	75	125	111.6	0.124	20	
104.5	1.00	100.0	12.10	92.4	75	125	105.5	0.990	20	
	TestCode: Result 79.66 570.2 78.36 111.6 105.5 Client ID: TestCode: Result 101.6 115.8 83.96 106.6 101.6 101.6 Client ID: TestCode: Result 80.81 573.2 54.23 111.4	Result RPT Limit 79.66 5.00 570.2 10.0 570.2 10.0 78.36 0.700 111.6 5.00 105.5 1.00 105.5 1.00 Client ID: MW-20 TestCode: RPT Limit 101.6 5.00 115.8 10.0 105.5 0.700 106.6 5.00 101.6 5.00 101.6 5.00 101.6 5.00 101.6 5.00 101.6 5.00 101.6 5.00 101.6 5.00 101.6 5.00 101.6 5.00 101.6 5.00 101.6 S.00 Solar 5.00 Solar 5.00 Solar 5.00 Solar 5.00 Solar 0.700 Solar 0.700 Solar 0.700 Solar 0.700 Sola	TestCode: Total Metals by ICP/MS SW6020A Result RPT Limit SPK value 79.66 5.00 100.0 570.2 10.0 100.0 78.36 0.700 100.0 78.36 0.700 100.0 111.6 5.00 100.0 105.5 1.00 100.0 105.5 1.00 100.0 Result RPT Limit SPK value 101.6 5.00 100.0 115.8 10.0 100.0 115.8 10.0 100.0 105.6 5.00 100.0 105.6 5.00 100.0 105.6 5.00 100.0 105.6 5.00 100.0 106.6 5.00 100.0 101.6 S.00 100.0 Result RPT Limit SPK value Result RPT Limit 100.0 573.2 10.0 100.0 54.23 0.700 100.0 54.23 0.700 100.0	TestCode: Total Metals by ICP/MS SW6020A Result RPT Limit SPK value SPK Ref Val 79.66 5.00 100.0 1.687 570.2 10.0 100.0 530.9 78.36 0.700 100.0 0.1903 111.6 5.00 100.0 3.882 105.5 1.00 100.0 12.10 Client ID: MW-20 SW6020A 102.0 TestCode: rotal Metals by ICP/MS SW6020A 12.10 101.6 5.00 100.0 0.8527 115.8 10.0 100.0 22.10 83.96 0.700 100.0 0.1648 106.6 5.00 100.0 0.1648 106.6 5.00 100.0 3.467 101.6 Total Metals by ICP/MS SW6020A SPK Ref Val Result RPT Limit SW6020A SPK Ref Val Result RPT Limit SPK value SPK Ref Val Result RPT Limit SPK value SPK Ref Val 80.81 5.00 100.0 <td>TestCode: Total Metals by ICP/MS SW6020A Bat Result RPT Limit SPK value SPK Ref Val %REC 79.66 5.00 100.0 1.687 78.0 570.2 10.0 100.0 530.9 39.3 78.36 0.700 100.0 0.1903 78.2 111.6 5.00 100.0 3.882 108 105.5 1.00 100.0 12.10 93.4 Client ID: MW-20 SW6020A 101.0 93.4 TestCode: Total Metals by ICP/MS SW6020A 108 93.4 Result RPT Limit SPK value SPK Ref Val %REC 101.6 5.00 100.0 0.8527 101 115.8 10.0 100.0 2.10 93.7 83.96 0.700 100.0 3.551 103 101.6 5.00 100.0 3.467 98.1 Client ID: MW-16 SW6020A SPK Ref Val %REC Result RPT Limit SPK value SPK Ref Val %REC<td>TestCode: Total Metals by ICP/MS SW6020A Batt-III: 213518 Result RPT Limit SPK value SPK Ref Val %REC Low Limit 79.66 5.00 100.0 1.687 78.0 75 570.2 10.0 100.0 530.9 39.3 75 78.36 0.700 100.0 0.1903 78.2 75 111.6 5.00 100.0 3.882 108 75 105.5 1.00 100.0 3.882 108 75 Client ID: MW-20 SW6020A 12.10 93.4 75 Result RPT Limit SPK value SPK Ref Val %REC Low Limit 101.6 5.00 100.0 0.8527 101 75 115.8 10.0 100.0 3.467 98.1 75 106.6 5.00 100.0 3.467 98.1 75 101.6 1.00 100.0 3.467 98.1 75 101.6 1.00 100.0 3.467 98.1 75 <tr< td=""><td>BatchID: 213518 Ana Result RPT Limit SPK value SPK Ref Val %REC Low Limit High Limit 79.66 5.00 100.0 1.687 78.0 75 125 570.2 10.0 100.0 530.9 39.3 75 125 78.36 0.700 100.0 0.1903 78.2 75 125 111.6 5.00 100.0 3.882 108 75 125 105.5 1.00 100.0 12.10 93.4 75 125 Client ID: MW-20 SW6020A Units: ug/L Prep TestCode: Total Metals by ICP/MS SW6020A Units: ug/L Prep 101.6 5.00 100.0 0.8527 101 75 125 15.8 10.0 100.0 2.10 93.7 75 125 106.6 5.00 100.0 0.1648 83.8 75 125 101.6 1.00 100.0 3.467 98.1 75 125 101.6</td><td>TestCode: Total Metab by ICP/MS SW6020A BatchID: 213518 Analysis Date: 10/02 Result RPT Limit SPK value SPK Ref Val %REC Low Limit High Limit RPD Ref Val 79.66 5.00 100.0 1.687 78.0 75 125 </td><td>TestCode: Total Metals by ICP/MS SW6020A BatchID: 213518 Analysis Date: 10/02/2015 Result RPT Limit SPK value SPK Ref Val %REC Low Limit High Limit RPD Ref Val %RPD 79.66 5.00 100.0 1.687 78.0 75 125 125 125 125 125 100 100.0 530.9 39.3 75 125 110 100.0 0.100.0 3.882 108 75 125 111 100.0 100.0 3.882 108 75 125 111 100.0 100.0 12.10 93.4 75 125 111 100 100.0 12.10 93.4 75 125 101 100 100 12.10 93.4 75 125 09/28/2015 101 100 100 100.0 100</td><td>TestCole: Total Metab by ICPMS SW020A Bat: ID 213518 Amalysis Date: 100/2/15 Seq No: 64440 Result RPT Limit SPK value SPK Ref Val %REC Low Limit High Limit RPD Ref. %RPD MRPD Limit 79.66 5.00 100.0 1.687 78.0 75 125 $$</td></tr<></td></td>	TestCode: Total Metals by ICP/MS SW6020A Bat Result RPT Limit SPK value SPK Ref Val %REC 79.66 5.00 100.0 1.687 78.0 570.2 10.0 100.0 530.9 39.3 78.36 0.700 100.0 0.1903 78.2 111.6 5.00 100.0 3.882 108 105.5 1.00 100.0 12.10 93.4 Client ID: MW-20 SW6020A 101.0 93.4 TestCode: Total Metals by ICP/MS SW6020A 108 93.4 Result RPT Limit SPK value SPK Ref Val %REC 101.6 5.00 100.0 0.8527 101 115.8 10.0 100.0 2.10 93.7 83.96 0.700 100.0 3.551 103 101.6 5.00 100.0 3.467 98.1 Client ID: MW-16 SW6020A SPK Ref Val %REC Result RPT Limit SPK value SPK Ref Val %REC <td>TestCode: Total Metals by ICP/MS SW6020A Batt-III: 213518 Result RPT Limit SPK value SPK Ref Val %REC Low Limit 79.66 5.00 100.0 1.687 78.0 75 570.2 10.0 100.0 530.9 39.3 75 78.36 0.700 100.0 0.1903 78.2 75 111.6 5.00 100.0 3.882 108 75 105.5 1.00 100.0 3.882 108 75 Client ID: MW-20 SW6020A 12.10 93.4 75 Result RPT Limit SPK value SPK Ref Val %REC Low Limit 101.6 5.00 100.0 0.8527 101 75 115.8 10.0 100.0 3.467 98.1 75 106.6 5.00 100.0 3.467 98.1 75 101.6 1.00 100.0 3.467 98.1 75 101.6 1.00 100.0 3.467 98.1 75 <tr< td=""><td>BatchID: 213518 Ana Result RPT Limit SPK value SPK Ref Val %REC Low Limit High Limit 79.66 5.00 100.0 1.687 78.0 75 125 570.2 10.0 100.0 530.9 39.3 75 125 78.36 0.700 100.0 0.1903 78.2 75 125 111.6 5.00 100.0 3.882 108 75 125 105.5 1.00 100.0 12.10 93.4 75 125 Client ID: MW-20 SW6020A Units: ug/L Prep TestCode: Total Metals by ICP/MS SW6020A Units: ug/L Prep 101.6 5.00 100.0 0.8527 101 75 125 15.8 10.0 100.0 2.10 93.7 75 125 106.6 5.00 100.0 0.1648 83.8 75 125 101.6 1.00 100.0 3.467 98.1 75 125 101.6</td><td>TestCode: Total Metab by ICP/MS SW6020A BatchID: 213518 Analysis Date: 10/02 Result RPT Limit SPK value SPK Ref Val %REC Low Limit High Limit RPD Ref Val 79.66 5.00 100.0 1.687 78.0 75 125 </td><td>TestCode: Total Metals by ICP/MS SW6020A BatchID: 213518 Analysis Date: 10/02/2015 Result RPT Limit SPK value SPK Ref Val %REC Low Limit High Limit RPD Ref Val %RPD 79.66 5.00 100.0 1.687 78.0 75 125 125 125 125 125 100 100.0 530.9 39.3 75 125 110 100.0 0.100.0 3.882 108 75 125 111 100.0 100.0 3.882 108 75 125 111 100.0 100.0 12.10 93.4 75 125 111 100 100.0 12.10 93.4 75 125 101 100 100 12.10 93.4 75 125 09/28/2015 101 100 100 100.0 100</td><td>TestCole: Total Metab by ICPMS SW020A Bat: ID 213518 Amalysis Date: 100/2/15 Seq No: 64440 Result RPT Limit SPK value SPK Ref Val %REC Low Limit High Limit RPD Ref. %RPD MRPD Limit 79.66 5.00 100.0 1.687 78.0 75 125 $$</td></tr<></td>	TestCode: Total Metals by ICP/MS SW6020A Batt-III: 213518 Result RPT Limit SPK value SPK Ref Val %REC Low Limit 79.66 5.00 100.0 1.687 78.0 75 570.2 10.0 100.0 530.9 39.3 75 78.36 0.700 100.0 0.1903 78.2 75 111.6 5.00 100.0 3.882 108 75 105.5 1.00 100.0 3.882 108 75 Client ID: MW-20 SW6020A 12.10 93.4 75 Result RPT Limit SPK value SPK Ref Val %REC Low Limit 101.6 5.00 100.0 0.8527 101 75 115.8 10.0 100.0 3.467 98.1 75 106.6 5.00 100.0 3.467 98.1 75 101.6 1.00 100.0 3.467 98.1 75 101.6 1.00 100.0 3.467 98.1 75 <tr< td=""><td>BatchID: 213518 Ana Result RPT Limit SPK value SPK Ref Val %REC Low Limit High Limit 79.66 5.00 100.0 1.687 78.0 75 125 570.2 10.0 100.0 530.9 39.3 75 125 78.36 0.700 100.0 0.1903 78.2 75 125 111.6 5.00 100.0 3.882 108 75 125 105.5 1.00 100.0 12.10 93.4 75 125 Client ID: MW-20 SW6020A Units: ug/L Prep TestCode: Total Metals by ICP/MS SW6020A Units: ug/L Prep 101.6 5.00 100.0 0.8527 101 75 125 15.8 10.0 100.0 2.10 93.7 75 125 106.6 5.00 100.0 0.1648 83.8 75 125 101.6 1.00 100.0 3.467 98.1 75 125 101.6</td><td>TestCode: Total Metab by ICP/MS SW6020A BatchID: 213518 Analysis Date: 10/02 Result RPT Limit SPK value SPK Ref Val %REC Low Limit High Limit RPD Ref Val 79.66 5.00 100.0 1.687 78.0 75 125 </td><td>TestCode: Total Metals by ICP/MS SW6020A BatchID: 213518 Analysis Date: 10/02/2015 Result RPT Limit SPK value SPK Ref Val %REC Low Limit High Limit RPD Ref Val %RPD 79.66 5.00 100.0 1.687 78.0 75 125 125 125 125 125 100 100.0 530.9 39.3 75 125 110 100.0 0.100.0 3.882 108 75 125 111 100.0 100.0 3.882 108 75 125 111 100.0 100.0 12.10 93.4 75 125 111 100 100.0 12.10 93.4 75 125 101 100 100 12.10 93.4 75 125 09/28/2015 101 100 100 100.0 100</td><td>TestCole: Total Metab by ICPMS SW020A Bat: ID 213518 Amalysis Date: 100/2/15 Seq No: 64440 Result RPT Limit SPK value SPK Ref Val %REC Low Limit High Limit RPD Ref. %RPD MRPD Limit 79.66 5.00 100.0 1.687 78.0 75 125 $$</td></tr<>	BatchID: 213518 Ana Result RPT Limit SPK value SPK Ref Val %REC Low Limit High Limit 79.66 5.00 100.0 1.687 78.0 75 125 570.2 10.0 100.0 530.9 39.3 75 125 78.36 0.700 100.0 0.1903 78.2 75 125 111.6 5.00 100.0 3.882 108 75 125 105.5 1.00 100.0 12.10 93.4 75 125 Client ID: MW-20 SW6020A Units: ug/L Prep TestCode: Total Metals by ICP/MS SW6020A Units: ug/L Prep 101.6 5.00 100.0 0.8527 101 75 125 15.8 10.0 100.0 2.10 93.7 75 125 106.6 5.00 100.0 0.1648 83.8 75 125 101.6 1.00 100.0 3.467 98.1 75 125 101.6	TestCode: Total Metab by ICP/MS SW6020A BatchID: 213518 Analysis Date: 10/02 Result RPT Limit SPK value SPK Ref Val %REC Low Limit High Limit RPD Ref Val 79.66 5.00 100.0 1.687 78.0 75 125	TestCode: Total Metals by ICP/MS SW6020A BatchID: 213518 Analysis Date: 10/02/2015 Result RPT Limit SPK value SPK Ref Val %REC Low Limit High Limit RPD Ref Val %RPD 79.66 5.00 100.0 1.687 78.0 75 125 125 125 125 125 100 100.0 530.9 39.3 75 125 110 100.0 0.100.0 3.882 108 75 125 111 100.0 100.0 3.882 108 75 125 111 100.0 100.0 12.10 93.4 75 125 111 100 100.0 12.10 93.4 75 125 101 100 100 12.10 93.4 75 125 09/28/2015 101 100 100 100.0 100	TestCole: Total Metab by ICPMS SW020A Bat: ID 213518 Amalysis Date: 100/2/15 Seq No: 64440 Result RPT Limit SPK value SPK Ref Val %REC Low Limit High Limit RPD Ref. %RPD MRPD Limit 79.66 5.00 100.0 1.687 78.0 75 125 $$

Qualifiers: >

- > Greater than Result value
- BRL Below reporting limit

J Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Page 24 of 26

Analytical Environmental Services, Inc

Client: AMEC E&I, Inc. -Kennesaw Project Name: Swift - Moultrie Workorder: 1509L11

ANALYTICAL QC SUMMARY REPORT

BatchID: 213601

Sample ID: MB-213601 SampleType: MBLK	Client ID: TestCode: I	Dissolved Metals by ICP/	MS SW6020A		Uni Bat	ts: ug/L chID: 213601		p Date: alysis Date:	09/30/2 09/30/2		Run No: 3 Seq No: 6	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Re	f Val	%RPD	RPD I	limit Qual
Arsenic	BRL	5.00										
Barium	BRL	10.0										
Cadmium	BRL	0.700										
Chromium	BRL	5.00										
Lead	BRL	1.00										
Sample ID: LCS-213601 SampleType: LCS	Client ID: TestCode: I	Dissolved Metals by ICP/	/MS SW6020A		Uni Bat	ts: ug/L chID: 213601		p Date: alysis Date:	09/30/2 09/30/2		Run No: 3 Seq No: 6	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Re	f Val	%RPD	RPD I	Limit Qual
Arsenic	92.05	5.00	100.0		92.1	80	120					
Barium	90.54	10.0	100.0		90.5	80	120					
Cadmium	93.00	0.700	100.0		93.0	80	120					
Chromium	94.95	5.00	100.0		94.9	80	120					
Lead	98.87	1.00	100.0		98.9	80	120					
Sample ID: 1509L11-001BMS SampleType: MS	Client ID: M TestCode: I	/IW-20 Dissolved Metals by ICP/	/MS SW6020A		Uni Bat	ts: ug/L chID: 213601		p Date: alysis Date:	09/30/2 09/30/2		Run No: 3 Seq No: 6	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Re	f Val	%RPD	RPD I	Limit Qual
Arsenic	94.66	5.00	100.0	0.4640	94.2	75	125					
Barium	108.8	10.0	100.0	19.10	89.7	75	125					
Cadmium	70.23	0.700	100.0	0.1479	70.1	75	125					S
Chromium	94.36	5.00	100.0	0.4021	94.0	75	125					
Lead	93.52	1.00	100.0	0.3808	93.1	75	125					

Qualifiers: >

- > Greater than Result value
- BRL Below reporting limit
- J Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix

B Analyte detected in the associated method blank

- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Page 25 of 26

Date: 17-Nov-15

Analytical Environmental Services, Inc

17-Nov-15 Date:

Client: AMEC E&I, Inc. -Kennesaw **Project Name:** Swift - Moultrie Workorder: 1509L11

ANALYTICAL QC SUMMARY REPORT

BatchID: 213601

Sample ID: 1509L11-001BMSD	Client ID: N				Uni	ts: ug/L	Prep	Date: 09/30	/2015	Run No: 301111	l
SampleType: MSD	TestCode: Dissolved Metals by ICP/MS SW6020A			BatchID: 213601			lysis Date: 09/30	Seq No: 6436421			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	98.14	5.00	100.0	0.4640	97.7	75	125	94.66	3.61	20	
Barium	111.9	10.0	100.0	19.10	92.8	75	125	108.8	2.84	20	
Cadmium	72.53	0.700	100.0	0.1479	72.4	75	125	70.23	3.22	20	S
Chromium	100.9	5.00	100.0	0.4021	101	75	125	94.36	6.73	20	
Lead	97.83	1.00	100.0	0.3808	97.5	75	125	93.52	4.51	20	

Qualifiers: > Greater than Result value

BRL Below reporting limit

J

Estimated value detected below Reporting Limit

Rpt Lim Reporting Limit

- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix

- B Analyte detected in the associated method blank
- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Page 26 of 26

Field Sampling Reports for September 2015 Groundwater Sampling Event

PROJECT NA Swift- Moultrie		FIE	FIELD SAMPLING REPORT					Project Number: 6122140220		
		PHON	NTY ROAD NW JE: (770) 421-3	400 / FAX: (KENNESAW G (770) 421-3486					
SAMPLING EVEN MONITORING WE WELL ID: Mu WELL MATERIAL:	LL TYPE:Sta									
SAMPLE METHOD	: PProtalt	IC PUMP			METER:	ź"				
DUP./REP. OF:				TOTAL DI		5.75	GRAB (x) CO			
Top of Screened in Screen length:	nterval (ptoc):				OLUMN HEIG OLUME: 2	<u>ر د ۲</u>	5×163	X3-		
Arrived at: <u><i>l</i>[</u>	1						(well volumes) for 2" wells]		
Initial PID =							(well volumes			
Bailing PID =				[1.47 x wa	iter column h	eight (ft) x 3 (well volumes)	for 6" wells]		
тіме	VOL. PURGED (gal)	Diss. Oxygen (+/- 10%)	ORP (+/- 10 mV)	pH (+/- 0.1 pH units)	SPEC. COND. (ms/cm) [+/- 3%]	TEMP (°C)	TURB. (NTU) [<10 NTU]	Pump Rate ml/min. (& pump setting)	New Water Level	
Initial: 1126	1.000 cm	NA	NA	5-68	0.20	2811	7900	100 ()	11.15	
1138	-50	- /)-	· ,	5.65	0.19	27.3	414	150	11.85	
1150	1.00			5.46	0,19	29.4	390	150	12.00	
12.02	1.50			5.4.4	0.18	311.2	205	150	13.50	
1214	2.00			5.38	8.17	38.2	305	150	14.74	
1226	BANPL	o floor	mw-	1			7800		15.00	
				1						
·····										
······							÷			
			•			· · · · · · · · · · · · · · · · · · ·				
-										
NOTES:	Tubling	1 Jakp-	7 13 00'		D Law	and tubbe	intaho 2	14.00', 12	*//	
	6ALUP-	Tiblas	Intako	/	EDD .	12 20	Well +	PLIGHT DO	y word	
	51/74 1	> my	ldy, L	MAR M	nd dade		-det at	mell uni	11 60-	
	will rock	mor the	on Sam	110					·	
SAMPLE DATE:	123/15			· · v —						
									· · · · · · · · · · · · · · · ·	

CONTAINER			ANALYTICAL	
SIZE/TYPE	NO.	PRESERVATIVE	METHOD	ANALYSIS
				LAND TOTUL
				hear Dissolvar

	GE	NERAL INFORMATION			
WEATHER:					
SHIPPED VIA: Delivered to AES laboratory					
SHIPPED TO:	AES Laboratories, 3785 President	al Parkway, Atlanta, GA 30340			
SAMPLER: Ph	ark A.	OBSERVER:			

