

DAVID J. JOSEPH COMPANY/TRADEMARK METALS RECYCLING, LLC
CINCINNATI, OHIO

VOLUNTARY REMEDIATION PROGRAM
PROGRESS REPORT NO. 9

RICE IRON AND METALS (FORMER)
2000 WEST SAVANNAH AVENUE
VALDOSTA, LOWNDES COUNTY, GEORGIA

VRP NO. 1348601340
HSI NO. 10923
GF PROJECT NO. 057524.035
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QUALIFIED GROUNDWATER SCIENTIST CERTIFICATION

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

Aaron Getchell 11/16/18

Aaron Getchell, P.G.

P.G. Certification Number: PG002203



1.0 INTRODUCTION

1.1 Background

Gannett Fleming, Inc. (GF) was retained by the David J. Joseph Company/Trademark Metals Recycling, LLC (DJJ/TMR) to perform assessment and remediation activities at the Former Rice Iron & Metals property (VRP Property) located at 2000 West Savannah Avenue in Valdosta, Lowndes County, Georgia (Figures 1 and 2). The assessment and remediation activities were conducted pursuant to the Georgia Department of Natural Resources (GDNR), Environmental Protection Division (EPD) Voluntary Remediation Program (VRP) for the VRP Property (consistent with Code Section 12-8-105) listed in the Hazardous Site Inventory (HSI). A Voluntary Investigation and Remediation Plan (VIRP) Application and Checklist were submitted to EPD on March 8, 2013 (included in Appendix A). The VIRP Application was approved by EPD in a letter dated May 22, 2014 and indicated that the final Compliance Status Report (CSR) is due to EPD on or before April 18, 2019.

An Interim Site Assessment Report/VRP Status Report (Progress Report No. 1) was submitted to EPD in December 2014 and provided a summary of historical assessment and remediation findings, and results of the assessment activities performed by GF in 2014. This report also included previous reports completed by Stillwater Technologies, Inc. (STI). VRP Progress Report No. 2 was submitted to the EPD on May 28, 2015. TMR and GF met with EPD representatives at the VRP Property on August 6, 2015, to conduct an inspection and discuss further assessment and remediation requirements. EPD submitted an email on August 13, 2015, with comments to GF that referenced the May 22, 2014, EPD approval letter. Additional soil and groundwater assessment activities were completed and summarized in VRP Progress Report No. 3 dated December 15, 2015. VRP Progress Report No. 4 was submitted on May 31, 2016, and summarized the results of the April 2016 semi-annual groundwater monitoring. VRP Progress Report No. 5 was submitted on September 15, 2016, and summarized the assessment activities conducted in the vicinity of MW-8; and provided EPD with a technical justification for discontinuing groundwater sampling in certain areas of the VRP

Property. VRP Progress Report No. 6 (dated December 16, 2016) summarized soil and groundwater remediation activities in the vicinity of MW-8; and summarized the results of the October 2016 groundwater monitoring. A meeting was conducted with GF and EPD on February 7, 2017, and was summarized in an EPD comment letter dated February 27, 2017. VRP Progress Report No. 7 (dated June 29, 2017) was a bulleted list that summarized the sampling activities conducted in February 2017 and summarized the content of conference calls with EPD. VRP Progress Report No. 8 (dated October 5, 2017) was prepared, as recommended by EPD in a July 19, 2017, email, to summarize the development of the Risk Reduction Standards/Cleanup Standards and Regulated Chemicals/Delineation Standards. This VRP Progress Report #9 was prepared in response to EPD's comment letter dated August 30, 2018.

The purpose of conducting assessment and remediation activities at this VRP Property is to pursue risk-based corrective action and ultimately delist the VRP Property from the HSI. DJJ/TMR no longer owns the VRP Property, does not conduct business operations on the VRP Property, and has no control of chemical management at the VRP Property. Therefore, DJJ/TMR requires a scenario where impacted soil and groundwater is adequately characterized for risk-based corrective action with no ongoing obligations. Based on the history of industrial land use at the VRP Property; and the proposed future land use of the VPR Property for industrial purposes, risk-based corrective action planned include institutional controls in accordance with Code Section 12-8-102(a)(9). A draft Uniform Environmental Covenant that will be executed upon approval of this CSR is included in Appendix B.

1.2 VRP Property Description

The VRP Property (VRP No. VRP1348601340 and HSI No. 10923) consists of 27.57 acres with approximately 1,000 feet of frontage along West Savannah Avenue. The current owner is James Warren & Associates, Inc. As shown on Figures 2 and 3, the VRP Property (Lowndes County Parcel Number 0121A 026) is unpaved and primarily wooded in the eastern portion; and the western portion of the VRP Property contains structures to support business operations.

An unnamed surface water body (shown on Figure 2) is located on the southeastern portion of the VRP Property. According to U.S Fish and Wildlife Service, National Wetlands Inventory Wetlands Mapper (www.fws.gov/wetlands/data/mapper.html), accessed by GF on February 14, 2017, the unnamed surface water body is identified as a 1.25-acre freshwater pond. There do not appear to be estuarine/marine, freshwater emergent, or freshwater forested/shrub wetlands located on the VRP Property. The unnamed surface water body is not used as a source of potable water, irrigation water, or industrial process water; and was not used by TMR or is not used by the current property owner for recreational purposes such as swimming, fishing, or boating.

South of the surface water body, in the south eastern portion of the VRP Property, there is a cleared area that is comprised of approximately 2.5 acres (shown on Figure 2) that has historically been used for a feed plot for deer hunting before TMR purchased the property in October 2011. Upon purchasing the property, TMR discontinued the practice of hunting at the feed plot on the VRP Property.

Structures and improvements located in the western portion of the VRP Property (shown on Figure 2) include: a one-story office building that is approximately 1,630 square feet; a one-story warehouse building that is approximately 20,000 square feet; a building that contained a metal shear for previous scrap metal processing; and a metal shed which provided cover for a metal bailer and a truck scale that were previously operated at the VRP Property. The VRP Property has access to a 1,000-foot(ft) rail spur that is inactive; and a 6-ft tall chain-link fence and a locking entrance gate is located along West Savannah Avenue.

1.3 VRP Property Setting and Adjacent Properties

Elevation of the VRP Property is approximately 205 ft above mean sea level and the area topography is generally flat with a slight downward slope to the south (shown on Figure 1). The VRP Property is located in a mixed-use area that consist of residential, commercial, and industrial properties. The VRP Property is bordered to the north by West Savannah Avenue; to the east by residential properties; to the south by vacant undeveloped industrial land owned by Lowndes County; and to the west by A-1 Towing.

Figure 3 presents the VRP Property and surrounding adjoining parcel information obtained from the Lowndes County Assessor's Office website (www.qpublic.net/ga/lowndes/). The information provided includes: property owner, parcel identification number, and parcel size.

1.4 VRP Property History

The VRP Property was owned and operated by Rice Iron & Metals, Inc., as a scrap metal processing business reportedly beginning in the mid-1960s until TMR purchased the VRP Property in October 2011. TMR also operated a scrap metal processing business from October 2011 until November 2015, when the business was closed and recycling operations were ceased due to a decline in scrap metal market conditions. In December 2016, ownership of the VRP Property was transferred from TMR to James Warren & Associates, Inc. James Warren & Associates, Inc. uses the VRP Property to store equipment and materials to operate a utility contracting business (buried utility installation, repair, and maintenance).

In 2011, TMR contracted with STI to perform a pre-purchase environmental assessment. The environmental assessment revealed the presence of soil and groundwater impacts in several areas on the VRP Property including: 1) the Outdoor Metal Bailing Area; 2) the Metal Shearing Machine Area; 3) the Torch Cutting Area; 4) the Motor Block Storage Area; and 5) the Train Car Load-out Area. The history of previous chemical release(s) was not identified during the pre-purchase environmental assessment. Since assessment was initiated, soil and groundwater assessment activities have been conducted in several areas of the VRP Property that were broken into the Northern Operations Area (basically the northern portion of the VRP Property) and the Southern Operations Area (the southern portion of the VRP Property). Results of the VRP Property assessment revealed the presence of chlorinated solvents, petroleum hydrocarbons, and metals at concentrations above Maximum Contaminant Levels (MCLs).

As part of the pre-purchase assessment, a Soil Excavation and Groundwater Investigation Report was completed by STI in February 2012, and was included in GF's VRP Progress Report No. 1. The laboratory analytical data from the 2011 STI report has been incorporated into this VRP Progress

Report No. 9 so cumulative data collected through the years of assessment can be evaluated as part of the conceptual site model. The assessment included the installation of eleven monitoring wells (MW-1 through MW-11) and groundwater sampling in five potential source areas and background areas. Source removal soil excavation was also conducted by STI in six areas of the VRP Property to remove impacted soil. Following the soil excavations, STI collected confirmation soil samples for laboratory analysis which have been included in cumulative Figures and Tables.

2.0 GEOLOGY AND HYDROGEOLOGY

The geology and hydrogeology of the VRP Property has been characterized by advancing soil borings, installing monitoring wells, and sampling monitoring wells to develop a conceptual site model. Soil boring locations are shown on Figure 4 and monitoring wells are shown on Figure 5. Cumulative field forms (soil boring logs, monitoring well diagrams, and groundwater sampling logs) completed by GF since 2014 are included in Appendix C. Characterization of the geology and hydrogeology at the VRP Property has been adequate to understand the horizontal and vertical distribution of impacts; the potential for migration of impacted media; and sufficient to address the impacted media to protect the environment and points of exposure. The following sections provide an overview of the regional geology and hydrogeology; and detail the VRP Property characterization for the conceptual site model.

2.1 Regional Geology and Hydrogeology

Georgia consists of four distinct geologic regions (Geologic Map of Georgia, GDNR, Geologic and Water Resources Division, and Georgia Geological Society, 1976). Lowndes County is situated in South Georgia in the Coastal Plain geologic region. The Coastal Plain is a region comprised of Pleistocene and Pliocene sands and gravels; and Cretaceous and Cenozoic sedimentary rocks. The sedimentary rocks of the Coastal Plain partly consist of sediment eroded from the Piedmont over the last 100 million years and are partly limestone. These strata dip towards the southeast and are younger nearer the coast of the Atlantic Ocean. The sedimentary rocks are underlain by igneous and metamorphic rocks.

The Coastal Plain geologic region of Southeast Georgia is underlain by the Coastal Plain Aquifer System that includes the Floridan Aquifer System (Hydrogeology of the Southeastern Coastal Plain Aquifer System in Mississippi, Alabama, Georgia, and South Carolina, USGS Professional Paper 1410-B, 1996). In the immediate vicinity of the VRP Property, the Floridan Aquifer System consists of the Surficial Aquifer (corresponding to the Pleistocene and Pliocene undifferentiated sediments

consisting of sands and gravels with varying amounts of clay) that serves to recharge deeper aquifers. Below the unconfined Surficial Aquifer, the Intermediate Confining Unit (corresponding to the Hawthorn Formation) is comprised of less permeable material (such as clays, phosphatic sands and limestone/dolostone lenses) and acts as a confining unit between the Surficial Aquifer and the Floridan Aquifer. The Floridan Aquifer (consisting of the Avon Park Formation) is generally comprised of limestone. Based on soil boring logs advanced by GF at the VRP Property as part of assessment activities, the Surficial Aquifer has been assessed, and no assessment has occurred in the Intermediate Confining Unit or the Floridan Aquifer.

2.2 VRP Property Geology and Hydrogeology

Four soil borings (B-1 through B-4) were advanced on August 5 through 7, 2014 at the VRP Property to 50 ft below land surface (bls) using the direct push drilling method. Soil boring locations are shown on Figure 4; and transects and cross sections of the VRP Property that have contributed to the conceptual site model are included as Appendix D. Soil samples were collected at intervals of five feet using a Geoprobe with a stainless steel macrocore sampler. The general VRP Property lithology consists of sand from approximately 0-5 feet bls, then sandy clay from approximately 5-15 ft bls, and then sandy clay or clay with various layers of medium-grained sand lenses from approximately 15-50 ft bls. Topography at the VRP Property slopes gently to the south and groundwater was generally encountered during drilling at approximately 6-9 ft bls. These unconsolidated sands and the occurrence of an unconfined water table is consistent with the hydrogeology of the Surficial Aquifer of the Floridan Aquifer System.

Groundwater quality parameters, collected during purging to evaluate aquifer stabilization for monitoring well sampling (listed on groundwater sampling forms included in Appendix C), are generally consistent with published values for the unconfined Surficial Aquifer in the Coastal Plain (Water Quality of Surficial Aquifers in the Georgia-Florida Coastal Plain, USGS Water-Resources Investigations Report 95-4269, 1996). For example, the mean published temperature values for temperature and pH indicate 22° Celsius and a slightly acidic pH, which is generally consistent with water quality parameters observed in MW-1R, MW-1D, and MW-1DD. Published values also indicate an aerobic dissolved oxygen [greater than 1 milligram per liter (mg/L)] and fresh water

specific conductivity [less than 10,000 microsiemens per centimeter ($\mu\text{S}/\text{cm}$)] which is also generally consistent with values recorded during purging MW-1R, MW-1D, and MW-1DD. Therefore, the geochemistry of the unconfined Surficial Aquifer at the VRP Property is an environment capable of sustaining microbial activity that is conducive to the natural attenuation of Volatile Organic Compounds (VOCs).

2.2.1 Groundwater Flow Directions

Water level measurements have been collected during each groundwater monitoring event (listed in Table 1) to evaluate groundwater flow directions at the VRP Property. Eleven groundwater sampling events were conducted by GF from July 21, 2014, to July 27, 2017. The top of casing elevations of each of the monitoring wells was surveyed to North American Vertical Datum of 1988 (NAVD 88) on September 23, 2014 and additional monitoring wells have been surveyed into the monitoring well network to NAVD 88. Monitoring well locations are shown on Figure 5; and monitoring well construction details are listed in Table 1 with groundwater level measurements and survey data.

The average depth to water measured in the upper portion of the Surficial Aquifer is 6.09 feet from top of casing (each monitoring well is flush mount). There have been great fluctuations noted in monitoring wells at the VRP Property. For example, depth to water in MW-8R was 9.32 ft bls on November 11, 2014; and was 1.84 ft bls on April 5, 2016. Another example is MW-1R, when depth to water was 11.38 ft bls on November 11, 2014; and was 3.01 ft bls on April 5, 2016. While these examples represent the extreme high and low groundwater table elevations, the fluctuating unconfined water table has created a large smear zone in the sandy/clayey sediments. The large smear zone and a fluctuating groundwater table leaches regulated chemicals that may be sorbed to smear zone sediments or bound in aquifer matrix pore space.

Groundwater flow direction in the upper surficial aquifer at the VRP Property has fluctuated but has generally been shown towards the east which is consistent with the most recent and most complete round of groundwater elevations collected on February 17, 2017 (shown on Figure 6a). There has been some variability in the northern portion of the VRP Property with groundwater flow to the

southwest and southeast, although hand contouring conducted by GF may vary depending on the technical input of the GF professional compiling data for the conceptual site model. Contours were hand-drawn onto Figure 6a using the interpolation method to calculate elevations between two data points. Groundwater flow direction in the intermediate portion of the surficial aquifer has generally been consistent with the upper surficial aquifer indicating that the upper and intermediate portions of the unconfined surficial aquifer are hydraulically connected.

The groundwater elevations shown on 6a were also used to further evaluate groundwater flow direction in the upper portion of the surficial aquifer in the Outdoor Metal Bailing Area (shown on Figure 6b). This evaluation was conducted to assess the monitoring well network delineating chlorinated solvent and arsenic impacts at MW-1R. As shown on Figure 6b, groundwater flow direction in the Outdoor Metal Bailing Area is generally towards the south and southeast, following topography towards the unnamed surface water body which is located to the southeast of MW-1R. Monitoring well MW-2R has previously displayed low-level concentrations of chlorinated solvents which were also detected at MW-1R; which indicates that MW-2R is located in a position to sufficiently characterize contaminant transport, following groundwater flow direction, from MW-1R. The impacts at MW-1R are further delineated to the east (MW-15), north (MW-14), the northeast (MW-4), and the west (MW-3). Therefore, GF believes that the current monitoring well network in the Outdoor Metal Bailing Area is sufficient to demonstrate delineation within the boundaries of the VRP Property.

2.2.2 Horizontal and Vertical Gradients

Horizontal and vertical hydraulic gradients in the Outdoor Metal Bailing Area (calculations listed in Appendix E) were evaluated for the conceptual site model. The Outdoor Metal Bailing Area was selected for this evaluation because of the chlorinated solvent- and arsenic-impacted groundwater in the upper portion of the surficial aquifer. Groundwater flow in this area has generally been towards the east to southeast in this portion of the VRP Property. Therefore, to assess the horizontal gradient of the upper portion of the surficial aquifer, the following well pairs were used: MW-4/MW-1R and MW-1R/MW-15. Groundwater elevations, from five sampling events (between November 11, 2014, and July 27, 2017) at these two well pairs, were used to calculate an average horizontal hydraulic

gradient. The groundwater elevation data is listed in Table 1 and also on the horizontal gradient calculation pages included in Appendix E. Horizontal hydraulic gradients ranged from 0.0011 feet per foot (ft/ft) to 0.0099 ft/ft, with an average horizontal hydraulic gradient of 0.0034 ft/ft, for well pair MW-4/MW-1R; and from 0.0000 ft/ft to 0.0026 ft/ft, with an average horizontal hydraulic gradient of 0.0018 ft/ft, at well pair MW-1R/MW-15. The average horizontal hydraulic gradient at the VRP Property was 0.0026 ft/ft. This shallow gradient is typical of the upper portion of the unconfined surficial aquifer where groundwater flow generally mirrors land surface topography.

When developing the conceptual site model, this horizontal hydraulic gradient is relatively shallow and typical for the surficial aquifer of the Floridan Aquifer System. The shallow gradient would not greatly contribute to regulated chemicals migrating great distances to points of exposure at the VRP Property within the sandy/clayey upper portion of the surficial aquifer; and impacted groundwater would tend to remain relatively localized in the immediate vicinity of the source.

To evaluate vertical hydraulic gradients at the VRP Property, nine groundwater elevations, from nine sampling events (between November 11, 2014, and July 27, 2017) in wells MW-1R (upper surficial aquifer), MW-1D (intermediate surficial aquifer), and MW-1DD (lower surficial aquifer), were used with the midpoint elevation of each well screen. The groundwater elevations are listed on Table 1 and on the vertical gradient calculation pages included in Appendix E. Vertical hydraulic gradients from MW-1R (upper surficial aquifer) and MW-1D (intermediate surficial aquifer) ranged from -0.01 ft/ft (upward) to 0.06 ft/ft (downward) and averaged at 0.04 ft/ft. Vertical hydraulic gradients from MW-1D (intermediate surficial aquifer) and MW-1DD (lower surficial aquifer) ranged from 0.74 ft/ft (downward) to 0.85 ft/ft (downward) and averaged at 0.79 ft/ft (downward).

The average vertical hydraulic gradients indicated that there is a slight downward hydraulic gradient between the upper, intermediate, and lower portions of the surficial aquifer. This slight downward hydraulic gradient would have a slight to negligible effect on regulated chemical migration through the sandy/clayey upper portion of the surficial aquifer of the Floridan Aquifer System.

2.2.3 Hydraulic Conductivity

Slug testing was performed on September 23, 2014, in shallow monitoring wells MW-12, MW-13, and MW-14 to estimate physical aquifer properties at the VRP Property. Slug testing was also performed at MW-1D and MW-5D but this data was not evaluated herein because the intermediate portion of the surficial aquifer is not impacted by regulated chemicals. Slug testing was also performed at MW-2R but this data appeared to be anomalous, and therefore, was not included in the conceptual site model. Each of these three monitoring wells (MW-12, MW-13, and MW-14) is approximately 20 feet deep with 10 feet of screen and is screened in the unconfined upper surficial aquifer. The raw slug test data and an evaluation of the slug test data is included in Appendix E.

The slug test data were analyzed using the software package AQTESOLV (Geraghty & Miller, Inc., 1987) and the analytical method outlined by Bouwer and Rice (1976), resulting in a value for hydraulic conductivity (K) in feet per minute. These values were converted into feet per day (ft/day) for MW-12 (0.0023 ft/day), MW-13 (0.0016 ft/day), and MW-14 (0.0393 ft/day); for an average hydraulic conductivity value for the upper portion of the surficial aquifer of 0.0144 ft/day. Based on the observed lithology (sand and clay), an average effective porosity of 30% was established for the sediments in the upper surficial aquifer (C. W. Fetter, Applied Hydrogeology, Third Edition, 1994).

Therefore, where the average hydraulic conductivity (K) is 0.0144 ft/day; the average horizontal hydraulic gradient (i) is 0.0026 ft/ft (refer to section 2.2.3); and the average estimated effective porosity (n) is 30%; the average linear groundwater velocity (V) where $V=(K*i)/n$ is 0.0001 ft/day or 0.046 ft/year.

Even with retardation factors of the regulated chemicals not included in this calculation, the average linear groundwater velocity of 0.046 ft/year is consistent with the conceptual site model of the upper surficial aquifer and typical of the Floridan Aquifer System. This average linear groundwater velocity would not be capable of contributing to regulated chemicals migrating great distances to affect points of exposure at the VRP Property.

3.0 REGULATED CHEMICALS AND DELINEATION

The regulated chemicals were initially assessed at the VRP Property based on the 2012 STI Soil Excavation and Groundwater Investigation Report. Since 2014, GF has conducted assessment and remediation activities at the VRP Property to address EPD comment letters and emails dated May 22, 2014; August 13, 2015; February 7, 2017; February 27, 2017; and August 30, 2018. While previous VRP Progress Reports may not have been cumulative, the following summary (including cumulative Figures and Tables included herein) presents EPD with a concise, yet comprehensive and cumulative summary of assessment and remediation activities conducted by GF at the VRP Property.

3.1 Delineation Criteria and Risk Reduction Standards

Historical soil and groundwater analytical data were reviewed by GF to identify the regulated substances that were released at the VRP Property. Before TMR purchased the VRP Property in October 2011, a Phase II Environmental Site Assessment (ESA) was completed by STI to evaluate environmental impacts in the soil and groundwater. The Phase II ESA data included: VOCs, metals, Polycyclic Aromatic Hydrocarbons (PAHs), and Polychlorinated Biphenyls (PCBs). Additional assessment of the soil and groundwater at the VRP Property was completed by STI in 2011. Based on the results of the assessment and visual assessment, soil excavation was completed in six areas as reported in STI's February 2012 Soil Excavation and Groundwater Investigation Report. At the request of EPD, the approximate outlines of each of the soil excavations has been included on the Figures herein. Based on STI's February 2012 Soil Excavation and Groundwater Investigation Report, soil and groundwater has been assessed at the following areas: Outdoor Metal Nailing Area; Aboveground Storage Tank (AST) Area, Former Underground Storage Tank (UST) Area, and Non-ferrous Processing Building Area; Metal Shearing Machine Area; and the Motor Block Storage Area. At the request of EPD, GF has also conducted assessment activities in the Shed Area and the Feed Plot Area.

GF has conducted assessment and remediation work at the VRP Property since 2014 to bring contamination issues to regulatory closure with institutional controls (restricting future land use to commercial/industrial activity) in accordance with 12-8-102(a)(9). During the December 2016 sale of the VRP Property to James Warren & Associates, Inc., DJJ/TMR disclosed the contamination issues at the VRP Property and indicated that these would be ultimately be addressed within a Uniform Environmental Covenant (a draft is included in Appendix B). Representatives and legal counsel of James Warren & Associates, Inc. were informed that future land use at the VRP Property would be restricted to commercial/industrial. Based on discussions between James Warren & Associates, Inc. and DJJ/TMR, a Uniform Environmental Covenant was agreeable to both parties. Therefore, the goal of assessment and remediation at the VRP Property has been to adequately characterize and remediate regulated chemical-impacted material to a commercial/industrial scenario with no ongoing obligations such as routine groundwater monitoring or an engineered cap that would require ongoing maintenance and an engineering control maintenance plan.

Based on the laboratory analytical data collected, and as recommended by EPD in a July 19, 2017, email, GF prepared VRP Progress Report #8 to include a cumulative summary of laboratory analysis, the calculation of delineation criteria, and the calculation of Type 1 through 4 Risk Reduction Standards (RRS'). GF greatly appreciates EPD's contributions and detailed comments regarding the development of the RRS' which have been incorporated into the following sections.

3.1.1 Delineation Criteria

As required by EPD, cumulative soil analytical data is listed in Table 2 and cumulative groundwater data is listed in Table 3. The cumulative soil and groundwater data were used to evaluate the delineation criteria.

After consultation with EPD GF has proposed to use Type 1 RRS' for delineation standards for soil and groundwater. Appendix F -Table F1 lists delineation criteria for soil; and indicates that the maximum concentrations within the source area of tetrachloroethene (PCE) and arsenic in soil exceeded their respective Type I RRS'. Table F2 lists delineation criteria for groundwater; and indicates that the maximum concentrations within their respective source areas of benzene, 1,1-

dichloroethene (DCE), cis-1,2-dichloroethene (cDCE), PCE, toluene, trichloroethene (TCE), vinyl chloride (VC), and arsenic in groundwater exceeded their respective Type 1 RRS'. Table F3 lists the Type 1 RRS' for regulated chemicals in soil, and Table F4 lists the Type 1 RRS' for regulated chemicals in groundwater. Backup calculation pages for Type 1 RRS' are also included in Appendix F.