PROJECT NA Swift- Moultrie							Project Number: 6122140220			
			1075 BIG SHAN			KENNESAW G	A 30144			
						(770) 421-3486				
SAMPLING EVEN										
MONITORING WE	$\sim L$:Sta	andard Cor	npliance	Background	Lettractio	n			
WELL MATERIAL	PVC									
SAMPLE METHOD	ppr 30	tall-12	PUMP							
			<u></u>		WELL DIA	METER:	2″			
DUP./REP. OF:		···			DEPTH TO	O WATER:	401	GRAB (x) CO	MPOSITE ()	
					TOTAL DI	EPTH: <u>/3</u> .	37			
Top of Screened in		otoc):	<u> </u>		WATER C	OLUMN HEIG	энт: <u>4 3</u> 6	X 0.163X	3	
Screen length:						OLUME: 7				
Arrived at: 121	6				[0.163 x w	ater column	height (ft) x 3	(well volumes) for 2" wells]	
Initial PID =					[0.653 x w	ater column	height (ft) x 3	(well volumes) for 4" wells]	
Bailing PID =					[1.47 x wa	iter column h	eight (ft) x 3 (well volumes)	for 6" wells]	
				1		SPEC. COND.			Pump Rate	
	VOL. PL		Diss. Oxygen	ORP (+/- 10	pH (+/- 0.1	(ms/cm) [+/-		TURB. (NTU)	ml/min. (& pump	New Water
TIME	(ga	1)	(+/- 10%)	mV)	pH units)	3%]	TEMP (°C)	[<10 NTU]	setting)	Level
initial: 1226		-	NA-	Nor	6.15	0-45	26.5	12.7	300 ()	4.35
1235	.7	5			6.17	0.45	26.4	8.61	300 .	K.35
17 44	1.5	Ũ			6.13	0.45	26.4	562	300	4.35
17 53	2.2	5			6.17	B 45	26.6	155	700	4.35
13 0 7	3-19	ð			6.20	0.47	26.5	(372	300	4.35
1301	3.7				6,21	M. 41	26.5	0,68	300	4.35
1200	11 6	<u>ر</u> ک			6.20	0.47	26.2	0.31	200	4.31
-1320-	4.7	2			6.19	0.41 0.41	26.3			
<u>B20</u>	0-6/6				<u>©, </u>	<u>(2.47</u>		0.37	300	4.35
1020	5	amp	7 61	0						· · · · ·
1320		amp	le fm							
				·						
								· · ·/		
	ļ					<u></u> .				
r										
NOTES:	TUD	Ins 1	Mane = .	5.00'					_	
			•••							
				ander de la serie de la se	a na an		na a anna an			
SAMPLE DATE:	122/1	5					inda, konstanti inda			
SAMPLE TIME:	132									
CONTAINER						ANALYTICAL				
SIZE/TYPE	NO.		PRESE	RVATIVE		METHOD		ANA	LYSIS	
1/250 Poly	1		HN03		,		LAND	/	·····	
your cont			<u>e i j i e</u>							

	GEI	NERAL INFORMATION			
WEATHER:	Partly Cloudy Hot				
SHIPPED VIA:	Delivered to AES laboratory				
SHIPPED TO:	AES Laboratories, 3785 Presidentia	al Parkway, Atlanta, GA 30340			
SAMPLER: N	Ark A	OBSERVER:			
h					

					PLING REPORT			Project Number: 6122140220		
SAMPLING EVENT	· 1ST (PHON	NTY ROAD NW	400 / FAX: (KENNESAW G (770) 421-3486				
WELL ID: MAL	LL TYPE:	Sta	indard Co	mplianceE	3RD QUAR Background	d_Extraction	n			
SAMPLE METHOD DUP./REP. OF: INTAKE @ Top of Screened in Screen length: Arrived at: Initial PID =	13.0 nterval (bto				DEPTH TO TOTAL DI WATER C PURGE V [0.163 x w	OLUME:	7: 43 3:80 6HT: <u>5:8</u> 2:97 height (ft) x 3	GRAB (x) CO 7 X,17 (well volumes (well volumes	= 0,99 X 3	= 2,97
Bailing PID =					[1.47 x wa	ter column h	eight (ft) x 3 (well volumes)	for 6" wells]	
TIME	VOL. PUR (gal)	GED	Diss. Oxygen (+/- 10%)	ORP (+/- 10 mV)	pH (+/- 0.1 pH units)	SPEC. COND. (ms/cm) [+/- 3%]	TEMP (°C)	TURB. (NTU) [<10 NTU]	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1335	0.2	5	-		4,23	9,62	26.7	3,49	200 ()	8.32
1340	015		~	-	4.95	6.56	26.7	5,26	200	8.83
1350	1.0		-	-	5.90	3.71	26.5	3.38	200	9.69
1400	1.5	1		-	5.82	3.72	26,6	7.98	200	10,59
1410	2,0	>	_	1	5.65	4,41	26.6	5116	200	11,33
1420	2.5		· · · · · ·	-	5.31	5,46	26.5	3,12	200	12,01
1425	2.7	5	-	-	4.62	7.49	26.3	2.06	200	12.37
1430	3,0	_	-		4.60		26.4	1.98	200	12,73
1435	3,2		~	-	4.55	7,80	26.3	1.88	200	12,91
1440			ect	San	npl	e		1.00	600	· sr II
			-01		7-					
LOTES										
NOTES:		-								
SAMPLE DATE: SAMPLE TIME:	9-23-1	5								
CONTAINER						ANALYTICAL				
SIZE/TYPE	NO.		PRESE	RVATIVE		METHOD		ANA	LYSIS	
250 ML PE	1		HN	03			P	5 - BARI	COLUMN AND ADDRESS OF THE OWNER WATCHING THE OWNER THE OWNER WATCHING THE OWNER W	
							14	Such		

	GENE	ERAL INFORMATION		
WEATHER: HOT-HUMID-CLOUDY				
SHIPPED VIA: Delivered to AES laboratory				
SHIPPED TO:	AES Laboratories, 3785 Presidential	Parkway, Atlanta, GA 30340		
SAMPLER: E	EL GUILLEN	OBSERVER:		

PROJECT	NAME:
Swift-Moul	trie, GA

FIELD SAMPLING REPORT

					MEC, E&I					
						KENNESAW G	SA 30144			
SAMPLING EVENT MONITORING WE WELL ID: <u>MO</u> WELL MATERIAL:	LL TYPE:		TER2ND C	UARTER	3RD QUAF				99 <u>00000000000000000000000</u> 000000000000	
SAMPLE METHOD		RIS	TACTIC				- 11			
DUP./REP. OF:					WELL DI	AMETER:	15.91	GRAB (x) CO		
INTAKE Top of Screened in	sete	2110	0'		TOTAL D	EDTU: 7/	143			- ,9
Top of Screened in Screen length:		toc):	1105 (c)	87	WATER C	OLUMN HEIG	GHT: <u>10119</u>	1x 0.17=	1.73×3= 5	2110
Arrived at:		-3				000000000000000000000000000000000000000		(well volumes) for 2" wellel	
Initial PID =								(well volumes		
Bailing PID =								well volumes)	승규가 안 한 상태에 도망가 가지 않는 것이 없다.	
					ľ					
			Di 0	000 / 1 40		SPEC. COND.			Pump Rate	
TIME	VOL. PU (ga		Diss. Oxygen (+/- 10%)	ORP (+/- 10 mV)	pH (+/- 0.1 pH units)	(ms/cm) [+/- 3%]	TEMP (°C)	TURB. (NTU) [<10 NTU]	ml/min. (& pump setting)	New Water Level
Initial: 1005	0.2		-		5,43	3,95	25.5	8518	200 ()	16.15
1020	110		-	-	5,46	3,89	25,2	13,1	200	16,48
1040	2,0	2	(-	5154	3.81	24.5	11,4	200	16.86
1050	310		-		5,59	3,78	24.2	7,46	400	17.32
1100	410		-	-	5,58	the second se	24,0	2,27	400	17,93
1110	5.0		an -	-	5157	3,81	24,0	1,50	400	18:68
1/15	515		0 -		5,57	3.79	24,1	1.47	400	18,91
1120	C	al	ect	Samy	ele					
NOTES:										
		10-10-10								
		_								
CANDLE DATE.	9-22	15	-							
SAMPLE DATE: SAMPLE TIME:	112									
CONTAINER						ANALYTICAL				
SIZE/TYPE	NO.		PRESE	RVATIVE		METHOD		ANA	ALYSIS	
250 ML POLY	1		HNO3				P	b		
		_								
			and the second second	GENERA	LINFORM	ATION				
			Carl Sector Sector Sector	(7)					Contraction of the local division of the loc	

		GENERAL INFORMATION	
WEATHER:	Hor - HUMID - Som	e Ccoups	
SHIPPED VIA:	Delivered to AES laboratory		
SHIPPED TO:	AES Laboratories, 3785 Preside	ential Parkway, Atlanta, GA 30340	
SAMPLER: EVE	ER GUILCEN	OBSERVER:	

2

PROJECT NAME:	
Swift- Moultrie, GA	

MW-9 DUP-1

> SHIPPED TO: SAMPLER:

EVER GUILLEN

FIELD SAMPLING REPORT

			A	MEC, E&I			110,00		140220
		1075 BIG SHAI			KENNESAW (GA 30144			
		PHON	NE: (770) 421-3	400 / FAX:	(770) 421-3486				
SAMPLING EVEN MONITORING WE WELL ID: <u>Ma</u> WELL MATERIAL: SAMPLE METHOD	LL TYPE: _St	andard Co	QUARTER mpliancef	Backgroun	dExtractio	n			
DUP./REP. OF: Top of Screened in Screen length: Arrived at: Initial PID = Bailing PID =	. 18.0 ' nterval (btoc):_ 2.0,0	<u>z,63</u>		TOTAL DE WATER C PURGE V [0.163 x w [0.653 x w	EPTH: 20 COLUMN HEIC OLUME: 2 vater column vater column	HT: 5,7 HT: 5,7 height (ft) x 3 height (ft) x 3	GRAB (x) CO (well volumes (well volumes) well volumes)	0,96 × 3) for 2" wells]) for 4" wells]	= 2.90
тіме	VOL. PURGED (gal)	Diss. Oxygen (+/- 10%)	ORP (+/- 10 mV)	pH (+/- 0.1 pH units)	SPEC. COND. (ms/cm) [+/- 3%]	TEMP (°C)	TURB. (NTU) [<10 NTU]	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1335	0.25	-		3.87	4.54	26.8	124	200 ()	14.63
1340	0.5	-	-	9,11	13.88	25.9	23,5	200	14.68
1345	0.75	-	-	4.32	2.71	25.3	8,16	200	19.73
1350	1.0	-	_	4,31	2.74	2512	5.57	200	14.74
1355	1.25	-		4.32	2,74	25.2	5124	200	14.76
1400	1.5	-	-	4.31	2.75	25,1	4,49	200	14.77
1405	1.75	-	-	4.31	2.74	25.1	4,68	200	14,77
1410	2.0	_	-	4.31	2.75	25.0	3.90	200	14.78
1415	2.25	-	-	4.31	2.75	2510	3,48	200	14.78
1420	2.5	~	-	4.31	2.75	25,0	3,3,73	200	14.78
1425	2.75	-	-	4.31	2.75	25,1	2.88	200	14.78
1430	3.0			4.31	2.75	25.1	2.59	200	14.78
1445	Col	lect	- Sa	mpl	e				
NOTES:									
н. 									
SAMPLE DATE:	9-22-15 1445								
CONTAINER SIZE/TYPE	NO.	PRESE	RVATIVE		ANALYTICAL METHOD		ANA	LYSIS	
250 ML PE	1	HA	103			1	2 b		
250 ML PE	1	HA	103			f	2Ъ		
			OFNER	INFORM	TION				
WEATHED.	the U.	And a d		INFORMA	TION				
WEATHER: SHIPPED VIA:		MID - Sol	ME GLOU	())					
SHIPPED VIA:	Delivered to AE	5 laboratory							

OBSERVER:

AES Laboratories, 3785 Presidential Parkway, Atlanta, GA 30340

PROJECT NAM Swift- Moultrie					Project Number: 6122140220				
AMEC									
	1075 BIG SHANTY ROAD NW, SUITE 100 KENNESAW GA 30144								
PHONE: (770) 421-3400 / FAX: (770) 421-3486 SAMPLING EVENT:1ST QUARTER2ND QUARTER3RD QUARTER4TH QUARTER									
MONITORING WEI WELL ID: MIC-	L TYPE: Sta	andard Co	mplianceE	lackgroun	dExtraction	UARTER 1			
WELL MATERIAL:	PVC								
SAMPLE METHOD	Perspatte	Pump			0	1			
DUP./REP. OF:				DEPTH TO	METER: 2		GRAB (x) CO	MPOSITE ()	
Top of Screened in	nterval (btoc):			TOTAL DI WATER C	EPTH: // · ` OLUMN HEIG	7-7 HT: (39	* X . 163X	? ·	
Screen length:					OLUME: 2			<i>,</i>	
Arrived at: 13 3	?7						(well volumes) for 2" wells1	
Initial PID =	·						(well volumes		
Bailing PID =							well volumes)	-	
				<u> </u>	[[
					SPEC. COND.		2	Pump Rate	
71845	VOL. PURGED	Diss. Oxygen (+/- 10%)	ORP (+/- 10 mV)	pH (+/- 0.1 pH units)	(ms/cm) [+/-	TEMP (%0)	TURB. (NTU)	ml/min. (& pump	New Water
	(gal)	(+/- 1076) A//1	R/ h		3%]	TEMP (°C)	[<10 NTU]	setting)	Level
Initial: 1405	<u>en</u>	NH-	NH	6,00 5 00	0.35	30.2	6.69	200 ()	6.30
1414	~50 1 01			5.88	0.36	29.0	2.02	200	B,50
1418	1.00			5.74	0.37	29.3	1.30	200	7.80
1438	1.50			5.87	0.36	29.1	0.39	200	1.80
	2.00] . 80 _	0,36	24.3	1-2.1	200	7,83
-1458	2-50		·····	5.45	0.36	24.7	0.15	200	7.83
1505	2.75			5.45	0.37	29.5	0-85	200	7.83
1000	~ ~ ~	10/1		() (
1505	Samp	10 flmo	<u> </u>	1-12					
								1819-18-	
NOTES:	Tubho	intake	r = 9	00'					
	····							10. 10. 10. 10. 10. 10. 10. 10. 10. 10.	
		· · · ·		11					
SAMPLE DATE:	122/15				100 × 11 100				
SAMPLE TIME: 7	1505								

CONTAINER			ANALYTICAL			
SIZE/TYPE	NO,	PRESERVATIVE	METHOD	1	ANALYSIS	
250/Poly	1	thro3		LAND		
		• • •				

	GEI	NERAL INFORMATION			
WEATHER:	Cloudy Host				
SHIPPED VIA:	ED VIA: Delivered to AES laboratory				
SHIPPED TO:	AES Laboratories, 3785 Presidential Parkway, Atlanta, GA 30340				
SAMPLER: Murk A		OBSERVER:	······································		

PROJECT NAME: Swift- Moultrie, GA

FIELD SAMPLING REPORT

Project Number: 6122140220

		1075 BIG SHAI	VTY ROAD NW	, SUITE 100	KENNESAW G	A 30144			
		PHON	NE: (770) 421-34	400 / FAX:	(770) 421-3486				
SAMPLING EVEN MONITORING WE WELL ID: MW	-13D	RTER2ND (andard Co	QUARTER mplianceE	3RD QUAR Background	TER4TH G	QUARTER			
WELL MATERIAL:									
SAMPLE METHOD	: <u>18615740</u>	-776		WELLDU	METER: 2	, 11			
DUP./REP. OF:				DEPTH TO	WATER:	15.56	GRAB (x) CO		
INTAKE P	22.5'			TOTAL DI	EPTH: 2	4,00			
INTAKE @ Top of Screened in		19.18		WATER C	OLUMN HEIG	HT: 2,90	> X.17 =	1,43×3=	9,30
Screen length:	5.0'			PURGE V	OLUME: 4	,30			
Arrived at:				[0.163 x w	ater column	height (ft) x 3	(well volumes) for 2" wells]	
Initial PID =							(well volumes		
Bailing PID =							well volumes)		
				-					
TIME	VOL. PURGED (gal)	Diss. Oxygen (+/- 10%)	ORP (+/- 10 mV)	pH (+/- 0.1 pH units)	SPEC. COND. (ms/cm) [+/- 3%]	TEMP (°C)	TURB. (NTU) [<10 NTU]	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 1530	0.25	-	_	3.81	5,69	26.4	26,0	200()	15.72
1535	0.5.	-	1	3.81	5.79	25,2	20,4	200	15,74
1540	0,75	-	-	3.81	5.81	24,6	12.3	200	15.73
1545	1.0		-	3.81	5.82	243	7.80	200	15.74
1550	1.25	-	-	3.82	5.82	24,1	6.36	200	15.75
1600	1.75	_		3.82	5183	24,0	5115	200	15.75
1615	2.5	_	1	3.80	5.83	23.8	3.80	200	15:75
1625	3.0	-	(3.83	5181	23.8	5110	200	15:76
1635	3.5	_	-	3.82	5.78	23.9	2.38	200	15.76
16 45	4.0	-	-	3.82	the second division of	23.9	2,68	200	15,77
1650	4.25	-	~	3.83	5.76	24.0	2.41	200	15.77
1655		lect	Samp		0.74	CTIV	6.71	600	13.00
16 3	lou	eci	Samp	re					
NOTES:									
SAMPLE DATE: SAMPLE TIME:	7-22-15								
CONTAINER					ANALYTICAL				
SIZE/TYPE	NO.		RVATIVE		METHOD			LYSIS	
250 ML PE	1	HN	03				Pb		

GENERAL INFORMATION						
WEATHER:	Hot - Humid - Some Cu	ouds				
SHIPPED VIA:	Delivered to AES laboratory					
SHIPPED TO:	AES Laboratories, 3785 Presidential Parkway, Atlanta, GA 30340					
SAMPLER:	VER GUILLEN	OBSERVER:				

PROJECT NAME:	
Swift- Moultrie, GA	

FIELD SAMPLING REPORT

11.00

Project Number: 6122140220

PHONE: (770) 421-3400 / FAX: (770) 421-3406 SAMPLING EVENT: _1ST QUARTER 3RD QUARTER 3RD QUARTER 3RD QUARTER 3RD QUARTER 3RD QUARTER 4TH QUARTER MONITORING WELL TYPE: _Standard _ Compliance _ Background _ Extraction WELL DIAMETER _ 141 QUARTER WELL MATTER _ 200 QUARTER _ 3RD QUARTER 4TH QUARTER WELL DIAMETER: $2^{(1)}$ WELL DIAMETER: $2^{(1)}$ DUP.REP. OF:
SAMPLE METHOD: <u>PERISTACTIC</u> WELL DIAMETER: $2^{//}$ DUP/REP. OF:
Dorrate: OF Market Construction Market Construction Market Construction Market Construction INTARE Construction Total DEPTH: 1505 Market Construction Market Construction Top of Screened interval (btoc): 5.10 Total DEPTH: 1505 Market Construction 1172 1.1112 1.1
Top of Screened interval (btoc): $S.1/D$ WATER COLUMN HEIGHT: 7.0 $X_1/7 = 1/19 \times 3 = 3.5 T$ Screen length: 10^{-1} Screen length: 10^{-1} Arrived at:
Arrived at: [0.163 x water column height (ft) x 3 (well volumes) for 2" wells] Initial PID = [0.653 x water column height (ft) x 3 (well volumes) for 4" wells] Bailing PID = [1.47 x water column height (ft) x 3 (well volumes) for 6" wells] Bailing PID = [1.47 x water column height (ft) x 3 (well volumes) for 6" wells] TIME VOL. PURGED (gal) Diss. Oxygen (r+10%) ORP (+10 mV) pH (+10.1 mV) SPEC. COND. (ms/cm) (r+1 mV) Pump Rate ml/min. (& pump setting) New Water Level Initial: //15 Ø/25 - - 4/1/5 6/26 27.4 3/15 200 (-) 8/37 //120 Ø.5 - - 4/1/5 6/26 27.4 3/15 200 (-) 8/37 //120 Ø.5 - - 4/1/5 6/26 27.4 3/15 200 (-) 8/37 //120 Ø.5 - - 4/1/5 6/14 27.9 3/13 200 (-) 9/01 //125 0/175 - - 4/15 6/11 27.0 3/72 200 (-) 10/13 //130 1/.0 - - 4/15 6/
$\begin{array}{c c c c c c c c c c c c c c c c c c c $
$\begin{array}{c c c c c c c c c c c c c c c c c c c $
$\begin{array}{c c c c c c c c c c c c c c c c c c c $
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
1210 310 4153 4186 2714 12.9 200 \$12,62 1220 315 4118 5173 2714 7,84 200 1297
1220 3,5 4,18 5,73 27,4 7,84 200 1297
Image: Second
NOTES:
SAMPLE DATE: 9-23-15 SAMPLE TIME: 1225
CONTAINER ANALYTICAL SIZE/TYPE NO. PRESERVATIVE METHOD ANALYSIS
250MLPE 1 HND3 PB
GENERAL INFORMATION

WEATHER:	HOT - HUMID - Some	CLOUDS
SHIPPED VIA:	Delivered to AES laboratory	
SHIPPED TO:	AES Laboratories, 3785 Presidential Par	kway, Atlanta, GA 30340
SAMPLER: E	IER GUILLEN	OBSERVER:

PROJECT NAI Swift- Moultrie	rie, GA FIELD SAMPLING REPORT					l	Project Number: 6122140220			
				MEC, E&I						
		1075 BIG SHAN			(770) 421-3486	6A 30144				
SAMPLING EVENT										
MONITORING WEI	LL TYPE: St	andard Co	mpliance I	Background	d Extraction	n				
WELL ID: MG	V-16	50		9						
WELL MATERIAL:										
SAMPLE METHOD	PERISTA	CTIC				750				
nontro anno arco 🙀	Action			WELL DIA		-				
DUP./REP. OF:	TSIMSD			DEPTHIC	J WATER:	7160	GRAB (x) CO	MPOSITE ()		
INTAKE @ 17. Top of Screened in	5	3.56		TOTAL DI	EPTH: 18.	25	V 17-8	167 × 3 = 2	2.03	
Screen length:		1.1.1					X111-0	101 1 1 - 2		
							19 1050 1056 10			
Arrived at:							(well volumes			
Initial PID =	;			[0.653 x w	ater column	height (ft) x 3	(well volumes) for 4" wells]		
Bailing PID =				[1.47 x wa	iter column h	eight (ft) x 3 (well volumes)	for 6" wells]		
					SPEC. COND.			Pump Rate		
* 1859-19-19-19	VOL. PURGED		ORP (+/- 10	pH (+/- 0.1	(ms/cm) [+/-		TURB. (NTU)	ml/min. (& pump	New Water	
TIME	(gal)	(+/- 10%)	mV)	pH units)	3%]	TEMP (°C)	[<10 NTU]	setting)	Level	
Initial: 1150	0,25		1	4153	1.30	25,6	71000	200 ()	14.45	
1155	0,5		-	4,31	0,99	26.9	286	200	14.39	
1200	0:75		5	4,22	0.95	25.8	185	200	14,40	
1205	1,0		-	4,22		25.5	88.3	200	14,39	
1210	1.25		-	4.22	0.94	25,9	51.5	200		
1215	1150		1000 C	4.21		25,6			14,40	
1220	the second s				0.96		30,0	200	19.40	
	1.75	-		4.20		25,9	14.8	200	14,40	
1225	210	-	-	4,20	0.96	2516	8,22	200	14,41	
1230	Colle	ect	Samp	ple						
			/							
NOTER	6	2	6	00	2 0	+ 0 -	2 10.	it o	10 0	
NOTES:	JILTY P	SOTTOM -	- Surg	ed 31	urged	= 0,5	Sallons	after Con	lection	
	Jampe	ce.							U	
							10-161			
	Coll	ected	Ma -	16, M	W-16.	MS & M	10-161	MSD		
				1						
SAMPLE TIME:	1230									
CONTAINER					ANALYTICAL					
SIZE/TYPE	NO.	PRESE	RVATIVE		METHOD		ANA	ALYSIS		
250 ML PE	3	HNC	3				Pb			
		1140					1.4			

	GE	NERAL INFORMATION			
WEATHER:	HOT-HUMID-SOM	ECLOODS			
SHIPPED VIA:	Delivered to AES laboratory				
SHIPPED TO:	HPPED TO: AES Laboratories, 3785 Presidential Parkway, Atlanta, GA 30340				
SAMPLER: EV	ELGUICCEN	OBSERVER:			

PROJECT NAME:	
Swift- Moultrie, GA	

SHIPPED TO:

SAMPLER: EVEL

FIELD SAMPLING REPORT

Project Number: 6122140220

		Stational States and States of States		VEC, E&I					
					KENNESAW G	A 30144			
SAMPLING EVEN MONITORING WE	LL TYPE:St	RTER 2ND (UARTER	3RD QUAR	(770) 421-3486 TER4TH Q dExtraction	UARTER			
WELL ID: ML									
WELL MATERIAL:					-			54	
SAMPLE METHOD	: [EKIST	ACTIC				211			
DUP./REP. OF:	24.01			DEPTHIC		16,07	GRAB (x) CO	MPOSITE ()	
INTAKE C Top of Screened i	zoio	7.43		MATER C		-1'LO	1 V.17-	= 1,04 × 3	= 3,14
Screen length:		1113		PURGE V		14	<u>e _ </u>	- 110/1/ 5	
Arrived at:				[0.163 x w	ater column	height (ft) x 3	(well volumes) for 2" wells]	
Initial PID =				[0.653 x w	ater column l	height (ft) x 3	(well volumes) for 4" wells]	
Bailing PID =						11.5 M	well volumes)	8 352	
	1			T	1				
ТІМЕ	VOL. PURGED (gal)	Diss. Oxygen (+/- 10%)	ORP (+/- 10 mV)	pH (+/- 0.1 pH units)	SPEC. COND. (ms/cm) [+/- 3%]	TEMP (°C)	TURB. (NTU) [<10 NTU]	Pump Rate ml/min. (& pump setting)	New Water Level
Initial: 850	0.25	-		4.58	7,58	23.6	81.2	200 ()	16,51
855	0,5	-	-	4,59	7,60	2317	57,2	200	16,69
905	110	-		4,50	7159	2317	26.7	200	16,91
915	1.5			4159	7.64.	23,8	Q11.9	200	17,19
925	2,0	-	-	4.53	7.82	24,0	16.7	200	17.42
935	2.5	-	-	4.51	7.85	29,1	12.8	200	
945	3.0			4.50	7,86				17.83
950	3.25	-	-		7.87	24,1	21.3	200	18,12
				4151		24,6	17,2	200	18,38
955	315		-	9,51	7,86	2411	15,0	200	18.72
1000	3175			4151	7.85	24.1	17.0	200	19,09
1005	4.0	0 -	-	4,51	7.85	2411	17.9	200	19,31
1010	Colt	ect	Samp	ele					
NOTES:		TY WAS					SE. SAMP	ILE	
SAMPLE DATE:	9-23-15								
CONTAINER	12.12				ANALYTICAL				
SIZE/TYPE	NO.	DDESI	ERVATIVE		METHOD		411	AL VEIC	
250 ML PE	1	HNU	the second se		METHOD		a state of the second se	ALYSIS	
							Pb	Pres	F. SEDED
250 ML PE	C	HNU	12			DISOL	VED PB	(FIECD)	FILTERED
			GENERA	L INFORMA	ATION				
WEATHER:	HOT-	HUMID .	- CLOU	DY					
SHIPPED VIA:	Delivered to AE	Contraction of the second							

OBSERVER:

AES Laboratories, 3785 Presidential Parkway, Atlanta, GA 30340

GUILLEN

PROJECT NA <u>Swift- Moultrie</u>		FIE	LD SAM	PLING	REPORT		Projec	t Number: 6122	140220
SAMPLING EVEN MONITORING WE	LL TYPE: St	RTER2ND G	ITY ROAD NW E: (770) 421-3 QUARTER	400 / FAX: 3RD QUAR	(770) 421-3486 TER4TH G	UARTER			
WELL ID: <u>MW</u> WELL MATERIAL:									
SAMPLE METHOD	perstalter	and the	•			. 10			
DUP./REP. OF:	•				CDTU. 127		GRAB (x) CO		
Top of Screened i	nterval (btoc):_			WATER C	OLUMN HEIG	внт: <u> <i>С. С</i> </u>	<u>06 X 0.16</u>	3×3-	
Screen length:				PURGE V	OLUME: 2.	1 <u>C</u>			
Arrived at: 10C	0			[0.163 x v	vater column	height (ft) x 3	(well volumes) for 2" wells]	
Initial PID =				[0.653 x w	vater column	height (ft) x 3	(well volumes) for 4" wells]	
Bailing PID =				[1.47 x wa	ater column h	eight (ft) x 3 (well volumes)	for 6" wells]	
	VOL. PURGED	Diss. Oxygen	ORP (+/- 10	pH (+/- 0.1	SPEC. COND. (ms/cm) [+/-		TURB. (NTU)	Pump Rate ml/min. (& pump	New Water
TIME	(gal)	(+/- 10%)	mV)	pH units)	3%]	TEMP (°C)	[<10 NTU]	setting)	Level
Initial: 1020		NA	NA-	5:54	0.23	28.2	78.5	200 (m)(m))	4.67
1030	.50	NA	NA	5.53	0.23	27.7	15.4	200	10.15
1040	1.00	MA-	N.A.	5.49	0.23	24.1	775	150	10 45
1057	1.50	NA	MA	5.50	0.23	28.3	73.3	150	16-40
1104	5.00	11A	NA-	5.46	12-22	28.2	63-7	150	11.65
<u> </u>	2.50	1/A	NA	5.46	0,21	28.7	45.7	150	0.32
1124	3.00	N/A-	MA	5.45	0.21	29.6	46.4	150	17.70
11 \$40	3.50	AVA-	WA	5.46	0.21	24.3	51-3	150	12.80
1143	Sano	la the	mu.	1-26	2			······································	
·····								·	
NOTES:	TUbles	Mater -		13.00	2		· ·····		
			· · · · · · · · · · · · · · · · · · ·						
SAMPLE DATE:	1/22//5	•							
CONTAINER					ANALYTICAL				
SIZE/TYPE	NO.	PRESE	RVATIVE		METHOD	·	ANA		
250 m/poly		+N03				Lead			
250 m/ 10/4		+N03				Alsolu	d Lord		
						V			
			,		1				
			0-1-1	NEODI					
	A HUC			L INFORM	ATION				

WEATHER:	Pointly Cloudy Het
SHIPPED VIA:	Delivered to AES laboratory
SHIPPED TO:	AES Laboratories, 3785 Presidential Parkway, Atlanta, GA 30340
SAMPLER:	Maril A. OBSERVER:

PROJECT N <u>Swift- Moultr</u>			FIE			REPORT	Г	Projec	t Number: 6122	2140220
			1075 BIG SHAN		MEC, E&I V SUITE 100	KENNESAW	A 30144			
						(770) 421-3486				
SAMPLING EVEN MONITORING W WELL ID:	ELL TYPE:	:St	RTER2ND (UARTER	3RD QUAF	RTER 4TH	QUARTER			
WELL MATERIA		410								
SAMPLE METHO		1 500	Aur				11			
	·					AMETER:	2			
DUP./REP. OF:					TOTAL D	0 WATER:	40	GRAB (x) CO		
Top of Screened	l interval (b	toc):_			WATER C	COLUMN HEI	знт: <u>63</u> ,	73× 163	E	
Screen length:	<u> </u>				PURGE V	OLUME: <u>//</u>	7.39 541			
Arrived at: 07	NO_				[0.163 x v	vater column	height (ft) x 3	(well volumes) for 2" wells]	
Initial PID =								(well volumes		
Bailing PID =								well volumes)		
								wen volumes)		1
	VOL. PU	RGED	Diss. Oxygen	ORP (+/- 10	pH (+/- 0.1	SPEC. COND (ms/cm) [+/-		TURB. (NTU)	Pump Rate	New W-r
TIME	(ga		(+/- 10%)	mV)	pH units)	3%]	TEMP (°C)	[<10 NTU]	ml/min. (& pump setting)	New Water Level
Initial: 077 ()			NA	N/A-	576	1 _1	122 11	5)1,000		
man 1	1.4	20	/# <i>I</i> T		5.01	1.21	100 -		<u>600 ()</u>	34.00
0726		~			1.1.	1.78	22-7	47.5	600	35.35
-0734		$\frac{D}{2}$			7.90	2.22	10,20,9	15.5	500	34.50
0742	3.0				4.83	2.24	23.1	21.4	500	34.50
0950	4.00				4.84	2.24	23.2	5.64	500	34.48
0958	50	$\underline{0}$			4.78	2.26	23.6	3.42	500	34.48
1005	6.00	2			4.83	2.211	23.8	9.12	500	24.44
1014	2.0	Ò			4.86	2.54	23.9	6.37	500	34.44
1022	\$.00)			4.92	1 1 2	24.0	9-21	500	34.48
1030	9.0	0			4.90	2 21	24.0	8.71	500	34.50
1034	10.0				4.417	2 23	24.0	5.56	500	34.50
1047	10.5				4.90	10 26	211.2	2 911	500	
		_			F.10	2.20	0.4.2	3.14		3650
1045	50-	np/	· Haro	Mu	-270	DADO				
	_									
NOTER				71 0				· · · · · · · · · · · · · · · · · · ·		
NOTES:	P00		ntano z	71.00	<u> </u>					
								·		
			······				·			
	1, ,			·····						
SAMPLE DATE:	1. 1.0	15								
SAMPLE TIME:	1045						·			
CONTAINER						ANALYTICAL				
SIZE/TYPE	NO.		PRESE	RVATIVE		METHOD		ANA	ALYSIS	
							BANK	um		
								····		
	l									
				GENERA	L INFORM	TION				
	1									

WEATHER:		
SHIPPED VIA:	Delivered to AES laboratory	
SHIPPED TO:	AES Laboratories, 3785 Presidential Parkway, Atla	nta, GA 30340
SAMPLER:	narh A	OBSERVER:

PROJECT NAME: Swift- Moultrie, GA

FIELD SAMPLING REPORT

			AM	MEC, E&I										
		1075 BIG SHAN				A 30144								
CAMPLING EVENT					(770) 421-3486	ULAPTER								
SAMPLING EVENT MONITORING WEL WELL ID: <u>Ma</u> WELL MATERIAL: SAMPLE METHOD	L TYPE: _Sta	andard <u>Co</u> r		3ackgroun	dExtraction	n								
DUP./REP. OF:				DEPTH TO	METER: 2	13,05	GRAB (x) CO	MPOSITE ()						
INTAKE C Top of Screened in	nterval (btoc):	10:36		WATER C		HT: 7.60	× 17	=1.39 ×3=	3.87					
Screen length:/				PURGE VOLUME: 3,87										
Arrived at:				[0.163 x water column height (ft) x 3 (well volumes) for 2" wells]										
Initial PID =				[0.653 x water column height (ft) x 3 (well volumes) for 4" wells]										
Bailing PID =				[1.47 x wa	ter column h	eight (ft) x 3 (well volumes)	for 6" wells]						
ТІМЕ	VOL. PURGED (gal)	Diss. Oxygen (+/- 10%)	ORP (+/- 10 mV)	pH (+/- 0.1 pH units)	SPEC. COND. (ms/cm) [+/- 3%]	TEMP (°C)	TURB. (NTU) [<10 NTU]	Pump Rate ml/min. (& pump setting)	New Water Level					
Initial: 1515	0,25	-	-	4.26	0.42	2516	5.69	()	13.56					
1520	0.5	~		4,16			6,63		13,74					
1530	1.0	-	-	4.12	0139	26.3	3,28		13,96					
1540	1.5	_		4.09	0.39	26.3	1.44		14,18					
1550	210	-	_	4,08	0,40	26,1	0,73							
1600	2.5	_	-	4.07	0.40	26.0	0,81		14,40					
1610	3,0	-	_	4109	0,40	25.9	0,65		14,64					
16 20	3.5		_	4.08		25.9	And and a sub-							
1625	3.75	-	-	4.08	0,40	25.9	0.94		15,19					
1630	4.0	_	_	4.07	0,40	25.7	1.61	15:3	NG CONST					
		0 ×	5		0190	6317	0.81		1547					
1635	Call	let	Sam	file	1									
NOTES:														
SAMPLE DATE: SAMPLE TIME:	1635													
CONTAINER SIZE/TYPE	NO.		RVATIVE		ANALYTICAL METHOD		ANA	ALYSIS						
250 ML PE	1	HN03				РЬ								

	GENER	AL INFORMATION	
WEATHER:	HOT-HUMID - Cloudy	iy .	
SHIPPED VIA:	Delivered to AES laboratory		
SHIPPED TO:	AES Laboratories, 3785 Presidential Pa	arkway, Atlanta, GA 30340	
SAMPLER: E	VER GUILLEN	OBSERVER:	

PROJECT NAME: Swift- Moultrie, GA

SHIPPED TO: SAMPLER:

Mark

4

FIELD SAMPLING REPORT

AMEC, E&I 1075 BIG SHANTY ROAD NW, SUITE 100 KENNESAW GA 30144

		PHON	IE: (770) 421-3	400 / FAX:	(770) 421-3486							
SAMPLING EVEN												
MONITORING WE	LL TYPE:St	andard <u> </u>	mplianceE	Backgroun	dExtractio	n						
WELL ID: /////												
SAMPLE METHO	peristal	42 Dune										
	·			WELL DI	AMETER:	1/						
DUP./REP. OF:				DEPTH T	O WATER:	2.23	GRAB (x) CO	MPOSITE ()				
				TOTAL D	EPTH: 21.	35						
Top of Screened i	nterval (btoc):	······		WATER C	OLUMN HEIG	ынт: у/ _	X.163X	3				
Screen length:				PURGE V	OLUME: <u>4</u>	166						
Arrived at: 13	34						(well volumes) for 2" wells]				
Initial PID =												
Bailing PID =						eight (ft) x 3 (well volumes) for 4" wells] ight (ft) x 3 (well volumes) for 6" wells]						
	<u> </u>	Τ							T1			
									1			
	VOL. PURGED	Diss. Oxygen	ORP (+/- 10	pH (+/- 0.1	SPEC. COND. (ms/cm) [+/-		TURB. (NTU)	Pump Rate				
TIME	(gal)	(+/- 10%)	mV)	pH units)	3%]	TEMP (°C)	[<10 NTU]	ml/min. (& pump setting)	New Water Level			
Initial: 1343		hin-	h(n_	11/17	0,65	24.4		(3)				
12572	, 50	- NOT	J	4,43	6.1	- C- L	4.03	200()	12.65			
	· · · · · · · · · · · · · · · · · · ·		·	4.27	0.64	26.6	2.44	200	12.90			
17403	1.00			4.31	0.63	26.7	1.75	200	12-90			
1413	1.50			4.24	0.61	27.(1.60	200	12.90			
1423	2.00			4.23	0-61	27.2	0.72	200	12,90			
1433	2.50			4.19	041	27.2	0-71	200	12.90			
11/43	3.00			4.19	062	27.7	0.60	200	12 90			
1453	3.507			11.18	0.62	ファイ	0.54	200	12.50			
15-193	14 012			119	0,62	071	0.20	200	12.90			
1-12	41 0-17			4,14	10 10	271	0.66		10 11			
	7.50			711	0.62	201	0.06	200	12.90			
	Shaf	10 4/2	P Mu	2	<u>}</u>			·				
+ > + > >	- Cap	<u> 77</u> A	P //4									
NOTES:												
								······································				
								······································				
									a characteristic construction			
SAMPLE DATE:	7/23/15	~						······				
SAMPLE TIME:	1.535											
CONTAINER					ANALYTICAL							
SIZE/TYPE	NO.	PRESE	RVATIVE		METHOD		A.N./	LYSIS				
					marriod		ANA					
			······				······································	· · · · · · · · · · · · · · · · · · ·				
	L											
		<u> </u>	GENERAL	_ INFORMA	ATION							
WEATHER:	cloud "	1 He	·	-								
SHIPPED VIA:	Delivered to AE	S laboratory										

OBSERVER:

AES Laboratories, 3785 Presidential Parkway, Atlanta, GA 30340

APPENDIX B SourceDK Modeling Results

Site Location and LD: Swift NW-1 (Don't enter any data) Constituent of Interest: Barium and Lead 3. OUTPUT GRAPH Image: Constituent A constituent B constituent C	
Date (m)(dy) Concentration mg/L Dissolved BARIUM CONCENTRATION (mg/L) 1 8/30/2001 0.05 0.05 0.01 0.02 0.05 0.01 0.02 0.05 0.01 0.02 0.025 0.02 0.025 0.01 0.005 0.02 0.005 0.01 0.005 0.	
Date Concentration mg/L Dissolved BARIUM CONCENTRATION (mg/L) 1 Barium Lead Image: Constituent A Constituent B Constituent C Constituent D 1 Barium Lead Image: Constituent A Constituent C Consti	
Date (mm/dd/yy) Constituent A Constituent B Constituent C Constituent D 1 8/30/2001 0.05 0.05 1	
(mm/ddyy) Barium Lead 1 8/302001 0.05 0.05 0.01 2 9/62001 0.05 0.01 1.00E+01 R2=0.1715 3 12/182001 0.33 0.005 1.00E+01 1.00E+00 5 9/232015 0.191 0.077 1.00E+01 1.00E+01 6 1.00E+01 1.00E+02 1.00E+03 1.00E+03 7 1.00E+04 1.00E+03 1.00E+04 1.00E+04 9 1.00E+04 1.00E+04 1.00E+04 1.00E+04 12 1.00E+04 1.00E+04 1.00E+04 1.00E+03 13 1.00E+04 1.00E+04 1.00E+04 1.00E+04 14 14 1.00E+04 1.00E+04 1.00E+04 1.00E+04 15 1.00E+05 8/2001 6/2004 4/2007 2/2010 11/2012 What is the cleanup level? What is the cleanup level? What is the cleanup level? Predicted Date to Achieve Cleanup: Can't Calc (Calc (C	
1 8/30/2001 0.05 0.05 0.01 2 9/6/2001 0.03 0.005 0.01 3 12/18/2001 0.33 0.005 0.01 4 13/13/2003 0.042 0.005 0.01 7 1.00E+00 1.00E-01 0 8 1.00E-01 0 0 9 1.00E-02 0 0 11 1.00E-02 0 0 12 1.00E-03 0 0 13 1.00E-04 1.00E-03 0 14 1.00E-05 8/2001 6/2004 4/2007 2/2010 11/2012 13 1 1.00E-05 8/2001 6/2004 4/2007 2/2010 11/2012 What is the cleanup level? What is the cleanup level? What is the cleanup level? Print Historical Data What is the cleanup level? Predicted Date to Achieve Cleanup: Can't Calc (
2 9/6/2001 0.05 0.01 3 12/18/2001 0.33 0.005 4 12/18/2001 0.033 0.005 9/23/2015 0.191 0.077 1.00E-01 6 1.00E-02 1.00E-02 7 1.00E-04 1.00E-04 11 1.00E-04 1.00E-04 12 1.00E-05 1.00E-04 13 1.00E-05 8/2001 6/2004 4/2007 2/2010 11/2012 Whith is the cleanup level? What is the cleanup level? What is the cleanup level? Predicted Date to Achieve Cleanup: Can't Cate (
3 12/182001 0.33 0.005 1.00E+00 4 1/31/2003 0.042 0.005 1.00E+00 5 9/23/2015 0.191 0.077 1.00E+00 6 1 1.00E-01 1.00E-02 8 1 1.00E-03 1.00E-04 9 1 1.00E-04 1.00E-04 11 1 1.00E-05 8/2001 6/2004 4/2007 2/2010 11/2012 13 1 1.00E-05 8/2001 6/2004 4/2007 2/2010 11/2012 What is the cleanup level? What is the cleanup level? Predicted Date to Achieve Cleanup: Can't Calc (
12 13 14 1.00E-05	
12 13 14 1.00E-05	
12 13 14 1.00E-05	
12 13 14 1.00E-05	
12 13 14 1.00E-05	
12 13 14 1.00E-05	
12 13 14 1.00E-05	
13 13 14 1.00E-05	
14 15 8/2001 6/2004 4/2007 2/2010 11/2012 2. WHICH CONSTITUENT TO PLOT? Print Historical Data Number of Years Over Which to Plot Graph (yr) Update Graph What is the cleanup level? Image: Can't Calc (Can't Calc	
Image: Second state is the cleanup level? Time (day) Image: Second state is the cleanup level? Number of Years Over Which to Plot Graph (yr) Update Graph Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level? Image: Second state is the cleanup level?<	9/2015
2. WHICH CONSTITUENT TO PLOT? Print Historical Data What is the cleanup level? Number of Years Over Which to Plot Graph (yr) Update Graph Predicted Date to Achieve Cleanup:	0/2010
2. WHICH CONSTITUENT TO PLOT? What is the cleanup level? Barium 2 (mg/L)	
Predicted Date to Achieve Cleanup: Can't Calc (-	
Predicted Date to Achieve Cleanup: Can't Calc (-	
Barium 2 (mg/L)	
	e Trend)
Confidence Interval on Predicted Cleanup Date: 90 % Confidence Interval	
(at least 3 data points needed to calculate confidence intervals)	
O Lead 0.015 (mg/L)	
2001 to Can't Calc (- (Lower Limit on Confidence Interval) (Upper Limit on Con	
O Constituent C (mg/L)	Jence Interval)
Source Decay Rate Constant (1/year):	02
(positive numbers represent shrinking plumes while negative numbers represent expanding plumes)	
O Constituent D (mg/L)	
Return To Main Screen New Site/Clear Screen Paste Example Data	IELP
Return To Main Screen New Site/Clear Screen Set	