3.1.2 Risk Reduction Standards

Based on the delineation criteria and Type 1 RRS' developed for the regulated chemicals (Tables F1 through F4), GF developed Type 2 (Table F5), Type 3 (Table F6), and Type 4 (Table F7) RRS' for soil; and Type 2 (Table F8) and Type 4 (Table F9) RRS' for groundwater. Based on the historic and proposed future land use of the VRP Property, GF proposes the following RRS' at the VRP Property.

- GF proposes Type 3 RRS' that have been developed for soil. Based on the calculations in Appendix F and summarized in Table F6, arsenic remains the regulated chemical that exceeds the Type 3 RRS. GF evaluated the use of Type 4 RRS' (Table F7), however, arsenic remained a regulated chemical that exceeds the Type 4 RRS, therefore Type 3 RRS' have been proposed for the purposes of assessment and remediation. Please note that arsenic has been horizontally and vertically delineated in soil in the immediate vicinity of MW-1R (refer to Section 3.2.1) and is in compliance with the Type 1 and Type 3 RRS.
- GF proposes Type 2 and Type 4 RRS' that have been developed for groundwater. Based on the calculations summarized in Table F9, benzene, cDCE, PCE, TCE, toluene, VC, and arsenic exceed the Type 2 RRS'; note that DCE was resolved by calculating the Type 2 RRS'. Based on the calculations summarized in Table F9, benzene, cDCE, PCE, TCE, VC, and arsenic exceed the Type 4 RRS'; note that toluene was resolved by the Type 4 RRS'. Based on the remediation of petroleum compounds in the immediate vicinity of MW-8/MW-8R (refer to Section 3.2.4), benzene and toluene were not detected during two consecutive groundwater sampling events and are no longer considered regulated chemicals that warrant additional assessment or remediation for the VRP Property.

3.2 Delineation of Regulated Chemicals

Sampling in 2017 confirmed that soil is impacted with arsenic; and groundwater is impacted with chlorinated VOCs and arsenic at the outdoor metal bailing area above their respective Type 1 RRS'. Groundwater samples collected from point of demonstration (POD) monitoring wells MW-3, MW, 4, and MW-11 indicated that regulated chemicals did not exceed their respective Type 1 RRS'. Based on soil sampling data, it appears that concentrations of arsenic have been delineated within the VRP Property boundaries to the Type 1 RRS'. Based on historical and most recent groundwater sampling results, it appears that the regulated chemicals have been delineated to within the VRP Property boundaries to their respective Type 1 RRS'. The following is a summary of assessment and remediation activities that have been conducted at the VRP Property.

3.2.1 Outdoor Metal Bailing Area

STI conducted soil source removal activities at the Outdoor Metal Bailing Area (shown on Figure 2) in October 2011, that were scoped based on PCE concentrations detected in soil sample SS-1. The extent of the excavation was limited to a telephone pole and a tree to the north; and the bailer to the south and west. STI collected soil samples Area 6-CSS-3 and Area 5-CSS-4 (listed in Table 2 and shown on Figure 7a) following excavation activities; and laboratory results indicated no Type 1 RRS' were exceeded. Laboratory analysis of groundwater samples collected from monitoring well MW-1R indicated that concentrations of petroleum compounds (benzene and xylenes) were detected above the Type 1 RRS' until the October 2015 sampling event (listed in Table 3 and shown on Figure 7b). Based on these groundwater sampling results it appears that the 2011 excavation conducted by STI followed by natural attenuation, was successful in remediating the petroleum compounds to below the Type 1 RRS'.

To further investigate the vertical extent of arsenic and chlorinated solvent-impacted groundwater at MW-1R, monitoring wells MW-1D (screened 35 to 40 ft bls) and MW-1DD (screened 70 to 75 ft bls) were installed and sampled. Groundwater sampling indicated that chlorinated solvent-impacted groundwater is limited to the unconfined surficial aquifer. Low-level detections of PCE and TCE in

MW-1D (September 2014) and MW-1DD (October 2015 and October 2016) were detected just above Type 1 RRS', which are likely associated with seasonal groundwater table fluctuations. Therefore, concentrations of chlorinated solvents at MW-1R appear to be localized to the upper portion of the unconfined surficial aquifer in the immediate vicinity of the former metal bailer. Based on the February 2017 groundwater sampling data, concentrations of PCE, TCE, cDCE, and VC exceed the Type 1 RRS'. While historic groundwater sampling data does show some concentration fluctuation, the presence of TCE, cDCE, and VC indicate that naturally occurring reductive dechlorination is occurring, although not at a rate that would reach Type 1 RRS' within a reasonable timeframe (five years); and groundwater modeling (detailed in Section 3.4) indicated a longer duration (100 years). The chlorinated solvent-impacted groundwater at MW-1R has been horizontally delineated to the north by MW-14, to the east by MW-15, to the south by MW-2/MW-2R, and to the west by MW-3; these wells have not exhibited petroleum compounds or chlorinated solvent detections above Type 1 RRS' for six consecutive sampling events. Monitoring well MW-4 was also used as a delineation well to the northwest and sampling data indicated that petroleum compounds and chlorinated solvent compounds have not been detected above Type 1 RRS' for four consecutive sampling events.

Soil sampling was conducted in February 2017 (detailed in Section 5) to further investigate the extent of arsenic-impacted soil identified at B-5/B-5R that exceeded the Type 1 RRS', that may be contributing to arsenic-impacted groundwater at MW-1R. Based on soil sampling data, the horizontal extent of impacts was delineated to Type 1 RRS' to the north of B-5/B-5R by B-10, to the east by B-11, to the south by B-7, and to the west by B-6. A soil sample was also collected from B-5R for laboratory analysis of arsenic using Synthetic Precipitation Leaching Procedure (SPLP) which confirmed that there are leachable concentrations of arsenic in the vicinity of B-5/B-5R that may be capable of flux to groundwater. GF also collected a soil sample from B-5R from 0-2 ft bls to evaluate concentrations that may pose an unacceptable risk to commercial/industrial workers at the VRP Property. Based on laboratory analysis, no arsenic concentrations exceeded the Type 1 RRS; and therefore, no additional remediation or engineered cap is warranted to prevent direct exposure for the arsenic-impacted soil that is localized to this area of the VRP Property. Groundwater sampling indicated that arsenic-impacted groundwater is limited to the unconfined surficial aquifer. Arsenic detections in MW-1D and MW-1DD have been below the Type 1 RRS for six consecutive

groundwater sampling events; indicating that vertical delineation of arsenic-impacted groundwater has been achieved. The arsenic-impacted groundwater at MW-1R has been horizontally delineated to the north by MW-14, to the east by MW-15, to the south by MW-2/MW-2R, and to the west by MW-3, these wells have not exhibited arsenic detections above the Type 1 RRS for six consecutive sampling events. Monitoring well MW-4 was also used as a delineation well to the northwest and sampling data indicated that arsenic has not been detected above the Type 1 RRS for four consecutive sampling events.

Based on the remediation and assessment work conducted to date, the arsenic-impacted soil has been delineated horizontally; and arsenic concentrations in the top two feet of surface soil will not require additional remediation or an engineered cap to protect commercial/industrial workers from direct exposure. The chlorinated solvent and arsenic-impacted groundwater has been delineated horizontally and vertically and appears to be localized to the upper portion of the surficial aquifer within the immediate vicinity of the metal bailer and does not appear to have migrated off the VRP Property; and does not pose an unacceptable risk to potential points of exposure.

3.2.2 AST, Former UST, and Non-Ferrous Processing Building Area

Groundwater monitoring has been conducted in this area of the VRP Property (shown on Figure 2) to evaluate potential impacts from historic uses of an AST and a former UST. As requested in comment 1a and 1b of EPDs comment letter dated February 2017, GF identified spreadsheets “All UST Facilities: Owner and Other Data as of 05.27.2016”, “Facility-Owner_Data_041417”, “LUST_List_04142017”, and “AllOpenReleaseesandHazardRanking_091316” posted to EPD’s website. The spreadsheets indicated that Rice Iron & Metal is a closed facility (Facility ID No. 920172) and the VRP Property was not listed as a Leaking Underground Storage Tank (LUST) facility, or a facility with an open release with a hazard ranking. Additionally, GF attempted to retrieve data from EPD’s Facility Status database, however, search results indicated “This Facility ID does not exist or it is closed”. In EPD’s trip report dated May 10, 2012, it was reported that the facility ID is 90172 and indicates there were three USTs (two gasoline and one diesel) that were installed in May 1972 and removed in August 1987; and no releases were reported from the USTs.

On September 5, 2017, GF contacted Mr. James Warren (owner and operator of James Warren & Associates, Inc.) to document chemical usage. Mr. Warren does not manage petroleum products in tanks at the VRP Property; such as portable ASTs for filling equipment at the yard, permanent ASTs, or USTs. While there is limited machinery maintenance to support his business, Mr. Warren stated that he does not use chlorinated solvents (either in cans or in parts washers) at the VRP Property. While the AST is present at the VRP Property (adjacent to MW-3) it is not used by Mr. Warren. Therefore, there would be a low potential for Mr. Warren's current industrial business operations to create a new release; or to exacerbate or contribute to impacts at the Outdoor Metal Bailing Area (Section 3.3.1).

STI conducted soil source removal activities in this area in October 2011. Based on confirmation soil samples collected by STI following soil source removal activities, no regulated chemicals exceeded their respective Type 1 RRS'. Following soil source removal activities, monitoring wells MW-3 and MW-4 were sampled for metals. Laboratory results (listed in Table 3 and shown on Figure 8) indicated that no metals were detected at concentrations above their respective Type 1 RRS'. Groundwater samples collected from MW-3, MW-4, and MW-10 indicate that no regulated chemicals have been detected above their respective Type 1 RRS' for four consecutive sampling events (conducted in July 2014, April 2015, October 2015, and April 2016). Groundwater monitoring has been conducted at MW-11 for VOCs in July 2014, April 2015, October 2015, and April 2016; and results indicated that regulated chemicals haven not been detected exceeding their respective Type 1 RRS'. Groundwater monitoring has been conducted at MW-14 for VOCs and arsenic in September 2014, August 2015, October 2015, and April 2016; and results indicated that regulated chemicals haven not been detected exceeding their respective Type 1 RRS'. The water well has been sampled for VOCs and arsenic in April 2015, October 2015, and April 2016; and results indicated that regulated chemicals haven not been detected exceeding their respective Type 1 RRS'. Therefore, based on the source removal conducted in October 2011 by STI (including confirmation soil sampling), and the results of groundwater monitoring conducted for up to four consecutive groundwater monitoring events (in accordance with EPD's May 22, 2014, VRP Application approval letter), no further monitoring or assessment is warranted in the AST, Former UST and Non-ferrous Processing Building Area of the VRP Property.

3.2.3 Metal Shearing Machine Area

STI conducted soil source removal activities at two locations in the Metal Shearing Machine area (shown on Figure 2) in October 2011. Based on confirmation soil samples collected by STI following soil source removal activities, no regulated chemicals exceeded their respective cleanup criteria. Following soil source removal activities, monitoring wells MW-5, MW-6, MW-7, and MW-9 were sampled for VOCs and metals (listed in Table 3 and shown on Figure 9). Laboratory results from MW-5 indicated that benzene was detected above the Type 1 RRS in 2011 and 2014. Subsequently, detections of benzene in MW-5 were below the Type 1 RRS for three consecutive sampling events performed by GF in April 2015, October 2015, and April 2016. The sampling data indicates that the source removal and natural attenuation were sufficient to remediate benzene impacts at this area. No regulated chemicals have been detected exceeding their respective Type 1 RRS' in MW-5D for four consecutive sampling events conducted in August 2014, April 2015, October 2015, and April 2016. No regulated chemicals have exceeded their respective Type 1 RRS' in MW-6 for three consecutive sampling events conducted in July 2014, April 2015, and October 2015. No regulated chemicals have exceeded their respective Type 1 RRS' in MW-12 or MW-13 (installed for delineation purposes south and east of MW-5) for four consecutive sampling events conducted in August 2014, April 2015, October 2015, and April 2016. The results of groundwater monitoring in this area indicate that the detection of benzene identified in 2011 has naturally attenuated to below the Type 1 RRS. Therefore, based on the source removal conducted in October 2011 by STI (including confirmation soil sampling), and the results of groundwater monitoring conducted for up to four consecutive groundwater monitoring events (in accordance with EPD's May 22, 2014, VRP Application approval letter), no further monitoring or assessment is warranted in the Metal Shearing Machine Area of the VRP Property.

3.2.4 Motor Block Storage Area

In response to comment 2b in EPD's letter dated May 22, 2014: GF advanced soil borings SB-1 through SB-5 (shown on Figure 10a) in April 2015 within STI's "Source Area 3" located in the southern portion of the Motor Block Storage Area (shown on Figure 2). Soil borings were advanced in the immediate vicinity of the previous aroclor detections and soil samples were collected for

laboratory analysis of PCBs. Laboratory results (listed in Table 2 and shown on Figure 10a) did indicate detections of PCBs, but not at concentrations exceeding their respective Type 1 RRS'. GF mobilized to the VRP Property in October 2015 and advanced soil boring SB-5 and collected a soil sample for laboratory analysis of dioxins and furans. Laboratory analysis indicated that concentrations of dioxin and furans were not detected above Type 1 RRS'. Therefore, based on laboratory data from soil samples submitted for analysis of PCBs, dioxins, and furans, no additional assessment or remediation activities are warranted.

Following source removal and restoration by STI in October 2011, monitoring well MW-8 was installed within the footprint of the excavation. In April 2016, groundwater sampling indicated a spike in benzene, toluene, and xylenes above Type 1 RRS' (listed in Table 3 and shown on Figure 10b). To investigate these petroleum compound impacts, GF advanced soil borings in July 2016 in the immediate vicinity of MW-8, and to the north, east, south, and west (SB-1 through SB-5). Laboratory analysis indicated that no petroleum compounds were detected above Type 1 RRS'; and petroleum compounds were not detected at concentrations indicative of being able to flux to impact groundwater at the concentrations observed at MW-8. During this mobilization, monitoring well MW-16 was installed east of MW-8 for horizontal delineation; and monitoring well MW-11 continued to be monitored for horizontal delineation to the west.

In October 2016, GF conducted a soil excavation source removal at MW-8 that also included adding an oxidizing amendment to the backfilled excavation for groundwater polishing. The limits of the excavation are shown on Figure 10c. During remediation, approximately 107.09 tons of soil were removed from an area defined by soil sampling conducted by GF in July 2016 (SB-2, SB-5, SB-7, and SB-8), and disposed of offsite as non-hazardous waste. Following excavation activities, approximately 100-pounds of Regenisis' Oxygen Releasing Compound Advanced was applied to the backfill of the excavation for groundwater polishing. Copies of non-hazardous waste manifests, weigh-tickets, and an EPD Underground Injection Control Program Pilot Test Injection Well Notification Form are included as Appendix G.

Monitoring MW-8R was installed in the approximate location of MW-8, within the footprint of the excavation. Groundwater sampling results for two consecutive sampling events (February 2017 and

July 2017) did not indicate petroleum compounds exceeding Type 1 RRS' in MW-8R, MW-11, or MW-16. Therefore, with no detections of petroleum compounds or other regulated chemicals exceeding Type 1 RRS' in soil or groundwater from this area of the VRP Property, no additional assessment or remediation is warranted.

3.2.5 Shed Area

In response to comment 4.b.ii in EPD's comment letter dated May 22, 2014, GF advanced four soil borings (SB-1 through SB-4) in October 2015 in the immediate vicinity of the Shed Area (shown on Figure 11) in the wooded eastern portion of the VRP Property that was identified during EPD's March 8, 2012, VRP Property visit. The soil borings were advanced to four ft bls surrounding the shed and within the wooded eastern portion of the VRP Property. Soil samples were collected from 0-2 ft bls and 2-4 ft bls; and submitted for a suite of laboratory analysis that included chlorinated solvents, petroleum compounds, and PCBs. Laboratory results indicated that no analyte, where detected, exceeded its respective Type 1 RRS (listed in Table 2 and shown on Figure 11). Therefore, no additional assessment or remediation is warranted for the Shed Area.

3.2.6 Feed Plot Area

Based on comment 6a in EPD's comment letter dated February 27, 2017, GF conducted additional assessment activities to further evaluate the environmental quality of the Feed Plot Area (shown on Figure 12). These additional assessment activities were a combination of desktop reviews, soil sampling, and laboratory analysis.

On March 12, 2017, GF viewed historical aerial photographs on GoogleEarth (www.google.com/earth) and on NETRONLINE (www.historicaerials.com/viewer) for years 1952, 1993, 1999, 2003, 2005, 2006, 2007, 2009, 2010, 2011, 2012, 2013, and 2015. Based on the historical aerial photographs, no scrap yard or other industrial operations related to scrap metal processing appear to have been conducted in the Feed Plot portion of the VRP Property.

As requested by EPD, in an additional effort to confirm that this portion of the VRP Property was not used as a landfill, on February 16, 2017, GF advanced a soil boring (B-12) to eight ft bls in the central portion of the feed lot as shown on Figure 12. The soil boring was advanced using a decontaminated stainless-steel hand auger to evaluate the overall soil quality of the Feed Plot Area. As recorded on the soil boring log (included in Appendix C), a gray and tan fine-grained sand was encountered to four ft bls, then a tan/orange sandy clay to eight ft bls. During soil boring activities, no unnatural staining was observed; no petroleum or chemical odors were noted; and no unnatural features (such as bullets, shot, shell casings, buried municipal waste, scrap metal, drums, unidentified containers, or obvious fill material) were encountered. Therefore, the Feed Plot portion of the VRP Property does not appear to have been used as a dump or a landfill.

GF notes that the VRP Property does not appear to be listed by EPD Land Protection Branch as a solid waste disposal or collection facility (active, closed, or in closure). Therefore, it does not appear that this portion of the VRP Property has been an active, closed, or in closure solid waste disposal or collection facility.

As requested by EPD, GF conducted soil sampling on July 27, 2017, in an additional effort to confirm that use of this portion of the VRP Property has not been adversely impacted by use as a feed plot for deer hunting. GF advanced three soil borings (SBFP-1, SBFP-2, and SBFP-3, shown on Figure 12) in a north to southwest transect across the Feed Plot Area based on the rationale that deer would likely come from the wooded east and wooded south portions of the VRP Property to drink from the unnamed surface water body, then walk west across the feed plot to bed for the night. The optimum location for a deer hunter to shoot from would be on the north side of the feed plot, as the deer walked into the clearing from the east and the south. SBFP-1, SBFP-2, and SB-FP3 were advanced to two ft bls with a decontaminated stainless-steel hand auger. During augering, dry to moist fine-grained sand was encountered from land surface to the total depth of each soil boring; and no unnatural staining was observed; no petroleum or chemical odors were recorded; and no unnatural features (such as bullets, shot, shell casings, buried municipal waste, scrap metal, drums, unidentified containers, or obvious fill material) were encountered. Soil samples were collected from 0-2 feet bls and submitted for laboratory analysis of lead. Laboratory analysis (listed in Table 2) indicated that lead concentrations ranged between non-detect at 1 milligram per kilogram

(mg/Kg) to 3.1 mg/Kg, which was below the Type 1 RRS of 75 mg/Kg. Therefore, it does not appear that use of this portion of the VRP Property as a feed plot has adversely affected soil quality, and no additional assessment is warranted.

3.3 Potential Receptors/Points of Exposure

The purpose of identifying potential receptors and points of exposure within the vicinity of the VRP Property is to evaluate exposure pathways. The nearest water wells and the nearest surface water bodies within the general area of the VRP Property are shown on Figure 13. POD monitoring wells MW-3 and MW-11 are also shown on Figure 13 with an indication of a 1,000-foot radius from the arsenic and chlorinated VOC-impacted groundwater in MW-1R at the Outdoor Metal Bailing Area. The exposure pathway of impacted groundwater migrating to these potential receptors was evaluated by conducting a potable well survey for a ½-mile radius of the VRP Property during multiple mobilizations for the period of July through November 2014. Available data regarding potable wells in the vicinity were collected from: Georgia EPD; Lowndes County Health Department; and a well survey to visually locate private or irrigation wells that may not have been found by a record search.

The VRP Property contains two water wells as shown on Figure 2. One water well is located near the northwest property boundary; and one water well is located in the southern portion of the VRP Property, near MW-5. The northwest well was in use at the facility for non-potable water prior to closure of the facility; and was sampled by GF in April and October 2015, and April 2016 (listed in Table 3). Laboratory analysis of these samples indicated that no regulated chemicals were detected above laboratory method detection limits. The water well in the southern area of the VRP Property has reportedly been capped, closed, and is no longer in use.

Residential properties with private water wells are located less than ½ mile to the east and southwest of the VRP Property. The locations of nearby drinking water supply wells were verified; however, the depths of the wells could not be verified by inspection. No public water supply wells were identified during the ½-mile radius survey performed around the VRP Property. Based on review of state records, the VRP Property was not found to be located within a wellhead protection zone for a public water supply or a well field. No public water supply wells, public supply conversion (top 20)

wells, or public supply conversion/reclass wells were identified within a ½-mile radius of the VRP Property. No industrial wells were identified within a ½-mile radius of the VRP Property.

A 1.25-acre freshwater surface water body is located on the eastern portion of the VRP Property; and a surface water body is located on the Lowndes County industrial property adjoining and south of the VRP Property (shown on Figure 2). These two surface water bodies are considered to be points of exposures for ecological receptors, even though they are located on property used for commercial/industrial purposes. These surface water bodies are not used as a potable, industrial, or irrigation water supply source; and are not intended to be used for recreational activities.

Groundwater assessment activities completed to date by GF indicated that regulated chemicals associated with former industrial scrap metal operations appear to have been delineated to their respective Type 1 RRS' to POD wells within the property boundaries. The regulated chemicals appear to be delineated within the boundaries of the VRP Property, and do not appear to have migrated off the VRP Property to adversely impact potential receptors. Therefore, the exposure pathway to potential receptors on the VRP Property and outside of the VRP Property boundaries appears to be incomplete .

3.4 Groundwater Contaminant Fate and Transport Modeling

As required by EPD and to further support risk-based closure with a Uniform Environmental Covenant, GF completed groundwater modeling for the chlorinated VOCs and arsenic that persist in MW-1R at the Outdoor Metal Bailing Area. A description of groundwater modeling (including assumptions, outputs, and results) of the groundwater modeling has been included in Appendix H. Based on assessment results, these compounds have been detected in groundwater at MW-1R at concentrations that exceed their respective Type 1 RRS' and have been horizontally and vertically delineated to POD wells within the property boundaries of the VRP Property.

GF used the USEPA's BIOCHLOR, Natural Attenuation Decision Support System code, Version 2.2, to assess the fate and transport of the chlorinated VOCs at MW-1R. According to the BIOCHLOR model results for simulation periods of 30, 50 and 100 years, the highest concentrations

of chlorinated VOCs, detected in groundwater samples collected from the source area monitoring well (MW-1R) in 2014, will not migrate to the nearest POD well, which is located 70 feet downgradient, at levels above the Type 1 RRS'.

GF used the Quick Domenico (QD) code to assess the fate and transport of arsenic impacted groundwater at MW-1R. According to the QD model results for simulation periods of 30, 50 and 100 years, the highest concentrations of arsenic, detected in groundwater samples collected from the source area monitoring well (MW-1R) in 2017, will not migrate to the nearest POD well, which is located 70 feet downgradient, at levels above the Type 1 RRS'.

4.0 PROGRESS REPORT INVESTIGATION

The purpose of this section is to provide the results of assessment and remediation activities that have been completed since submittal of the VRP Status Report containing the results of field work (VRP Status Report #6, December 12, 2016). The additional assessment and remediation activities are described in the following sections and have been included in the cumulative summary included in Section 3.3.

Since 2014, assessment and remediation activities were performed by GF in general accordance with the requirements listed in the EPD Groundwater Sampling Guidelines (Update) Memorandum dated January 31, 2012; and United States Environmental Protection Agency (USEPA) Operating Procedure SESDPROC-301-R3 dated March 4, 2013. Cumulative groundwater sampling field forms (included in Appendix C) include information regarding: well diameter, tubing type and diameter, well screen interval, static water depth, pump type, initial/final tubing depth in the well, purging times/volumes, field parameters and values, flow rates, depth to water, sampling times, and intended analysis.

Soil and groundwater samples collected by GF during assessment and remediation activities at the VRP Property since 2014 have been packaged in iced coolers and submitted under proper chain-of-custody documentation to SGS Accutest Southeast (SGS Accutest). SGS Accutest has remained certified with the following credentials throughout the scope of assessment and remediation conducted by GF since 2014: Georgia Board of Water & Wastewater Treatment, Wastewater Laboratory Analyst (#WWL013516 and WL012348); National Environmental Laboratory Accreditation Program Certification (#E83510); Georgia Rural Water Association, Wastewater Collection (#CE-6-WW-1215-GRWA-013118-0061); and Georgia Rural Water Association, GRWA Water Utility Math (#CE-12-W-1215-GRWA-013118-0073). During assessment of PCBs and dioxins, SGS Accutest subcontracted the PCB and dioxin analysis to Cape Fear Analytical which also maintained certifications during that portion of the work. Cumulative laboratory certifications

and cumulative laboratory analytical reports since GF began assessment activities at the site in 2014 are included in chronological order in Appendix I.