Air Fo Site L		er for Environment and I.D.:	ecision Suppo		D		_	Empirical Data	
_			E AND HISTORIC				3	3. OUTPUT GRAPH	
	Date	Constituent A	Constituent B	Constituent C	Constituent D			DISSOLVED LEAD CONCENTRATION (mg/L)	
	n/dd/yy)	Barium	Lead	Constituent C	Constituent D				
								1.00E+00	<u> </u>
	0/2001	0.05	0.05			•		R ² = 0.4129	
	/2001 8/2001	0.05 0.33	0.01 0.005					1 .00E-01	
	8/2001 1/2003	0.33	0.005					1.00E-01 1.00E-02 1.00E-03 1.00E-04	
	3/2015	0.191	0.077						_
6								5 1.00E-02	
7								aiti	
8								1.00E-03	
10									
11								5 1.00E-04	- 1
12								0	
13								1.00E-05	
14 15						Ŧ			2015
								Time (day)	
				Print I	Historical Data				
2. Wł		STITUENT TO P	LOT?				Nur	Number of Years Over Which to Plot Graph Update Graph	
									_
			Wha	at is the cleanup le	vel?		4.	4. RESULTS	
	-				_			Predicted Date to Achieve Cleanup: Can't Calc (+ve Trend)	
	0	Barium		2	(mg/L)			Confidence Interval on Predicted Cleanup Date:	
	\odot	Lead		0.015	(mg/L)			(at least 3 data points needed to calculate confidence intervals) O 95 % Confidence Interval	
	-							2001 to Can't Calc (+ve Trend)	
	~							(Lower Limit on Confidence Interval) (Upper Limit on Confidence Interval)	al)
	0	Constituent C			(mg/L)				
								Source Decay Rate Constant (1/year): -1.36E-01	
	0	Constituent D			(mg/L)				
								Return To Main Screen New Site/Clear Screen Paste Example Data	
								Return To Wain Screen Set	

		n Timeframe D er for Environment and I.D.:	Timeframe De or Environmenta d I.D.:	ecision Suppo				Data Input Instructions: 10.80 — Enter value directly. Value calculated by model. (Don't enter any data).	
Date Concentration mg/L Date Constituent A Constituent B Constituent C 1 Britum Lead Constituent A Constituent C 1 Britum Lead Constituent A Constituent B Constituent C 1 Britum Lead Constituent A Constituent C Constituent C 1 Britum Lead Constituent A Constituent C Constituent C 1 Britum Constituent A Constituent C Constituent C Constituent C 1 Britum Constituent A Constituent A Constituent C Constituent C Constituent C 1 Discource Constituent A Constituent C Constituent C Constituent C Constituent C 1 Discource Constituent C Constituent C </td <td>1. ENTER CO</td> <td>NSTITUENT NAM</td> <td></td> <td>E AND HISTORIC</td> <td>AL DATA</td> <td></td> <td></td> <td>3. OUTPUT GRAPH</td>	1. ENTER CO	NSTITUENT NAM		E AND HISTORIC	AL DATA			3. OUTPUT GRAPH	
Date (mm/ddyy) Constituent A Lead Constituent D Constituent A Constituent C Constituent D (mg/L) 1 Barium Lead Constituent D Constituent D Constituent D 1 Barium Lead Constituent D Constituent D Constituent D 1 9/62001 2.1 0.27 Constituent D Constituent D 3 12/182001 5.3 0.55 Constituent A Constituent D 4 3/302012 0.0746 0.001 Constituent A Constituent D 9/9/22013 0.42 0.0534 Constituent A Constituent D Constituent A Constituent A 10 Constituent A Constituent A Constituent A Constituent A Constituent A Constituent A 9/9/22013 0.44 0.132 Constituent A Constituen							1		
(mm/ddlyy) Barium Lead 1 8/30/2001 2 0.19 2 9/6/2001 2.1 0.27 3/12/18/2001 5.3 0.55 1 4 3/30/2012 0.0746 0.001 1 5 9/27/2012 0.296 0.0322 1 1.00E+00 5 9/27/2012 0.296 0.0322 1 1.00E+01 9 9/232/2015 0.449 0.132 1 1 1 0 10 11 1 1 1 0 1 0 0 11 1 1 1 1 0 1 0 0 0 11 1 1 1 1 0 1 0	Date	Constituent A	Constituent A			Constituent D	-		
1 8/30/2001 2 0.19 R* = 0.2187 1 1/2/18/2001 5.3 0.55 1 4 3/30/2012 0.0746 0.001 1 5 9/27/2013 0.296 0.0322 1 6 3/27/2013 0.42 0.0554 9 9 9/23/2015 0.449 0.132 1 10 1 1 1 0 9 11 1 1 1 1 0 12 1 1 1 0 9 9 9/23/2015 0.449 0.132 1 1 0 11 1 1 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 1 </td <td>(mm/dd/yy)</td> <td>Barium</td> <td>Barium</td> <td></td> <td></td> <td></td> <td>1</td> <td>Cleanup Lavel</td>	(mm/dd/yy)	Barium	Barium				1	Cleanup Lavel	
2 9482001 2.1 0.27 3 12/182001 5.3 0.55 4 3302012 0.0746 0.001 5 9272012 0.296 0.0322 6 32727013 0.039 0.001 7 9/102013 0.42 0.0534 9 9232015 0.449 0.132 10 10 1.00E-02 11 10 1.00E-03 12 1.00E-04 4/2007 13 1 1.00E-04 14 1 1.00E-02 15 1.00E-04 1.00E-02 10 1.00E-04 1.00E-04 11 1 1.00E-04 12 1 1.00E-04 13 1 1.00E-04 14 1 1.00E-04 15 What is the cleanup level? What is the cleanup level? What is the cleanup level? What is the cleanup level? 0 9 % Confidence Interval (at least 3 data points needed to calculate confidence interval) 0 1.0015 (mg/L) 2001 0 9 % % Confidence Interval					1	T	_	1.00E+02	
3 12/18/2001 5.3 0.55 4 3/30/2012 0.0746 0.001 9 9/27/2013 0.039 0.001 7 9/10/2013 0.42 0.0534 9 9/23/2014 10.3 1.16 10 1 1 1 11 1 1 1 12 1 1 1 13 1 1 1 14 1 1 1 15 1 1 1 14 1 1 1 15 1 1 1 What is the cleanup level? What is the cleanup level? 1 14 1 1 1 15 1 1 1 1 What is the cleanup level? @ Barium 2 (mg/L) 2 (mg/L) 2002 Confidence Interval on Predicted Cleanup: 2002 0 % % confidence Interval Q 1 (a Bead 0.015 (mg/L) 201 10 <td colspan<<="" td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>^</td><td></td></td>	<td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>^</td> <td></td>							^	
12 13 10 100<									
12 13 10 100<								2 1.00E+00	
12 13 1000000000000000000000000000000000000		0.296	0.296						
12 13 1000000000000000000000000000000000000								<u>6</u> 1.00E-01	
12 13 10 100E-05 100E-05 100E-05 11/2012 15 100E-05 8/2001 6/2004 4/2007 2/2010 11/2012 Print Historical Data What is the cleanup level? What is the cleanup level? Image: State of the cleanup level level								1 00E-02	
12 13 1.00E-05 1.00E-05 8/2001 6/2004 4/2007 2/2010 11/2012 1 1.00E-05 8/2001 6/2004 4/2007 2/2010 11/2012 Which constituent to Plot? What is the cleanup level? What is the cleanup level? Image: Colspan="2">Output to Confidence Interval Image: Colspan="2">Confidence Interval Image: Colspan="2">Confidence Interval Image: Colspan="2">Confidence Interval Image: Colspan="2">Output to Confidence Interval Image: Colspan="2">Confidence Interval Image: Colspan="2">Output to Confidence Interval Image: Colspan="2">Output to Confidence Interval				-					
12 13 10 100E-05 100E-05 100E-05 11/2012 15 100E-05 8/2001 6/2004 4/2007 2/2010 11/2012 Print Historical Data What is the cleanup level? What is the cleanup level? Image: State of the cleanup level level		0.770	0.440	0.102				9 1.00E-03	
12 13 1.00E-05 1.00E-05 8/2001 6/2004 4/2007 2/2010 11/2012 1 1.00E-05 8/2001 6/2004 4/2007 2/2010 11/2012 Which constituent to Plot? What is the cleanup level? What is the cleanup level? Image: Colspan="2">Output to Confidence Interval Image: Colspan="2">Confidence Interval Image: Colspan="2">Confidence Interval Image: Colspan="2">Confidence Interval Image: Colspan="2">Output to Confidence Interval Image: Colspan="2">Confidence Interval Image: Colspan="2">Output to Confidence Interval Image: Colspan="2">Output to Confidence Interval	11								
14 1.00E-05 15 Print Historical Data Print Historical Data Number of Years Over Which to Plot Graph What is the cleanup level? What is the cleanup level? Image: Barium 2(mg/L) Image: Lead 0.015 (mg/L) Image: Lead 0.015 (mg/L)								0 1.00E-04	
11 11 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1.00E-05</td></td<>								1.00E-05	
Print Historical Data Time (day) 2. WHICH CONSTITUENT TO PLOT? Print Historical Data What is the cleanup level? What is the cleanup level? Image: Barium 2 (mg/L) Image: Lead 0.015 (mg/L) Image: Lead 0.015 (mg/L) Image: Lead 0.015 (mg/L)							•		
2. WHICH CONSTITUENT TO PLOT? What is the cleanup level? What is the cleanup level? What is the cleanup level? Image: Barium 2(mg/L) Image: Lead 0.015 (mg/L)								Time (day)	
What is the cleanup level? Image: Barium 2 (mg/L) Lead 0.015 (mg/L)					Print I	Historical Data			
Image: Barium 2 (mg/L) Predicted Date to Achieve Cleanup: 2002 Image: Confidence Interval 0.015 (mg/L) Image: Confidence Interval on Predicted Cleanup Date: Image: Optimized on Pre	2. WHICH CO	NSTITUENT TO P	TITUENT TO PL	LOT?				Number of Years Over Which to Plot Graph	
Image: Barium 2 (mg/L) Predicted Date to Achieve Cleanup: 2002 Image: Confidence Interval 0.015 (mg/L) Image: Confidence Interval on Predicted Cleanup Date: Image: Optimized on Pre									
Image: Barium 2 (mg/L) Image: Description of the construction of t				Wh	at is the cleanup le	vel?		4. RESULTS	
Confidence Interval on Predicted Cleanup Date: 90% Confidence Interval (at least 3 data points needed to calculate confidence intervals) 95% Confidence Interval	~					-		Predicted Date to Achieve Cleanup: 2002	
O Lead 0.015 (mg/L) (at least 3 data points needed to calculate confidence intervals) 0.95 % Confidence Interval 2001 to Can't Calc (+v)	۲	Barium	arium		2	(mg/L)		Our fisherer lateral an Davisted Olegan Date:	
O Lead 0.015 (mg/L) 2001 to Can't Calc (+v									
2001 to Can't Calc (+v	0	Lead	ad		0.015	(ma/L)		U 95 % Contidence Interval	
	Ŭ				0.010			2001 to Can't Calc (+ve Trend)	
	-					-		(Lower Limit on Confidence Interval) (Upper Limit on Confidence Interval)	
O Constituent C (mg/L)	0	Constituent C	onstituent C			(mg/L)			
Source Decay Rate Constant (1/year): 1.45E-0 (positive numbers represent shrinking plumes while negative numbers represent expanding plumes)									
O Constituent D (mg/L)	0	Constituent D	onstituent D			(ma/L)			
	_					1 3 -7			
Return To Main Screen New Site/Clear Screen Paste Example Data									
Return To Main Screen Set								Set Set	

	I.D.:	al Excellence Swift MW-6 Barium and Lead	rt System	D	ion 1	1.1	Empiri	cal Dat	ta	10.80 10.80	Val	nter value directly. Sue calculated by moc on't enter any data).	el.	
Constituent of Inte					- r					_	_		_	
1. ENTER CONST	ITUENT NAME					3. C	OUTPUT GRAPH							
			tration mg/L v					C	DISSOLVE		CONCENTRA	TION		
Date Co (mm/dd/yy)	onstituent A Barium	Constituent B	Constituent C	Constituent D						(៣ը				
(mm/dd/yy)	Dariulli	Leau					1.00E+01			Cleanup L	_evel			
1 8/30/2001	2	0.19					1.002.101					R ² = 0.1389		
2 9/6/2001	2.1	0.27					- 1.00E+00							
3 12/18/2001	5.3	0.55					1.00E+00 1.00E-01 1.00E-02 1.00E-03 1.00E-04							
4 <u>3/30/2012</u> 5 <u>9/27/2012</u>	0.0746 0.296	0.001 0.0322					Ĕ 1.00E-01						_	
6 3/27/2013	0.230	0.0322					L.							
7 9/10/2013	0.42	0.0534					1.00E-02							
8 9/25/2014	10.3	1.16					htra							
9 9/23/2015	0.449	0.132					່ອີ 1.00E-03							
10 11														
12							හ 1.00E-04							
13														
14							1.00E-05 8/2	001 6/2	2004	4/20	07 0	/2010 11	/2012	9/201
15					-		0/2	001 0/2	2004	4/20	Time (day)		2012	9/201
			Drint I	Historical Data							Time (day)			
2. WHICH CONST		012	Print	HISTORICAI Data		Num	mber of Years Over Wi	aich to Plot Granh				(vr) Update	Graph	
2. Which consti	II ULNI IU FI	-011			╎┟	INUIT		lich to Plot Graph			1	ייע) ייד		
		Wha	at is the cleanup le	vel?		4. R	RESULTS							
						F	Predicted Date to Achi	eve Cleanup:					2018	
🔾 🛛 Bari	ium		2	(mg/L)							~			
							Confidence Interval or				-	Confidence Interval		
Eea	d	1	0.015	(mg/L)		(;	(at least 3 data points neede	ed to calculate confider	nce intervals))	O 95 %	Confidence Interval		
e Lea	iu .	l	0.015	((iig/L)						20	01	to Can't	Calc (+ve Tr	end)
									(Lowe		onfidence Interval)		on Confidence	
O Con	nstituent C			(mg/L)										
							Source Decay Rate Co		o pogetive	mbore	oont ovner die er d		1.56E-01	
O Con	nstituent D	l l l l l l l l l l l l l l l l l l l		(mg/L)		((positive numbers represent	sminking plumes while	e negative hu	impers repre	sent expanding plu	umes)		
C 001		l		(('''9' L)										
							Return To Main So		New Site/	Claar Sar	Paste	e Example Data	HEL	
							Return To Main So		Sile/	orear SUIE		Set		<u>. </u>

	n Timeframe D er for Environment and I.D.:			Vers	sior	1.1		T I E mpiri	R cal	Dat	1 a	Data Inj 10.80 10.80	Val	ter value ue calcula	directly. ated by mod any data).	əl.	
1. ENTER CO	NSTITUENT NAM	E AND HISTORIC	AL DATA			3.	. OUTP	UT GRAPH									
		Concer	ntration mg/L 🔻							DIS	SOLVE	D BARIU		ATION			
Date	Constituent A	Constituent B	Constituent C	Constituent D								(m	ng/L)				
(mm/dd/yy)	Barium	Lead			1			1.005.00				Cleanup	Level				
1 12/18/2001	13	0.32		[1.00E+02						R ² :	= 0.8134		
2 3/30/2012	0.577	0.026					~	1.00E+01							- 0.0101		
3 9/28/2012	0.384	0.00666					Concentration (mg/L)										
4 <u>3/27/2013</u> 5 <u>9/11/2013</u>	0.127 0.216	0.001 0.001			-		Ē	1.00E+00									
6 9/23/2014	0.315	0.00913					G	1.00E-01								••	
7 9/22/2015	0.493	0.00995					atio	1 005 02									
8					-		ntr	1.00E-02									
10							JCe	1.00E-03									
11							ğ	1.00E-04									
12							U	1.00E-04									
13 14								1.00E-05	 	1 1							
15					•			12/2	2001	9/2	004	6/2		/2010	12/	2012	9/20
					00000								Time (day)				
			Print I	Historical Data											Update 0	rooh	
2. WHICH CO	NSTITUENT TO P	LOT?				N	umber o	of Years Over WI	nich to Plo	ot Graph				(yr)	Opdate	sraph	
		Wh	at is the cleanup le	vel?		4	RESU	LTS									
			·····,···,					cted Date to Achi	eve Clea	nup:						2007	
۲	Barium		2	(mg/L)									_				
								dence Interval or					• 90 %	Confidenc	ce Interval		
0	Lead		0.015	(mg/L)			(at leas	t 3 data points neede	a to calcula	ate confidence	ce intervals	5)	O 95 %	Confidence	ce Interval		
	Loud		0.013	I(9/ L)								2	002	to		2020	
				-							(Lov	ver Limit on	Confidence Interval)		(Upper Limit	on Confidence	Interval)
0	Constituent C			(mg/L)			Source	e Decay Rate Co	onetant (1	(voar):						2.94E-01	
								e numbers represent	· ·		negative r	umbers rep	resent expanding pl	umes)		2.946-01	
0	Constituent D			(mg/L)													
													Dest	-			
							Re	eturn To Main Se	creen	N	lew Site	/Clear Sc	reen	Examp	le Data	HEL	.P 📕
										-71-							

	on Timeframe D ter for Environment	Decision Suppo tal Excellence		Vers	_	_	TIE Empiric	R t al Dat	10. a	Va	1s: nter value directly. Ilue calculated by moo on't enter any data).	lel.
Constituent o	f Interest:	Barium and Lead			_							
1. ENTER CO	NSTITUENT NAM	IE AND HISTORIC	AL DATA			3. OUTE	PUT GRAPH					
		Concer	ntration mg/L 🔻					DI			TION	
Date	Constituent A	Constituent B	Constituent C	Constituent D						(mg/L)		
(mm/dd/yy)	Barium	Lead					4 0 0 - 0 0		Clea	nup Level		
1 12/18/2001	13	0.32				-	1.00E+00				R ² = 0.5829	
2 3/30/2012	0.577	0.026			-						R-= 0.3629	
3 9/28/2012	0.384	0.00666					ີ 1.00E-01					
4 3/27/2013	0.127	0.001										
5 9/11/2013	0.216	0.001					1.00E-02					
6 <u>9/23/2014</u> 7 <u>9/22/2015</u>	0.315	0.00913 0.00995			-	i.						
8		0.00333				Concentration (md/l)	1.00E-03					
9						i i i i i i i i i i i i i i i i i i i						
10												
11					-	3	5 1.00E-04					
12 13					-		-					
14							1.00E-05					
15					-		12/200)1 9/20	004			/2012 9/20
			(Time (day	<i>'</i>)	
			Print I	Historical Data							(vr) Update	Graph
2. WHICH CO	INSTITUENT TO F	PLOT?				Number	of Years Over Which	n to Plot Graph			(yr) Update	Graph
		W/b	at is the cleanup le	vel?		4. RESL	II TS					
		VV//		VG1:				Cleanur				2010
0	Barium		2	(mg/L)		Pieu	licted Date to Achieve	e Cleanup.				2010
Ĭ	Danam		£	(119/2)		Conf	idence Interval on Pr	edicted Cleanur	p Date:	9 90 9	% Confidence Interval	
_			_	_		(at lea	est 3 data points needed to	calculate confidenc	ce intervals)	O 95 9	% Confidence Interval	
۲	Lead		0.015	(mg/L)						-		0070
									(Lewer Limi	2002 t on Confidence Interva	to	2073 t on Confidence Interval)
0	Constituent C			(mg/L)					(LOWEI LIIII	t on confidence interva		t on connuence mierval)
				1(Sour	ce Decay Rate Cons	tant (1/year):				3.29E-01
				T		(positiv	ve numbers represent shr	nking plumes while	negative numbers	represent expanding p	lumes)	
0	Constituent D			(mg/L)								
										Pact	e Example Data	
						R	eturn To Main Scre	en N	lew Site/Clear	Screen	Set	HELP

Air Force Cent Site Location	n Timeframe D er for Environment and I.D.:	Swift MW-9		Vers	sion	1.1	Empirical Data	value directly. alculated by model. inter any data).
Constituent o	f Interest:	Barium and Lead			_	_		
1. ENTER CO	NSTITUENT NAM	E AND HISTORIC	AL DATA			3.	OUTPUT GRAPH	
		Concer	tration mg/L 🔻				DISSOLVED BARIUM CONCENTRATI	ON
Date	Constituent A	Constituent B	Constituent C	Constituent D			(mg/L)	
(mm/dd/yy)	Barium	Lead]		Cleanup Level	
		0.00		1			1.00E+01	
1 8/30/2001	1.6 2	0.08 0.077			^			R ² = 0.7352
2 <u>9/6/2001</u> 3 <u>12/18/2001</u>	2 5.3	0.077					1.00E+00	
4 10/21/2009	1.22	0.20					1.00E+00 1.00E-01 1.00E-02 1.00E-03 1.00E-04	
5 3/30/2012	0.18	0.0437					E 1.00E-01	
6 9/28/2012	0.118	0.0472			1		5	
7 3/27/2013	0.232	0.0483					1.00E-02	
8 9/11/2013	0.225	0.0613					j j j	
9 9/24/2014	0.338	0.0678					5 1.00E-03	
10 <u>9/22/2015</u> 11	0.375	0.0898						
12							8 1.00E-04	
13								
14							1.00E-05	
15					-		8/2001 6/2004 4/2007 2/20	10 11/2012 9/201
							Time (day)	
			Print I	Historical Data				(
2. WHICH CO	NSTITUENT TO P	LOT?				N	umber of Years Over Which to Plot Graph (yr)	Update Graph
				10				
		VVha	at is the cleanup le	vel?		4.	RESULTS	
•				T			Predicted Date to Achieve Cleanup:	2002
۲	Barium		2	(mg/L)			Confidence Interval on Predicted Cleanup Date:	fidence Interval
0	Lead		0.015	(mg/L)			O 95 % Cor	fidence Interval
-			5.010	1 (0, -)			2001	to 2010
							(Lower Limit on Confidence Interval)	(Upper Limit on Confidence Interval)
0	Constituent C		0.005	(mg/L)				
							Source Decay Rate Constant (1/year):	1.88E-01
0	Constituent D			(mg/L)			(positive numbers represent shrinking plumes while negative numbers represent expanding plume	5)
0				(mg/L)				
							Paste Ex	ample Data HELP
							Return To Main Screen New Site/Clear Screen	Set HELP

Air Force Cent	n Timeframe D er for Environment and I.D.:	Swift MW-9		Vers	sion	1.1		mpiri	Cą		Dat	1 ta	Data II 10.80		→ Enter Value	r value di calculati enter ar	ed by mod	el.	
Constituent of	f Interest:	Barium and Lead			_	_													
1. ENTER CO	NSTITUENT NAM	E AND HISTORIC	AL DATA		_	3.	OUTPU	T GRAPH											
		Concer	tration mg/L 🔻								D	DISSOL			NTRATIO	ON			
Date	Constituent A	Constituent B	Constituent C	Constituent D									(1	mg/L)					
(mm/dd/yy)	Barium	Lead											- Cleanu	n Level					
		-			_			1.00E+00	1				oreanu			_			
1 8/30/2001	1.6	0.08			-											R ² =	0.2949		
2 9/6/2001 3 12/18/2001	2 5.3	0.077 0.26			-		C	1.00E-01											
4 10/21/2009	5.3 1.22	0.26					l/b		-										
5 3/30/2012	0.18	0.0437					Concentration (mg/L)	4.005.05											
6 9/28/2012	0.118	0.0472					5	1.00E-02	1										
7 3/27/2013	0.232	0.0483					atic		-										
8 9/11/2013	0.225	0.0613					Itra	1.00E-03	-										
9 9/24/2014	0.338	0.0678					ē		-										
10 9/22/2015	0.375	0.0898			-		Du c	1.00E-04	-										
11 12					-		ŭ	1.00E-04											
13					-				-										
14								1.00E-05											
15					-			8/	2001		6/2	2004	4/2	2007		010	11	/2012	9/2
														Time	(day)				
			Print	Historical Data												1		· ·	
2. WHICH CO	NSTITUENT TO P	LOT?				Nu	umber of	Years Over V	Vhich	to Plot	Graph				(yı)	Update	Graph	
											-								
		Wha	at is the cleanup le	evel?		4.	RESUL	TS											
-				_			Predict	ed Date to Ac	hieve	Cleanu	ıp:							2042	
0	Barium		2	(mg/L)					_		_ .	_							
								ence Interval							● 90 % Ca				
۲	Lead		0.015	(mg/L)			(at least .	3 data points nee	ded to c	calculate	contider	nce Interv	ais)	•	O 95 % Ca	onfidence	Interval		
•	Leau		0.015	(mg/L)										2016		to	Can't (Calc (+ve T	(rend)
												(L		Confidence	Interval)			on Confiden	
0	Constituent C		0.005	(mg/L)								,_			,				
								Decay Rate										5.05E-02	
0				T			(positive	numbers represe	nt shrinl	king plun	nes while	e negative	numbers re	present expa	anding plum	es)			
0	Constituent D			(mg/L)															
															Paste E	vample	Data		
							Ret	urn To Main	Scree	n	/	Vew Sit	e/Clear S	creen 📕	rasie L	Set	Dala	HE HE	ELP

Air Ford Site Lo	ce Center	r for Environment	ecision Suppo		Vers	sior	1.1		Empirical Data	Value ca	alue directly. alculated by model. nter any data).	
1. ENI	ER CON	SIIIUENI NAM	E AND HISTORIC			٦L	3	. 00	PUT GRAPH			
				tration mg/L 💌					DISSOLVED BA	RIUM CONCENTRATIO	N	
Da		Constituent A	Constituent B	Constituent C	Constituent D					(mg/L)		
(mm/o	dd/yy)	Barium				1			1.00E+01	nup Level		
1 8/30/	2001	0.5			[1.00E+01		R ² = 0.4967	
2 9/6/2		0.5				F			1.005,00		1(= 0.4907	
3 12/19		0.13							1.00E+00			
4 10/20	/2009	0.12							1.00E+00 1.00E-01 1.00E-02 1.00E-03 1.00E-04		D	
5 3/29/		0.182							1.00E-01			• - T
6 9/27/		0.134							1.00E-02			
7 <u>3/26/</u> 8 <u>9/10/</u>		0.102 0.124				-			1.00E-02			
9 9/23/		0.124							1.00E-03			
10 9/22/		0.13										
11									1.00E-04			
12						1) 1.00L-04			
13									1.00E-05			
14										4/2007 2/20	10 11/2	012 9/20 ⁻
15									0/2001 0/2001	Time (day)	10 11/2	012 0,20
				Drint	Historical Data					·····• (
2 WUI		STITUENT TO P	1072	Print	Historical Data			lumb	of Veero Over Which to Diet Creph	(yr)	Update Gr	aph
2. WHI		SITUENTIOP	LUT					aunio	of Years Over Which to Plot Graph	(<i>i</i> y)		<u></u>
			Wha	at is the cleanup le	evel?		4	. RE	JLTS			
				,				Pre	icted Date to Achieve Cleanup:			2001
() e	Barium		2	(mg/L)							2001
	-				1(5)			Co	idence Interval on Predicted Cleanup Date:	🖲 90 % Conf	fidence Interval	
	-				-			(at	st 3 data points needed to calculate confidence intervals)	O 95 % Conf	fidence Interval	
() (Constituent B			(mg/L)							0004
									()			2001
(D C	Constituent C			(mg/L)				(Lower Limi	it on Confidence Interval)	(Upper Limit of	n Confidence Interval)
, in the second s					1(9/-)			So	ce Decay Rate Constant (1/year):		7	14E-02
									ve numbers represent shrinking plumes while negative numbers	s represent expanding plumes		
(D C	Constituent D			(mg/L)							
								-				
									eturn To Main Screen New Site/Clear		ample Data Set	HELP
										``		

(mm/dd/yy)	Constituent A		AL DATA		_												
Date C (mm/dd/yy)	Constituent A	Concen				3	. OUTPUT	GRAPH									
(mm/dd/yy)					ור	"		0.0.0.11									
(mm/dd/yy)			Constituent C	Constituent D						DI	SSOLVE		M CONC 1g/L)	ENTRATION			
1 8/30/2001		Lead	Constituent C	Constituent D													
						_		1.00E+01	1			Cleanup	Level				
	3.2	0.16			•	<u> </u>		ĺ						R	² = 0.9612		
2 9/6/2001	2.4	0.14					î	1.00E+00									
3 <u>12/18/2001</u> 4 <u>3/30/2012</u>	1.7 0.273	0.19 0.168			-		Concentration (mg/L)										
4 <u>3/30/2012</u> 5 <u>9/28/2012</u>	0.273	0.168					E	1.00E-01									
6 3/28/2013	0.383	0.123					L.										
7 9/12/2013	0.338	0.139					ti	1.00E-02									
8 9/25/2014	0.254	0.176					tra										
9 9/22/2015	0.169	0.129					en	1.00E-03									
10							Do										
11							ပိ	1.00E-04									
12 13																	
14								1.00E-05		1 1		1 1			1 1 1	1 1 1	
15					-	•		8/2	001	6/2	2004	4/2	007	2/2010	11	1/2012	9/20
													Time	(day)			
			Print H	Historical Data											6		
2. WHICH CONST	FITUENT TO PL	_OT?				Nu	Number of N	Years Over WI	hich to Ple	ot Graph				(yr)	Update	Graph	
				10													
		Wha	at is the cleanup le	vel?		4.	. RESULT										
				Τ			Predicte	ed Date to Achi	ieve Clea	nup:						2002	
e Bar	rium	l	2	(mg/L)			Confide	nce Interval or	Prodicto	d Cloop	In Data:		6	90 % Confide	nce Interval		
								data points neede				s)		95 % Confide			
O Lea	ad		0.015	(mg/L)			,	,					(95 % Confide	nce mierval		
												2	001	to		2004	
~											(Lo	wer Limit on	Confidence	Interval)	(Upper Lin	nit on Confider	ce Interval)
O Cor	nstituent C			(mg/L)			0			(
								Decay Rate Co numbers represent	· ·		ovitenan e	numbers roo	resent even			1.79E-01	
O Cor	nstituent D	l l		(mg/L)			(positive fi	ambers represent	on inking pl		negative	ionibers rep	ioseni expa	iaing planes)			
C 001		L. L.		(
							Detr	To Main C			Now Site	/Clear Sc		Paste Exam			
							Retu	irn To Main So	creen		vew Sile	Julear 30		Set			

Air Force Site Loca	ation Timeframe I Center for Environmer ation and I.D.:	Decision Suppo tal Excellence Swift MW13D	ort System	Vers	Data Input Instructions: 10.80 Enter value directly. 10.80 Value calculated by model. (Don't enter any data).
Constitu	ent of Interest:	Barium and Lead			
1. ENTE	R CONSTITUENT NAM	ME AND HISTORIC	AL DATA		3. OUTPUT GRAPH
		Concer	ntration mg/L 🔻		DISSOLVED LEAD CONCENTRATION
Date	Constituent A	Constituent B	Constituent C	Constituent D	(mg/L)
(mm/do	/yy) Barium	Lead			Cleanup Level
			1	t	1.00E+00
1 8/30/20		0.16			▲ R ² = 0.1413
2 9/6/20 3 12/18/2		0.14			2 1.00E-01
4 3/30/20		0.19			1.00E-01 1.00E-02 1.00E-03 1.00E-04
5 9/28/20		0.128			
6 3/28/20		0.143			6 1.00E-02
7 9/12/20	0.338	0.139			
8 9/25/20		0.176			1.00E-03
9 9/22/20	015	0.129			
10					6 1.00E-04
11					3 1.002-04
12 13					
14					1.00E-05
15					▼ 8/2001 6/2004 4/2007 2/2010 11/2012 9/2
			·		Time (day)
			Print I	Historical Data	
2. WHIC	H CONSTITUENT TO	PLOT?			Number of Years Over Which to Plot Graph Update Graph
		Wh	at is the cleanup le	vel?	4. RESULTS
					Predicted Date to Achieve Cleanup: 2274
0	Barium		2	(mg/L)	
					Confidence Interval on Predicted Cleanup Date:
	Land		0.017	[((1	(at least 3 data points needed to calculate confidence intervals) O 95 % Confidence Interval
	Lead		0.015	(mg/L)	2094 to Can't Calc (+ve Trend)
					(Lower Limit on Confidence Interval) (Upper Limit on Confidence Interval)
	Constituent C			(mg/L)	
				1. 3 /	Source Decay Rate Constant (1/year): 8.72E-03
					(positive numbers represent shrinking plumes while negative numbers represent expanding plumes)
	Constituent D			(mg/L)	
					Return To Main Screen New Site/Clear Screen Set HELP

Air Force Cent	on Timeframe D ter for Environment and I.D.:	Swift MW15	rt System	Vers	sion	1.1		Data Input Instructions: 10.80 — Enter value directly. 10.80 — Value calculated by model. (Don't enter any data).
Constituent o		Barium and Lead						
1. ENTER CC	NSTITUENT NAM	IE AND HISTORIC			٦	3	5. OU	OUTPUT GRAPH
			tration mg/L	1				DISSOLVED BARIUM CONCENTRATION
Date (mm/dd/ss)	Constituent A Barium	Constituent B	Constituent C	Constituent D				(mg/L)
(mm/dd/yy)	Barium	Lead						1.00E+01
1 4/8/2003	0.412	0.124						R ² = 0.9754
2 9/25/2014	0.0628	0.311						1.00E+00 1.00E+00
3 9/23/2015	0.075	0.243						
5								E 1.00E-01
6								5
7								9 1.00E-02
8								
10								5 1.00E-03
11								1.00E+00 1.00E-01 1.00E-02 1.00E-03 1.00E-04
12								
13 14								1.00E-05
15					•			4/2003 10/2005 4/2008 9/2010 3/2013 9/20
								Time (day)
			Print I	Historical Data				
2. WHICH CC	INSTITUENT TO P	PLOT?				N	lumbe	mber of Years Over Which to Plot Graph
		14//-						
		VVTIč	at is the cleanup le	iver?		4		RESULTS
	Barium		2	(mg/L)			Pre	Predicted Date to Achieve Cleanup: 2003
	Darium		2	_(mg/L)			Co	Confidence Interval on Predicted Cleanup Date:
								(at least 3 data points needed to calculate confidence intervals)
	Lead		0.015	(mg/L)				
								2003 to Can't Calc (+ve Trend)
0	Constituent C			(mg/L)				(Lower Limit on Confidence Interval) (Upper Limit on Confidence Interval)
Ĭ	Constituent o			1(9/=)			So	Source Decay Rate Constant (1/year): 1.48E-01
				7				(positive numbers represent shrinking plumes while negative numbers represent expanding plumes)
0	Constituent D			(mg/L)				
								Paste Example Data
								Return To Main Screen New Site/Clear Screen Set HELP

1. ENTER CONSTITUENT NAME AND HISTORICAL DATA Concentration mg/. 3. OUTPUT GRAPH Date (mm/ddiyy) Constituent & Constituent C Constituent C 1 482003 0.412 0.124 2 9252016 0.0628 0.311 3 9232016 0.0628 0.311 4 0.0628 0.311 1.00E+00 5 0.243 1.00E-01 10 1.00E-02 1.00E-02 1 1.00E-03 1.00E-04 1 1.00E-04 1.00E-04 1 1.00E-05 4/2003 10/2005 1 0.00E-04 1.00E-05 4/2008 1 0.00E-04 1.00E-05 4/2008 9/2010 3/201 11 1 1.00E-05 4/2003 10/2005 4/2008 9/2010 3/201 12 1 1.00E-05 1.00E-04 1.00E-05 4/2003 10/2005 4/2008 9/2010 3/201 13 1 1.00E-05 1.00E-05 4/2003 10/2005 4/2008 9/2010 3/201 14 EBarlum<	Air Force Cente	n Timeframe D er for Environment and I.D.:	Swift MW15	ort System	D Vers	sion			impir	E R ical	Dat	1	Data In 10.80 10.80	put Instruc	Enter valu	ue directly. sulated by mode er any data).	əl.	
Date (middly) Concentration mg/L DissolveD LEAD CONCENTRATION (mg/L) 1 482:003 0.412 Constituent A Constituent C			Barium and Lead				_											
Date (mm/ddyy) Constituent A Constituent B Constituent D 1 Lead Imm/ddyy) R*=0.8925 2 2/252014 0.628 0.311 R*=0.8925 3 9/232015 0.2243 Imm/ddyy) R*=0.8925 4 0.026/05 0.2243 Imm/ddyy) Imm/ddyy) R*=0.8925 7 Imm/ddyy) 0.026/05 0.2243 Imm/ddyy) Imm/ddyy) Imm/ddyy) Imm/ddyy) R*=0.8925 10 Imm/ddyy) Imm/ddy	1. ENTER CO	NSTITUENT NAM					3.	OUTP	UT GRAPH									
(mm/ddlyy) Barium Lead 1 482003 0.412 0.124 3 9232014 0.0628 0.311 4 0.0628 0.311 1.00E+00 5 0.243 1.00E-01 1.00E-02 6 1.00E-04 1.00E-04 1.00E-04 9 1.00E-04 1.00E-04 1.00E-04 11 1.00E-04 1.00E-04 1.00E-04 12 1.00E-04 1.00E-04 1.00E-04 13 1.00E-04 1.00E-04 1.00E-04 14 15 1.00E-04 1.00E-05 What is the cleanup level? What is the cleanup level? What is the cleanup level? Intercolspan="2">Confidence Interval on Predicted Cleanup: Confidence Interval on Predicted Cleanup Date: © 9 % Confidence Interval Or 9 % Confidence Int											D	ISSOL	/ED LEAD	CONCEN	TRATION			
1 482003 0.412 0.124 2 9252014 0.0628 0.311 3 9232015 0.243 4 6 1.00E-01 7 1.00E-01 1.00E-02 9 1.00E-03 1.00E-04 9 1.00E-04 1.00E-04 9 1.00E-04 1.00E-03 9 1.00E-04 1.00E-04 11 1.00E-04 1.00E-04 12 1.00E-04 1.00E-05 13 1.00E-05 1.00E-06 14 1.00E-04 1.00E-04 15 1.00E-05 1.00E-05 What is the cleanup level? Vint tis the cleanup level? What is the cleanup level? Vint is the cleanup level? 0 Barium 2(mg/L) 0 Contidence Interval 9 % Contidence Interval 0 Source Decay Rate Constant (1/year): 0 (cover Limit on Confidence Interval) 0 Confidence Interval 0 Confidence Interval 0 Confidence Interval 0 Source Decay Rate Constant (1/year):				Constituent C	Constituent D								(n	ng/L)				
1 4/82/2003 0.412 0.124 2 9252/2014 0.0628 0.311 3 9232/2015 0.243 1 4 0.0628 0.243 1 5 0.243 1 1 6 1 1 1 1 7 1 1 1 1 1 10 1 1 1 1 1 1 1 12 1	(mm/dd/yy)	Barium	Lead						1 00E±00				Cleanup	Level				
3 9/232015 0.243 4 0.10 0.243 5 0 0.243 6 0.243 0.243 7 0 0.243 8 0 0.243 9 0 0.243 10 0 0.243 11 0 0.243 12 0 0.015 13 0 0 14 0 0 15 0 0.015 What is the cleanup level? 0 0 Barium 2(mgL) 0 Lead 0.015 0 Constituent C (mgL) 0 Constituent C (mgL)	1 4/8/2003	0.412	0.124						1.002+00						F	R ² = 0.8925		_
12 13 1.00E-05 4/2003 10/2005 4/2008 9/2010 3/201 15 1.00E-05 4/2003 10/2005 4/2008 9/2010 3/201 Vinit Historical Data What is the cleanup level? O Barium 2 (mg/L) Image: Constituent C 0.015 (mg/L) Predicted Date to Achieve Cleanup: Image: Confidence Interval Constituent C (mg/L) Source Decay Rate Constant (1/year): 0 95 % confidence Interval (Upper Limit on Confidence Interval) Source Decay Rate Constant (1/year): (postive numbers represent shrinking plumes) Source Decay Rate Constant (1/year): 6.45		0.0628						~		-								
12 13 1.00E-05 4/2003 10/2005 4/2008 9/2010 3/201 15 1.00E-05 4/2003 10/2005 4/2008 9/2010 3/201 Vinit Historical Data What is the cleanup level? O Barium 2 (mg/L) Image: Constituent C 0.015 (mg/L) Predicted Date to Achieve Cleanup: Image: Confidence Interval Constituent C (mg/L) Source Decay Rate Constant (1/year): 0 95 % confidence Interval (Upper Limit on Confidence Interval) Source Decay Rate Constant (1/year): (postive numbers represent shrinking plumes) Source Decay Rate Constant (1/year): 6.45	3 9/23/2015		0.243					۲ ۲	1.00E-01									
12 13 1.00E-05 4/2003 10/2005 4/2008 9/2010 3/201 1.00E-05 4/2003 10/2005 4/2008 9/2010 3/201 What is the cleanup level? O Barium 2 (mg/L) Image: Constituent C 0.015 (mg/L) Predicted Date to Achieve Cleanup: Image: Confidence Interval Image: Constituent C (mg/L) Source Decay Rate Constant (1/year): 0 Source Decay Rate Constant (1/year): Constituents represent shrinking plumes	4							Ĕ										
12 13 1.00E-05 4/2003 10/2005 4/2008 9/2010 3/201 1.00E-05 4/2003 10/2005 4/2008 9/2010 3/201 What is the cleanup level? O Barium 2 (mg/L) Image: Constituent C 0.015 (mg/L) Predicted Date to Achieve Cleanup: Image: Confidence Interval Image: Constituent C (mg/L) Source Decay Rate Constant (1/year): 0 Source Decay Rate Constant (1/year): Constituents represent shrinking plumes	6							- S	1.00E-02									
12 13 1.00E-05 4/2003 10/2005 4/2008 9/2010 3/201 1.00E-05 4/2003 10/2005 4/2008 9/2010 3/201 What is the cleanup level? O Barium 2 (mg/L) Image: Constituent C 0.015 (mg/L) Predicted Date to Achieve Cleanup: Image: Confidence Interval Image: Constituent C (mg/L) Source Decay Rate Constant (1/year): 0 Source Decay Rate Constant (1/year): Constituents represent shrinking plumes	7							atic										
12 13 1.00E-05 1.00E-05 4/2008 9/2010 3/201 1 1.00E-05 4/2003 10/2005 4/2008 9/2010 3/201 Vinit Historical Data What is the cleanup level? O Barium 2 (mg/L) Image: Constituent C 0.015 (mg/L) Predicted Date to Achieve Cleanup: Image: Constituent C Image: Constituent C (mg/L) Source Decay Rate Constant (1/year): 0 95 % confidence Interval Source Decay Rate Constant (1/year): Constituent Strepresent shrinking plumes while negative numbers represent shrinking plumes) 0 6.45								Jtra	1.00E-03	-								
12 13 1.00E-05 1.00E-05 4/2008 9/2010 3/201 1 1.00E-05 4/2003 10/2005 4/2008 9/2010 3/201 Vinit Historical Data What is the cleanup level? O Barium 2 (mg/L) Image: Constituent C 0.015 (mg/L) Predicted Date to Achieve Cleanup: Image: Constituent C Image: Constituent C (mg/L) Source Decay Rate Constant (1/year): 0 95 % confidence Interval Source Decay Rate Constant (1/year): Constituent Strepresent shrinking plumes while negative numbers represent shrinking plumes) 0 6.45								cer										
12 13 1.00E-05 1.00E-05 4/2008 9/2010 3/201 1 1.00E-05 4/2003 10/2005 4/2008 9/2010 3/201 Vinit Historical Data What is the cleanup level? O Barium 2 (mg/L) Image: Constituent C 0.015 (mg/L) Predicted Date to Achieve Cleanup: Image: Constituent C Image: Constituent C (mg/L) Source Decay Rate Constant (1/year): 0 95 % confidence Interval Source Decay Rate Constant (1/year): Constituent Strepresent shrinking plumes while negative numbers represent shrinking plumes) 0 6.45								Č	1.00E-04									
14 1.00E-05 4/2003 10/2005 4/2008 9/2010 3/201 Interview of Years Over Which to Plot Graph Verticate Data What is the cleanup level? O Barium 2(mg/L) Image: Description of Constituent C 0.015 (mg/L) O Constituent C (mg/L) O Constituent C (mg/L) Image: Description of Constituent C (mg/L) Source Decay Rate Constant (1/year): Image: Description of Constituent C (mg/L) Source Decay Rate Constant (1/year): 6.45								Ũ										
Image: state classical data Print Historical Data Print Historical Data Print Historical Data What is the cleanup level? What is the cleanup level? Barium 2(mg/L) Lead 0.015(mg/L) Constituent C (mg/L) Source Decay Rate Constant (1/year): to Constituent C										-								
Image: Constituent Constend Constituent Constituent Constituent Constit											10/3	2005	1/2	008	0/2010	ן אין אין אין אין אין אין אין אין אין אי	2013	9/20
Print Historical Data WhICH CONSTITUENT TO PLOT? What is the cleanup level? Barium 2(mg/L) Lead 0.015 (mg/L) Constituent C (mg/L) Source Decay Rate Constant (1/year): Constituent confidence Interval (Upper Limit on Confidence Interval) Constituent (1/year): (positive numbers represent shrinking plumes while negative numbers represent expanding plumes)	15								Т	2000	10/2	_000	7/2			5 0/2	_010	5/20
2. WHICH CONSTITUENT TO PLOT? What is the cleanup level? O Barium 2(mg/L) Image: Constituent C 0.015 (mg/L) Image: Constituent C (mg/L) Image: Constituent C (mg/L) Image: Constituent C (mg/L)				Print	-listorical Data													
What is the cleanup level? A. RESULTS Image: Barium 2 (mg/L) Image: Barium 0.015 (mg/L)	2 WHICH CO							umber (of Years Over V	Which to P	lot Granh				(vr)	Update C	Graph	
Image: Section of the section of th	2. Which co		LOT						or rears over		lot Oraph				(יע)	<u> </u>		
O Barium 2 (mg/L) O Lead 0.015 (mg/L) O Constituent C (mg/L) Constituent C (mg/L) Source Decay Rate Constant (1/year): (positive numbers represent shrinking plumes while negative numbers represent expanding plumes) O			Wha	at is the cleanup le	vel?		4.	RESU	ILTS									
O Barium 2 (mg/L) O Lead 0.015 (mg/L) O Constituent C (mg/L) Constituent C (mg/L) Source Decay Rate Constant (1/year): (positive numbers represent shrinking plumes while negative numbers represent expanding plumes) O								Predi	cted Date to A	chieve Clea	anup:					Can't C	alc (+ve T	rend)
 Lead O.015 (mg/L) Constituent C Constituent C Market C <li< td=""><td>0</td><td>Barium</td><td></td><td>2</td><td>(mg/L)</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>~</td><td></td><td></td><td></td><td></td></li<>	0	Barium		2	(mg/L)									~				
Lead O.015 (mg/L) Constituent C Constent C Constituent C Constituent C Constituent C Co														-				
Constituent C (mg/L) Constituent C (mg/L) Constituent C (mg/L) Constituent C (upper Limit on Confidence Interval) Source Decay Rate Constant (1/year): (positive numbers represent expanding plumes) Constituent C (upper Limit on Confidence Interval) Constituent C (upper Limit on Confidence Interval)		Load		0.015	(mg/L)			(at leas	st 3 data points nee	eded to calcul	ate confiden	ce interva	lS)	0	95 % Confide	ence Interval		
Constituent C (Lower Limit on Confidence Interval) (Upper Limit on Confidence Interva		Leau		0.015	I(IIIg/L)								2	012	to	Can't C	alc (+ve T	rend)
Source Decay Rate Constant (1/year): -6.49 (positive numbers represent shrinking plumes while negative numbers represent expanding plumes)												(La						
(positive numbers represent shrinking plumes while negative numbers represent expanding plumes)	0	Constituent C			(mg/L)													
												nonctive	numbers are	rocont			6.49E-02	
O Constituent D (mg/L)	0	Constituent D			(ma/L)			(positiv	e numbers représe	ent shrinking p	ournes while	negative	numbers rep	resent expand	ang plumes)			
	0	Constituent D			1(9/ ⊏)													
Return To Main Screen New Site/Clear Screen Paste Example Data								D		Saraan		low Site	/Cloar So	I			HE	
Return To Main Screen New Site/Clear Screen Set								Re	sturn ro walh	Screen		iew olle			Se	t		-