4.1 Soil Sampling

During the February 2017 mobilization, GF advanced three soil borings (B-5R, B-10, and B-11) at the Outdoor Metal Bailing Area as shown on Figure 7a. Each soil boring was advanced to eight ft bls using a decontaminated stainless-steel hand auger and soil samples were collected for laboratory analysis to horizontally delineate the extent of arsenic-impacted soil above the Type 1 RRS; and to further evaluate the chlorinated solvent source area. Soil sampling and laboratory analysis have been summarized in the bullets below.

- Soil samples were collected from B-5R 0-2 and 6-8 ft bls and submitted for laboratory analysis for arsenic, SPLP arsenic, VOCs and SPLP VOCs. Laboratory results indicated that arsenic was detected in the sample from 6-8 ft bls, at 540 mg/kg which was above the Type 1 RRS; the SPLP arsenic sample was reported at 0.2 mg/L which was above the Type 1 RRS. PCE was detected at 2.11 mg/Kg which is below the Type 3 RRS; while PCE was detected in the SPLP VOC analysis, it was detected at a concentration below the Type 1 RRS. Arsenic, SPLP arsenic, VOC, and SPLP VOC analysis of the 0-2 ft bls sample did not indicate detections above Type 1 RRS’.
- Soil samples were collected from B-10 and B-11 6-8 feet bls and submitted for laboratory analysis of arsenic and SPLP arsenic. Laboratory analysis indicated no detections exceeding Type 1 RRS’.

GF mobilized to the VRP Property on February 16, 2017, and July 28, 2017, to further assess the environmental quality of the feed plot area. Soil sampling was conducted by GF using a decontaminated stainless-steel hand auger. The following bullets summarize soil sampling and results:

- On February 16, 2017, GF advanced a soil boring (B-12) to 8 ft bls in the central portion of the feed plot as shown on Figure 12. As recorded on the soil boring log (included in Appendix A), a gray and tan fine-grained sand was encountered to four ft bls, then a tan/orange sandy clay to eight ft bls. During soil boring activities, no unnatural staining was observed; no petroleum or chemical odors were recorded; and no unnatural features (such as bullets, shell casings, buried municipal waste, scrap metal, drums, unidentified containers, or obvious fill material) were encountered.
- On July 27, 2017, GF advanced three soil borings (SBFP-1, SBFP-2, and SBFP-3, shown on Figure 12) to two ft bls. During augering, dry to moist fine-grained sand was encountered from land surface to the total depth of each soil boring; and no unnatural staining was observed; no petroleum or chemical odors were recorded; and no unnatural features (such as bullets, shell casings, buried municipal waste, scrap metal, drums, unidentified containers, or obvious fill material) were encountered. Soil samples were collected from each soil boring from 0-2 ft bls and submitted for laboratory analysis of lead by EPA Method 6010C. Laboratory analysis indicated that lead concentrations ranged between non-detect at 1 mg/Kg to 3.1 mg/Kg, which were below the Type 1 RRS of 75 mg/Kg.

4.2 Groundwater Sampling

Groundwater samples were collected in February 2017 from five monitoring wells installed in the Outdoor Metal Bailing Area (shown on Figure 7b) to evaluate delineation of VOC- and arsenic-impacted groundwater; and to obtain geochemical and water quality data for groundwater modeling. GF collected groundwater samples from: MW-1R (the source well); MW-1D and MW-1DD (for vertical delineation); MW-2R and MW-14 (crossgradient); MW-15 (upgradient); and MW-3 (downgradient). Groundwater samples were submitted for laboratory analysis of VOCs, arsenic, nitrate, methane, total organic carbon, and chloride.

During the February 2017 and July 2017 sampling events at the Motor Block Storage Area, three monitoring wells (shown on Figure 10b) were sampled. Groundwater samples were collected from monitoring wells installed in the Motor Block Storage Area to evaluate the April 2016 spike in

petroleum-impacted groundwater. GF collected groundwater samples from MW-8R (the source well), MW-11 (downgradient), and MW-16 (upgradient). Groundwater samples were submitted for laboratory analysis of VOCs.

Prior to groundwater sampling events conducted on February 17, 2017, and July 27, 2017, depth to water was measured from each accessible monitoring well at the VRP Property and converted to groundwater elevations to evaluate the inferred groundwater flow direction. The groundwater elevation data is listed in Table 1 and the February 17, 2017 data is plotted on Figures 6a and 6b. The inferred groundwater flow direction for the monitoring wells screened in the upper surficial aquifer, is generally toward the east, showing some variability which is likely the result of seasonal rainfall fluctuations; but are generally consistent with groundwater elevations documented in previous groundwater monitoring events.

Before sampling, each monitoring well was purged with a peristaltic pump and new disposable polyethylene tubing using the low-flow equipment volume sampling technique. During purging, physical water quality parameters (pH, temperature, specific conductivity, dissolved oxygen, turbidity, oxygen reduction potential, and observations) were recorded on groundwater sampling logs to evaluate aquifer stabilization. Groundwater sampling and calibration logs are included in Appendix C.

The laboratory reports from the February 2017 and July 2017 groundwater sampling events are summarized in Table 3, plotted on Figures 7b and 10b, and included in Appendix I. The following is a summary of notable observations:

- No free product or sheens were noted during groundwater sampling activities.
- Laboratory analysis of groundwater samples collected from monitoring well MW-1R (Outdoor Metal Bailing Area) in February 2017 indicated that PCE, TCE, cDCE, VC, and arsenic exceeded their respective Type 1 RRS'. Laboratory results from MW-1D, MW-1DD, MW-2R, MW-14, MW-15, and MW-3 indicated that concentrations of VOCs and arsenic were below their respective Type 1 RRS'.

- Laboratory analysis of groundwater samples collected in February 2017 and July 2017 from monitoring well MW-8R, MW-11, and MW-16 (Motor Block Storage Area) indicated that VOCs were below their respective Type 1 RRS'.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations have been prepared for this VRP Progress Report No. 9 by GF for the Former Rice Iron & Metals VRP Property (VRP No. VRP1348601340 and HSI No. 10923). Conclusions are presented in Section 5.1 and recommendations are presented in Section 5.2.

5.1 Conclusions

Based on environmental assessment and remediation activities conducted at the VRP Property by GF since 2014, the following conclusions have been noted:

- The VRP Property has been historically used as an industrial facility for scrap metal recycling by Rice Iron & Metals dating back to at least the 1960s. TMR purchased the business and property in 2011 with the intent of remediating it through the VRP program. In 2015, TMR closed the scrap operations down and sold the property on December 22, 2016. TMR no longer owns the VRP Property or operates at the VRP Property. TMR has a commitment from the current property owner that the VRP Property will continue to be used as an industrial facility by Mr. Warren into the foreseeable future.
- The geology, hydrogeology, and geochemistry of the VRP Property have been adequately characterized during development of the conceptual site model to evaluate regulated chemical migration, horizontal and vertical delineation of regulated chemicals, exposure pathways, PODs, POEs, and property boundaries.
- Regulated chemicals at the Outdoor Metal Bailing Area in soil have been horizontally delineated in the immediate vicinity of MW-1R; and are within the property boundaries of the VRP Property. There is no evidence (through soil sampling and laboratory analysis) that

there is a potential for regulated chemicals to be a human exposure concern at this industrial property, or adversely impact points of exposure.

- Regulated chemicals at the Outdoor Metal Bailing Area in groundwater have been horizontally and vertically delineated in the immediate vicinity of MW-1R and are within the property boundaries of the VRP Property. There is no evidence (through groundwater sampling, laboratory analysis, and groundwater modeling) that there is a potential for regulated chemicals to migrate past the points of demonstration; migrate beyond the VRP Property boundaries; or migrate to adversely impact points of exposure beyond the VRP Property boundaries.
- No additional assessment, remediation, or long-term monitoring activities are warranted to further characterize or monitor the regulated chemicals at the Outdoor Metal Bailing Area in the immediate vicinity of MW-1R.
- Based on the conclusions of this VRP Progress Report No. 9, with respect to the RRS' of the Rules for Hazardous Site Response, Rule 391- 3-19-.07, this VRP Property is in compliance with Type I and Type III RRS'.
- Mr. Warren is agreeable to executing the Uniform Environmental Covenant for the VRP Property (real property consisting of 2000 West Savannah Avenue in Valdosta, Lowndes County, Georgia, Tax Parcel Number: 0121A026). The Uniform Environmental Covenant will contain activity and use limitations to prevent land use other than commercial/industrial; and prevent exposure to existing regulated chemicals that have been delineated in soil and groundwater in the immediate vicinity of MW-1R at the Outdoor Metal Bailing Area.

5.2 Recommendations

Based on the conclusions noted in Section 5.1, GF recommends that EPD consider approval of this VRP Progress Report No. 9. Upon receiving EPD's approval GF will submit the Compliance Status

Report and execute the Uniform Environmental Covenant, so EPD can delist the VRP Property from the HSI.

6.0 REFERENCES

Fetter, C.W., Applied Hydrogeology, Third Edition, 1994.

Georgia Department of Natural Resources, Environmental Protection Division, Memorandum, Subject: Groundwater Sampling Guidelines (Update), January 31, 2012.

Georgia Department of Natural Resources, Geologic and Water Resources Division, Georgia Geologic Survey, Geologic Map of Georgia, 1976, reprinted in 1997.

Georgia Rules and Regulations, Department 391, Chapter 391-3, Subject 391-3-19 Hazardous Site Response, 1992 as amended.

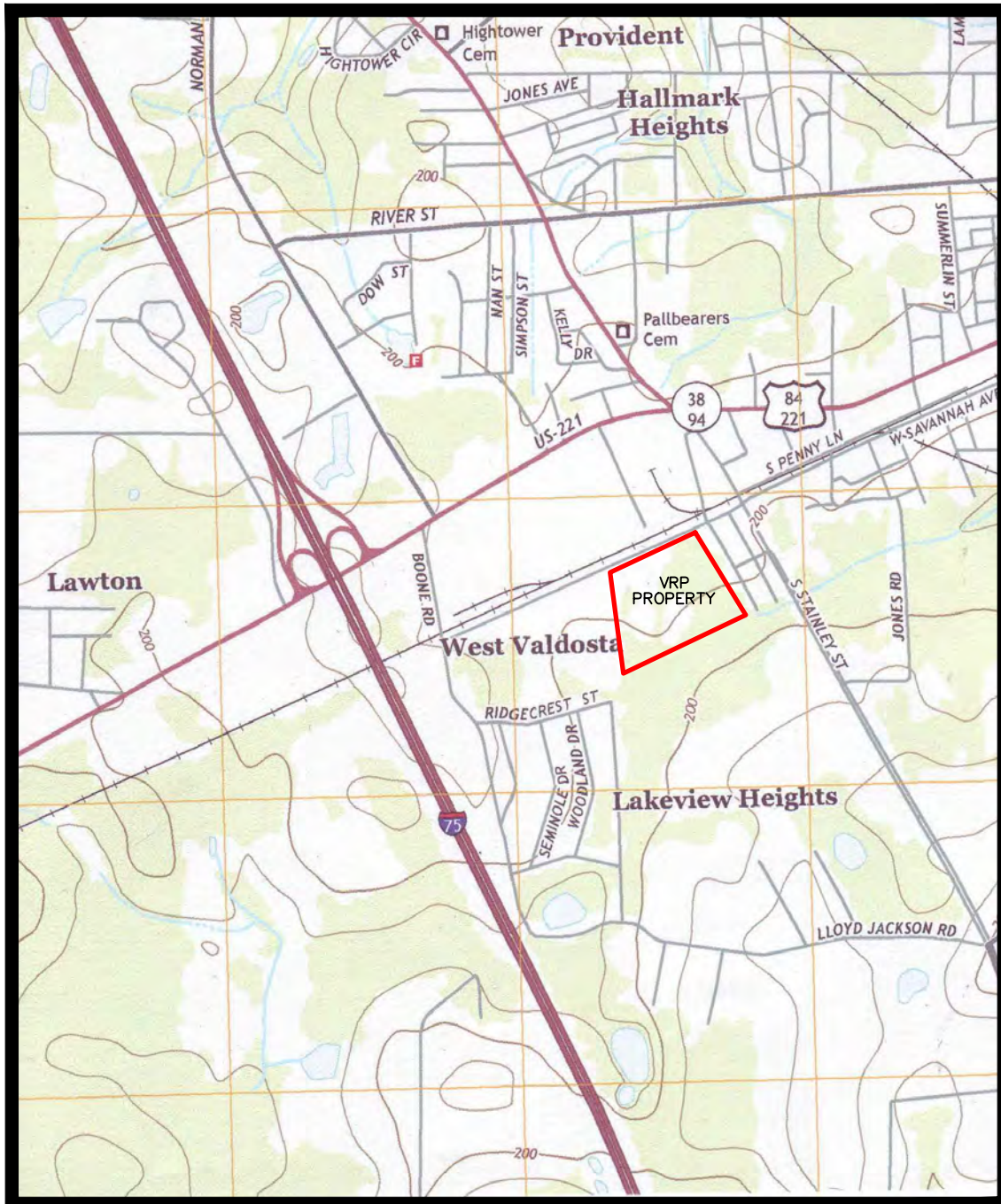
Georgia Voluntary Remediation Act, Official Code of Georgia Annotated § 12-8-100, June 1, 2009.

U.S. Geological Survey, Professional Paper 1410-B, Hydrogeology of the Southeastern Coastal Plain Aquifer System in Mississippi, Alabama, Georgia, and South Carolina, 1996.

U.S. Geological Survey, Water-Resources Investigations Report 95-4269, Water Quality of Surficial Aquifers in the Georgia-Florida Coastal Plain, 1996.

FIGURES

FORMER RICE IRON & METALS
 2000 WEST SAVANNAH AVENUE
 VALDOSTA, LOWNDES COUNTY, GEORGIA
 FACILITY ID: HSI#10923/VRP1348601340



SCALE 1"=2,000'

U.S.G.S. 7.5 MINUTE QUADRANGLE
 VALDOSTA, GEORGIA

VRP PROPERTY LOCATION MAP



LEGEND

 Monitoring Well Location

0 200
Approximate
Scale in Feet



**VRP PROPERTY
LAYOUT & FEATURES**
RICE IRON & METALS (FORMER)
2000 WEST SAVANNAH AVENUE
VALDOSTA, LOWNDES COUNTY, GEORGIA
FACILITY ID: HSI#10923/VRP1348601340



FIGURE 3

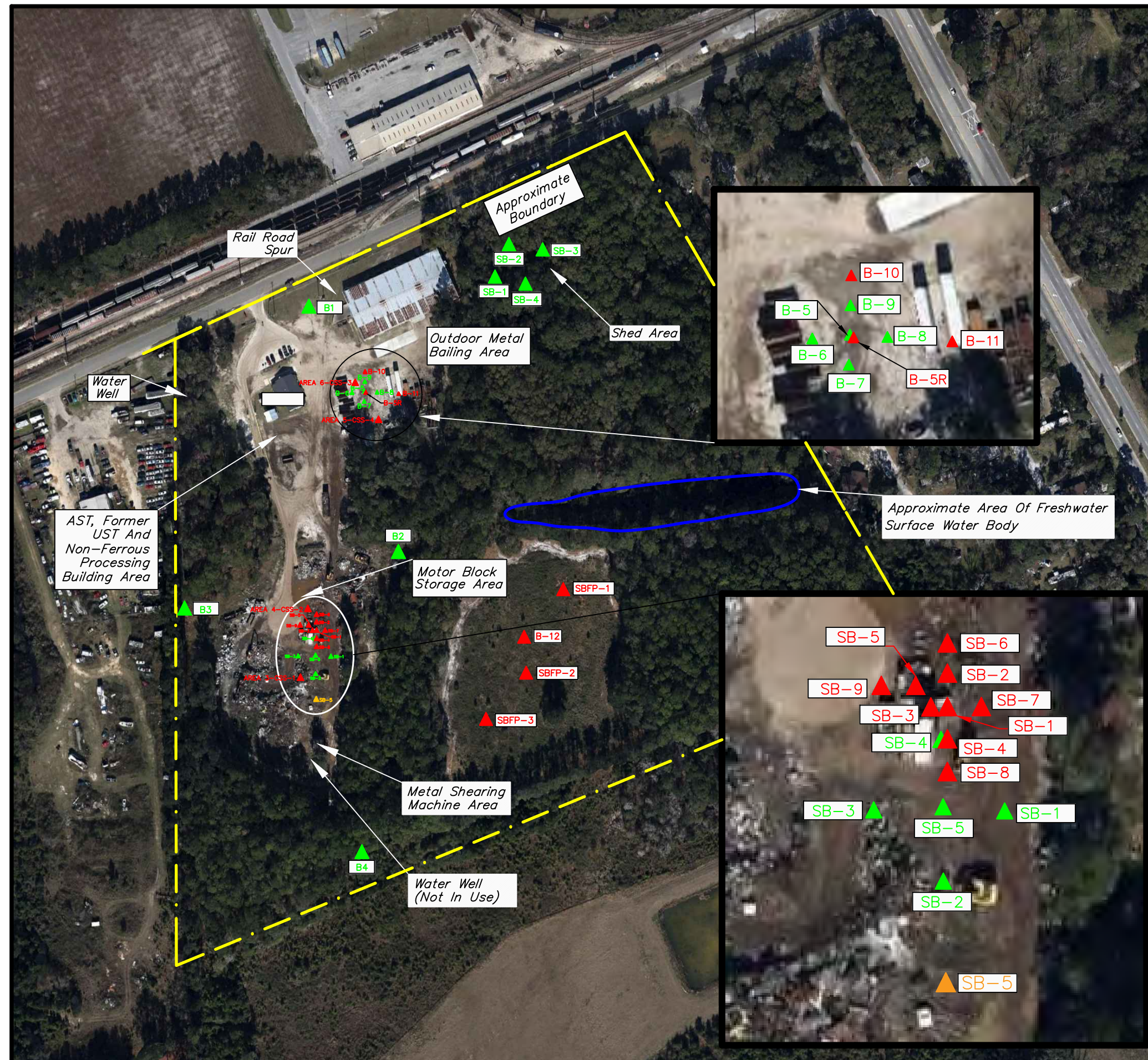


ID	Adjoining Property Owner	Parcel ID
1	Matchett Florence & Ella Ree Sanders	0121A004 through 0121A010
2	Jackson Charles	0121A011
3	Sanders Coley & Ella Ree	0121A012
4	Matchett Florence & Ella Ree Sanders	0121A013
5	Cowart JC	0121A014
6	Phil'ips Mary Jean Mill Brenda Joyce Miller Sem	0121A015
7	Cowart JC	0121A016 and 0121A017
8	Carter Edward L & Toney Matchett CO Florence MA	0121A018
9	Matchett Florence ETAL	0121A019
10	Sanders Earnest & Gloria ETAL	0121A020
11	Cesar Russell & Minnie	0121A021
12	William Curtis	A0121022 through 0121A024
13	Crumley Billy	0121A025
14	Valdosta Lowndes	0121A083A
15	Mason Scott Alan	0088B013 and 0088B014
16	Williams Investment Co.	0088B016
17	Not Listed	0121A001
18	Bazemore Walters	0121A002

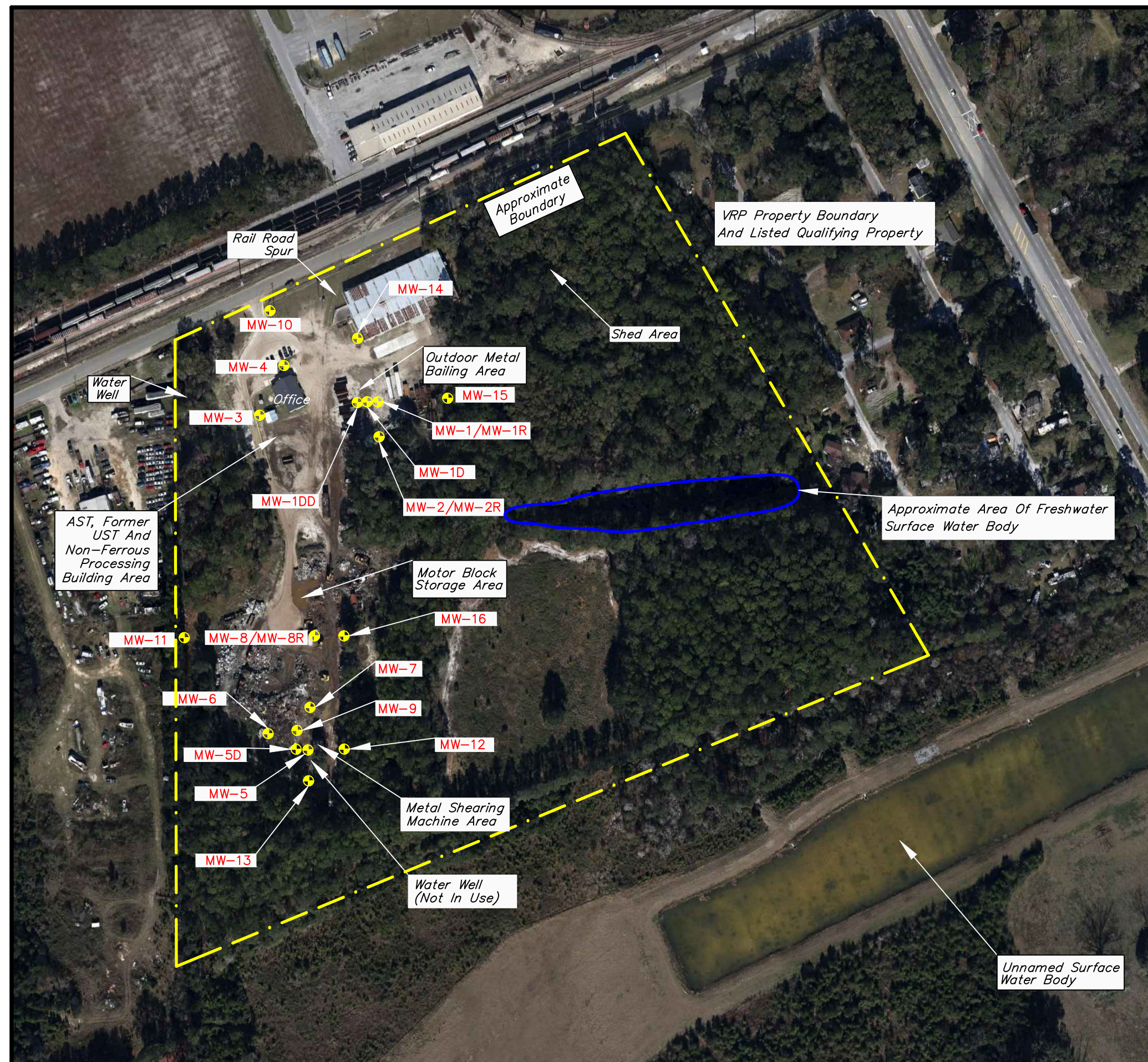
VRP Property James Warren & Associates 0121A026