A		n Timeframe D er for Environment	Decision Suppo		Vers	Data Input Instructions: 10.80 — Enter value directly 10.80 — Value calculated by (Don't enter any date)	model.
C	onstituent o	f Interest:	Barium and Lead				
1	ENTER CO	NSTITUENT NAM	IE AND HISTORIC	AL DATA		OUTPUT GRAPH	
			Concer	ntration mg/L 🔻		DISSOLVED BARIUM CONCENTRATION	
	Date	Constituent A	Constituent B	Constituent C	Constituent D	(mg/L)	
	(mm/dd/yy)	Barium	Lead			Cleanun Louel	
1000000000						1.00E+01 a	
1	2/14/2003	2.34	0.1			R ² = 0.29	55
2	3/29/2012 9/28/2012	0.542 0.642	0.0239 0.022			☐ 1.00E+00	
4	3/27/2012	0.642	0.022				
5	9/11/2013	0.631	0.0129			E 1.00E-01	
6	9/24/2014	0.01	0.0244				
7	9/22/2015	0.531	0.0121			i 1.00E-02	
8							
9 10						5 1.00E-03	
11							
12						ö 1.00E-04	
13						1.00E-05	
14						2/2003 8/2005 2/2008 9/2010	3/2013 9/2015
15						Z/2003 8/2003 2/2008 9/2010 Time (day)	3/2013 9/2010
				Drive	listeries Dete		
		NSTITUENT TO P		Print	Historical Data	under of Veers Quer Which to Plat Graph	ate Graph
²	. WHICH CO	NSTITUENT TO P	2017			Imber of Years Over Which to Plot Graph (yr)	
			Wh	at is the cleanup le	vel?	RESULTS	
						Predicted Date to Achieve Cleanup:	2004
	۲	Barium		2	(mg/L)		2004
	-				1(9, =)	Confidence Interval on Predicted Cleanup Date: 0 90 % Confidence Interv	/al
	_					(at least 3 data points needed to calculate confidence intervals) O 95 % Confidence Intervals	/al
	0	Lead		0.015	(mg/L)		
							an't Calc (+ve Trend)
	0	Constituent C			(mg/L)	(Lower Limit on Confidence Interval) (Uppe	er Limit on Confidence Interval)
	0	Constituent C			1(119/1)	Source Decay Rate Constant (1/year):	2.21E-01
						(positive numbers represent shrinking plumes while negative numbers represent expanding plumes)	
	0	Constituent D			(mg/L)		
						Return To Main Screen New Site/Clear Screen Set	HELP

Constituent of Interest: Datum and Lead 1. ENTER CONSTITUENT NAME AND HISTORICAL DATA Data Consentration [mg/l] Data Constituent A. Constituent A. Constituent C. Immodely and the second and the secon		n Timeframe D er for Environment	ecision Suppo		Vers	Data Input Instructions: 10.80 — Enter value directly. 10.80 — Value calculated by model. (Don't enter any data). (Don't enter any data).
Date (mm0ddigy) Concentration mg/L Constituent A Constituent B Constituent D 3 22/42003 2.34 0.1 (mg/L) 3 22/42003 0.642 0.0239 (mg/L) 9 9222012 0.642 0.0239 (mg/L) 9 9222013 0.455 0.00974 (mg/L) 9 9222015 0.01 0.02244 (mg/L) 9 9222015 0.02091 1.00E-02 (mg/L) 10 1.00E-02 1.00E-02 (mg/L) 9 9222015 0.01 0.02244 (mg/L) 9 9222015 0.01 0.02121 1.00E-02 10 1.00E-02 1.00E-03 1.00E-02 (mg/L) 11 1.00E-02 1.00E-02 (mg/L) 1.00E-02 12 1.00E-02 (mg/L) 1.00E-02 (mg/L) 1.00E-02 13 1.00E-02 (mg/L) 1.00E-02 (mg/L) 1.00E-02 14 1.00E-02 (mg/L) (mg/L) (mg/L) 0.00E-02 (mg/L) 0.0213	Constituent o	f Interest:	Barium and Lead			
Date Constituent A Constituent B Constituent C Constituent C (mg/L) Didect Classing Constituent A Constituent C Constituent C (mg/L) Didect Classing Constituent A Constituent C (mg/L) Didect Classing Constituent C (mg/L) Didect Classing Constituent C (mg/L) On Early Constituent C (mg/L) On Early Constituent C (mg/L) On Constituent C (mg/L) <td>1. ENTER CO</td> <td>NSTITUENT NAM</td> <td>E AND HISTORIC</td> <td>AL DATA</td> <td></td> <td>3. OUTPUT GRAPH</td>	1. ENTER CO	NSTITUENT NAM	E AND HISTORIC	AL DATA		3. OUTPUT GRAPH
Date Constituent A Constituent B Constituent C Constituent C 1 2 2 3 0.1 1			Concer	tration mg/L 🔻		DISSOLVED LEAD CONCENTRATION
Immiddly Barlum Lead 1 2.34 0.1 2.3292012 0.642 0.022 3 9262012 0.642 0.022 4 227/013 0.495 0.0014 5 911/2013 0.631 0.0129 6 9242015 0.0121 1.00E-01 7 922/2015 0.0121 1.00E-02 8 0.0121 1.00E-03 1.00E-03 9 1.00E-04 1.00E-03 9/2010 3/2013 10 1.00E-04 1.00E-03 9/2010 3/2013 9/2010 11 1.00E-04 1.00E-04 1.00E-03 9/2010 3/2013 9/2010 12 1.00E-04 1.00E-	Date	Constituent A	Constituent B	Constituent C	Constituent D	
2/142003 2.34 0.1 3/232072 0.642 0.0239 9/232073 0.642 0.0222 4 3/272073 0.445 0.00914 9/11/2013 0.631 0.0729 6 9/24/2014 0.0121 1.00E-01 8 9/11/2013 0.631 0.0724 9 1.00E-01 1.00E-02 1.00E-04 9 1.00E-01 1.00E-03 1.00E-04 9 1.00E-04 1.00E-04 1.00E-04 9 1.00E-04 1.00E-04 1.00E-04 10 1.00E-04 1.00E-04 1.00E-04 11 1.00E-04 1.00E-04 1.00E-04 12 1.00E-04 1.00E-04 1.00E-04 13 1.00E-04 1.00E-04 1.00E-04 14 1.00E-04 1.00E-04 1.00E-04 15 1.00E-04 1.00E-04 1.00E-04 16 1.00E-04 1.00E-04 1.00E-04 16 1.00E-04 1.00E-04 1.00E-04 17 1.00E-04 1.00E-04	(mm/dd/yy)	Barium	Lead			
2 2920/012 0.642 0.0239 3 02820/012 0.642 0.0022 4 32720/013 0.633 0.0729 6 92420/14 0.0121 1.00E-02 7 92220/15 0.0121 1.00E-03 9 0.0121 1.00E-04 1.00E-04 10 10 1.00E-05 1.00E-04 11 11 1.00E-05 2/2003 8/2005 2/2008 9/2010 3/2013 9/2010 11 11 1.00E-04 1.00E-05 1.00E-04 1.00E-04 1.00E-04 1.00E-04 1.00E-04 1.00E-05 1.00E-04 1.00E-04 1.00E-04 1.00E-04 1.00E-05 1.00E-04 1.00E-05 1.00E-04 1.00E-04 1.00E-04 1.00E-04 1.00E-04 1.00E-04 1.00E-04 1.00E-04 1.00					1	1.00E+00
3 3 28282012 0.642 0.022 4 3272013 0.495 0.00914 1 5 9/112013 0.633 0.0129 1 9 0.0121 1 1 1 1 9 0.0121 1 1 1 1 1 10 0.0121 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 <td></td> <td></td> <td></td> <td></td> <td></td> <td>▲ R² = 0.7686</td>						▲ R ² = 0.7686
12 14 100E-05 2/2008 9/2010 3/2013 9/2010 2. WHICH CONSTITUENT TO PLOT? Print Historical Data What is the cleanup level? What is the cleanup level? Barium 2(mg/L) Eaad 0.015 (mg/L) Constituent C (mg/L) Constituent C (mg/L) Constituent D (mg/L)						☐ 1.00E-01 ■
12 14 100E-05 2/2008 9/2010 3/2013 9/2010 2. WHICH CONSTITUENT TO PLOT? Print Historical Data What is the cleanup level? What is the cleanup level? Barium 2(mg/L) Eaad 0.015 (mg/L) Constituent C (mg/L) Constituent C (mg/L) Constituent D (mg/L)						
12 100E-05 2/2003 8/2005 2/2008 9/2010 3/2013 9/2010 2. WHICH CONSTITUENT TO PLOT? Print Historical Data What is the cleanup level? What is the cleanup level? Barium 2(mg/L) Eaad 0.015(mg/L) Constituent C (mg/L) Constituent C (mg/L) Source Decay Rate Constant (1/year): (Upper Limit on Confidence Interval) (paste Example Data) 1.05E-01 Paste Example Data HEL D						
12 14 100E-05 2/2008 9/2010 3/2013 9/2010 2. WHICH CONSTITUENT TO PLOT? Print Historical Data What is the cleanup level? What is the cleanup level? Barium 2(mg/L) Eaad 0.015 (mg/L) Constituent C (mg/L) Constituent C (mg/L) Constituent D (mg/L)		0.01				
12 100E-05 2/2003 8/2005 2/2008 9/2010 3/2013 9/2010 2. WHICH CONSTITUENT TO PLOT? Print Historical Data What is the cleanup level? What is the cleanup level? Barium 2(mg/L) Eaad 0.015(mg/L) Constituent C (mg/L) Constituent C (mg/L) Source Decay Rate Constant (1/year): (Upper Limit on Confidence Interval) (paste Example Data) 1.05E-01 Paste Example Data HEL D			0.0121			
12 14 100E-05 2/2008 9/2010 3/2013 9/2010 2. WHICH CONSTITUENT TO PLOT? Print Historical Data What is the cleanup level? What is the cleanup level? Barium 2(mg/L) Eaad 0.015 (mg/L) Constituent C (mg/L) Constituent C (mg/L) Constituent D (mg/L)	-					1.00E-03
12 100E-05 2/2003 8/2005 2/2008 9/2010 3/2013 9/2010 2. WHICH CONSTITUENT TO PLOT? Print Historical Data What is the cleanup level? What is the cleanup level? Barium 2(mg/L) Eaad 0.015(mg/L) Constituent C (mg/L) Constituent C (mg/L) Source Decay Rate Constant (1/year): (Upper Limit on Confidence Interval) (paste Example Data) 1.05E-01 Paste Example Data HEL D						
12 14 100E-05 2/2008 9/2010 3/2013 9/2010 2. WHICH CONSTITUENT TO PLOT? Print Historical Data What is the cleanup level? What is the cleanup level? Barium 2(mg/L) Eaad 0.015 (mg/L) Constituent C (mg/L) Constituent C (mg/L) Constituent D (mg/L)						5 1.00E-04
14 1.00E-05 2/2008 9/2010 3/2013 9/2010 2. WHICH CONSTITUENT TO PLOT? Print Historical Data What is the cleanup level? What is the cleanup level? O Barium 2(mg/L) Image: Constituent C 0.015 (mg/L) O Constituent C (mg/L) O Constituent D (mg/L) O Constituent D (mg/L)						- U
15 2/2003 8/2005 2/2008 9/2010 3/2013 9/2018 2. WHICH CONSTITUENT TO PLOT? Print Historical Data What is the cleanup level?	13					1 00E 05
Image: Second						
Print Historical Data WHICH CONSTITUENT TO PLOT? What is the cleanup level? Barium 2(mg/L) Lead 0.015(mg/L) Constituent C (mg/L) Constituent D (mg/L) Source Decay Rate Constant (1/year): 1.65E-01 (positive numbers represent shrinking plumes while negative numbers represent expanding plumes) Paste Example Data	15					
2. WHICH CONSTITUENT TO PLOT? What is the cleanup level? Barium 2 (mg/L) Lead 0.015 (mg/L) Constituent C (mg/L) Constituent D (mg/L)				Drint	listeries Dete	
What is the cleanup level? Barium 2(mg/L) Lead 0.015 (mg/L) Constituent C (mg/L) Constituent D (mg/L)				Print	Historical Data	Number of Veers Quer Which to Diet Creek
O Barium 2 (mg/L) Image: Constituent C 0.015 (mg/L) O Constituent C (mg/L) O Constituent D (mg/L)	2. WHICH CO	NSTITUENT TO P	2017			Number of Years Over Which to Plot Graph
O Barium 2 (mg/L) Image: Constituent C 0.015 (mg/L) O Constituent C (mg/L) O Constituent D (mg/L) O Constituent D (mg/L)			Wh	at is the cleanup le	vel?	4. RESULTS
 Barium 2 (mg/L) Lead 0.015 (mg/L) Constituent C (mg/L) Constituent D (mg/L) 						
 Lead O.015 (mg/L) Constituent C Constituent D (mg/L) Constituent D (mg/L) Mary Taylor S accon Mary Sita/Clast Scroop Paste Example Data Paste Example Data 	0	Barium		2	(ma/L)	
 Lead 0.015 (mg/L) Constituent C (mg/L) Constituent D (mg/L) (mg/L) (at least 3 data points needed to calculate confidence intervals) (at least 3 data points needed to calculate confidence intervals) (b) 95 % Confidence Interval (c) 95 % Confidence Interval	Ĭ	Banam			1(9/=/	Confidence Interval on Predicted Cleanup Date:
 Lead 0.015 (mg/L) Constituent C (mg/L) Constituent D (mg/L) Detune To Main Sense <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
O Constituent C (mg/L) O Constituent D (mg/L) O Constituent D (mg/L) Source Decay Rate Constant (1/year): (positive numbers represent shrinking plumes while negative numbers represent expanding plumes) 1.65E-01		Lead		0.015	(mg/L)	
O Constituent C (mg/L) O Constituent D (mg/L) Source Decay Rate Constant (1/year): (positive numbers represent shrinking plumes while negative numbers represent expanding plumes) 1.65E-01 D Constituent D (mg/L) Return To Main Server Now Site/Clear Server Paste Example Data						
O Constituent D (mg/L) Source Decay Rate Constant (1/year): (positive numbers represent shrinking plumes while negative numbers represent expanding plumes) 1.65E-01 O Constituent D Image: Constant Co	0	Constituent C			(mg/l)	(Lower Limit on Confidence Interval) (Upper Limit on Confidence Interval)
O Constituent D (mg/L)		Constituent			(mg/L)	Source Decay Rate Constant (1/year):
Beturn To Main Sereen New Site/Clear Screen Paste Example Data						
	0	Constituent D			(mg/L)	
Ser						

Ai Si		n Timeframe D er for Environment and I.D.:	ecision Support al Excellence Swift MW-18 Barium and Lead		Vers	sion	1.1		m piri	Cal	Dat		Data Inp 10.80 10.80		Enter value	lated by mode	I.	
									T GRAPH				_		_			
1.	ENTER CO		E AND HISTORIC			٦L	3.	00190	GRAPH									
				tration mg/L							DIS	SOLVED			RATION			
	Date	Constituent A Barium	Constituent B	Constituent C	Constituent D								(m	g/L)				
	mm/dd/yy)	Barium	Lead						1.00E+01			C	Cleanup	Level				
1	1/30/2003	0.2835	0.3665		[1		1.002+01						R ²	= 0.0751		
	10/21/2009	0.345	0.318					~	1.00E+00									
	3/30/2012	0.148	0.0211					ਿੱਤ	1.002100								• _	
	9/28/2012	0.093	0.00288					Concentration (mg/L)	1.00E-01	-								
	3/27/2013	0.531	0.00329						1.002 01							_		
	9/10/2013 9/24/2014	0.124 0.254	0.00166 0.216					<u>io</u>	1.00E-02	-								
	9/23/2014 9/23/2015	0.173	0.258					rat										
9	0/20/2010	0.170	0.200					ant	1.00E-03	-								
10								ğ										
11								ō	1.00E-04	-								
12								U										
13									1.00E-05	-								
14 15										2003	8/20	005	2/20	008	9/2010	3/2	013	9/201
						0000								Time (da				
				Print	Historical Data									•	••			
2	WHICH CO	NSTITUENT TO P			notoriou Butu		Nu	umber of	Years Over W	hich to Plo	ot Graph				(yr)	Update G	raph	
			2011								or Oraph					· · ·		
			Wha	at is the cleanup le	vel?		4.	RESUL	тѕ									
								Predict	ed Date to Ach	ieve Clear	nup:						2003	
	۲	Barium		2	(mg/L)						•			_				
									ence Interval or					9 🔘	0 % Confiden	ce Interval		
	0				T			(at least 3	3 data points need	ed to calculat	te confidenc	e intervals)		O 9!	5 % Confiden	ce Interval		
	0	Lead		0.015	(mg/L)									003	to	Capit C		ad)
												(Lower		Confidence Inter			alc (+ve Tre	
	0	Constituent C			(mg/L)							(LOWEI			vaij	(Opper Limit C		itervar)
	•				(····3/ =/			Source	Decay Rate C	onstant (1)	/year):					3	.98E-02	
									numbers represent			negative nur	mbers repr	esent expandin	g plumes)			
	0	Constituent D			(mg/L)											-		
															ofo F	de Deta		
								Ret	urn To Main S	creen	Ne	ew Site/C	lear Sci	reen Pa	ste Examµ Set	Die Data	HEL	Ρ 📕
											-11-				Gel			

	n Timeframe D er for Environment and I.D.:	ecision Suppo		Vers		1.1	Data Input Instructions: 10.80 — Enter value directly. Value calculated by model. (Don't enter any data).
		E AND HISTORIC				3 0	OUTPUT GRAPH
I. ENTER OO			tration mg/L		۱	0. 0.	
Date	Constituent A	Constituent B	Constituent C	Constituent D			DISSOLVED LEAD CONCENTRATION (mg/L)
(mm/dd/yy)	Barium	Lead	Constituent C	Constituent D			
							1.00E+00
1 1/30/2003	0.2835	0.3665			•		R ² = 0.1271
2 10/21/2009	0.345	0.318					1.00E-01
3 <u>3/30/2012</u> 4 <u>9/28/2012</u>	0.148 0.093	0.0211 0.00288					1.00E-01 1.00E-02 1.00E-03 1.00E-04
5 3/27/2013	0.531	0.00288					
6 9/10/2013	0.124	0.00166					g 1.00E-02
7 9/24/2014	0.254	0.216					
8 9/23/2015		0.258					1.00E-03
9					4		
10 11							Š 1.00E-04
12							ö 1.002 01
13							
14							1.00E-05 ////////////////////////////////////
15			(<u> </u>			1/2003 8/2005 2/2008 9/2010 3/2013 9/20 Time (day)
2. WHICH CO	NSTITUENT TO P	LOT?	Print I	Historical Data		Numt	mber of Years Over Which to Plot Graph
		What	at is the cleanup le	vel?		4. RI	RESULTS
							Predicted Date to Achieve Cleanup: 2015
0	Barium		2	(mg/L)			
-				1(3,)		С	Confidence Interval on Predicted Cleanup Date: 90 % Confidence Interval
~				-		(a	(at least 3 data points needed to calculate confidence intervals) O 95 % Confidence Interval
۲	Lead		0.015	(mg/L)			
							2003 to Can't Calc (+ve Trend) (Lower Limit on Confidence Interval) (Upper Limit on Confidence Interval)
0	Constituent C			(mg/L)			(Lower Limit on Confidence Interval) (Upper Limit on Confidence Interval)
Ŭ				(S	Source Decay Rate Constant (1/year): 2.12E-01
				-		(p	(positive numbers represent shrinking plumes while negative numbers represent expanding plumes)
0	Constituent D			(mg/L)			
							Paste Example Data
							Return To Main Screen New Site/Clear Screen Set HELP

	er for Environment and I.D.:	ecision Suppo	ort System	Vers	tion	1.1		TIE Empiri	R	Data	a	Data Inp 10.80 10.80	out Instruct	t ions: Enter value Value calcula (Don't enter a	ated by mod	el.		
												_	_	_		_	_	-
1. ENTER CO	NSTITUENT NAM	3.	3. 00	TPUT GRAPH														
						DISS	SOLVED			ITRATION								
Date	Constituent A	Constituent B	Constituent C	Constituent D								(m)	g/L)					
(mm/dd/yy)	Barium	Lead			1			1.00E+01			(Cleanup	Level					
1 1/30/2003	0.045	0.005						1.00						R ² :	= 0.1401			
2 10/22/2009	0.0224	0.00344						- 1.00E+00										
3 3/30/2012	0.0447	0.00549						<u>ح</u>										
4 9/27/2012	0.0325	0.0049						1.00E+00 1.00E-01 1.00E-02 1.00E-03 1.00E-03 1.00E-04										
5 3/27/2013	0.0333	0.00689						_ 1.00L-01										
6 <u>9/10/2013</u> 7 <u>9/24/2014</u>	0.0413 0.0334	0.0101 0.0038						.00E-02										
8 9/22/2014	0.0334	0.0038																
9	0.0221	0.000 11						1.00E-03										
10																		
11								Ö 1.00E-04										
12								•										
13 14								1.00E-05										
15					-			1/20	003	8/20	05	2/20	800	8/2010	3/	2013	9/2)15
					1000								Time (d	lay)				
			Print	Historical Data														
2. WHICH CO	NSTITUENT TO P	LOT?				N	Numbe	er of Years Over Wh	hich to Pl	ot Graph				(yr)	Update	Graph		
														0.7	`			_
		Wha	at is the cleanup le	vel?		4.	4. RES	SULTS										
							Pre	edicted Date to Achi	eve Clea	nup:						2003		
۲	Barium		2	(mg/L)									~					
								nfidence Interval on					-	90 % Confidenc				
0	Lood		0.045	(mg/l)			(at le	east 3 data points neede	d to calcula	ate confidence	e intervals)		0	95 % Confidenc	e Interval			
	Lead		0.015	(mg/L)								.20	003	to	Can't (Calc (+ve Ti	(end)	
											(Lowe		Confidence Inte			t on Confidence		
0	Constituent C			(mg/L)							(.,	(7777-2010			
								urce Decay Rate Co								2.64E-02		
				Τ			(pos	sitive numbers represent	shrinking p	lumes while n	legative nu	imbers repre	esent expandi	ng plumes)				
0	Constituent D			(mg/L)														٦.
														aste Examp	le Data			
								Return To Main So	reen	Ne	ew Site/0	Clear Scr	reen	Set	io Dala	HE	LP	
																		1