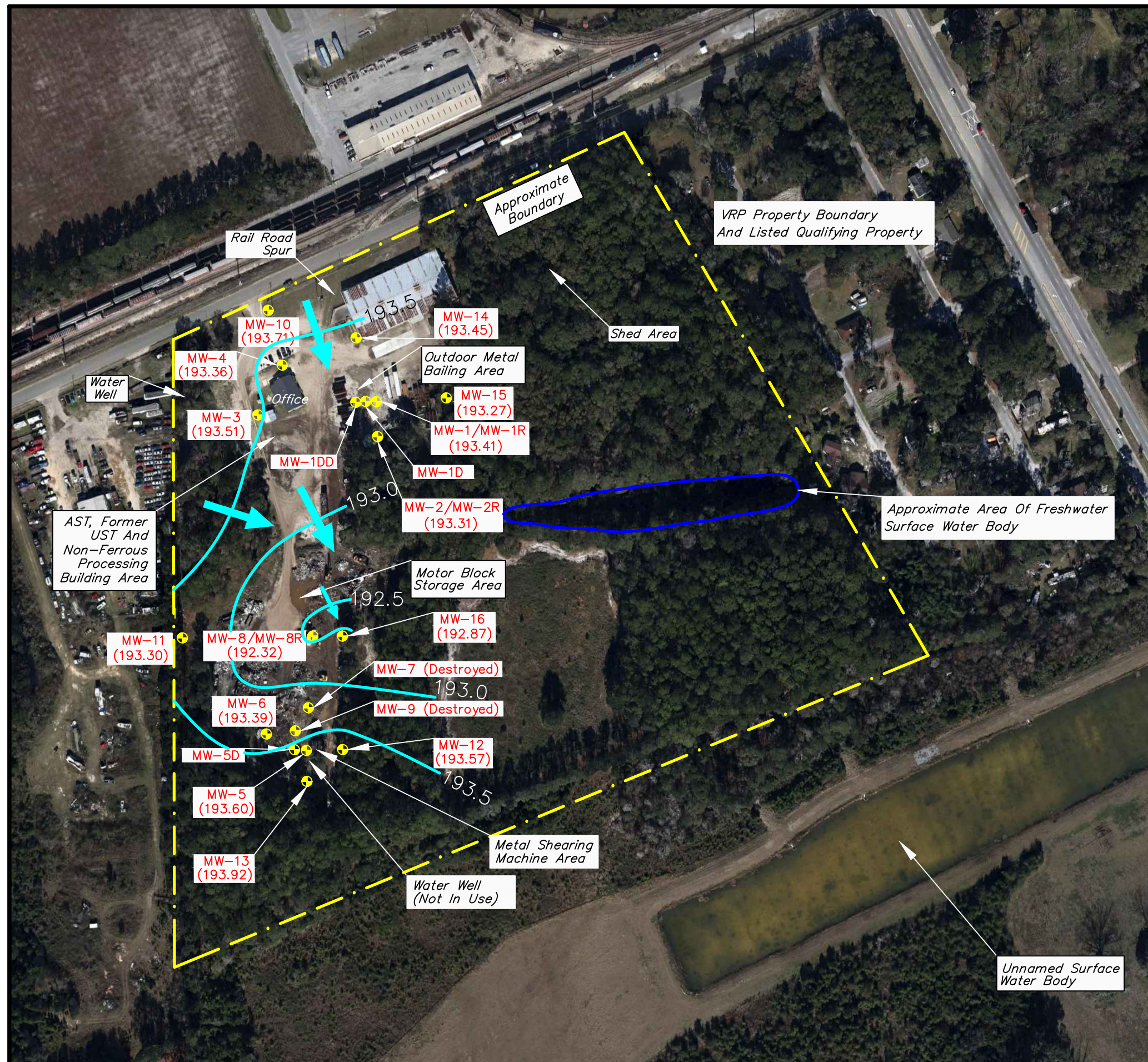
ADJOINING PARCEL INFORMATION

RICE IRON & METALS (FORMER)
2000 WEST SAVANNAH AVENUE
VALDOSTA, LOWNDES COUNTY, GEORGIA
FACILITY ID: HSI#10923/VRP1348601340



SOIL BORING LOCATIONS
RICE IRON & METALS (FORMER)
2000 WEST SAVANNAH AVENUE
VALDOSTA, LOWNDES COUNTY, GEORGIA
FACILITY ID: HSI#10923/VRP1348601340





LEGEND

 Monitoring Well Location

 193.0 Water Level Elevation Contour

(193.92) Relative Water Level Elevation

 Inferred Groundwater Flow Direction

Elevations Relative To NAVD 88

0 200
Approximate Scale in Feet

GROUNDWATER ELEVATIONS (UPPER SURFICIAL AQUIFER)

FEBRUARY 17, 2017
RICE IRON & METALS (FORMER)
2000 WEST SAVANNAH AVENUE
VALDOSTA, LOWNDES COUNTY, GEORGIA
FACILITY ID: HSI#10923/VRP1348601340



LEGEND

 Monitoring Well Location

 193.0 Water Level Elevation Contour

(193.92) Relative Water Level Elevation

 Inferred Groundwater Flow Direction

Elevations Relative To NAVD 88

0 50
Approximate Scale in Feet

OUTDOOR METAL BAILING AREA GROUNDWATER ELEVATIONS

FEBRUARY 17, 2017
RICE IRON & METALS (FORMER)
2000 WEST SAVANNAH AVENUE
VALDOSTA, LOWNDES COUNTY, GEORGIA
FACILITY ID: HSI#10923/VRP1348601340



FIGURE 7a

LEGEND

 Soil Boring Location

Regulated Substance	Units	CAS Number	Delineation Criteria Type I RRS (mg/Kg)
Benzene	mg/Kg	71-43-2	0.5
Tetrachloroethylene	mg/Kg	127-18-4	0.5
Toluene	mg/Kg	108-88-3	100
Trichloroethylene	mg/Kg	79-01-6	0.5
Vinyl Chloride	mg/Kg	75-01-4	0.2
1,1-Dichloroethene	mg/Kg	75-35-4	0.7
Cis-1,2-Dichloroethene	mg/Kg	156-59-2	7
Arsenic	mg/Kg	7440-38-2	20

Notes:
* = soil sample B-5R was collected as a re-sample of the B-5 that STI collected in 2011
2011 samples from STI Report dated 2/21/12
a = detections confirmed by dual column analysis
CAS = Chemical Abstracts Service
ft BLS = feet below land surface
J = indicates an estimated value
mg/Kg = milligrams per kilogram
NA = not submitted for analysis
ND AND U = not detected above method detection limit
RRS indicates Risk Reduction Standard
Bold = Exceeds Type I RRS

-  Iso contour to Type I RRS for Arsenic
-  Iso contour to Type I RRS for PCE



**OUTDOOR METAL
BAILING AREA—SOIL
ANALYTICAL RESULTS**

RICE IRON & METALS (FORMER)
2000 WEST SAVANNAH AVENUE
VALDOSTA, LOWNDES COUNTY, GEORGIA
FACILITY ID: HSI#10923/VRP1348601340



FIGURE 7b

LEGEND

 *Monitoring Well Location*

Regulated Substance	Units	CAS Number	Default Residential Type 1 RRS (ug/L)
Benzene	ug/L	71-43-2	5
cis-1,2-Dichloroethene	ug/L	156-59-2	70
trans-1,2-Dichloroethene	ug/L	156-60-5	100
Ethylbenzene	ug/L	100-41-4	700
Tetrachloroethylene	ug/L	127-18-4	5
Toluene	ug/L	108-88-3	1,000
Trichloroethylene	ug/L	79-01-4	5
Vinyl Chloride	ug/L	75-01-4	2
m,p-Xylene	ug/L	108-38-3/108-42-3	Xylene, total
o-Xylene	ug/L	95-47-6	Xylene, total
Arsenic	ug/L	7440-38-2	10

Notes:
ug/L = micrograms per liter (parts per billion)
2011 samples from STI Report dated 2/21/12
ft BLS = feet below land surface well screen interval
J = Indicates an estimated value
NA = not analyzed or data not available
Type 1 RRS = Appendix (391-3-19) III. Media Target Concentration and Exposure Assumptions, Table 1. Groundwater Criteria
U and ND = not detected above the laboratory detection limit
Bold = Exceeds Type 1 RRS

 - *Isocontour To Delineation Criteria (Type 1 RRS)*



**OUTDOOR METAL BAILING AREA
GROUNDWATER
ANALYTICAL RESULTS**

2011-2017
RICE IRON & METALS (FORMER)
2000 WEST SAVANNAH AVENUE
VALDOSTA, LOWNDES COUNTY, GEORGIA
FACILITY ID: HSI#10923/VRP1348601340

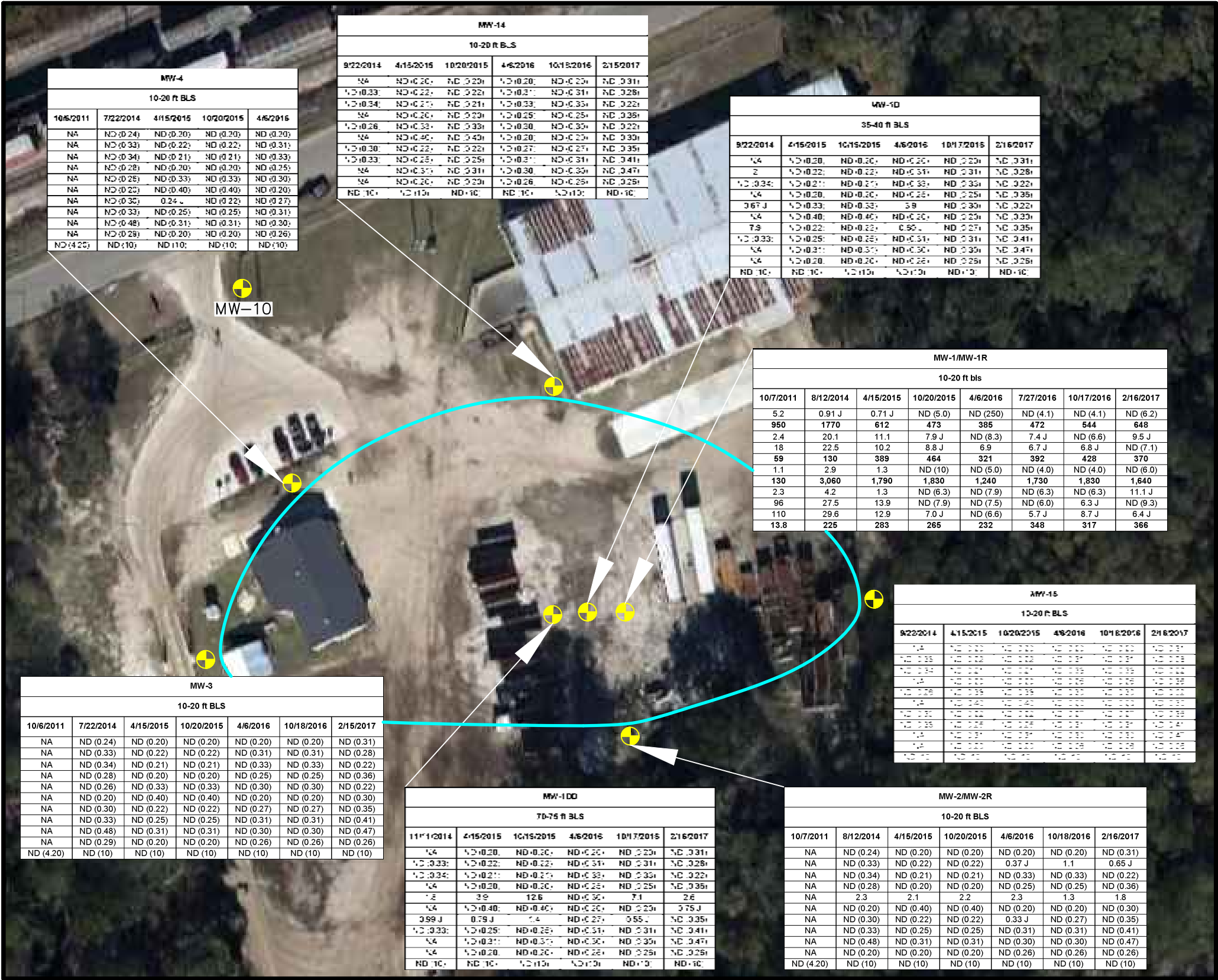




FIGURE 8



LEGEND

 Monitoring Well Location

Regulated Substance	Units	CAS Number	Default Residential Type 1 RRS (ug/L)
Benzene	ug/L	71-43-2	5
1,2-Dichloroethane	ug/L	107-06-2	5
cis-1,2-Dichloroethene	ug/L	156-59-2	70
Ethylbenzene	ug/L	100-41-4	700
Tetrachloroethylene	ug/L	127-18-4	5
Toluene	ug/L	108-88-3	1,000
Trichloroethylene	ug/L	79-01-6	5
Vinyl Chloride	ug/L	75-01-4	2
Arsenic	ug/L	7440-38-2	0.01

Notes:
ug/L = micrograms per liter (parts per billion)
2011 samples from STI Report dated 2/21/12
J = Indicates an estimated value
NA = not analyzed or data not available
Type 1 RRS = Appendix(391-3-19) III. Media Target Concentrations and Exposure Assumptions, Table 1. Groundwater Criteria
U and ND = not detected above the laboratory detection limit
Bold = Exceeds Type 1 RRS



AST, FORMER UST, & NON-FERROUS PROCESSING BUILDING AREA – GROUNDWATER ANALYTICAL RESULTS
RICE IRON & METALS (FORMER)
2000 WEST SAVANNAH AVENUE
VALDOSTA, LOWNDES COUNTY, GEORGIA
FACILITY ID: HSI#10923/VRP1348601340



LEGEND

Regulated Substance	Units	CAS Number	Default Residential Type 1 RRS (ug/L)
Benzene	ug/L	71-43-2	5
1,1-Dichloroethene	ug/L	75-35-4	7
cis-1,2-Dichloroethene	ug/L	156-59-2	70
Tetrachloroethylene	ug/L	127-18-4	5
Toluene	ug/L	108-88-3	1,000
Trichloroethylene	ug/L	79-01-6	5
Vinyl Chloride	ug/L	75-01-4	2
Arsenic	ug/L	7440-38-2	10

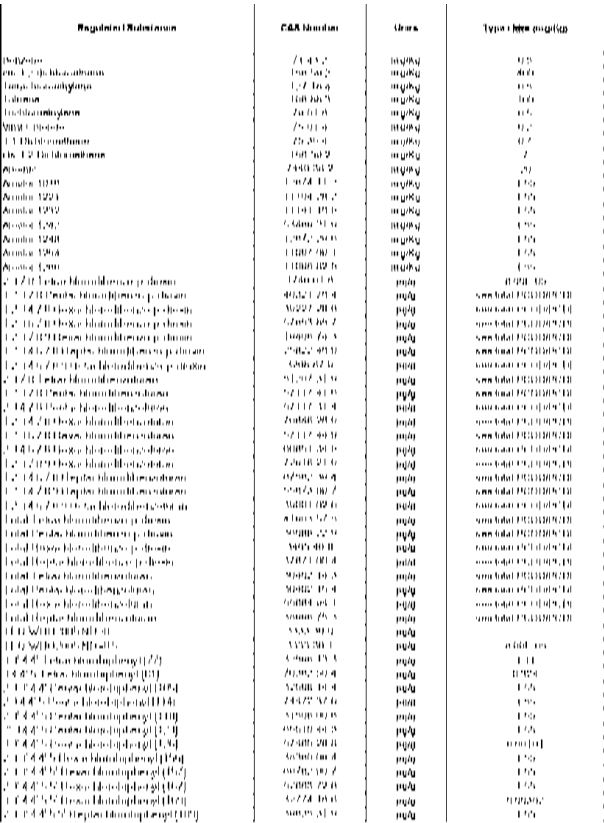
0 30
Approximate
Scale in Feet

110118



LEGEND

▲ *Soil Boring Location*

[illegible]

MOTOR BLOCK
STORAGE AREA
SOIL ANALYTICAL RESULTS

RICE IRON & METALS (FORMER)
2000 WEST SAVANNAH AVENUE
VALDOSTA, LOWNDES COUNTY, GEORGIA
FACILITY ID: HSI#10923/VRP1348601340



FIGURE 10b



LEGEND

 Monitoring Well Location

Regulated Substance	Units	CAS Number	Default Residential Type 1 RRS (ug/L)
Benzene	ug/L	71-43-2	5
1,1-Dichloroethene	ug/L	75-35-4	7
cis-1,2-Dichloroethene	ug/L	156-59-2	70
Tetrachloroethylene	ug/L	127-18-4	5
Toluene	ug/L	108-88-3	1,000
Trichloroethylene	ug/L	79-01-6	5
Vinyl Chloride	ug/L	75-01-4	2
Arsenic	ug/L	7440-38-2	10

Notes:
ug/L = micrograms per liter (parts per billion)
2011 samples from STI Report dated 2/21/12
b = blank spike recovery outside control limits
ft BLS = feet below land surface well screen interval
J = Indicates an estimated value
NA = not analyzed or data not available
Type 1 RRS = Appendix(391-3-19) III. Media Target Concentrations and Exposure Assumptions, Table 1. Groundwater Criteria
U and ND = not detected above the laboratory detection limit
Bold = Exceeds Type 1 RRS

0 60
Approximate
Scale in Feet

**MOTOR BLOCK
STORAGE AREA
GROUNDWATER
ANALYTICAL RESULTS**
RICE IRON & METALS (FORMER)
2000 WEST SAVANNAH AVENUE
VALDOSTA, LOWNDES COUNTY, GEORGIA
FACILITY ID: HSI#10923/VRP1348601340



LEGEND

 *Monitoring Well Location*

 *Soil Boring Location
(July 2016)*

 *Footprint of
October 2016
Soil Excavation*

0 50

*Approximate
Scale in Feet*

MOTOR BLOCK
STORAGE AREA
OCTOBER 2016
EXCAVATION LIMITS
RICE IRON & METALS (FORMER)
2000 WEST SAVANNAH AVENUE
VALDOSTA, LOWNDES COUNTY, GEORGIA
FACILITY ID: HSI#10923/VRP1348601340



LEGEND

Regulated Substance	CAS Number	Units	Type I RRS (mg/Kg)
Benzene	71-43-2	mg/Kg	0.5
cis-1,2-dichloroethene	156-59-2	mg/Kg	400
Ethylbenzene	108-90-7	mg/Kg	70
Tetrachloroethylene	127-18-4	mg/Kg	0.5
Toluene	108-88-3	mg/Kg	100
Trichloroethylene	79-01-6	mg/Kg	0.5
Vinyl Chloride	75-01-4	mg/Kg	0.2
1,1-Dichloroethene	75-35-4	mg/Kg	0.7
Arsenic	7440-38-2	mg/Kg	20
Aroclor 1016	12674-11-2	mg/Kg	1.55
Aroclor 1221	11104-28-2	mg/Kg	1.55
Aroclor 1232	11141-16-5	mg/Kg	1.55
Aroclor 1242	53469-21-9	mg/Kg	1.55
Aroclor 1248	12672-29-6	mg/Kg	1.55
Aroclor 1254	11097-69-1	mg/Kg	1.55
Aroclor 1260	11096-82-5	mg/Kg	1.55

Notes:
CAS = Chemical Abstracts Service
ftBLS = feet below land surface
mg/Kg = milligrams per kilogram (parts per million)
NA = not submitted for analysis
ND AND U= not detected above method detection limit
RRS indicates Risk Reduction Standard



**SHED AREA—SOIL
ANALYTICAL RESULTS**
OCTOBER 21, 2015
RICE IRON & METALS (FORMER)
2000 WEST SAVANNAH AVENUE
VALDOSTA, LOWNDES COUNTY, GEORGIA
FACILITY ID: HSI#10923/VRP1348601340





FIGURE 12

LEGEND

 *Soil Boring Location*

Constituent of Concern	CAS Number	Units	Type I RRS (mg/Kg)
Lead	7439-92-1	mg/Kg	75

Notes:
CAS = Chemical Abstracts Service
ft BLS = feet below land surface
mg/Kg = micrograms per kilogram (parts per million)
U= not detected above method detection limit
RRS indicates Type I Risk Reduction Standard

0 60

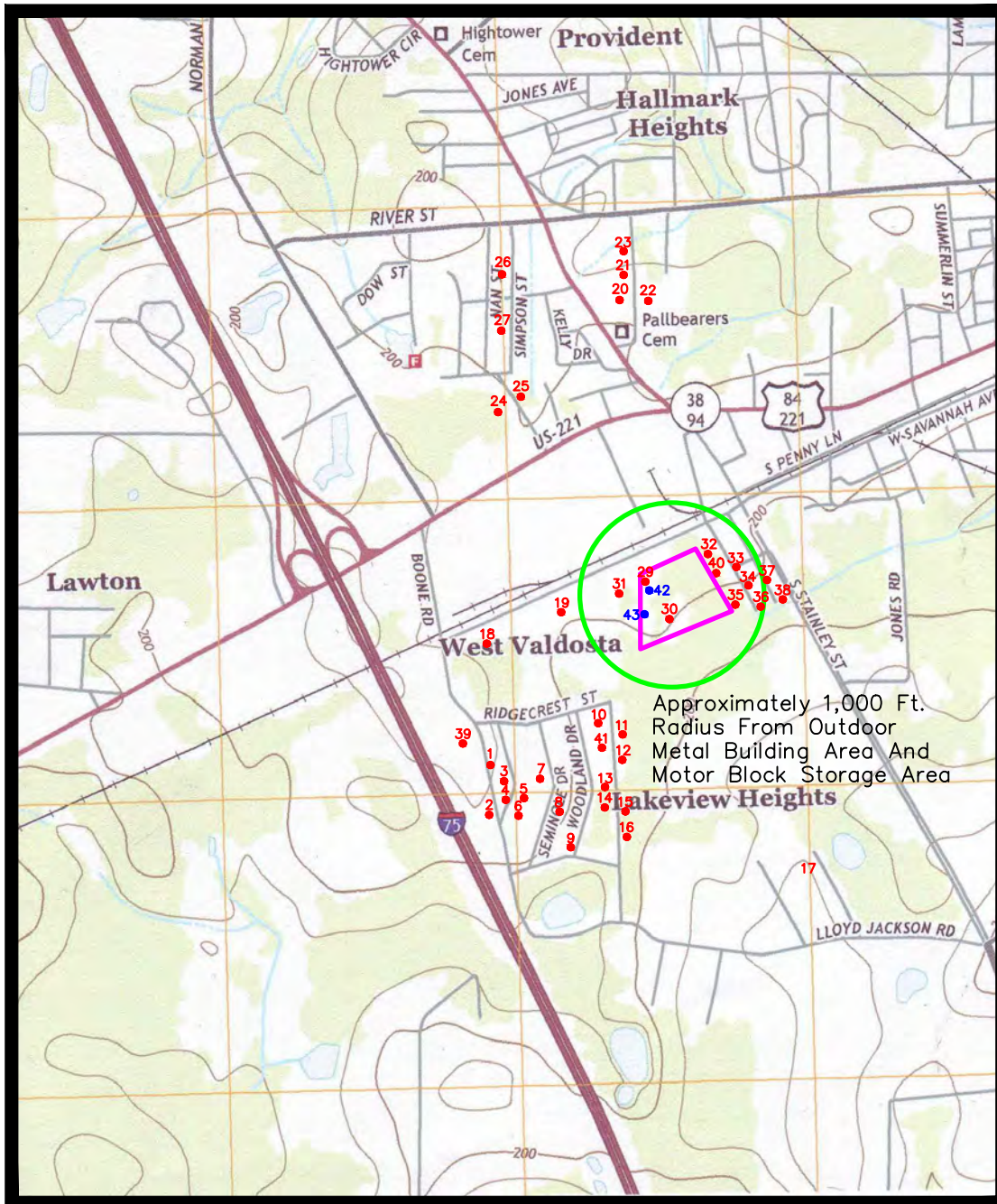
*Approximate
Scale in Feet*

FEED PLOT AREA SOIL ANALYTICAL RESULTS

JULY 28, 2017
RICE IRON & METALS (FORMER)
2000 WEST SAVANNAH AVENUE
VALDOSTA, LOWNDES COUNTY, GEORGIA
FACILITY ID: HSI#10923/VRP1348601340



POTENTIAL RECEPTOR MAP



- | | | |
|-------------------------|-----------------------------|---|
| 1. 2124 BOONE RD. | 14. 1770 RIDGECREST ST. | 27. 306 SIMPSON ST. |
| 2. 1660 BOONE RD. | 15. 1771 RIDGECREST ST. | 28. 202 SIMPSON ST. |
| 3. 2038 WOODY CIRCLE | 16. 1783 RIDGECREST ST. | 29. 2000 WEST SAVANNAH AVE. |
| 4. 2050 WOODY CIRCLE | 17. 1757 MYERS RD. | 30. 2000 WEST SAVANNAH AVE. |
| 5. 2057 WOODY CIRCLE | 18. 2301 WEST SAVANNAH AVE. | 31. 2005 WEST SAVANNAH AVE. |
| 6. 2059 WOODY CIRCLE | 19. 2305 WEST SAVANNAH AVE. | 32. 501 BURNETTE BLVD. |
| 7. 1936 SEMINOLE DR. | 20. 222 BECK ST. | 33. 512 GREEN ACRES DR. |
| 8. 1951 SEMINOLE DR. | 21. 230 BECK ST. | 34. 544 BURNETTE BLVD. |
| 9. 1890 WOOLAND DR. | 22. 231 BECK ST. | 35. 540 BURNETTE BLVD. |
| 10. 1690 RIDGECREST ST. | 23. 234 BECK ST. | 36. 549 BURNETTE BLVD. |
| 11. 1722 RIDGECREST ST. | 24. 128 HAZELTON ST. | 37. 442, 442 1/2, 444 GREEN ACRES BLVD. |
| 12. 1726 RIDGECREST ST. | 25. 121 HAZELTON ST. | 38. 449 GREEN ACRES BLVD. |
| 13. 1758 RIDGECREST ST. | 26. 308 SIMPSON ST. | 39. 2072 BOONE RD. |

40. 509 BURNETTE BLVD.
41. 1710 RIDGECREST ST.
42. POD MW-3
43. POD MW-11

SCALE 1"=2,000'

- WELL LOCATIONS
- ▭ VRP PROPERTY
- 1,000 FT. RADIUS FROM IMPACTED GROUNDWATER

RICE IRON & METALS (FORMER)
2000 WEST SAVANNAH AVENUE
VALDOSTA, LOWNDES COUNTY, GEORGIA
FACILITY ID: HSI#10923/VRP1348601340

TABLES

Table 1:
Cumulative Monitoring Well Construction and Groundwater Elevation Data
Rice Iron & Metals (Former)