Air Force Cent Site Location	n Timeframe D ter for Environment and I.D.:	Swift MW-20		Vers	ion	1.1		Empiri	R al Dat	1 [a	Data Inpu 10.80 10.80	tt Instructions: Enter value of Value calcula (Don't enter a	ted by model.	
Constituent o	f Interest:	Barium and Lead			_	_								
1. ENTER CO	NSTITUENT NAM	E AND HISTORIC	AL DATA			3	3. OU	JTPUT GRAPH						
		Concen				D	ISSOLVED	LEAD C	ONCENTRATION					
Date	Constituent A	Constituent B	Constituent C	Constituent D							(mg/	/L)		
(mm/dd/yy)	Barium	Lead]			4.005.00		Cl	leanup L	evel		
1 1/30/2003	0.045	0.005		1				1.00E+00			_		0.0009	
2 10/22/2009	0.045	0.00344			Ē							rt~ =	0.0003	
3 3/30/2012	0.0447	0.00549						(J 1.00E-01						
4 9/27/2012	0.0325	0.0049						1.00E-01 1.00E-02 1.00E-03 1.00E-03						
5 3/27/2013	0.0333	0.00689						L 1.00E-02						
6 <u>9/10/2013</u>	0.0413	0.0101						<u>io</u>						
7 <u>9/24/2014</u> 8 <u>9/22/2015</u>	0.0334	0.0038 0.00347										-		Т
9		0.00347						1.00E-03						
10								30						
11								5 1.00E-04						
12								0						
13								1.00E-05						
14 15					•				003 8/2	005	2/200	08 8/2010	3/2013	9/201
												Time (day)		•, _ • ·
			Print	Historical Data										
2. WHICH CO	NSTITUENT TO P	LOT?					Numb	per of Years Over Wh	ich to Plot Graph			(yr)	Update Graph	
		Wha	at is the cleanup le	evel?		4	4. RE	ESULTS						
							Pre	redicted Date to Achi	eve Cleanup:				Can't Calc (+ve	Trend)
0	Barium		2	(mg/L)								0		
								onfidence Interval on				90 % Confidence		
۲	Lead		0.045	(mg/L)			(at	t least 3 data points neede	a to calculate confiden	ice intervals)		O 95 % Confidence	e Interval	
U	Leau		0.015	(iiig/L)							200	to	Can't Calc (+ve	Trend)
										(Lower I		nfidence Interval)	(Upper Limit on Confide	
0	Constituent C			(mg/L)						,		,		
								ource Decay Rate Co					-2.82E-03	3
0	Osnatilused D			(L	(po	ositive numbers represent	shrinking plumes while	e negative num	bers repres	ent expanding plumes)		
0	Constituent D			(mg/L)										
												Paste Exampl	e Data	
								Return To Main So	reen A	Vew Site/Cl	ear Scre	en Set		ELP

	n Timeframe D ter for Environment and I.D.:	ecision Suppo al Excellence Swift MW-27DDD Barium	rt System	Vers	sion	1.1	1	T I E Empiri	E R cal	Dat	1 a	Data Inp 10.80 10.80	out Instruct	Enter value	lated by mod	el.	
		E AND HISTORIC		2 0117	TPUT GRAPH												
I. ENTER CC		°	3. 001	IFUI GRAFH													
Concentration mg/L Date Constituent A Constituent B Constituent C Constituent D										DIS	SOLVE			ITRATION			
Date (mm/dd/yy)	Barium	Constituent B	Constituent C	Constituent D							_		g/L)				
(11111, dd, yy)	Duridin							1.00E+01	3			Cleanup	Level				
1 11/10/2004	0.5				•									R ²			•
2 2/15/2011	4.34						-	1 .00E+00									
3 5/3/2012 4 9/27/2012	4.91 5.15							l/6									
5 3/28/2013	5.55							E 1.00E-01									
6 9/12/2013	5.11							D									
7 9/25/2014	6.72							1.00E-02									
8 <u>9/23/2015</u> 9	4.95							1.00E-03									
10								1.00E-01 1.00E-02 1.00E-03 1.00E-04									
11								0 1.00E-04									
12								0 11002 01									
13 14								1.00E-05	1								
15					-			11/2	2004	1/2	007	3/2		5/2011	7/2	2013	9/2015
													Time (d	lay)			
			Print	Historical Data											7		
2. WHICH CC	NSTITUENT TO P	LOT?					Numbe	er of Years Over W	hich to Plo	t Graph				(yr)	Update (Graph	
		14/1-					4 850										
		VVIIa	at is the cleanup le	ver?		4	4. RES										
۲	Barium			(mg/L)			Pred	edicted Date to Ach	ieve Clean	nup:					Can't C	alc (+ve Tr	end)
	Barium		2	_(mg/ב)			Con	nfidence Interval or	Predicted	d Cleanu	p Date:		\odot	90 % Confider	ice Interval		
								east 3 data points need				s)	0	95 % Confider	ice Interval		
0	Constituent B			(mg/L)									-				
													(+ve Trend			alc (+ve Tr	
0	Constituent C			(mg/L)							(LOV	ver Limit on C	Confidence Inte	erval)	(Upper Limit	on Confidence	Interval)
l ũ	oonoliidonii o			1(9/=/			Sou	urce Decay Rate C	onstant (1/	/year):						-2.34E-01	
				_			(posi	sitive numbers represent	shrinking plu	umes while	negative r	numbers repr	esent expandi	ng plumes)			
0	Constituent D			(mg/L)													
													P	aste Exam	nle Data		
							F	Return To Main S	creen	N	lew Site	/Clear Sci	reen	Set	oro Data	HEL	.Р 📕

Air For	rce Cente		ecision Suppo		Vers	_		F E		ata		Data Inpu 10.80 10.80	ut Instruct	t ions: Enter value Value calcula (Don't enter d	ated by mode	əl.	
Consti	ituent of	Interest:	Barium and Lead			_											
1. EN	TER CO	NSTITUENT NAM	E AND HISTORIC	AL DATA			3. OUTPL	JT GRAPH									
			Concer	ntration mg/L 🔻						DISS		BARIUM	CONCEN	ITRATION			
D	ate	Constituent A	Constituent B	Constituent C	Constituent D					2.00	02122	(mg					
(mm/	/dd/yy)	Barium	Lead]						leanup L	evel				
	0.000	0.005	0.00000		1			1.00E+01						D2	0.0700		
	2/2009 /2012	0.985 0.819	0.00899 0.00733					4 00- 00						K²	= 0.9796		
	/2012	0.765	0.00692				L Ĵ	1.00E+00							 		
4 3/28	/2013	0.764	0.0078				Concentration (mg/L)										
	/2013	0.712	0.00721					1.00E-01									
	/2014	0.682 0.589	0.00718				ē.	1.00E-02									
8	/2015	0.589	0.00715				Lat	1.000-02									
9							j t	1.00E-03									
10							Ŭ Ž	11002 00									
11								1.00E-04									
12 13							l .										
14								1.00E-05 🕂								1 1 1	
15						•		10/20	009	12/20	10	3/20		5/2013	7/2	2014	9/2015
						0000							Time (d	lay)			
				Print I	Historical Data										(
2. WH	ICH COI	NSTITUENT TO P	LOT?				Number of	f Years Over Whi	ch to Plot G	Graph				(yr)	Update C	Braph	
					10												
			VVn	at is the cleanup le	vel?		4. RESUL										
	۲	Devium		0	(Predic	ted Date to Achie	ve Cleanup):						2009	
	•	Barium		2	(mg/L)		Confid	lence Interval on I	Predicted Cl	leanun I	Date [.]			90 % Confidence	e Interval		
								3 data points needed					-	95 % Confidence			
	0	Lead		0.015	(mg/L)									is is connucle			
												20		to		2009	
	0	O an a l'huan h O			((Lower	r Limit on Co	onfidence Inte	erval)	(Upper Limit	on Confidence	Interval)
	0	Constituent C			(mg/L)		Source	e Decay Rate Cor	stant (1/ve	ar).						8.33E-02	
								numbers represent s		,	egative nur	nbers repre	sent expandi	ng plumes)			
	0	Constituent D			(mg/L)												
							Ret	turn To Main Scr	een	Nev	w Site/C	lear Scre	en P	aste Examp Set	le Data	HEL	.P 📕
														381			

A	Air Force Cen	n Timeframe D	Decision Supportal Excellence		Vers	sion	1.1		TIER 1 mpirical Data	10.80	Value	r value directly. e calculated by mode t enter any data).	
_	Site Location		Barium and Lead							-	(Don	i chici any dalaj.	
			IE AND HISTORIC				2		UT GRAPH				
1.	. ENTER OC					۱		001					
	Date	Constituent A	Constituent B	Constituent C	Constituent D				DISS		CONCENTRATI	ON	
	(mm/dd/yy)	Barium	Lead	Constituent C	Constituent D					-			
10000000000									1.00E+00	Cleanup	Level		
1	10/22/2009	0.985	0.00899			-						R ² = 0.5704	
2	3/30/2012	0.819	0.00733						1.00E-01				
3	9/27/2012 3/28/2013	0.765 0.764	0.00692 0.0078										
5	9/11/2013	0.712	0.00721										
6	9/24/2014	0.682	0.00718						1.00E-02				-8
7	9/23/2015		0.00715										
8									1.00E-03				
9													
10									1.00E-04				
12													
13									1.005.05				
14									1.00E-05	0 2/2	012 5/2	2013 7/2	014 9/201
15						-			10/2009 12/2010	0 3/2	Time (day)	2013 7/2	014 9/201
											Time (day)		
				Print	Historical Data					-		r) Update G	ranh
²	. WHICH CO	NSTITUENT TO P	2017				NU	imbe	of Years Over Which to Plot Graph		(У		
			Wh	at is the cleanup le	vel?		4.	RES	LTS				
									cted Date to Achieve Cleanup:				2009
	0	Barium		2	(mg/L)			110					2003
	-							Cor	dence Interval on Predicted Cleanup Da	ate:	🖲 90 % C	onfidence Interval	
	-				-			(at le	t 3 data points needed to calculate confidence int	tervals)	O 95 % C	onfidence Interval	
	۲	Lead		0.015	(mg/L)						000	1.	0000
											009 Confidence Interval)	to (Upper Limit d	2009 n Confidence Interval)
	0	Constituent C			(mg/L)					(Lower Limit on v	Confidence Interval)	(Opper Limit o	n Conidence interval)
	Ŭ	Conduction C			1(9, =)			Sou	e Decay Rate Constant (1/year):			3	.53E-02
									e numbers represent shrinking plumes while nega	ative numbers rep	resent expanding plum	nes)	
	0	Constituent D			(mg/L)								
											Dente 1	Trample Data	
								1	eturn To Main Screen	Site/Clear Sc	reen	Example Data	HELP

A S		n Timeframe D er for Environment and I.D.:	Cecision Supported Excellence		Vers		n 1.		T L E Empiri	Cal	Dat	1	Data In 10.80		Enter valu	ue directly. ulated by mo er any data).	del.		
_								3 OUT	FPUT GRAPH										٦.
	LITTER OU			tration mg/L		ר	`	0. 001			DIG								
	Date	Constituent A	Constituent B	Constituent C	Constituent D	-					DIS	SOLVE		ng/L)	ENTRATION				
	(mm/dd/yy)	Barium	Lead			1							Cleanu						
1	5/0/0040	1.00	0.0055				-		1.00E+01	1			Gleand	Level	R²	4			
2	5/2/2012 9/23/2015	1.09 0.837	0.0055 0.00894			-			- 1.00E+00						R ²	= 1			
3								í.											
4 5								, inc	E 1.00E-01	-									
6 7 8								0;;0	1.00E-02										
9 10									1.00E-01 1.00E-02 1.00E-02 1.00E-03 1.00E-03	-									
11									b 1.00E-04	-									
13 14									1.00E-05	-		, , , ,							
15						-			5/2	2012	1/2	013	9/2	2013 Time	5/2014 (day)	L 1.	/2015	9/20	115
	WHICH CO	NSTITUENT TO P	U OT2	Print H	Historical Data			Number	r of Years Over W	hich to Plo	t Granh	_			(yr)	Update	Graph		Ŧ
²	Willow Co			at is the cleanup le	vol2			4. RES			diapit				(יע)				
			VV//c		V61:				dicted Date to Ach	iovo Cloan							2012		
	۲	Barium		2	(mg/L)			1100			iup.						2012		
									nfidence Interval o						90 % Confide				
	0	Lead		0.015	(mg/L)			(at lea	east 3 data points need	ed to calculate	e confident	ce interva	IS)	(🔾 95 % Confide	ence Interval			
	Ŭ	Loud		0.010	1(9, -)								1	#N/A	to		#N/A		
	0	O an a titu and O			((Lo	wer Limit on	Confidence	Interval)	(Upper Lim	nit on Confidenc	e Interval)	
	0	Constituent C			(mg/L)			Sou	urce Decay Rate C	onstant (1/	/year):						7.79E-02		
	~				T		L		itive numbers represen			negative	numbers re	present expa	anding plumes)				
	0	Constituent D			(mg/L)														Ĩ
												1 O'	101- 0		Paste Exan	nple Data			
								F	Return To Main S	creen		vew Site	/Clear So	creen	Se	ť	HE		

	n Timeframe D er for Environment and I.D.:	ecision Suppo		Vers	_			T Em	npiri	ca	R Da	1 ata		<i>ata Inp</i> 10.80 10.80	ut Instru	Ente	r value d	ed by mo	del.		
		E AND HISTORIC				Γ	2 011							_	_	_	_		_	_	
1. ENTER CO	NSTITUENT NAM		tration mg/L		٦Ĺ	`	3. 00	TPUT	SKAPH												
Dete	Constituent A			Constituent D								DISS	OLVED			NTRATI	ON				
Date (mm/dd/yy)	Constituent A Barium	Constituent B	Constituent C	Constituent D											g/L)	1					
(1111/00/99)	Danam	Loud			_			1.	.00E+00	3			CI	eanup	Level						_
1 5/2/2012	1.09	0.0055			-												R ² = 1				
2 9/23/2015	0.837	0.00894			-			ר 1	1.00E-01	-											
4								/ɓ(
5								Concentration (mg/L)	1.00E-02												·
6								ioi ,	1.002-02	-											
8								rat	1.00E-03	-											
9								' ent	1.00E-03												
10								ů,		-											
11					4			ပီ 1	1.00E-04												
12 13										-											
14								1	1.00E-05							= /0			/		
15					-				5/	2012	1	1/2013	3	9/20	Time		2014	1.	/2015	9	/2015
[Time	(day)					
			Print I	Historical Data		Ι.	Number			VI-1-1-1-	Dist Ores							Update	Graph		
2. WHICH CO	NSTITUENT TO P	2017				Ľ	NUMD	erorye	ars Over V	vnich to	Plot Gra	pn				(Y	n	opuato	Graph		
		What	at is the cleanup le	vel?			4. RE	SULTS	i												
							Pre	edicted	Date to Ac	hieve Cl	eanup:							Can't	Calc (+ve	Trend)	
0	Barium		2	(mg/L)												-					
									e Interval c						-	90 % C					
	Lead		0.015	(mg/L)			(at	ieast 3 da	ata points nee	ueu lo calo	ulate confi	uence in	itervals)		() 95 % C	onfidence	Interval			
Ĭ	2000		0.010	1(9/ ⊏)										#N	N/A		to		#N/A		
				-									(Lower L	imit on C	Confidence	Interval)		(Upper Lim	it on Confid	ence Interv	al)
0	Constituent C			(mg/L)			6-		ecay Rate (Conctor	(1/1000)								-1.43E-0	1	
									nbers represe				ative num	pers repre	esent expa	nding plum	nes)		-1.45E-0		
0	Constituent D			(mg/L)		H															
															-						
								Return	n To Main S	Screen		New	Site/Cle	ear Scr	reen	Paste E	Example Set	e Data	H	ELP	
							-				_1										
						1															

APPENDIX C Updated Fate And Transport Modeling Results

BIOSCREEN-AT Model Results Former Swift Site, Moultrie, Georgia Fate and Transport of Lead

This section presents the modeled fate and transport for lead at the former Swift site, which was found above the screening level for groundwater in one or more wells. The screening level is based on the Groundwater Protection Standard (GWPS) of 0.015 mg/L. This section will focus on lead concentrations in groundwater since this form is subject to migration. The purpose of the following assessment is to evaluate the potential for lead detected above the screening levels to migrate beyond the current monitoring well network.

The maximum lead concentration detected in groundwater samples taken in September 2015 was at MW-18 (0.258 mg/L). Additonally, the lead concentration at MW-15 (0.243 mg/L), located on the eastern perimeter of the site, was also modeled using BIOSCREEN-AT.

Lead Transport

The potential for lead in groundwater to migrate from current locations to beyond the current monitoring well network was evaluated using the one-dimensional fate and transport model BIOSCREEN-AT. BIOSCREEN-AT is an enhanced version of BIOSCREEN (Newell et al., 1996) with an exact analytical solution for the transport of a contaminant (Karanovic et al., 2007). This model is based on Microsoft Excel software that solves the widely-used analytical Domenico equation (Karanovic et al, 2007). This equation describes transport of solute in groundwater (inorganic or organic, decaying or non-decaying). Features within the model designed to account for processes specific to natural attenuation of organic constituents were not used. The model simulates advection, adsorption and three dimensional dispersion of any dissolved constituent (inorganic or organic), and has the ability to simulate constant or decaying sources, and contaminant degradation using degradation constants. The use of BIOSCREEN AT was limited for this site-specific application to model only advection, dispersion, and adsorption onto porous media since lead is an elemental contaminant that does not naturally degrade. Processes such as degradation or other chemical/biological processes were not included in this model. The use of this model as described above is consistent with USEPA guidance (Ford et al, 2007), where the USEPA's Center for Subsurface Modeling Support states that the Domenico-basedmodels (such as BIOCHLOR, BIOSCREEN, FOOTPRINT, and REMChlor) in their current forms are reasonable for screening level tools.

Lead is modeled as being transported from the source area with the following assumptions.

- The modeled flow path is depicted from MW-18 through MW-09 and beyond.
- The highest detected lead concentration in MW-18 is representative of lead concentrations in the source area and is constant in concentration.
- An alternate scenario using MW-15 as a source area is also modeled.

The parameters selected for use in the model are presented in the following subsections.

Source Zone Width

The source zone is defined as the two-dimensional cross sectional area that is perpendicular to the direction of groundwater flow and of known constituent concentration. Downgradient of this

Swift & Company, Moultrie, GA Voluntary Remediation Program Status Report No. 1 HIS Site No. 10509

zone, the groundwater concentration is calculated by the model based on the dispersion, decay, adsorption, etc. that would occur in the flow field based on the value of the parameters used in the model. The modeled source is MW-18, with MW-15 also modeled as an alternate scenario. The planar two-dimensional source is represented by the highest detected lead concentration (MW-18 or MW-15). The cross section of the source is assumed to be approximately 100 feet wide around MW-18, or MW-15 in the alternate scenario.

Source Zone Thickness

The source zone thickness was assumed to be 50 feet based on the boring log and potentiometric surface measurements of MW-26DDD (near the central portion of the site).

Seepage velocity

There are two ways to input seepage velocity in this model – either as a final seepage velocity or as hydraulic conductivity, groundwater gradient, and effective porosity. The final seepage velocity method was used in this model exercise.

There are two water-bearing zones in the area of this model (Zone A and B). For this model, they are considered as one unit. The seepage velocity in Zone A has been calculated to be 65 ft/yr based on a horizontal gradient of 0.0086 ft/ft. Seepage velocities in Zone B have been calculated to be 32 - 91 ft/yr; based on a horizontal gradient of 0.0063 – 0.0178 ft/ft. Since the model requires a single seepage velocity, 65 ft/y was used. This value is consistent with reported values for both zones.

Dispersivity

The dispersivities were calculated by the model based on an estimated plume length of 280 feet. The resulting values are longitudinal dispersivity (13.3 feet), the transverse dispersivity (1.3 feet), and vertical dispersivity of 0.13 feet. The model estimates these based on published guidelines for dispersivity (Newell et al., 1996).

Partitioning Coefficient

BIOSCREEN is designed to use an organic Kd partitioning coefficient. This value is dependent on the fraction of organic carbon (foc) in the aquifer matrix, which is used to multiply the entered organic carbon partitioning coefficient (Koc) to get the organic Kd. It can also be used to model an inorganic metal constituent by entering a foc = 1.0 and an actual Kd for the Koc. With this adjustment, the appropriate actual metal Kd value is used in the adsorption formula. The Kd value for lead is dependent on pH. Both H+ (which determines pH) and Pb2+ are cations so there can be competition between them for adsorption sites on grain surfaces. This means the effective Kd depends on actual groundwater pH. Literature values report a range of Kd values from 5 L/kg to 100,000 L/kg (USEPA, 1996). Because the groundwater pH is below neutral, the median of literature values (15,849L/kg) was used as an initial input value and adjusted to calibrate the model to historic plume length and actual groundwater concentrations. Final Kd was dependent on length of time assumed since initial release. Swift & Company, Moultrie, GA Voluntary Remediation Program Status Report No. 1 HIS Site No. 10509

Source Concentration and Strength

For the initial calibration, the lead concentration used in the MW-18 area was 0.258 mg/L, based on the September 2015 total metals sampling result at MW-18. At MW-18, both total and dissolved metals samples were collected, as turbidity could not be reduced below 17.9 NTU. The dissolved metals result at MW-18 was 0.176 mg/L. The source was assumed to be constant over time. The lead concentration in the MW-15 area is 0.243 mg/L based on the September 2015 sampling result.

Degradation and Chemical Transformations

No degradation of lead or chemical reactions was assumed in the model.