2000 West Savannah Avenue, Valdosta, Lowndes County, Georgia

WELL ID	MW-1/MW-1R			MW-1D			MW-1DD			MW-2/MW-2R			MW-3			MW-4		
AQUIFER	Upper Surficial			Intermediate Surficial			Lower Surficial			Upper Surficial			Upper Surficial			Upper Surficial		
DIAMETER (inches)	2.0			2.0			2.0			2.0			1.0			1.0		
WELL DEPTH (feet BLS)	20			40			75			20			20			20		
SCREEN (feet BLS)	10-20			35-40			70-75			10-20			10-20			10-20		
TOC ELEVATION (feet NAVD)	199.77			199.94			199.85			199.31			198.79			200.21		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
07/21/14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	191.53	7.26	0.00	191.53	8.68	0.00
08/11/14	189.62	10.15	0.00	NA	NA	NA	NA	NA	NA	189.56	9.75	0.00	189.86	8.93	0.00	189.84	10.37	0.00
11/11/14	188.39	11.38	0.00	187.80	12.14	0.00	161.68	38.17	0.00	188.31	11.00	0.00	188.89	9.90	0.00	188.66	11.55	0.00
04/14/15	194.52	5.25	0.00	193.51	6.43	0.00	166.21	33.64	0.00	194.44	4.87	0.00	195.11	3.68	0.00	194.92	5.29	0.00
10/19/15	194.10	5.67	0.00	192.68	7.26	0.00	164.45	35.40	0.00	193.89	5.42	0.00	195.15	3.64	0.00	194.26	5.95	0.00
04/05/16	196.76	3.01	0.00	195.83	4.11	0.00	166.84	33.01	0.00	196.74	2.57	0.00	196.51	2.28	0.00	196.85	3.36	0.00
07/27/16	192.21	7.56	0.00	191.08	8.86	0.00	165.19	34.66	0.00	192.17	7.14	0.00	193.00	5.79	0.00	192.42	7.79	0.00
10/17/16	190.08	9.69	0.00	190.34	9.60	0.00	162.90	36.95	0.00	189.82	9.49	0.00	188.84	9.95	0.00	191.97	8.24	0.00
02/15/17	193.47	6.30	0.00	192.32	7.62	0.00	162.64	37.21	0.00	193.16	6.15	1.00	193.24	5.55	0.00	193.37	6.84	0.00
02/17/17	193.41	6.36	0.00	192.24	7.70	0.00	162.52	37.33	0.00	193.31	6.00	0.00	193.51	5.28	0.00	193.36	6.85	0.00
07/27/17	190.98	8.79	0.00	190.09	9.85	0.00	162.65	37.20	0.00	190.91	8.40	0.00	NA	NA	NA	191.46	8.75	0.00

WELL ID	MW-5			MW-5D			MW-6			MW-7			MW-8/MW-8R			MW-9		
AQUIFER	Upper Surficial			Intermediate Surficial			Upper Surficial			Upper Surficial			Upper Surficial			Upper Surficial		
DIAMETER (inches)	1.0			2.0			1.0			1.0			2.0			1.0		
WELL DEPTH (feet BLS)	20			40			20			20			20			20		
SCREEN (feet BLS)	10-20			35-40			10-20			10-20			10-20			10-20		
TOC ELEVATION (feet NAVD)	197.10			197.22			196.79			NA			197.27			NA		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
07/21/14	191.92	5.18	0.00	NA	NA	NA	191.32	5.47	0.00	NA	NA	NA	190.60	6.67	0.00	NA	NA	NA
08/11/14	190.62	6.48	0.00	188.39	8.83	0.00	190.09	6.70	0.00	NA	NA	NA	189.04	8.23	0.00	NA	NA	NA
11/11/14	189.75	7.35	0.00	187.23	9.99	0.00	188.92	7.87	0.00	NA	NA	NA	187.95	9.32	0.00	NA	NA	NA
04/14/15	194.73	2.37	0.00	192.45	4.77	0.00	194.91	1.88	0.00	NA	NA	NA	192.97	4.30	0.00	NA	NA	NA
10/19/15	194.62	2.48	0.00	191.71	5.51	0.00	193.80	2.99	0.00	NA	NA	NA	192.70	4.57	0.00	NA	NA	NA
04/05/16	196.38	0.72	0.00	194.87	2.35	0.00	NA	NA	NA	NA	NA	NA	195.43	1.84	0.00	NA	NA	NA
07/27/16	193.01	4.09	0.00	190.04	7.18	0.00	192.10	4.69	0.00	NA	NA	NA	190.86	6.41	0.00	NA	NA	NA
10/17/16	190.91	6.19	0.00	188.48	8.74	0.00	190.38	6.41	0.00	NA	NA	NA	189.62	7.65	0.00	NA	NA	NA
02/15/17	NA	NA	NA	191.07	6.15	0.00	193.39	3.4	0.00	NA	NA	NA	193.77	3.50	0.00	NA	NA	NA
02/17/17	193.60	3.50	0.00	191.07	6.15	0.00	193.39	3.40	0.00	NA	NA	NA	192.32	4.95	0.00	NA	NA	NA
07/27/17	191.50	5.60	0.00	189.23	7.99	0.00	191.25	5.54	0.00	NA	NA	NA	190.55	6.72	0.00	NA	NA	NA

Table 1:
Cumulative Monitoring Well Construction and Groundwater Elevation Data
Rice Iron & Metals (Former)

2000 West Savannah Avenue, Valdosta, Lowndes County, Georgia

WELL ID	MW-10			MW-11			MW-12			MW-13			MW-14			MW-15		
AQUIFER	Upper Surficial			Upper Surficial			Upper Surficial			Upper Surficial			Upper Surficial			Upper Surficial		
DIAMETER (inches)	1.0			1.0			2.0			2.0			2.0			2.0		
WELL DEPTH (feet BLS)	20			20			20			20			20			20		
SCREEN (feet BLS)	10-20			10-20			10-20			10-20			10-20			10-20		
TOC ELEVATION (feet NAVD)	200.16			197.00			197.67			197.36			200.51			199.19		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
07/21/14	191.65	8.51	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
08/11/14	189.95	10.21	0.00	NA	NA	NA	190.41	7.26	0.00	190.53	6.83	0.00	NA	NA	NA	NA	NA	NA
11/11/14	188.78	11.38	0.00	188.91	8.09	0.00	189.49	8.18	0.00	189.61	7.75	0.00	188.35	12.16	0.00	188.16	11.03	0.00
04/14/15	194.96	5.20	0.00	194.52	2.48	0.00	195.35	2.32	0.00	194.94	2.42	0.00	194.44	6.07	0.00	194.52	4.67	0.00
10/19/15	192.90	7.26	0.00	193.89	3.11	0.00	194.42	3.25	0.00	194.71	2.65	0.00	193.93	6.58	0.00	194.32	4.87	0.00
04/05/16	196.92	3.24	0.00	196.22	0.78	0.00	196.57	1.10	0.00	196.49	0.87	0.00	196.72	3.79	0.00	196.81	2.38	0.00
07/27/16	192.73	7.43	0.00	NA	NA	NA	192.66	5.01	0.00	192.52	4.84	0.00	192.31	8.20	0.00	191.91	7.28	0.00
10/17/16	190.72	9.44	0.00	NA	NA	NA	190.89	6.78	0.00	191.01	6.35	0.00	189.95	10.56	0.00	189.74	9.45	0.00
02/15/17	193.72	6.44	0.00	193.38	3.62	0.00	193.57	4.10	0.00	193.92	3.44	0.00	190.51	6.85	0.00	193.35	5.84	0.00
02/17/17	193.71	6.45	0.00	193.30	3.70	0.00	193.57	4.10	0.00	193.92	3.44	0.00	193.45	7.06	0.00	193.27	5.92	0.00
07/27/17	191.50	8.66	0.00	191.38	5.62	0.00	192.00	5.67	0.00	192.06	5.30	0.00	190.98	9.53	0.00	190.68	8.51	0.00

WELL ID	MW-16		
AQUIFER	Upper Surficial		
DIAMETER (inches)	2.0		
WELL DEPTH (feet BLS)	20		
SCREEN (feet BLS)	10-20		
TOC ELEVATION (feet NAVD)	198.22		
DATE	ELEV	DTW	FP
07/21/14	NA	NA	NA
08/11/14	NA	NA	NA
11/11/14	NA	NA	NA
04/14/15	NA	NA	NA
10/19/15	NA	NA	NA
04/05/16	NA	NA	NA
07/27/16	191.57	6.65	0.00
10/17/16	190.00	8.22	0.00
02/15/17	192.87	5.35	0.00
02/17/17	192.87	5.35	0.00
07/27/17	190.77	7.45	0.00

Notes:

BLS = below land surface

DTW = Depth to Water

ELE = Elevation

FP = Free Product

MSL = Mean Sea Level

MW-7 and MW-9 were destroyed

MW-8 (TOC 198.42 feet) was replaced by MW-8R on 2/16/17

NA = Data not available

Monitoring wells were surveyed on 9/23/14 by Innovate! Engineering Solutions

NAVD = North American Vertical Datum of 1988

MW-1 was replaced by MW-1R on 8/5/14

MW-2 was replaced by MW-2R on 8/6/14

MW-8 was replaced by MW-8R on 2/16/17

Table 2:
Cumulative Soil Analytical Data
Rice Iron and Metals, Inc. (Former)
2000 West Savannah, Valdosta, Lowndes County, Georgia

Analyte	CAS Number	Units	Type I RRS (mg/Kg)	B-8	B-9	B-10	B-11	SB-1	SB-1	SB-1	SB-1	SB-2
				6-8 ft BLS	6-8 ft BLS	6-8 ft BLS	6-8 ft BLS	0-2 ft BLS	0-2 ft BLS	2-4 ft BLS	4-6 ft BLS	0-2 ft BLS
				9/17/14	9/17/14	2/16/2017	2/16/2017	4/14/15	10/21/15	10/21/15	7/26/2016	4/14/15
VOCs by EPA Method 8260B												
Acetone	67-64-1	mg/Kg	400	NA	NA	NA	NA	NA	ND (0.012)	ND (0.0095)	0.0175 J	NA
Benzene	71-43-2	mg/Kg	0.5	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.0063)	0.0098	NA
2-Butanone (MEK)	78-93-3	mg/Kg	200	NA	NA	NA	NA	NA	ND (0.0065)	ND (0.0054)	ND (0.0064)	NA
Carbon Disulfide	75-15-0	mg/Kg	400	NA	NA	NA	NA	NA	ND (0.0011)	ND (0.00093)	ND (0.00071)	NA
Ethylbenzene	108-90-7	mg/Kg	70	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	0.0034 J	NA
Isopropylbenzene	98-82-8	mg/Kg	21.88	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.0010)	NA
p-Isopropyltoluene	99-87-6	mg/Kg	NR	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00071)	NA
Naphthalene	91-20-3	mg/Kg	60.4	NA	NA	NA	NA	NA	ND (0.0015)	ND (0.0013)	ND (0.0014)	NA
n-Propylbenzene	103-65-1	mg/Kg	NR	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00088)	NA
Styrene	100-42-5	mg/Kg	14	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00071)	NA
Tetrachloroethylene	127-18-4	mg/Kg	0.5	0.0039 J	ND (0.00091)	NA	NA	NA	ND (0.0013)	ND (0.001)	ND (0.00093)	NA
Toluene	108-88-3	mg/Kg	100	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	0.046	NA
Trichloroethylene	79-01-6	mg/Kg	0.5	ND (0.00089)	ND (0.00073)	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00083)	NA
1,2,4-Trimethylbenzene	95-63-6	mg/Kg	NR	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	0.0017 J	NA
1,3,5-Trimethylbenzene	108-67-8	mg/Kg	NR	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00071)	NA
m,p-Xylene	108-38-3/106-42-3	mg/Kg	1000	NA	NA	NA	NA	NA	ND (0.00082)	ND (0.00068)	0.0178	NA
o-Xylene	95-47-6	mg/Kg	1000	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	0.0136	NA
Acrolein	107-02-8	mg/Kg	0.0628	NA	NA	NA	NA	NA	ND (0.0010)	ND (0.0085)	NA	NA
Acrylonitrile	107-31-1	mg/Kg	1.37	NA	NA	NA	NA	NA	ND (0.0054)	ND (0.0044)	NA	NA
2-Chloroethyl Vinyl Ether	110-75-8	mg/Kg	NR	ND (0.0088)	ND (0.0072)	NA	NA	NA	ND (0.019)	ND (0.0063)	NA	NA
o-Chlorotoluene	95-49-8	mg/Kg	NR	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00071)	NA
p-Chlorotoluene	106-43-4	mg/Kg	NR	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00071)	NA
Dichlorodifluoromethane	75-71-8	mg/Kg	0.0803	ND (0.0011)	ND (0.00091)	NA	NA	NA	ND (0.0011)	ND (0.00086)	ND (0.0018)	NA
Vinyl Chloride	75-01-4	mg/Kg	0.2	ND (0.00089)	ND (0.00073)	NA	NA	NA	ND (0.0012)	ND (0.0010)	ND (0.0012)	NA
Vinyl Acetate	108-05-4	mg/Kg	0.51	NA	NA	NA	NA	NA	ND (0.0091)	ND (0.0075)	ND (0.0066)	NA
Chloroethane	75-00-3	mg/Kg	0.17	ND (0.0020)	ND (0.0016)	NA	NA	NA	ND (0.0015)	ND (0.0013)	ND (0.0014)	NA
Trichlorofluoromethane	75-69-4	mg/Kg	200	ND (0.00088)	ND (0.00072)	NA	NA	NA	ND (0.0013)	ND (0.0011)	ND (0.0013)	NA
1,1-Dichloroethene	75-35-4	mg/Kg	0.7	ND (0.00088)	ND (0.00072)	NA	NA	NA	ND (0.0010)	ND (0.00083)	ND (0.0012)	NA
Methyl Bromide (Bromomethane)	74-83-9	mg/Kg	0.8	ND (0.0016)	ND (0.0013)	NA	NA	NA	ND (0.0017)	ND (0.0014)	ND (0.0018)	NA
Methyl Chloride (Chloromethane)	74-87-3	mg/Kg	0.3	ND (0.0018)	ND (0.0014)	NA	NA	NA	ND (0.0015)	ND (0.0013)	ND (0.0017)	NA
Methylene Bromide (Dibromomethane)	74-95-3	mg/Kg	1000	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.0013)	NA
Methylene Chloride (Dichloromethane)	75-09-2	mg/Kg	0.5	ND (0.0035)	ND (0.0029)	NA	NA	NA	ND (0.0031)	ND (0.0025)	ND (0.0028)	NA
4-Methyl-2-pentanone (MIBK)	108-10-1	mg/Kg	200	NA	NA	NA	NA	NA	ND (0.0041)	ND (0.0034)	ND (0.0076)	NA
Trans-1,2-Dichloroethene	156-60-5	mg/Kg	10	ND (0.0012)	ND (0.00097)	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.0011)	NA
Methyl tert-Butyl Ether	1634-04-4	mg/Kg	NR	NA	NA	NA	NA	NA	ND (0.00092)	ND (0.00076)	ND (0.00079)	NA
1,1-Dichloroethane	75-34-3	mg/Kg	42	ND (0.00088)	ND (0.00072)	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.0012)	NA
Cis-1,2-Dichloroethene	156-59-2	mg/Kg	7	ND (0.00088)	ND (0.00072)	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00085)	NA
2,2-Dichloropropane	594-20-7	mg/Kg	NR	NA	NA	NA	NA	NA	ND (0.00085)	ND (0.00070)	ND (0.00071)	NA
Bromochloromethane	74-97-5	mg/Kg	NR	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00079)	NA
Chloroform	67-66-3	mg/Kg	3.85	ND (0.00099)	ND (0.00081)	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00086)	NA
Carbon Tetrachloride	56-23-5	mg/Kg	0.5	ND (0.0012)	ND (0.0010)	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.0013)	NA
1,1,1-Trichloroethane	71-55-6	mg/Kg	20	ND (0.00088)	ND (0.00072)	NA	NA	NA	ND (0.0010)	ND (0.00083)	ND (0.00071)	NA
1,1-Dichloropropene	563-58-6	mg/Kg	NR	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00091)	NA
1,2-Dichloroethane	107-06-2	mg/Kg	0.5	ND (0.00088)	ND (0.00072)	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00071)	NA
1,2-Dichloropropane	78-87-5	mg/Kg	0.5	ND (0.00088)	ND (0.00072)	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.0011)	NA
Bromodichloromethane	75-27-4	mg/Kg	3.73	ND (0.00088)	ND (0.00072)	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00071)	NA
Cis-1,3-Dichloropropene	10061-01-5	mg/Kg	NR	ND (0.00088)	ND (0.00072)	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.0013)	NA
Trans-1,3-Dichloropropene	547-75-6	mg/Kg	NR	ND (0.00088)	ND (0.00072)	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00071)	NA
1,1,2-Trichloroethane	79-00-5	mg/Kg	0.5	ND (0.0014)	ND (0.0012)	NA	NA	NA	ND (0.00097)	ND (0.00080)	ND (0.0013)	NA
Dibromochloromethane	124-48-1	mg/Kg	8	ND (0.00088)	ND (0.00072)	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00071)	NA
1,3-Dichloropropane	142-28-9	mg/Kg	NR	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00071)	NA
1,2-Dibromoethane (EDB)	106-93-4	mg/Kg	0.01	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00071)	NA
Chlorobenzene	108-90-7	mg/Kg	10	ND (0.00088)	ND (0.00072)	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00071)	NA
1,1,1,2-Tetrachloroethane	630-20-6	mg/Kg	7	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00079)	NA
Bromoform	75-25-2	mg/Kg	80	ND (0.00095)	ND (0.00078)	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00071)	NA
Bromobenzene	108-86-1	mg/Kg	NR	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00086)	NA
1,1,2,2-Tetrachloroethane	79-34-5	mg/Kg	0.13	ND (0.0012)	ND (0.0010)	NA	NA	NA	ND (0.00085)	ND (0.00070)	ND (0.0016)	NA
2-Chlorotoluene	95-49-8	mg/Kg	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	96-18-4	mg/Kg	0.498	NA	NA	NA	NA	NA	ND (0.0011)	ND (0.00086)	ND (0.0012)	NA
4-Chlorotoluene	106-43-4	mg/Kg	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	98-06-6	mg/Kg	NR	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00071)	NA
1,2,4-Trimethylbenzene	95-63-6	mg/Kg	NR	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	0.00071 J	NA
sec-Butylbenzene	135-98-8	mg/Kg	NR	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00071)	NA
1,3-Dichlorobenzene	541-73-1	mg/Kg	60	ND (0.00088)	ND (0.00072)	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00071)	NA
1,4-Dichlorobenzene	106-46-7	mg/Kg	7.5	ND (0.00098)	ND (0.00081)	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00072)	NA
n-Butylbenzene	104-51-8	mg/Kg	NR	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00071)	NA
1,2-Dichlorobenzene	95-50-1	mg/Kg	60	ND (0.00088)	ND (0.00072)	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.00071)	NA
1,2-Dibromo-3-Chloropropane	96-12-8	mg/Kg	0.02	NA	NA	NA	NA	NA	ND (0.0011)	ND (0.00088)	ND (0.0016)	NA
1,2,4-Trichlorobenzene	120-82-1	mg/Kg	10.83	NA	NA	NA	NA	NA	ND (0.00077)	ND (0.00063)	ND (0.0010)	NA

Table 2:
Cumulative Soil Analytical Data
Rice Iron and Metals, Inc. (Former)
2000 West Savannah, Valdosta, Lowndes County, Georgia

Analyte	CAS Number	Units	Type I RRS (mg/Kg)	SB-2	SB-2	SB-2	SB-3	SB-3	SB-3	SB-4	SB-4
				0-2 ft BLS	2-4 ft BLS	0-2 ft BLS	0-2 ft BLS	0-2 ft BLS	0-2 ft BLS	0-2 ft BLS	0-2 ft BLS
				10/21/15	10/21/15	7/26/2016	4/14/15	10/21/15	10/21/15	7/26/2016	4/14/15
VOCs by EPA Method 8260B											
Acetone	67-64-1	mg/Kg	400	ND (0.011)	ND (0.01)	ND (0.0081)	NA	ND (0.013)	ND (0.01)	0.18	NA
Benzene	71-43-2	mg/Kg	0.5	ND (0.00074)	ND (0.00067)	ND (0.0010)	NA	ND (0.00084)	ND (0.00068)	ND (0.0016)	NA
2-Butanone (MEK)	78-93-3	mg/Kg	200	ND (0.0063)	ND (0.0057)	ND (0.0072)	NA	ND (0.0071)	ND (0.0058)	0.0267 J	NA
Carbon Disulfide	75-15-0	mg/Kg	400	ND (0.0011)	ND (0.00098)	ND (0.00080)	NA	ND (0.0012)	ND (0.001)	0.0227	NA
Ethylbenzene	108-90-7	mg/Kg	70	ND (0.00074)	ND (0.00067)	ND (0.00087)	NA	ND (0.00084)	ND (0.00068)	0.0169	NA
p-Propylbenzene	98-82-8	mg/Kg	21.88	ND (0.00074)	ND (0.00067)	ND (0.0011)	NA	ND (0.00084)	ND (0.00068)	0.0058	NA
p-Isopropyltoluene	99-87-6	mg/Kg	NR	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	0.0194	NA
Naphthalene	91-20-3	mg/Kg	60.4	ND (0.0015)	ND (0.0013)	ND (0.0016)	NA	ND (0.0017)	ND (0.0014)	0.0065	NA
n-Propylbenzene	103-65-1	mg/Kg	NR	ND (0.00074)	ND (0.00067)	ND (0.00099)	NA	ND (0.00084)	ND (0.00068)	0.0026 J	NA
Styrene	100-42-5	mg/Kg	14	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	0.0106	NA
Tetrachloroethylene	127-18-4	mg/Kg	0.5	ND (0.0012)	ND (0.0011)	ND (0.0010)	NA	ND (0.0014)	ND (0.0011)	ND (0.0017)	NA
Toluene	108-88-3	mg/Kg	100	ND (0.00074)	ND (0.00067)	ND (0.00090)	NA	ND (0.00084)	ND (0.00068)	0.0053 J	NA
Trichloroethylene	79-01-6	mg/Kg	0.5	ND (0.00074)	ND (0.00067)	ND (0.00093)	NA	ND (0.00084)	ND (0.00068)	ND (0.0015)	NA
1,2,4-Trimethylbenzene	95-63-6	mg/Kg	NR	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	0.0176	NA
1,3,5-Trimethylbenzene	108-67-8	mg/Kg	NR	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	0.0062 J	NA
m,p-Xylene	108-38-3/106-42-3	mg/Kg	1000	ND (0.00079)	ND (0.00072)	ND (0.0014)	NA	ND (0.0009)	ND (0.00073)	0.0099 J	NA
o-Xylene	95-47-6	mg/Kg	1000	ND (0.00074)	ND (0.00067)	ND (0.00087)	NA	ND (0.00084)	ND (0.00068)	0.0078	NA
Acrolein	107-02-8	mg/Kg	0.0628	ND (0.0099)	ND (0.0090)	NA	NA	ND (0.011)	ND (0.0092)	NA	NA
Acrylonitrile	107-31-1	mg/Kg	1.37	ND (0.0052)	ND (0.0047)	NA	NA	ND (0.0059)	ND (0.0048)	NA	NA
2-Chloroethyl Vinyl Ether	110-75-8	mg/Kg	NR	ND (0.00074)	ND (0.00067)	NA	NA	ND (0.0084)	ND (0.0068)	NA	NA
o-Chlorotoluene	95-49-8	mg/Kg	NR	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	ND (0.0013)	NA
p-Chlorotoluene	106-43-4	mg/Kg	NR	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	ND (0.0013)	NA
Dichlorodifluoromethane	75-71-8	mg/Kg	0.0803	ND (0.0010)	ND (0.00092)	ND (0.0020)	NA	ND (0.0012)	ND (0.00094)	ND (0.0031)	NA
Vinyl Chloride	75-01-4	mg/Kg	0.2	ND (0.0012)	ND (0.0011)	ND (0.0013)	NA	ND (0.0014)	ND (0.0011)	ND (0.0021)	NA
Vinyl Acetate	108-05-4	mg/Kg	0.51	ND (0.0088)	ND (0.0080)	ND (0.0074)	NA	ND (0.010)	ND (0.0081)	ND (0.012)	NA
Chloroethane	75-00-3	mg/Kg	0.17	ND (0.00074)	ND (0.0013)	ND (0.0016)	NA	ND (0.0017)	ND (0.0014)	ND (0.0025)	NA
Trichlorofluoromethane	75-69-4	mg/Kg	200	ND (0.0013)	ND (0.0012)	ND (0.0015)	NA	ND (0.0015)	ND (0.0012)	ND (0.0024)	NA
1,1-Dichloroethene	75-35-4	mg/Kg	0.7	ND (0.00097)	ND (0.00088)	ND (0.00080)	NA	ND (0.00084)	ND (0.00090)	ND (0.0013)	NA
Methyl Bromide (Bromomethane)	74-83-9	mg/Kg	0.8	ND (0.0016)	ND (0.0015)	ND (0.0021)	NA	ND (0.0018)	ND (0.0015)	ND (0.0033)	NA
Methyl Chloride (Chloromethane)	74-87-3	mg/Kg	0.3	ND (0.0015)	ND (0.0013)	ND (0.0019)	NA	ND (0.0017)	ND (0.0014)	ND (0.0030)	NA
Methylene Bromide (Dibromomethane)	74-95-3	mg/Kg	1000	ND (0.00074)	ND (0.00067)	ND (0.0014)	NA	ND (0.00084)	ND (0.00068)	ND (0.0023)	NA
Methylene Chloride (Dichloromethane)	75-09-2	mg/Kg	0.5	ND (0.0030)	ND (0.0027)	ND (0.0032)	NA	ND (0.00034)	ND (0.0027)	0.0197 B a	NA
4-Methyl-2-pentanone (MIBK)	108-10-1	mg/Kg	200	ND (0.0039)	ND (0.0036)	ND (0.0085)	NA	ND (0.0045)	ND (0.0037)	ND (0.0014)	NA
Trans-1,2-Dichloroethene	156-60-5	mg/Kg	10	ND (0.00074)	ND (0.00067)	ND (0.0012)	NA	ND (0.00084)	ND (0.00068)	ND (0.0019)	NA
Methyl tert-Butyl Ether	1634-04-4	mg/Kg	NR	ND (0.00089)	ND (0.00080)	ND (0.0085)	NA	ND (0.0010)	ND (0.0082)	ND (0.0014)	NA
1,1-Dichloroethane	75-34-3	mg/Kg	42	ND (0.00074)	ND (0.00067)	ND (0.0013)	NA	ND (0.00084)	ND (0.00068)	ND (0.0021)	NA
Cis-1,2-Dichloroethene	156-59-2	mg/Kg	7	ND (0.00074)	ND (0.00067)	ND (0.00095)	NA	ND (0.00084)	ND (0.00068)	ND (0.0015)	NA
2,2-Dichloropropane	594-20-7	mg/Kg	NR	ND (0.00082)	ND (0.00074)	ND (0.00080)	NA	ND (0.00093)	ND (0.00076)	ND (0.0013)	NA
Bromochloromethane	74-97-5	mg/Kg	NR	ND (0.00074)	ND (0.00067)	ND (0.00088)	NA	ND (0.00084)	ND (0.00068)	ND (0.0014)	NA
Chloroform	67-66-3	mg/Kg	3.85	ND (0.00074)	ND (0.00067)	ND (0.0097)	NA	ND (0.00084)	ND (0.00068)	ND (0.0015)	NA
Carbon Tetrachloride	56-23-5	mg/Kg	0.5	ND (0.00074)	ND (0.00067)	ND (0.0014)	NA	ND (0.00084)	ND (0.00068)	ND (0.0023)	NA
1,1,1-Trichloroethane	71-55-6	mg/Kg	20	ND (0.00097)	ND (0.00088)	ND (0.00080)	NA	ND (0.0011)	ND (0.00090)	ND (0.0013)	NA
1,1-Dichloropropene	563-58-6	mg/Kg	NR	ND (0.00074)	ND (0.00067)	ND (0.0010)	NA	ND (0.00084)	ND (0.00068)	ND (0.0016)	NA
1,2-Dichloroethane	107-06-2	mg/Kg	0.5	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	ND (0.0013)	NA
1,2-Dichloropropane	78-87-5	mg/Kg	0.5	ND (0.00074)	ND (0.00067)	ND (0.0013)	NA	ND (0.00084)	ND (0.00068)	ND (0.0020)	NA
Bromodichloromethane	75-27-4	mg/Kg	3.73	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	ND (0.0063)	NA
Cis-1,3-Dichloropropene	10061-01-5	mg/Kg	NR	ND (0.00074)	ND (0.00067)	ND (0.0015)	NA	ND (0.00084)	ND (0.00068)	ND (0.0024)	NA
Trans-1,3-Dichloropropene	547-75-6	mg/Kg	NR	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	ND (0.0013)	NA
1,1,2-Trichloroethane	79-00-5	mg/Kg	0.5	ND (0.00093)	ND (0.00084)	ND (0.0014)	NA	ND (0.0011)	ND (0.00086)	ND (0.0023)	NA
Dibromochloromethane	124-48-1	mg/Kg	8	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	ND (0.0013)	NA
1,3-Dichloropropane	142-28-9	mg/Kg	NR	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	ND (0.0013)	NA
1,2-Dibromomethane (EDB)	106-93-4	mg/Kg	0.01	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	ND (0.0013)	NA
Chlorobenzene	108-90-7	mg/Kg	10	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	ND (0.0013)	NA
1,1,1,2-Tetrachloroethane	630-20-6	mg/Kg	7	ND (0.00074)	ND (0.00067)	ND (0.00089)	NA	ND (0.00084)	ND (0.00068)	ND (0.0014)	NA
Bromoform	75-25-2	mg/Kg	80	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	ND (0.0013)	NA
Bromobenzene	108-86-1	mg/Kg	NR	ND (0.00074)	ND (0.00067)	ND (0.00097)	NA	ND (0.00084)	ND (0.00068)	ND (0.0015)	NA
1,1,2,2-Tetrachloroethane	79-34-5	mg/Kg	0.13	ND (0.00082)	ND (0.00074)	ND (0.0018)	NA	ND (0.00093)	ND (0.00076)	ND (0.0028)	NA
2-Chlorotoluene	95-49-8	mg/Kg	NR	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	96-18-4	mg/Kg	0.498	ND (0.0010)	ND (0.00092)	ND (0.0013)	NA	ND (0.0012)	ND (0.00094)	ND (0.0021)	NA
4-Chlorotoluene	106-43-4	mg/Kg	NR	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	98-06-6	mg/Kg	NR	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	ND (0.0013)	NA
1,2,4-Trimethylbenzene	95-63-6	mg/Kg	NR	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	0.0176	NA
sec-Butylbenzene	135-98-8	mg/Kg	NR	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	ND (0.0013)	NA
1,3-Dichlorobenzene	541-73-1	mg/Kg	60	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	ND (0.0013)	NA
1,4-Dichlorobenzene	106-46-7	mg/Kg	7.5	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	ND (0.0013)	NA
n-Butylbenzene	104-51-8	mg/Kg	NR	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	ND (0.0013)	NA
1,2-Dichlorobenzene	95-50-1	mg/Kg	60	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	ND (0.0013)	NA
1,2-Dibromo-3-Chloropropane	96-12-8	mg/Kg	0.02	ND (0.0010)	ND (0.00094)	ND (0.0018)	NA	ND (0.0012)	ND (0.00096)	ND (0.0028)	NA
1,2,4-Trichlorobenzene	120-82-1	mg/Kg	10.83	ND (0.00074)	ND (0.00067)	ND (0.0012)	NA	ND (0.00084)	ND (0.00068)	0.0176	NA
Hexachlorobutadiene	87-68-3	mg/Kg	17.5	ND (0.0010)	ND (0.00092)	ND (0.0017)	NA	ND (0.0012)	ND (0.00094)	ND (0.0028)	NA
2-Hexanone	591-78-6	mg/Kg	NR	ND (0.0060)	ND (0.0055)	ND (0.0069)	NA	ND (0.0069)	ND (0.0056)	ND (0.011)	NA
p-Isopropyltoluene	99-87-6	mg/Kg	NR	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	0.0194	NA
Naphthalene	91-20-3	mg/Kg	60.4	ND (0.0015)	ND (0.0013)	ND (0.0016)	NA	ND (0.0017)	ND (0.0014)	0.0065	NA
1,2,3-Trichlorobenzene	87-61-6	mg/Kg	NR	ND (0.00074)	ND (0.00067)	ND (0.0016)	NA	ND (0.00084)	ND (0.00068)	ND (0.0025)	NA
1,3,5-Trimethylbenzene	108-67-8	mg/Kg	NR	ND (0.00074)	ND (0.00067)	ND (0.00080)	NA	ND (0.00084)	ND (0.00068)	0.0062	NA
1,2-Dichloroethene (total)	540-59-0	mg/Kg	NR	NA	NA	NA	NA	NA	NA	NA	NA
Metals by EPA Method 6010B or Similar											
Arsenic	7440-38-2	mg/Kg	20	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	7440-43-9	mg/Kg	2	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	7440-47-3	mg/Kg	100	NA	NA	NA	NA	NA	NA	NA	NA
Lead	7439-92-1	mg/Kg	75	NA	NA	NA	NA	NA	NA	NA	NA
PCBs by EPA Method 8082A											
Aroclor 1016	12674-11-2	mg/Kg	1.55	ND (0.0071)	NA	NA	ND (0.0072)	ND (0.0075)	NA	NA	ND (0.0077)
Aroclor 1221	11104-28-2	mg/Kg	1.55	ND (0.0088)	NA	NA	ND (0.0090)	ND (0.0094)	NA	NA	ND (0.0096)
Aroclor 1232	11141-16-5	mg/Kg	1.55	ND (0.0088)	NA	NA	ND (0.0090)	ND (0.0094)	NA	NA	ND (0.0089)
Aroclor 1242	53469-21-9	mg/Kg	1.55	ND (0.0071)	NA	NA	ND (0.0072)	ND (0.0075)	NA	NA	ND (0.0077)
Aroclor 1248	12672-29-6	mg/Kg	1.55	ND (0.0071)	NA	NA	0.0292 a	ND (0.0075)	NA	NA	0.0628 a
Aroclor 1254	11097-69-1	mg/Kg	1.55	ND (0.0071)	NA	NA	ND (0.0072)	ND (0.0075)	NA	0.0677	ND (0.0071)
Aroclor 1260	11096-82-5	mg/Kg	1.55	ND (0.0071)	NA	NA	0.0269	ND (0.0075)	NA	NA	ND (0.0071)
Polychlorinated dibenzo-p-dioxins (PCDDs)											
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	mg/Kg	8.00E+00	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	40321-76-4	pg/g	see total PCDD/PCDF	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227-28-6	pg/g	see total PCDD/PCDF	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	57653-85-7	pg/g	see total PCDD/PCDF	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin											

Notes:

* = soil sample B-5R was collected as a re-sample of the B-5 that STI collected in 2011

2011 samples from STI Report dated 2/21/12

a = detections confirmed by dual column analysis

B = analyte was found in the assoc

CAS = Chemical Abstracts Service

EPA = Environmental Protection

ft BLS = feet below land surface

J = Indicates an estimated value

mg/Kg = milligrams Kilogram (parts per million)

NA = not submitted for analysis

NR = Not Regulated

ND AND U= not detected above method detection limit

PCBs = polychlorinated biphenyls

VOCs = volatile organic compounds

V = surrogate recovery not w

C = Congener has coeluters

a = archaic pattern appears to be weathered

a = aliochilid pattern appears to be weathered

PCB data for SB-5 was collected 4/14/15 from 0-2 ft bis pre-excavation; and dioxin data collected 10/21/15 from 3 ft

pg/g = picograms per gram

RRS indicates Risk Reduction Standard

PCDDs = polychlorinated dibenzodioxins

PCDDs = polychlorinated dibenzodioxins

Table 2:
Cumulative Soil Analytical Data
Rice Iron and Metals, Inc. (Former)
2000 West Savannah, Valdosta, Lowndes County, Georgia

Analyte	CAS Number	Units	Type I RRS (mg/Kg)	SB-4	SB-4	SB-5	SB-5	SB-5	SBFP-1	SBFP-2	SBFP-3
				2-4 ft BLS	2-4 ft BLS	0-2 ft BLS	0-2 ft BLS	2-4 ft BLS	0-2 ft BLS	0-2 ft BLS	0-2 ft BLS
				10/21/15	7/26/2016	4/14/15	10/21/15	7/26/2016	7/28/2017	7/28/2017	7/28/2017
VOCs by EPA Method 8260B											
Acetone	67-64-1	mg/Kg	400	ND (0.011)	0.119	NA	NA	ND (0.0082)	NA	NA	NA
Benzene	71-43-2	mg/Kg	0.5	ND (0.00073)	ND (0.0011)	NA	NA	0.0102	NA	NA	NA
2-Butanone (MEK)	78-93-3	mg/Kg	200	ND (0.0082)	0.0141 J	NA	NA	ND (0.0073)	NA	NA	NA
Carbon Disulfide	75-15-0	mg/Kg	400	ND (0.0011)	0.0013 J	NA	NA	ND (0.00080)	NA	NA	NA
Ethylbenzene	108-90-7	mg/Kg	70	ND (0.00073)	0.0023 J	NA	NA	0.133 J	NA	NA	NA
Isopropylbenzene	98-82-8	mg/Kg	21.88	ND (0.00073)	ND (0.0013)	NA	NA	ND (0.0011)	NA	NA	NA
p-Isopropyltoluene	99-87-6	mg/Kg	NR	ND (0.00073)	ND (0.00091)	NA	NA	ND (0.00080)	NA	NA	NA
Naphthalene	91-20-3	mg/Kg	60.4	ND (0.0015)	0.0026 J	NA	NA	ND (0.0016)	NA	NA	NA
n-Propylbenzene	103-65-1	mg/Kg	NR	ND (0.00073)	ND (0.0011)	NA	NA	ND (0.00099)	NA	NA	NA
Styrene	100-42-5	mg/Kg	14	ND (0.00073)	ND (0.00091)	NA	NA	ND (0.00080)	NA	NA	NA
Tetrachloroethylene	127-18-4	mg/Kg	0.5	ND (0.0012)	ND (0.0012)	NA	NA	ND (0.0010)	NA	NA	NA
Toluene	108-88-3	mg/Kg	100	ND (0.00073)	0.0011 J	NA	NA	0.0049	NA	NA	NA
Trichloroethylene	79-01-6	mg/Kg	0.5	ND (0.00073)	ND (0.0011)	NA	NA	ND (0.00094)	NA	NA	NA
1,2,4-Trimethylbenzene	95-63-6	mg/Kg	NR	ND (0.00073)	0.0043 J	NA	NA	ND (0.00080)	NA	NA	NA
1,3,5-Trimethylbenzene	108-67-8	mg/Kg	NR	ND (0.00073)	0.0012 J	NA	NA	0.0014 J	NA	NA	NA
m,p-Xylene	108-38-3/106-42-3	mg/Kg	1000	ND (0.00078)	0.0019 J	NA	NA	0.699	NA	NA	NA
o-Xylene	95-47-6	mg/Kg	1000	ND (0.00073)	0.0015 J	NA	NA	0.425	NA	NA	NA
Acrolein	107-02-8	mg/Kg	0.0628	ND (0.0098)	NA	NA	NA	NA	NA	NA	NA
Acrylonitrile	107-31-1	mg/Kg	1.37	ND (0.0051)	NA	NA	NA	NA	NA	NA	NA
2-Chloroethyl Vinyl Ether	110-75-8	mg/Kg	NR	ND (0.0073)	NA	NA	NA	NA	NA	NA	NA
o-Chlorotoluene	95-49-8	mg/Kg	NR	ND (0.00073)	ND (0.00091)	NA	NA	ND (0.00080)	NA	NA	NA
p-Chlorotoluene	106-43-4	mg/Kg	NR	ND (0.00073)	ND (0.00091)	NA	NA	ND (0.00080)	NA	NA	NA
Dichlorodifluoromethane	75-71-8	mg/Kg	0.0803	ND (0.0010)	ND (0.0023)	NA	NA	ND (0.0020)	NA	NA	NA
Vinyl Chloride	75-01-4	mg/Kg	0.2	ND (0.0012)	ND (0.0015)	NA	NA	ND (0.00130)	NA	NA	NA
Vinyl Acetate	108-05-4	mg/Kg	0.51	ND (0.0087)	ND (0.0085)	NA	NA	ND (0.0075)	NA	NA	NA
Chloroethane	75-00-3	mg/Kg	0.17	ND (0.0015)	ND (0.0018)	NA	NA	ND (0.0016)	NA	NA	NA
Trichlorofluoromethane	75-69-4	mg/Kg	200	ND (0.0013)	ND (0.0017)	NA	NA	ND (0.0015)	NA	NA	NA
1,1-Dichloroethene	75-35-4	mg/Kg	0.7	ND (0.00096)	ND (0.00091)	NA	NA	ND (0.00080)	NA	NA	NA
Methyl Bromide (Bromomethane)	74-83-9	mg/Kg	0.8	ND (0.0016)	ND (0.0023)	NA	NA	ND (0.0021)	NA	NA	NA
Methyl Chloride (Chloromethane)	74-87-3	mg/Kg	0.3	ND (0.0015)	ND (0.0022)	NA	NA	ND (0.0019)	NA	NA	NA
Methylene Bromide (Dibromomethane)	74-95-3	mg/Kg	1000	ND (0.00073)	ND (0.0017)	NA	NA	ND (0.0015)	NA	NA	NA
Methylene Chloride (Dichloromethane)	75-09-2	mg/Kg	0.5	ND (0.0029)	0.0054 JB a	NA	NA	ND (0.0032)	NA	NA	NA
4-Methyl-2-pentanone (MIBK)	108-10-1	mg/Kg	200	ND (0.0039)	ND (0.0097)	NA	NA	ND (0.0086)	NA	NA	NA
Trans-1,2-Dichloroethene	156-60-5	mg/Kg	10	ND (0.00073)	ND (0.0014)	NA	NA	ND (0.0012)	NA	NA	NA
Methyl tert-Butyl Ether	1634-04-4	mg/Kg	NR	ND (0.00088)	ND (0.0010)	NA	NA	ND (0.00089)	NA	NA	NA
1,1-Dichloroethane	75-34-3	mg/Kg	42	ND (0.00073)	ND (0.0015)	NA	NA	ND (0.0013)	NA	NA	NA
Cis-1,2-Dichloroethene	156-59-2	mg/Kg	7	ND (0.00073)	ND (0.0011)	NA	NA	ND (0.00096)	NA	NA	NA
2,2-Dichloropropane	594-20-7	mg/Kg	NR	ND (0.00081)	ND (0.00091)	NA	NA	ND (0.00080)	NA	NA	NA
Bromochloromethane	74-97-5	mg/Kg	NR	ND (0.00073)	ND (0.0010)	NA	NA	ND (0.00089)	NA	NA	NA
Chloroform	67-66-3	mg/Kg	3.85	ND (0.00073)	ND (0.0011)	NA	NA	ND (0.00098)	NA	NA	NA
Carbon Tetrachloride	56-23-5	mg/Kg	0.5	ND (0.00073)	ND (0.0016)	NA	NA	ND (0.0014)	NA	NA	NA
1,1,1-Trichloethane	71-55-6	mg/Kg	20	ND (0.00096)	ND (0.00091)	NA	NA	ND (0.00080)	NA	NA	NA
1,1-Dichloropropene	563-58-6	mg/Kg	NR	ND (0.00073)	ND (0.0012)	NA	NA	ND (0.0010)	NA	NA	NA
1,2-Dichloroethane	107-06-2	mg/Kg	0.5	ND (0.00073)	ND (0.00091)	NA	NA	ND (0.00080)	NA	NA	NA
1,2-Dichloropropane	78-87-5	mg/Kg	0.5	ND (0.00073)	ND (0.0014)	NA	NA	ND (0.0013)	NA	NA	NA
Bromodichloromethane	75-27-4	mg/Kg	3.73	ND (0.00073)	ND (0.00091)	NA	NA	ND (0.00080)	NA	NA	NA
Cis-1,3-Dichloropropene	10061-01-5	mg/Kg	NR	ND (0.00073)	ND (0.0017)	NA	NA	ND (0.0015)	NA	NA	NA
Trans-1,3-Dichloropropene	547-75-6	mg/Kg	NR	ND (0.00073)	ND (0.00091)	NA	NA	ND (0.00080)	NA	NA	NA
1,1,2-Trichloroethane	79-00-5	mg/Kg	0.5	ND (0.00092)	ND (0.0016)	NA	NA	ND (0.0015)	NA	NA	NA
Dibromochloromethane	124-48-1	mg/Kg	8	ND (0.00073)	ND (0.00091)	NA	NA	ND (0.00080)	NA	NA	NA
1,3-Dichloropropane	142-28-9	mg/Kg	NR	ND (0.00073)	ND (0.00091)	NA	NA	ND (0.00080)	NA	NA	NA
1,2-Dibromoethane (EDB)	106-93-4	mg/Kg	0.01	ND (0.00073)	ND (0.00091)	NA	NA	ND (0.00080)	NA	NA	NA
Chlorobenzene	108-90-7	mg/Kg	10	ND (0.00073)	ND (0.00091)	NA	NA	ND (0.00080)	NA	NA	NA
1,1,1,2-Tetrachloroethane	630-20-6	mg/Kg	7	ND (0.00073)	ND (0.0010)	NA	NA	ND (0.00090)	NA	NA	NA
Bromoform	75-25-2	mg/Kg	80	ND (0.00073)	ND (0.00091)	NA	NA	ND (0.00080)	NA	NA	NA
Bromobenzene	108-86-1	mg/Kg	NR	ND (0.00073)	ND (0.0011)	NA	NA	ND (0.00098)	NA	NA	NA
1,1,2,2-Tetrachloroethane	79-34-5	mg/Kg	0.13	ND (0.00081)	ND (0.0020)	NA	NA	ND (0.0018)	NA	NA	NA
2-Chlorotoluene	95-49-8	mg/Kg	NR	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	96-18-4	mg/Kg	0.498	ND (0.0010)	ND (0.0015)	NA	NA	ND (0.0013)	NA	NA	NA
4-Chlorotoluene	106-43-4	mg/Kg	NR	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	98-06-6	mg/Kg	NR	ND (0.00073)	ND (0.000091)	NA	NA	ND (0.00080)	NA	NA	NA
1,2,4-Trimethylbenzene	95-63-6	mg/Kg	NR	ND (0.00073)	0.0043 J	NA	NA	ND (0.00080)	NA	NA	NA
sec-Butylbenzene	135-98-8	mg/Kg	NR	ND (0.00073)	ND (0.00091)	NA	NA	ND (0.00080)	NA	NA	NA
1,3-Dichlorobenzene	541-73-1	mg/Kg	60	ND (0.00073)	ND (0.000091)	NA	NA	N (0.00080)	NA	NA	NA
1,4-Dichlorobenzene	106-46-7	mg/Kg	7.5	ND (0.00073)	ND (0.00093)	NA	NA	N (0.00082)	NA	NA	NA
n-Butylbenzene	104-51-8	mg/Kg	NR	ND (0.00073)	ND (0.00091)	NA	NA	ND (0.00080)	NA	NA	NA
1,2-Dichlorobenzene	95-50-1	mg/Kg	60	ND (0.00073)	ND (0.00091)	NA	NA	N (0.00080)	NA	NA	NA
1,2-Dibromo-3-Chloropropane	96-12-8	mg/Kg	0.02	ND (0.0010)	ND (0.0020)	NA	NA	ND (0.0018)	NA	NA	NA
1,2,4-Trichlorobenzene	120-82-1	mg/Kg	10.83	ND (0.00073)	ND (0.0013)	NA	NA	ND (0.0012)	NA	NA	NA
Hexachlorobutadiene	87-68-3	mg/Kg	17.5	ND (0.0010)	ND (0.0020)	NA	NA	ND (0.0017)	NA	NA	NA
2-Hexanone	591-78-6	mg/Kg	NR	ND (0.0060)	ND (0.0079)	NA	NA	ND (0.0070)	NA	NA	NA
p-Isopropyltoluene	99-87-6	mg/Kg	NR	ND (0.00073)	ND (0.00091)	NA	NA	ND (0.00080)	NA	NA	NA
Napthalene	91-20-3	mg/Kg	60.4	ND (0.0015)	0.0026 J	NA	NA	ND (0.0016)	NA	NA	NA
1,2,3-Trichlorobenzene	87-61-6	mg/Kg	NR	ND (0.00073)	ND (0.0018)	NA	NA	ND (0.0016)	NA	NA	NA
1,3,5-Trimethylbenzene	108-67-8	mg/Kg	NR	ND (0.00073)	0.0012 J	NA	NA	0.0014 J	NA	NA	NA
1,2-Dichloroethene (total)	540-59-0	mg/Kg	NR	NA	NA	NA	NA	NA	NA	NA	NA
Metals by EPA Method 6010B or Similar											
Arsenic	7440-38-2	mg/Kg	20	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	7440-43-9	mg/Kg	2	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	7440-47-3	mg/Kg	100	NA	NA	NA	NA	NA	NA	NA	NA
Lead	7439-92-1	mg/Kg	75	NA	NA	NA	NA	NA	< 1.0	3.1	1.3
PCBs by EPA Method 8082A											
Aroclor 1016	12674-11-2	mg/Kg	1.55	NA	NA	ND (0.0075)	NA	NA	NA	NA	NA
Aroclor 1221	11104-28-2	mg/Kg	1								

Table 3:
Cumulative Groundwater Analytical Data
Rice Iron and Metals, Inc. (Former)
2000 West Savannah, Valdosta, Lowndes County, Georgia