Simulation Time

For calibration, the estimated earliest and latest possible times of release (based on the years of operation of the former Swift facility) were modeled. The actual first release date is unknown but should lie somewhere between these endpoints. The estimated earliest possible release date gives the plume 100 years to develop and results in a slower moving plume with a higher retardation factor for the aquifer. Use of these parameters would lead to predictions of slower future growth and more limited extent. The estimated latest possible release date gives the plume 44 years to develop and results in a faster moving plume with a lower retardation factor for the aquifer. Use of these parameters would lead to predictions of faster future growth and more extensive plume development. Since neither of these scenarios takes into account source area attenuation (both use a continuing source), both will generate very conservative (higher concentrations and greater extent) estimates of future plume development.

Calibration Values

The following September 2015 concentrations were used to calibrate the Kd values for the 100 and 44 year historic plume development:

Well	Distance (Feet from Source Area)	September 2015 Lead Concentration (mg/L)
MW-18	0	0.258 (total)
MW-18	0	0.176 (dissolved)
MW-6	74	0.132
MW-13D	132	0.129
MW-9	194	0.0898
MW-20	224	0.00347

Screen captures of final input and output values for the 44 and 100 year historic plumes are attached.

The calibration using the MW-18 total metals value of 0.258 mg/L yielded unsatisfactory predicted values as compared to existing site values. Therefore, the calibration was performed again using the MW-18 dissolved metals value of 0.176 mg/L, which yielded a more satisfactory calibration when compared to site values. As mentioned above, the BIOSCREEN input pages for both the MW-18 total and dissolved metals values, and associated model output pages showing predicted values, are attached.

For the MW-15 scenario, the source used was the MW-15 September 2015 lead concentration of 0.243 mg/L. Modeled travel times of 50 and 100 years were used for this scenario. The setup for the MW-18 scenario was otherwise used, as there are no downgradient wells from MW-15 to use for calibration of the Kd values.

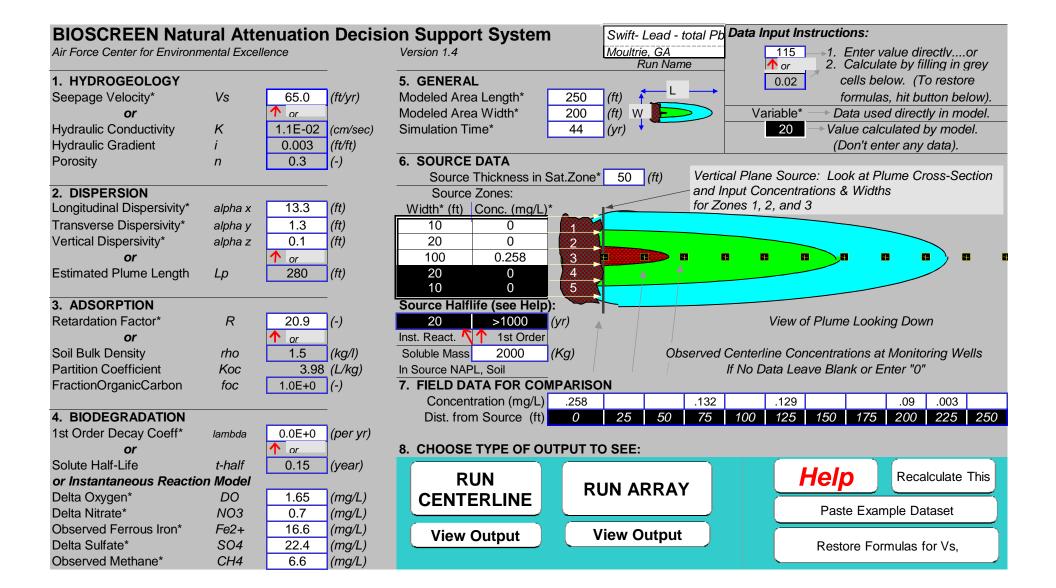
CONCLUSIONS

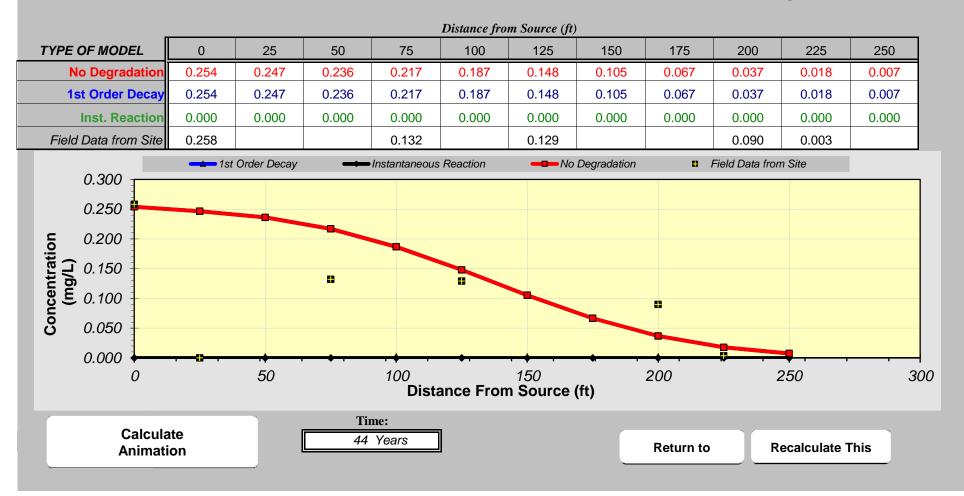
Lead Model Results

The results of this model of lead fate and transport from MW-18 toward MW-9 show that (for the modeled travel time of 100 additional years) the lead concentration would not exceed the GWPS of 0.015 mg/l between approximately 425 to 590 feet from MW-18 (44 year historic plume or 100 year historic plume, respectively). This distance would extend beyond the eastern property boundary approximately 220 to 380 feet for the two time periods. For the MW-15 source scenario, the lead concentration (for the modeled travel time of 100 additional years) would not exceed the GWPS of 0.015 mg/l between approximately 450 to 620 feet from MW-15, or approximately 270 to 320 feet beyond the eastern boundary along the prevalent groundwater flow direction.

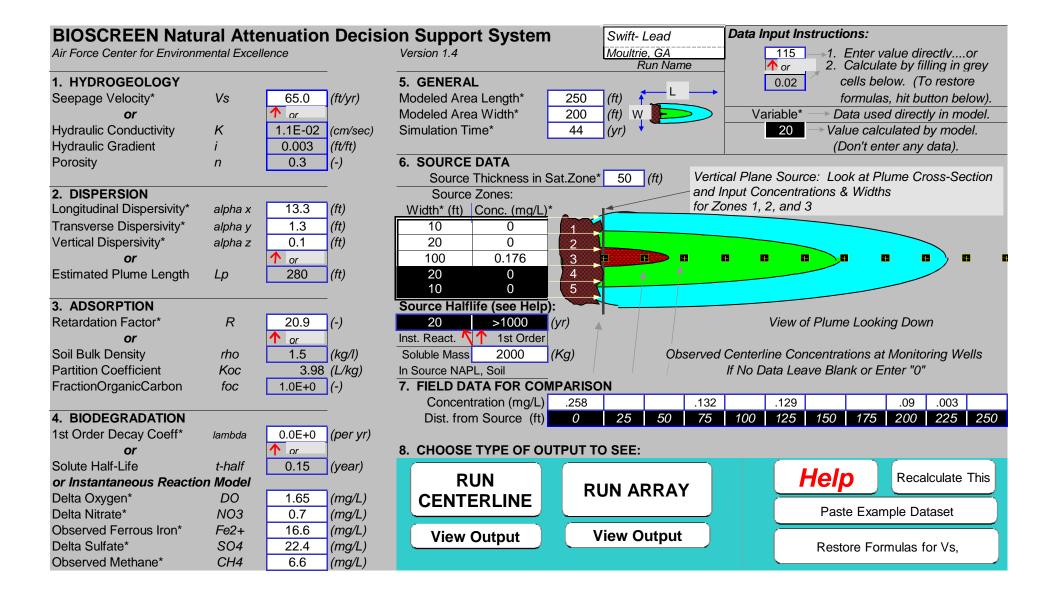
The models represent a very conservative estimate and actual conditions will be lower, as the highest detected groundwater concentration was maintained as a constant source over the entire model timeframe, and because the Kd values used are very low when compared to guidance document values. Most importantly, as pH becomes more neutral over time and distance from the source, the mobility of lead will be diminished and corresponding Kd values would increase. Screen captures of model inputs and results are attached.

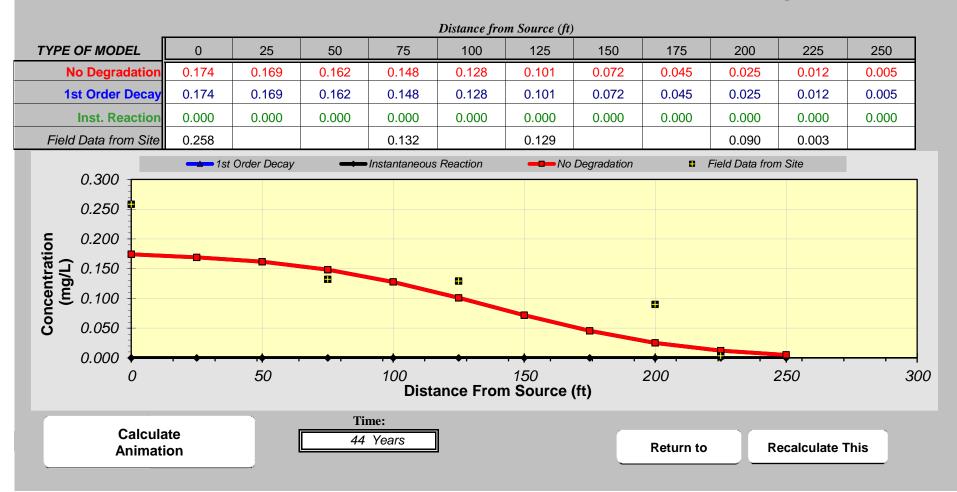
Initial Set-up and Calibration Using MW-18 Total Metals Value

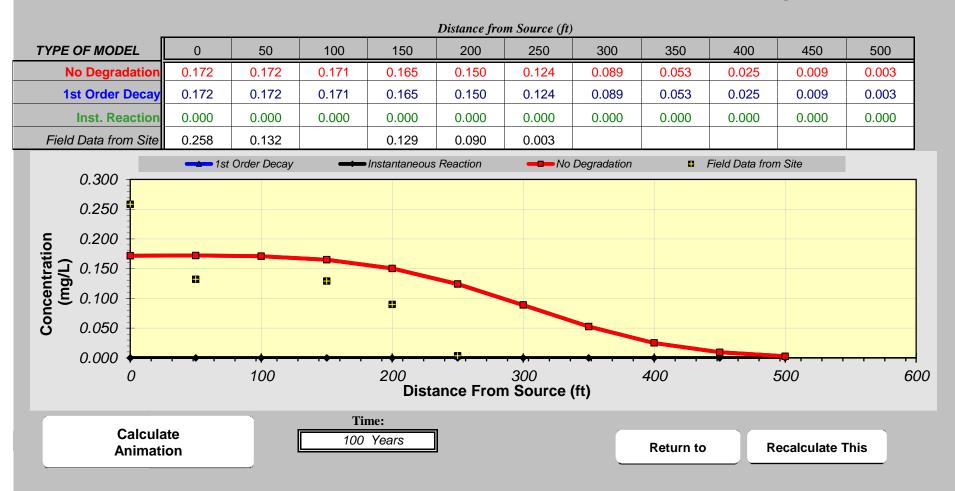


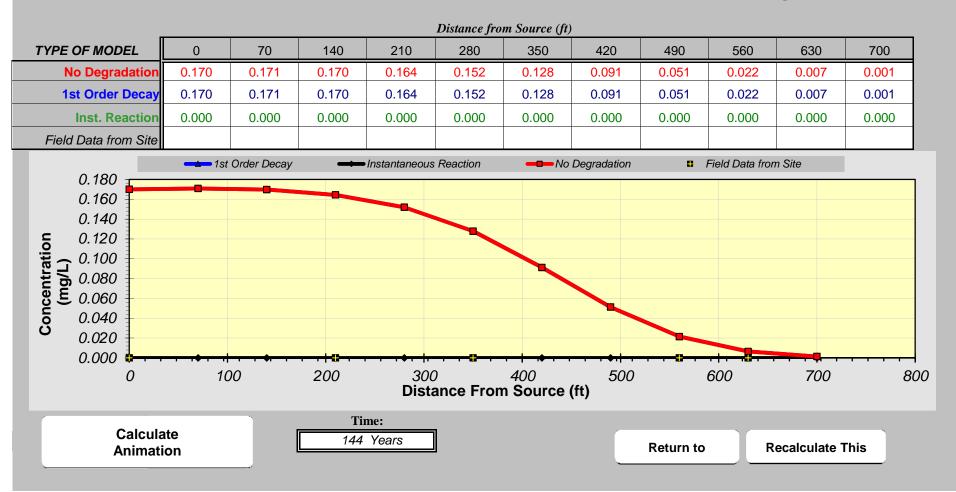


Final Set-up, Calibration and Predicted Values Using MW-18 Dissolved Metals Value

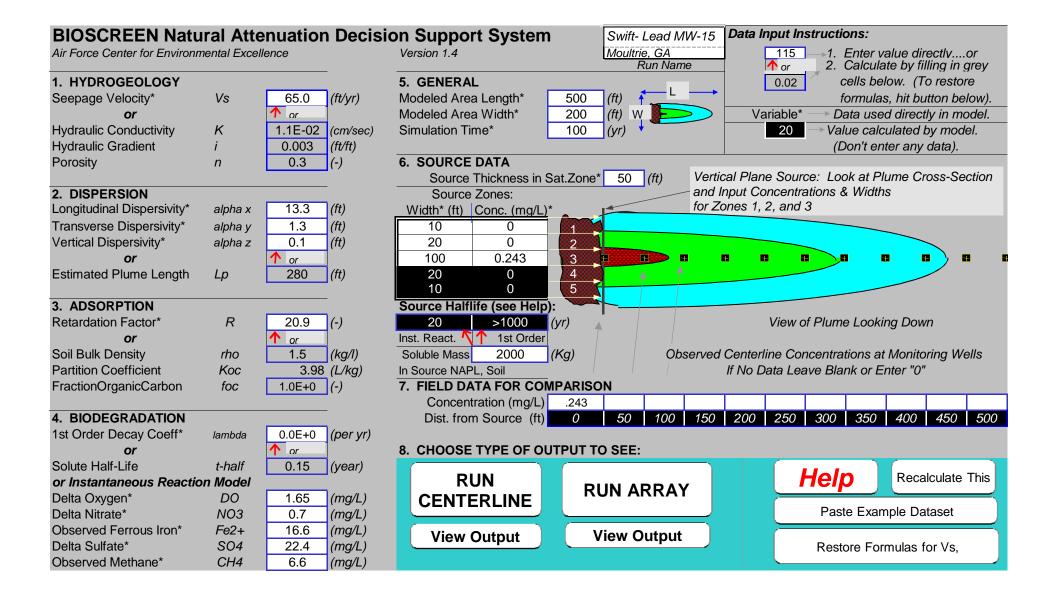


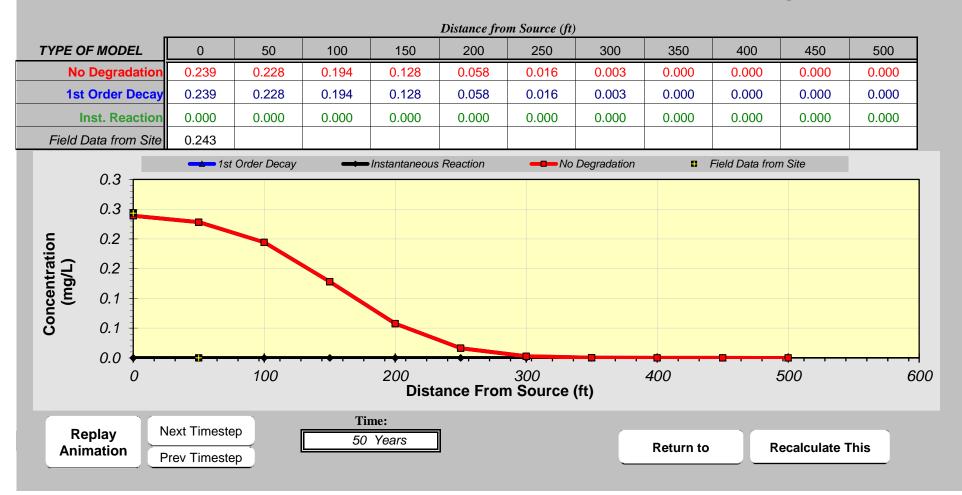


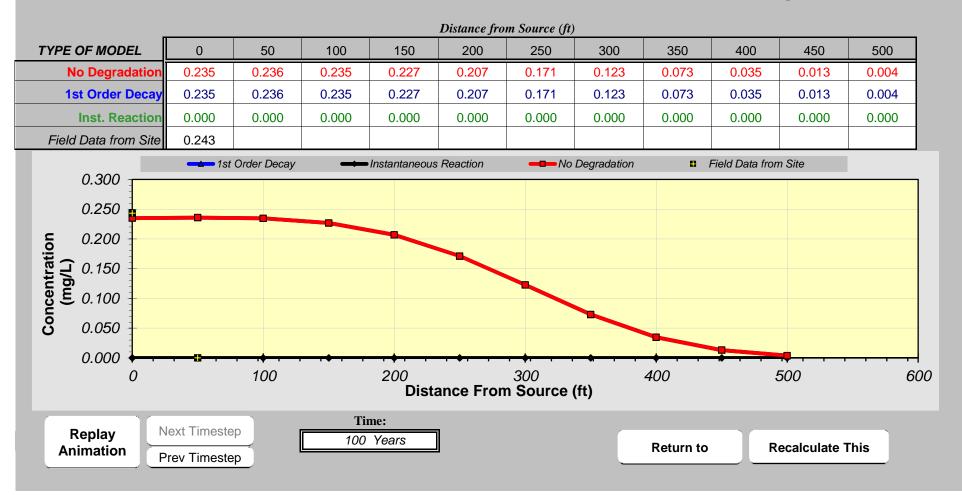


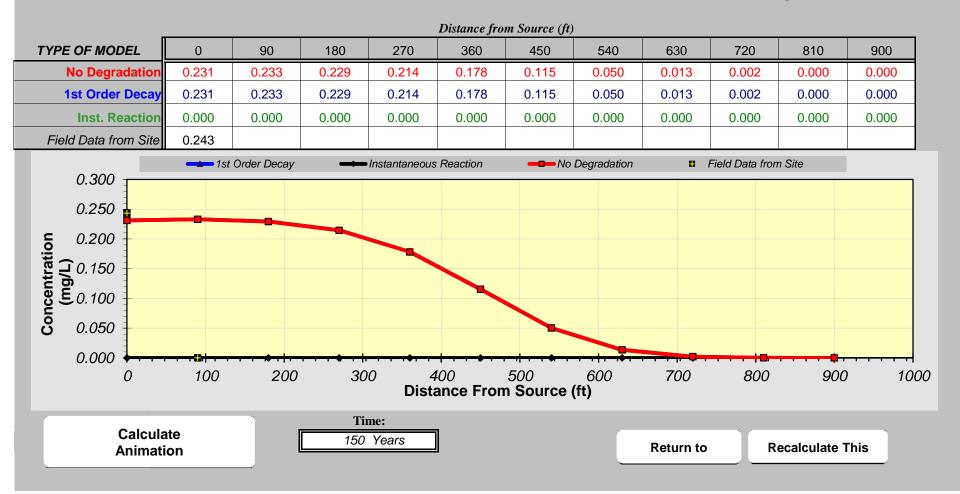


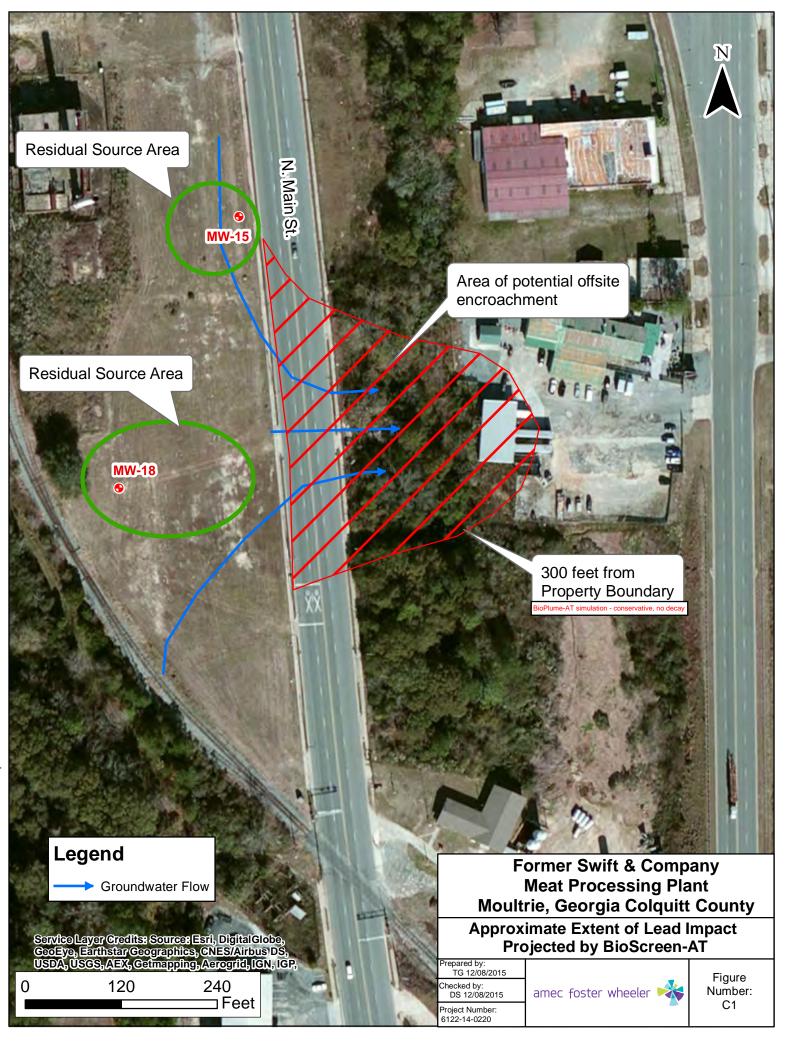
Set-up and Predicted Values of MW-15 Scenario











APPENDIX D REGISTERED PROFESSIONAL SUPPORTING DOCUMENTATION

Summary of Hours and Services

Former SWIFT & Company Meat Processing Plant HSI Site No. 10509 Amec Project No. 6122-14-0220

Submittal to EPD date December 8, 2015

David E. Smoak, P.G. Preparation of submittal and review 17 hours charged through December 4, 2015

John Quinn, P.G Preparation of submittal documentation 68 hours charged through December 4, 2015