Analyte	Units	CAS Number	Default Residential Type 1 RRS (µg/L)	MW-1/MW-1R								MW-2/MW-2R								MW-3							
				10-20 ft BLS								10-20 ft BLS								10-20 ft BLS							
				10/7/2011	8/12/2014	4/15/2015	10/20/2015	4/6/2016	7/27/2016	10/17/2016	2/16/2017	10/7/2011	8/12/2014	4/15/2015	10/20/2015	4/6/2016	10/18/2016	2/16/2017	10/6/2011	7/22/2014	4/15/2015	10/20/2015	4/6/2016	10/18/2016	2/15/2017		
VOCs by EPA Method 8260B																											
Acetone	µg/L	67-64-1	4000	NA	ND (11)	ND (10)	ND (250)	ND (250)	ND (200)	ND (200)	ND (500)	NA	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	
Acrolein	µg/L	107-02-8	700	NA	ND (6.4)	ND (5.0)	ND (130)	NA	NA	NA	NA	NA	ND (6.4)	ND (5.0)	ND (5.0)	NA	NA	NA	NA	ND (6.4)	ND (5.0)	ND (5.0)	NA	NA	NA	NA	
Acrylonitrile	µg/L	107-31-1	2	NA	ND (2.0)	ND (2.0)	ND (50)	NA	NA	NA	NA	NA	ND (2.0)	ND (2.0)	ND (2.0)	NA	NA	NA	NA	ND (2.0)	ND (2.0)	ND (2.0)	NA	NA	NA	NA	
Benzene	µg/L	71-43-2	5	5.2	0.91 J	0.71 J	ND (5.0)	ND (250)	ND (4.1)	ND (4.1)	ND (6.2)	NA	ND (0.24)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.31)	NA	ND (0.24)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.31)	ND (0.31)	
Bromobenzene	µg/L	108-86-1	NR	ND (0.20)	ND (0.31)	ND (0.27)	ND (6.7)	ND (11)	ND (8.4)	ND (8.4)	ND (7.3)	NA	ND (0.31)	ND (0.27)	ND (0.27)	ND (0.42)	ND (0.42)	ND (0.37)	NA	ND (0.31)	ND (0.27)	ND (0.27)	ND (0.42)	ND (0.42)	ND (0.37)		
Bromochloromethane	µg/L	74-87-5	NR	ND (0.5)	ND (0.36)	ND (0.34)	ND (8.4)	ND (11)	ND (8.5)	ND (8.5)	ND (9.0)	NA	ND (0.36)	ND (0.34)	ND (0.34)	ND (0.42)	ND (0.42)	ND (0.45)	NA	ND (0.36)	ND (0.34)	ND (0.34)	ND (0.42)	ND (0.42)	ND (0.45)		
Bromodichloromethane	µg/L	75-27-4	80	ND (0.5)	ND (0.26)	ND (0.22)	ND (5.4)	ND (6.0)	ND (4.8)	ND (4.8)	ND (4.8)	NA	ND (0.26)	ND (0.22)	ND (0.22)	ND (0.24)	ND (0.24)	ND (0.24)	NA	ND (0.26)	ND (0.22)	ND (0.22)	ND (0.24)	ND (0.24)	ND (0.24)		
Bromofom	µg/L	75-25-2	80	ND (0.20)	ND (0.38)	ND (0.32)	ND (8.1)	ND (12)	ND (9.3)	ND (9.3)	ND (8.1)	NA	ND (0.38)	ND (0.32)	ND (0.32)	ND (0.46)	ND (0.46)	ND (0.41)	NA	ND (0.38)	ND (0.32)	ND (0.32)	ND (0.46)	ND (0.46)	ND (0.41)		
2-Butanone (MEK)	µg/L	78-93-3	1.2	NA	ND (1.5)	ND (1.2)	ND (29)	ND (64)	ND (51)	ND (51)	ND (40)	NA	ND (1.5)	ND (1.2)	ND (1.2)	ND (2.6)	ND (2.6)	ND (2.0)	NA	ND (1.5)	ND (1.2)	ND (1.2)	ND (2.6)	ND (2.6)	ND (2.0)		
n-Butylbenzene	µg/L	104-51-8	NR	ND (0.5)	ND (0.30)	ND (0.22)	ND (5.6)	ND (11)	ND (8.7)	ND (8.7)	ND (4.6)	NA	ND (0.30)	ND (0.22)	ND (0.22)	ND (0.43)	ND (0.43)	ND (2.3)	NA	ND (0.30)	ND (0.22)	ND (0.22)	ND (0.43)	ND (0.43)	ND (2.3)		
sec-Butylbenzene	µg/L	135-98-8	NR	ND (0.5)	ND (0.27)	ND (0.20)	ND (5.0)	ND (6.3)	ND (5.1)	ND (5.1)	ND (4.9)	NA	ND (0.27)	ND (0.20)	ND (0.20)	ND (0.25)	ND (0.25)	ND (0.24)	NA	ND (0.27)	ND (0.20)	ND (0.20)	ND (0.25)	ND (0.25)	ND (0.24)		
tert-Butylbenzene	µg/L	98-06-6	NR	ND (0.5)	ND (0.29)	ND (0.20)	ND (5.0)	ND (10)	ND (8.0)	ND (8.0)	ND (6.3)	NA	ND (0.29)	ND (0.20)	ND (0.20)	ND (0.40)	ND (0.40)	ND (0.31)	NA	ND (0.29)	ND (0.20)	ND (0.20)	ND (0.40)	ND (0.40)	ND (0.31)		
Carbon Disulfide	µg/L	75-15-0	4000	NA	ND (0.20)	ND (0.29)	ND (7.4)	ND (5.8)	ND (4.6)	ND (4.6)	ND (11)	NA	ND (0.20)	ND (0.29)	ND (0.29)	ND (0.23)	ND (0.23)	ND (0.53)	NA	ND (0.20)	ND (0.29)	ND (0.29)	ND (0.23)	ND (0.23)	ND (0.53)		
Carbon Tetrachloride	µg/L	56-23-5	5	ND (0.80)	ND (0.40)	ND (0.28)	ND (7.1)	ND (7.5)	ND (6.0)	ND (6.0)	ND (7.1)	NA	ND (0.40)	ND (0.28)	ND (0.28)	ND (0.30)	ND (0.30)	ND (0.36)	NA	ND (0.40)	ND (0.28)	ND (0.28)	ND (0.30)	ND (0.30)	ND (0.36)		
Chlorobenzene	µg/L	108-90-7	100	0.71	ND (0.24)	0.21 J	ND (5.0)	ND (5.0)	ND (4.0)	ND (4.0)	ND (4.0)	NA	ND (0.24)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	NA	ND (0.24)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)		
Chloroethane	µg/L	75-00-3	0.5	ND (0.50)	ND (0.50)	ND (0.50)	ND (13)	ND (16)	ND (13)	ND (13)	ND (13)	NA	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.63)	ND (0.63)	ND (0.67)	NA	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.63)	ND (0.63)	ND (0.67)		
Chloromethane (Methyl chloride)	µg/L	74-87-3	3	ND (0.5)	ND (0.50)	ND (0.50)	ND (13)	ND (13)	ND (10)	ND (10)	ND (10)	NA	ND (0.53)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	NA	ND (0.53)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)		
2-Chloroethyl Vinyl Ether	µg/L	110-75-8	NR	NA	ND (1.0)	ND (1.0) a	ND (25)	NA	NA	NA	NA	NA	ND (1.0)	ND (1.0)	ND (1.0)	NA	NA	NA	NA	ND (1.0)	ND (1.0)	NA	NA	NA	NA		
Chloroform	µg/L	67-66-3	80	ND (0.2)	0.41 J	0.79 J	ND (7.5)	ND (7.5)	ND (6.0)	ND (6.0)	ND (6.0)	NA	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	NA	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)		
p-Chlorotoluene	µg/L	95-49-8	NR	ND (0.23)	ND (0.20)	ND (0.20)	ND (5.0)	ND (6.1)	ND (4.9)	ND (4.9)	ND (4.4)	NA	ND (0.23)	ND (0.20)	ND (0.20)	ND (0.24)	ND (0.24)	ND (0.22)	NA	ND (0.23)	ND (0.20)	ND (0.20)	ND (0.24)	ND (0.24)	ND (0.22)		
p-Chlorotoluene	µg/L	106-43-4	NR	ND (0.29)	ND (0.20)	ND (0.20)	ND (5.0)	ND (8.9)	ND (7.1)	ND (7.1)	ND (8.1)	NA	ND (0.29)	ND (0.20)	ND (0.20)	ND (0.36)	ND (0.36)	ND (0.31)	NA	ND (0.29)	ND (0.20)	ND (0.20)	ND (0.36)	ND (0.36)	ND (0.31)		
Dibromochloromethane	µg/L	124-48-1	80	ND (0.36)	ND (1.20)	ND (0.20)	ND (5.0)	ND (6.5)	ND (5.2)	ND (5.2)	ND (5.5)	NA	ND (0.36)	ND (0.20)	ND (0.20)	ND (0.26)	ND (0.26)	ND (0.28)	NA	ND (0.36)	ND (0.20)	ND (0.20)	ND (0.26)	ND (0.26)	ND (0.28)		
1,2-Dibromo-3-chloropropane	µg/L	96-12-8	0.2	ND (0.78)	ND (0.61)	ND (0.61)	ND (15)	ND (20)	ND (16)	ND (16)	ND (21)	NA	ND (0.78)	ND (0.61)	ND (0.61)	ND (0.81)	ND (0.81)	ND (1.0)	NA	ND (0.78)	ND (0.61)	ND (0.61)	ND (0.81)	ND (0.81)	ND (1.0)		
1,2-Dibromothane (EDB)	µg/L	106-93-4	0.05	ND (0.24)	ND (0.42)	ND (0.42)	ND (10)	ND (8.3)	ND (6.6)	ND (6.6)	ND (5.5)	NA	ND (0.24)	ND (0.42)	ND (0.42)	ND (0.33)	ND (0.33)	ND (0.28)	NA	ND (0.24)	ND (0.42)	ND (0.42)	ND (0.33)	ND (0.33)	ND (0.28)		
Dichlorodifluoromethane	µg/L	75-71-8	1000	ND (0.33)	ND (0.50)	ND (0.50)	ND (13)	ND (13)	ND (10)	ND (10)	ND (10)	NA	ND (0.33)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	NA	ND (0.33)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)		
1,2-Dichlorobenzene	µg/L	95-50-1	600	0.91	0.60 J	0.34 J	ND (5.6)	ND (6.7)	ND (5.3)	ND (5.3)	ND (6.5)	NA	ND (0.29)	ND (0.22)	ND (0.22)	ND (0.27)	ND (0.27)	ND (0.32)	NA	ND (0.29)	ND (0.22)	ND (0.22)	ND (0.27)	ND (0.27)	ND (0.32)		
1,3-Dichlorobenzene	µg/L	541-73-1	600	ND (0.20)	ND (0.20)	ND (0.22)	ND (5.4)	ND (5.9)	ND (4.7)	ND (4.7)	ND (4.3)	NA	ND (0.20)	ND (0.22)	ND (0.22)	ND (0.24)	ND (0.24)	ND (0.22)	NA	ND (0.20)	ND (0.22)	ND (0.22)	ND (0.24)	ND (0.24)	ND (0.22)		
1,4-Dichlorobenzene	µg/L	106-46-7	75	0.51	0.33 J	ND (0.25)	ND (6.1)	ND (9.8)	ND (7.8)	ND (7.8)	ND (5.1)	NA	ND (0.20)	ND (0.25)	ND (0.25)	ND (0.39)	ND (0.39)	ND (0.26)	NA	ND (0.20)	ND (0.25)	ND (0.25)	ND (0.39)	ND (0.39)	ND (0.26)		
1,1-Dichloroethane	µg/L	75-34-3	4000	1.9	1.6	0.70 J	ND (5.0)	ND (6.4)	ND (5.1)	ND (5.1)	ND (6.2)	NA	ND (0.26)	ND (0.20)	ND (0.20)	ND (0.26)	ND (0.26)	ND (0.34)	NA	ND (0.26)	ND (0.20)	ND (0.20)	ND (0.26)	ND (0.26)	ND (0.34)		
1,2-Dichloroethane	µg/L	107-06-2	7	ND (0.24)	ND (0.20)	ND (0.20)	ND (5.0)	ND (5.7)	ND (5.7)	ND (6.2)	NA	ND (0.24)	ND (0.20)	ND (0.20)	ND (0.28)	ND (0.28)	ND (0.31)	NA	ND (0.24)	ND (0.20)	ND (0.20)	ND (0.28)	ND (0.28)	ND (0.31)	ND (0.31)		
1,1-Dichloroethene	µg/L	75-35-4	3	24.8	13.8	11.5 J	11.5 J	10.4	10.5 J	10.5 J	9.5 J	NA	ND (0.25)	ND (0.27)	ND (0.27)	ND (0.22)	ND (0.22)	ND (0.32)	NA	ND (0.25)	ND (0.27)	ND (0.27)	ND (0.22)	ND (0.22)	ND (0.32)		
cis-1,2-Dichloroethene	µg/L	156-59-2	70	950	1770	612	473	385	472	544	648	NA	ND (0.33)	ND (0.22)	ND (0.22)	0.37 J	1.1	0.65 J	NA	ND (0.33)	ND (0.22)	ND (0.22)	ND (0.31)	ND (0.31)	ND (0.28)		
trans-1,2-Dichloroethene	µg/L	156-60-5	100	2.4	20.1	11.1	7.9 J	ND (8.3)	7.4 J	ND (6.6)	9.5 J	NA	ND (0.34)	ND (0.21)	ND (0.21)	ND (0.33)	ND (0.33)	ND (0.22)	NA	ND (0.34)	ND (0.21)	ND (0.21)	ND (0.33)	ND (0.33)	ND (0.22)		
1,2-Dichloropropane	µg/L	78-87-5	5	1.4	ND (0.36)	ND (0.25)	ND (6.3)	ND (8.6)	ND (6.9)	ND (6.9)	ND (8.5)	NA	ND (0.036)	ND (0.25)	ND (0.25)	ND (0.34)	ND (0.34)	ND (0.43)	NA	ND (0.36)	ND (0.25)	ND (0.25)	ND (0.34)	ND (0.34)	ND (0.43)		
1,3-Dichloropropane	µg/L	142-28-9	2	ND (0.34)	ND (0.26)	ND (0.26)	ND (6.6)	ND (7.9)	ND (6.3)	ND (6.3)	ND (6.2)	NA	ND (0.34)	ND (0.26)	ND (0.26)	ND (0.31)	ND (0.31)	ND (0.31)	NA	ND (0.34)	ND (0.26)	ND (0.26)	ND (0.31)	ND (0.31)	ND (0.31)		
2,2-Dichloropropane	µg/L	594-20-7	0.24	ND (0.10)	ND (0.27)	ND (0.27)	ND (6.6)	ND (6.8)	ND (5.5)	ND (5.5)	ND (4.8)	NA	ND (0.33)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.24)	NA	ND (0.33)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.27)	ND (0.24)		
1,1-Dichloropropene	µg/L	663-58-6	0.21	ND (0.28)	ND (0.21)	ND (0.21)	ND (5.3)	ND (7.3)	ND (5.8)	ND (5.8)	ND (6.7)	NA	ND (0.28)	ND (0.21)	ND (0.21)	ND (0.29)	ND (0.29)	ND (0.34)	NA	ND (0.28)	ND (0.21)	ND (0.21)	ND (0.29)	ND (0.29)	ND (0.34)		
cis-1,3-Dichloropropene	µg/L	10061-01-5	0.21	ND (0.21)	ND (0.25)	ND (0.25)	ND (6.3)	ND (7.8)	ND (5.3)	ND (5.3)	ND (5.8)	NA	ND (0.21)	ND (0.25)	ND (0.25)	ND (0.26)	ND (0.26)	ND (0.29)	NA	ND (0.21)	ND (0.25)	ND (0.25)	ND (0.26)	ND (0.26)	ND (0.29)		

Table 3:
Cumulative Groundwater Analytical Data
Rice Iron and Metals, Inc. (Former)
2000 West Savannah, Valdosta, Lowndes County, Georgia

Analyte	Units	CAS Number	MW-4					MW-5					MW-5D				MW-6				MW-7		MW-8/MW-8R								MW-9		MW-10											
			10-20 ft BLS					10-20 ft BLS					35-40 ft BLS				10-20 ft BLS				10-20 ft BLS		10-20 ft BLS								10-20 ft BLS		10-20 ft BLS											
			10/6/2011	7/22/2014	4/15/2015	10/20/2015	4/6/2016	10/6/2011	7/22/2014	4/14/2015	10/20/2015	4/7/2016	8/11/2014	4/14/2015	10/20/2015	4/7/2016	10/6/2011	7/22/2014	4/14/2015	10/20/2015	10/6/2011	10/6/2011	7/22/2014	4/15/2015	10/20/2015	4/6/2016	7/27/2016	10/17/2016	2/17/2017	7/28/2017	10/6/2011	10/7/2011	7/22/2014	4/15/2015	10/20/2015	4/6/2016								
VOCs by EPA Method 8260B																																												
Acelevone	µg/L	87-84-1	NA	ND (11)	ND (10)	ND (10)	ND (10)	NA	ND (11)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)	NA	ND (11)	ND (10)	ND (10)	NA	NA	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	NA	NA	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	NA	NA	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	
Acroline	µg/L	107-02-8	NA	ND (6.4)	ND (5.0)	ND (5.0)	NA	NA	ND (13)	ND (5.0)	ND (5.0)	NA	ND (6.4)	ND (5.0)	ND (5.0)	NA	NA	ND (6.4)	ND (5.0)	ND (5.0)	NA	NA	ND (6.4)	ND (5.0)	ND (5.0)	ND (5.0)	NA	NA	NA	ND (6.4)	ND (5.0)	ND (5.0)	ND (5.0)	NA	NA	NA	ND (6.4)	ND (5.0)	ND (5.0)	ND (5.0)	NA	NA		
Acrylonitrile	µg/L	107-31-1	NA	ND (2.0)	ND (2.0)	ND (2.0)	NA	NA	ND (4.0)	ND (2.0)	ND (2.0)	NA	ND (2.0)	ND (2.0)	ND (2.0)	NA	NA	ND (2.0)	ND (2.0)	ND (2.0)	NA	NA	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	NA	NA	NA	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	NA	NA	NA	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	NA	NA		
Benzene	µg/L	71-43-2	NA	ND (0.24)	ND (0.20)	ND (0.20)	ND (0.20)	34	12.9	2.7	1.4	0.72 J	ND (0.24)	ND (0.20)	ND (0.20)	ND (0.20)	NA	ND (0.24)	ND (0.20)	ND (0.20)	NA	NA	0.61 J	ND (0.20)	ND (0.20)	1600	1230	384	0.54 J	ND (0.31)	9.8	ND (0.5)	ND (0.24)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	
Bromobenzene	µg/L	108-86-1	NA	ND (0.31)	ND (0.27)	ND (0.27)	ND (0.42)	ND (0.20)	ND (0.31)	ND (0.27)	ND (0.27)	ND (0.42)	ND (0.31)	ND (0.27)	ND (0.27)	ND (0.42)	NA	ND (0.31)	ND (0.27)	ND (0.27)	NA	NA	ND (0.31)	ND (0.27)	ND (0.27)	ND (0.42)	ND (21)	ND (2.1)	ND (0.37)	ND (0.37)	ND (0.20)	ND (0.20)	ND (0.31)	ND (0.27)	ND (0.42)	ND (0.20)	ND (0.20)	ND (0.31)	ND (0.27)	ND (0.42)	ND (0.20)	ND (0.20)	ND (0.42)	
Bromochloromethane	µg/L	74-97-5	NA	ND (0.38)	ND (0.34)	ND (0.34)	ND (0.42)	ND (0.50)	ND (0.38)	ND (0.34)	ND (0.34)	ND (0.42)	ND (0.38)	ND (0.34)	ND (0.34)	ND (0.42)	NA	ND (0.38)	ND (0.34)	ND (0.34)	NA	NA	ND (0.38)	ND (0.34)	ND (0.34)	ND (0.42)	ND (21)	ND (2.1)	ND (0.45)	ND (0.45)	ND (0.50)	ND (0.38)	ND (0.34)	ND (0.34)	ND (0.42)	ND (0.50)	ND (0.50)	ND (0.38)	ND (0.34)	ND (0.34)	ND (0.42)	ND (0.50)	ND (0.50)	
Bromodichloromethane	µg/L	75-27-4	NA	ND (0.26)	ND (0.22)	ND (0.22)	ND (0.24)	ND (0.5)	ND (0.52)	ND (0.22)	ND (0.22)	ND (0.24)	ND (0.26)	ND (0.22)	ND (0.22)	ND (0.24)	NA	ND (0.26)	ND (0.22)	ND (0.22)	NA	NA	ND (0.26)	ND (0.22)	ND (0.22)	ND (0.24)	ND (12)	ND (1.2)	ND (0.24)	ND (0.24)	ND (0.5)	ND (0.5)	ND (0.26)	ND (0.22)	ND (0.22)	ND (0.24)	ND (0.5)	ND (0.5)	ND (0.26)	ND (0.22)	ND (0.22)	ND (0.24)	ND (0.5)	ND (0.5)
Bromofom	µg/L	75-25-2	NA	ND (0.38)	ND (0.32)	ND (0.32)	ND (0.46)	ND (0.20)	ND (0.77)	ND (0.32)	ND (0.32)	ND (0.46)	ND (0.38)	ND (0.32)	ND (0.32)	ND (0.46)	NA	ND (0.38)	ND (0.32)	ND (0.32)	NA	NA	ND (0.38)	ND (0.32)	ND (0.32)	ND (0.46)	ND (23)	ND (2.3)	ND (0.41)	ND (0.41)	ND (0.20)	ND (0.20)	ND (0.38)	ND (0.32)	ND (0.32)	ND (0.46)	ND (0.20)	ND (0.20)	ND (0.38)	ND (0.32)	ND (0.32)	ND (0.46)	ND (0.20)	ND (0.20)
2-Butanone (MEK)	µg/L	78-93-3	NA	ND (1.5)	ND (1.2)	ND (1.2)	ND (2.8)	NA	ND (3.0)	ND (1.2)	ND (1.2)	ND (2.8)	ND (1.5)	ND (1.2)	ND (1.2)	ND (2.8)	NA	ND (1.5)	ND (1.2)	ND (1.2)	NA	NA	ND (1.5)	ND (1.2)	ND (1.2)	ND (2.8)	ND (13)	ND (1.3)	ND (2.0)	ND (2.0)	NA	NA	ND (1.5)	ND (1.2)	ND (1.2)	ND (2.8)	NA	NA	ND (1.5)	ND (1.2)	ND (1.2)	ND (2.8)		
n-Butylbenzene	µg/L	104-51-8	NA	ND (0.30)	ND (0.22)	ND (0.22)	ND (0.43)	ND (0.5)	ND (0.60)	ND (0.22)	ND (0.22)	ND (0.43)	ND (0.30)	ND (0.22)	ND (0.22)	ND (0.43)	NA	ND (0.30)	ND (0.22)	ND (0.22)	NA	NA	ND (0.30)	ND (0.22)	ND (0.22)	ND (0.43)	ND (22)	ND (2.2)	ND (0.23)	ND (0.23)	ND (0.5)	ND (0.5)	ND (0.30)	ND (0.22)	ND (0.22)	ND (0.43)	ND (0.5)	ND (0.5)	ND (0.30)	ND (0.22)	ND (0.22)	ND (0.43)	ND (0.5)	ND (0.5)
sec-Butylbenzene	µg/L	135-98-8	NA	ND (0.27)	ND (0.20)	ND (0.20)	ND (0.25)	ND (0.5)	ND (0.54)	ND (0.20)	ND (0.20)	ND (0.25)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.25)	NA	ND (0.27)	ND (0.20)	ND (0.20)	NA	NA	ND (0.27)	ND (0.20)	ND (0.20)	ND (0.25)	ND (13)	ND (1.3)	ND (0.24)	ND (0.24)	ND (0.5)	ND (0.5)	ND (0.20)	ND (0.20)	ND (0.25)	ND (0.25)	ND (0.20)	ND (0.20)	ND (0.25)	ND (0.25)	ND (0.20)	ND (0.20)	ND (0.25)	
tert-Butylbenzene	µg/L	98-06-6	NA	ND (0.29)	ND (0.20)	ND (0.20)	ND (0.40)	ND (0.5)	ND (0.57)	ND (0.20)	ND (0.20)	ND (0.40)	ND (0.29)	ND (0.20)	ND (0.20)	ND (0.40)	NA	ND (0.29)	ND (0.20)	ND (0.20)	NA	NA	ND (0.29)	ND (0.20)	ND (0.20)	ND (0.40)	ND (20)	ND (2.0)	ND (0.31)	ND (0.31)	ND (0.5)	ND (0.5)	ND (0.29)	ND (0.20)	ND (0.40)	ND (0.5)	ND (0.5)	ND (0.29)	ND (0.20)	ND (0.40)	ND (0.5)	ND (0.5)		
Carbon Disulfide	µg/L	75-15-0	NA	ND (0.20)	ND (0.29)	ND (0.29)	ND (0.23)	NA	ND (0.20)	ND (0.29)	ND (0.29)	ND (0.23)	ND (0.20)	ND (0.29)	ND (0.29)	ND (0.23)	NA	ND (0.20)	ND (0.29)	ND (0.29)	NA	NA	ND (0.20)	ND (0.29)	ND (0.29)	ND (0.23)	ND (12)	ND (1.2)	ND (0.53)	ND (0.53)	NA	NA	ND (0.20)	ND (0.29)	ND (0.29)	ND (0.23)	ND (12)	ND (1.2)	ND (0.53)	ND (0.53)	NA	NA		
Carbon tetrachloride	µg/L	56-23-5	NA	ND (0.40)	ND (0.28)	ND (0.28)	ND (0.30)	ND (0.80)	ND (0.40)	ND (0.28)	ND (0.28)	ND (0.30)	ND (0.40)	ND (0.28)	ND (0.28)	ND (0.30)	NA	ND (0.40)	ND (0.28)	ND (0.28)	NA	NA	ND (0.40)	ND (0.28)	ND (0.28)	ND (0.30)	ND (15)	ND (1.5)	ND (0.36)	ND (0.36)	ND (0.80)	ND (0.80)	ND (0.40)	ND (0.28)	ND (0.30)	ND (0.80)	ND (0.80)	ND (0.40)	ND (0.28)	ND (0.30)	ND (0.80)	ND (0.80)		
Chlorobenzene	µg/L	108-90-7	NA	ND (0.24)	ND (0.20)	ND (0.20)	ND (0.20)	0.41	ND (0.48)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.24)	ND (0.20)	ND (0.20)	ND (0.20)	NA	ND (0.24)	ND (0.20)	ND (0.20)	NA	NA	ND (0.24)	ND (0.20)	ND (0.20)	ND (0.20)	ND (10)	ND (1.0)	ND (0.20)	ND (0.20)	ND (0.2)	ND (0.2)	ND (0.24)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	
Chloroethane	µg/L	75-50-3	NA	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.63)	ND (0.5)	ND (0.50)	ND (0.50)	ND (0.63)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.63)	ND (0.50)	NA	ND (0.50)	ND (0.50)	ND (0.50)	NA	NA	ND (0.50)	ND (0.50)	ND (0.63)	ND (0.31)	ND (0.31)	ND (0.67)	ND (0.67)	ND (0.5)	ND (0.5)	ND (0.50)	ND (0.50)	ND (0.63)	ND (0.50)	ND (0.50)	ND (0.63)	ND (0.50)	ND (0.50)	ND (0.63)	ND (0.50)	ND (0.50)		
Chloromethane (Methyl chloride)	µg/L	74-87-3	NA	ND (0.53)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.5)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.53)	ND (0.50)	ND (0.50)	ND (0.50)	NA	ND (0.53)	ND (0.50)	ND (0.50)	NA	NA	ND (0.53)	ND (0.50)	ND (0.50)	ND (0.50)	ND (25)	ND (2.5)	ND (0.50)	ND (0.50)	ND (0.5)	ND (0.5)	NA	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)		
2-Chloroethyl Vinyl Ether	µg/L	110-75-8	NA	ND (1.0)	ND (1.0)	ND (1.0)	NA	NA	ND (2.0)	ND (1.0)	ND (1.0)	NA	ND (1.0)	ND (1.0)	ND (1.0)	NA	NA	ND (1.0)	ND (1.0)	ND (1.0)	NA	NA	ND (1.0)	ND (1.0)	ND (1.0)	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (1.0)	ND (1.0)	ND (1.0)	NA	NA	NA	NA	NA		
Chloroform	µg/L	67-68-3	NA	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.2)	ND (0.62)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.30)	NA	ND (0.31)	ND (0.30)	ND (0.30)	NA	NA	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.30)	ND (15)	ND (1.5)	ND (0.30)	ND (0.30)	ND (0.2)	ND (0.2)	ND (0.31)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)		
o-Chlorotoluene	µg/L	95-49-8	NA	ND (0.23)	ND (0.20)	ND (0.20)	ND (0.24)	NA	ND (0.45)	ND (0.20)	ND (0.20)	ND (0.24)	ND (0.23)	ND (0.20)	ND (0.20)	ND (0.24)	NA	ND (0.23)	ND (0.20)	ND (0.20)	NA	NA	ND (0.23)	ND (0.20)	ND (0.20)	ND (0.24)	ND (12)	ND (1.2)	ND (0.22)	ND (0.22)	NA	NA	ND (0.23)	ND (0.22)	ND (0.24)	ND (0.23)	ND (0.22)	ND (0.22)	ND (0.24)	ND (0.23)	ND (0.22)	ND (0.24)		
p-Chlorotoluene	µg/L	106-43-4	NA	ND (0.29)	ND (0.20)	ND (0.20)	ND (0.36)	NA	ND (0.58)	ND (0.20)	ND (0.20)	ND (0.36)	ND (0.29)	ND (0.20)	ND (0.20)	ND (0.36)	NA	ND (0.29)	ND (0.20)	ND (0.20)	NA	NA	ND (0.29)	ND (0.20)	ND (0.20)	ND (0.36)	ND (18)	ND (1.8)	ND (0.31)	ND (0.31)	NA	NA	ND (0.29)	ND (0.20)	ND (0.20)	ND (0.36)	ND (0.29)	ND (0.20)	ND (0.36)	ND (0.29)	ND (0.20)	ND (0.36)		
Dibromochloromethane																																												

Table 3:
Cumulative Groundwater Analytical Data
Rice Iron and Metals, Inc. (Former)
2000 West Savannah, Valdosta, Lowndes County, Georgia

Analyte	Units	CAS Number	MW-11										MW-12				MW-13				MW-14				MW-15				MW-16				WATER WELL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
			10-20 ft BLS										10-20 ft BLS				10-20 ft BLS				10-20 ft BLS				10-20 ft BLS				10-20 ft BLS				-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
			10/7/2011	7/22/2014	4/15/2015	10/20/2015	4/6/2016	10/18/2016	2/16/2017	7/27/2017	8/11/2014	4/14/2015	10/20/2015	4/7/2016	8/11/2014	4/14/2015	10/20/2015	4/7/2016	9/22/2014	4/15/2015	10/20/2015	4/6/2016	10/18/2016	2/15/2017	9/22/2014	4/15/2015	10/20/2015	4/6/2016	10/18/2016	2/16/2017	7/27/2016	10/18/2016	2/17/2017	7/28/2017	4/15/2015	10/20/2015	4/6/2016																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
VOCs by EPA Method 8260B																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Aceflone	µg/L	67-64-1	NA	ND (11)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (11)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND 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APPENDIX A

Voluntary Investigation and Remediation Plan Application Form and Checklist

VRP APPLICANT INFORMATION					
COMPANY NAME	Trademark Metal Recycling, LLC.				
CONTACT PERSON/TITLE	Brenda Anderson/Environmental Manager				
ADDRESS	5220 Dover St., Tampa FL 33606				
PHONE	813-677-4471 x7658	FAX	None	E-MAIL	Brenda.Anderson@tmrecycling.com
GEORGIA CERTIFIED PROFESSIONAL GEOLOGIST OR PROFESSIONAL ENGINEER OVERSEEING CLEANUP					
NAME	Barry Robertson			GA PE/PG NUMBER	PG 831
COMPANY	Stillwater Technologies Inc.				
ADDRESS	203 Hillcrest Street, Orlando, FL 32801				
PHONE	407-206-7222	FAX	407-206-7223	E-MAIL	brobertson@stillwatertech.com
APPLICANT'S CERTIFICATION					
In order to be considered a qualifying property for the VRP: (1) The property must have a release of regulated substances into the environment; (2) The property shall not be: (A) Listed on the federal National Priorities List pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Section 9601. (B) Currently undergoing response activities required by an order of the regional administrator of the federal Environmental Protection Agency; or (C) A facility required to have a permit under Code Section 12-8-66. (3) Qualifying the property under this part would not violate the terms and conditions under which the division operates and administers remedial programs by delegation or similar authorization from the United States Environmental Protection Agency. (4) Any lien filed under subsection (e) of Code Section 12-8-96 or subsection (b) of Code Section 12-13-12 against the property shall be satisfied or settled and released by the director pursuant to Code Section 12-8-94 or Code Section 12-13-6. In order to be considered a participant under the VRP: (1) The participant must be the property owner of the voluntary remediation property or have express permission to enter another's property to perform corrective action. (2) The participant must not be in violation of any order, judgment, statute, rule, or regulation subject to the enforcement authority of the director. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, 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. I also certify that this property is eligible for the Voluntary Remediation Program (VRP) as defined in Code Section 12-8-105 and I am eligible as a participant as defined in Code Section 12-8-106.					
APPLICANT'S SIGNATURE	Brenda Anderson				
APPLICANT'S NAME/TITLE (PRINT)	Brenda Anderson, Environmental Mgr.			DATE	3/8/13

QUALIFYING PROPERTY INFORMATION (For additional qualifying properties, please refer to the last page of application form)			
HAZARDOUS SITE INVENTORY INFORMATION (if applicable)			
HSI Number	10923	Date HSI Site listed	September 2012
HSI Facility Name	Rice Iron and Metals, Inc. (Former)	NAICS CODE	
PROPERTY INFORMATION			
TAX PARCEL ID	0121A 026	PROPERTY SIZE (ACRES)	27.57
PROPERTY ADDRESS	2000 West Savannah Avenue		
CITY	Valdosta	COUNTY	Lowndes
STATE	GA	ZIPCODE	31603
LATITUDE (decimal format)	30.818889	LONGITUDE (decimal format)	83.305
PROPERTY OWNER INFORMATION			
PROPERTY OWNER(S)	Trademark Metals Recycling LLC	PHONE #	813-677-4471
MAILING ADDRESS	PO Box 672		
CITY	Valdosta	STATE/ZIPCODE	GA / 31603
ITEM #	DESCRIPTION OF REQUIREMENT	Location in VRP (i.e. pg., Table #, Figure #, etc.)	For EPD Comment Only (Leave Blank)
1.	\$5,000 APPLICATION FEE IN THE FORM OF A CHECK PAYABLE TO THE GEORGIA DEPARTMENT OF NATURAL RESOURCES. (PLEASE LIST CHECK DATE AND CHECK NUMBER IN COLUMN TITLED "LOCATION IN VRP." PLEASE DO NOT INCLUDE A SCANNED COPY OF CHECK IN ELECTRONIC COPY OF APPLICATION.)	Appendix B	
2.	WARRANTY DEED(S) FOR QUALIFYING PROPERTY.	Appendix C	
3.	TAX PLAT OR OTHER FIGURE INCLUDING QUALIFYING PROPERTY BOUNDARIES, ABUTTING PROPERTIES, AND TAX PARCEL IDENTIFICATION NUMBER(S).	Appendix C	
4.	ONE (1) PAPER COPY AND TWO (2) COMPACT DISC (CD) COPIES OF THE VOLUNTARY REMEDIATION PLAN IN A SEARCHABLE PORTABLE DOCUMENT FORMAT (PDF).	✓	
5.	The VRP participant's initial plan and application must include, using all reasonably available current information to the extent known at the time of application, a graphic three-dimensional preliminary conceptual site model (CSM) including a preliminary remediation plan with a table of delineation standards, brief supporting text, charts, and figures (no more than 10 pages, total) that illustrates the site's surface and subsurface setting, the known or suspected source(s) of contamination, how contamination might move within the environment, the potential human health and ecological receptors, and the complete or incomplete exposure pathways that may exist at the site; the preliminary CSM must be updated as the investigation and remediation progresses and an up-to-date CSM must be included in each semi-annual status report submitted to the director by the participant; a PROJECTED MILESTONE SCHEDULE for investigation and remediation of the site, and after enrollment as a participant, must update the schedule in each semi-annual status report to the director describing implementation of the plan	Attached Report with Figures, Tables, and Appendix	

	during the preceding period. A Gantt chart format is preferred for the milestone schedule. The following four (4) generic milestones are required in all initial plans with the results reported in the participant's next applicable semi-annual reports to the director. The director may extend the time for or waive these or other milestones in the participant's plan where the director determines, based on a showing by the participant, that a longer time period is reasonably necessary:		
5.a.	Within the first 12 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern on property where access is available at the time of enrollment;	Appendix A	
5.b.	Within the first 24 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern extending onto property for which access was not available at the time of enrollment;	Appendix A	
5.c.	Within 30 months after enrollment, the participant must update the site CSM to include vertical delineation, finalize the remediation plan and provide a preliminary cost estimate for implementation of remediation and associated continuing actions; and	Appendix A	
5.d.	Within 60 months after enrollment, the participant must submit the compliance status report required under the VRP, including the requisite certifications.	Appendix A	
6.	SIGNED AND SEALED PE/PG CERTIFICATION AND SUPPORTING DOCUMENTATION: "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, <u>et seq.</u>). 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." <u>BARRY D. ROBERTSON PG 831</u> Printed Name and GA PE/PG Number <u>3.8.2013</u> Date <u>Barry D Robertson</u> Signature and Stamp		

APPENDIX B

After Recording Return to:

James Warren & Associates, Inc.
519 Conley Avenue
Valdosta, Georgia 31602

CROSS-REFERENCE: Deed Book:

Page:

Environmental Covenant

This instrument is an Environmental Covenant executed pursuant to the Georgia Uniform Environmental Covenants Act, OCGA § 44-16-1, *et seq.* This Environmental Covenant subjects the Property identified below to the activity and/or use limitations specified in this document. The effective date of this Environmental Covenant shall be the date upon which the fully executed Environmental Covenant has been recorded in accordance with OCGA § 44-16-8(a).

Fee Owner of Property/Grantor: James Warren & Associates, Inc.
519 Conley Avenue
Valdosta, Georgia 31602

Grantee/Holder: James Warren & Associates, Inc.
519 Conley Avenue
Valdosta, Georgia 31602

**Grantee/Entity with
express power to enforce:** State of Georgia
Department of Natural Resources
Environmental Protection Division
2 Martin Luther King Jr. Drive, SE
Suite 1456 East Tower
Atlanta, Georgia 30334

Parties with interest in the Property: Trademark Metals Recycling, LLC
5401 W. Kennedy Blvd, Suite 400
Tampa, Florida 33609

Property:

The property subject to this Environmental Covenant is the Former Rice Iron & Metals, located on 2000 West Savannah Avenue in Valdosta, Lowndes County, Georgia (hereinafter "Property"). This tract of land was conveyed on December 22, 2016 from Trademark Metals Recycling LLC to James Warren & Associates, Inc. recorded in Deed Book 6100, Page 232, Lowndes County Records. The Property is located in Land Lot 0121A026 of the Second District of Lowndes County, Georgia. The Property consists of 27.57 acres zoned C5-Commercial that is bordered to the north by West Savannah Avenue and contains a storage warehouse built in 1971 and an office building built in 1986. A complete legal description of the Property is attached as Exhibit A and a map of the Property is attached as Exhibit B.

Tax Parcel Number(s): 0121A026

0212A026 of Lowndes County, Georgia

Name and Location of Administrative Records: qPublic.net Lowndes County, Georgia

The corrective action at the Property that is the subject of this Environmental Covenant is described in the following document[s] (as same may be amended from time to time with written approval from EPD):

- Rice Iron and Metals, Inc. (Former), Voluntary Remediation Program Compliance Status Report, 2000 West Savannah Avenue, Valdosta, Lowndes County, Georgia, VRP No. 1348601340, HSI No. 10923, Date TBD, prepared by Gannett Fleming, Inc.

These documents are available at the following locations in the files for HSI No. 10923:

Georgia Environmental Protection Division
Response and Remediation Program
2 MLK Jr. Drive, SE, Suite 1054 East Tower
Atlanta, GA 30334
M-F 8:00 AM to 4:30 PM excluding state holidays

2000 West Savannah Avenue
Valdosta, GA 31601

Description of Contamination and Corrective Action:

This Property has been listed on the state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning this Property. This notice is provided in compliance with the Georgia Hazardous Site Response Act.

This Declaration of Covenant is made pursuant to the Georgia Uniform Environmental Covenants Act, O.C.G.A. § 44-16-1 *et seq.* by James Warren & Associates, Inc, its successors and assigns, James Warren & Associates, Inc, and the State of Georgia, Department of Natural Resources, Environmental Protection Division (hereinafter “EPD”), its successors and assigns. This Environmental Covenant is required because a release of unknown regulated substances containing: metals, chlorinated solvents, petroleum compounds, and PCBs occurred on the Property. In soil: Acetone, Benzene, 2-Butanone (MEK), Carbon disulfide, cis-1,2-Dichloroethene, Ethylbenzene, Isopropylbenzene, Methylene Chloride, Naphthalene, Styrene, Tetrachloroethylene, Toluene, Trichloroethylene, 1,2,4-Trichlorobenzene, xylene, total, Arsenic, Cadmium, Chromium, Lead, Aroclor 1248, Aroclor 1254, Aroclor 1260, 1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin, 1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin, Total Heptachlorodibenzo-p-dioxin, Total Heptachlorodibenzofuran, Total PCDDs and PCDFs (TEQ WHO2005 ND=0.5), 3,3',4,4'-Tetrachlorobiphenyl (77), 3,4,4',5-Tetrachlorobiphenyl (81), 2,3,3',4,4'-Pentachlorobiphenyl (105), 2,3,4,4',5-Pentachlorobiphenyl (114), 2,3',4,4',5-Pentachlorobiphenyl (118), 2',3,4,4',5-Pentachlorobiphenyl (123), 3,3',4,4',5-Pentachlorobiphenyl (126), 2,3,3',4,4',5-Hexachlorobiphenyl (156), 2,3,3',4,4',5'-Hexachlorobiphenyl (157), 2,3',4,4',5,5'-Hexachlorobiphenyl (167), 2,3,3',4,4',5,5'-Heptachlorobiphenyl (189); and in groundwater: Benzene, Dichlorobromomethane, Chlorobenzene, Chloroform, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,1-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Ethylbenzene, 1,2-Dichloropropane, Naphthalene, Tetrachloroethene, Toluene, Trichloroethene, Trihalomethane, Total *, Vinyl chloride, Xylenes, total, Arsenic, Chromium, Lead are “regulated substances” as defined under the Georgia Hazardous Site Response Act, O.C.G.A. § 12-8-90 *et seq.*, and the rules promulgated thereunder (hereinafter “HSRA” and “Rules”, respectively). The Corrective Action consists institutional controls

(limit use to non-residential activities and groundwater limitation) to protect human health and the environment.

Grantor, James Warren & Associates, Inc, hereby binds Grantor, its successors and assigns to the activity and use restriction(s) for the Property identified herein and grants such other rights under this Environmental Covenant in favor of the James Warren & Associates, Inc, Trademark Metals Recycling LLC, and EPD. EPD shall have full right of enforcement of the rights conveyed under this Environmental Covenant pursuant to HSRA, O.C.G.A. § 12-8-90 *et seq.*, and the rules promulgated thereunder. Failure to timely enforce compliance with this Environmental Covenant or the use or activity limitations contained herein by any person shall not bar subsequent enforcement by such person and shall not be deemed a waiver of the person's right to take action to enforce any non-compliance. Nothing in this Environmental Covenant shall restrict EPD from exercising any authority under applicable law.

James Warren & Associates, Inc. makes the following declaration as to limitations, restrictions, and uses to which the Property may be put and specifies that such declarations shall constitute covenants to run with the land, pursuant to O.C.G.A. § 44-16-5(a); is perpetual, unless modified or terminated pursuant to the terms of this Covenant pursuant to O.C.G.A. § 44-16-9 and 10; and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereinafter "Owner"). Should a transfer or sale of the Property occur before such time as this Environmental Covenant has been amended or revoked then said Environmental Covenant shall be binding on the transferee(s) or purchaser(s).

The Environmental Covenant shall inure to the benefit of James Warren & Associates, Inc., EPD, Trademark Metals Recycling, LLC and their respective successors and assigns and shall be enforceable by the Director or his agents or assigns, James Warren & Associates, Inc. or its successors and assigns, Trademark Metals Recycling, LLC or its successors and assigns, and other party(ies) as provided for in O.C.G.A. § 44-16-11 in a court of competent jurisdiction.

Activity and/or Use Limitation(s)

1. Registry. Pursuant to O.C.G.A. § 44-16-12, this Environmental Covenant and any amendment or termination thereof, may be contained in EPD's registry for environmental covenants.
2. Notice. The Owner of the Property must give thirty (30) day advance written notice to EPD of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Corrective Action. The Owner of the Property must also give thirty (30) day advance written notice to EPD of the Owner's intent to change the use of the Property, apply for building permit(s), or propose any site work that would affect the Property.
3. Notice of Limitation in Future Conveyances. Each instrument hereafter conveying an interest in the Property subject to this Environmental Covenant shall contain a notice of the activity and use limitations set forth in this Environmental Covenant and shall provide the recorded location of the Environmental Covenant.
4. Activity and Use Limitation(s). The Property shall be used only for non-residential uses, as defined in Section 391-3-19-.02 of the Rules as of the date of this Environmental Covenant. Any residential use on the Property shall be prohibited. Any activity on the Property that may result in the release or exposure to the regulated substances that were contained as part of the Corrective Action, or create a new exposure pathway, is prohibited. With the exception of work necessary for the maintenance,

repair, or as otherwise approved by EPD, activities that are prohibited but are not limited to the following: drilling new water production wells.

5. Groundwater Limitation. The use or extraction of groundwater beneath the Property for drinking water or for any other non-remedial purposes shall be prohibited (with the exception of the existing water supply well that has been demonstrated to be clean and not at risk of being impacted by the regulated substances).
6. Right of Access. In addition to any rights already possessed by EPD and/or the James Warren & Associates, Inc., the Owner shall allow authorized representatives of EPD and/or James Warren & Associates, Inc. the right to enter the Property at reasonable times for the purpose of evaluating the Corrective Action; to take samples, to inspect the Corrective Action conducted at the Property, to determine compliance with this Environmental Covenant, and to inspect records that are related to the Corrective Action.
7. Recording of Environmental Covenant and Proof of Notification. Within thirty (30) days after the date of the Director's signature, James Warren & Associates, Inc, shall file this Environmental Covenant with the Records of Deeds for each County in which the Property is located, and send a file stamped copy of this Environmental Covenant to EPD within thirty (30) days of recording. Within that time period, James Warren & Associates, Inc, shall also send a file-stamped copy to each of the following: (1) Trademark Metals Recycling LLC., (2) each person holding a recorded interest in the Property subject to the covenant, (3) each person in possession of the real property subject to the covenant, (4) each municipality, county, consolidated government, or other unit of local government in which real property subject to the covenant is located, and (5) each owner in fee simple whose property abuts the property subject to the Environmental Covenant.
8. Termination or Modification. The Environmental Covenant shall remain in full force and effect in accordance with O.C.G.A. § 44-16-1 *et seq.*, unless and until the Director determines that the Property is in compliance with the Type 1, 2, 3, or 4 Risk Reduction Standards, as defined in Georgia Rules of Hazardous Site Response (Rules) Section 391-3-19-.07, whereupon the Environmental Covenant may be amended or revoked in accordance with Section 391-3-19-08(7) of the Rules and O.C.G.A. § 44-16-1 *et seq.*
9. Severability. If any provision of this Environmental Covenant is found to be unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired.
10. No EPD Interest in Property Created. This Environmental Covenant does not in any way create any interest by EPD in the Property that is subject to the Environmental Covenant. Furthermore, the act of approving this Environmental Covenant does not in any way create any interest by EPD in the Property in accordance with O.C.G.A. § 44-16-3(b).

Representations and Warranties.

Grantor hereby represents and warrants to the other signatories hereto:

- a) That the Grantor has the power and authority to enter into this Environmental Covenant, to grant the rights and interests herein provided and to carry out all obligations hereunder;
- b) That the Grantor is the sole owner of the Property and holds fee simple title which is free, clear and unencumbered;
- c) That the Grantor has identified all other parties that hold any interest (e.g., encumbrance) in the Property and notified such parties of the Grantor's intention to enter into this Environmental Covenant;

- d) That this Environmental Covenant will not materially violate, contravene, or constitute a material default under any other agreement, document or instrument to which Grantor is a party, by which Grantor may be bound or affected;
- e) That the Grantor has served each of the people or entities referenced in Activity 10 above with an identical copy of this Environmental Covenant in accordance with O.C.G.A. § 44-16-4(d).
- f) That this Environmental Covenant will not materially violate or contravene any zoning law or other law regulating use of the Property; and
- g) That this Environmental Covenant does not authorize a use of the Property that is otherwise prohibited by a recorded instrument that has priority over the Environmental Covenant.

Notices.

Any document or communication required to be sent pursuant to the terms of this Environmental Covenant shall be sent to the following persons:

Georgia Environmental Protection Division
Branch Chief
Land Protection Branch
2 Martin Luther King Jr. Drive SE
Suite 1054 East Tower
Atlanta, GA 30334

James Warren & Associates, Inc.
519 Conley Avenue
Valdosta, Georgia 31602

Grantor has caused this Environmental Covenant to be executed pursuant to The Georgia Uniform Environmental Covenants Act, on the ____ day of _____, 20__.

Signed, sealed, and delivered in the presence of:

For the Grantor:

Unofficial Witness *(Signature)*

Name of Grantor *(Print)*

Unofficial Witness Name *(Print)*

Grantor's Authorized Representative *(Signature)*

(Seal)

Unofficial Witness Address *(Print)*

Authorized Representative Name *(Print)*

Notary Public *(Signature)*

Title of Authorized Representative *(Print)*

My Commission Expires:_____

Dated:_____
(NOTARY SEAL)

Signed, sealed, and delivered in the presence of:

**For the State of Georgia
Environmental Protection Division:**

Unofficial Witness *(Signature)*

Unofficial Witness Name *(Print)*

Unofficial Witness Address *(Print)*

Notary Public *(Signature)*

My Commission Expires:_____

(Signature)

Judson H. Turner
Director

Dated:_____

(NOTARY SEAL)

(Seal)

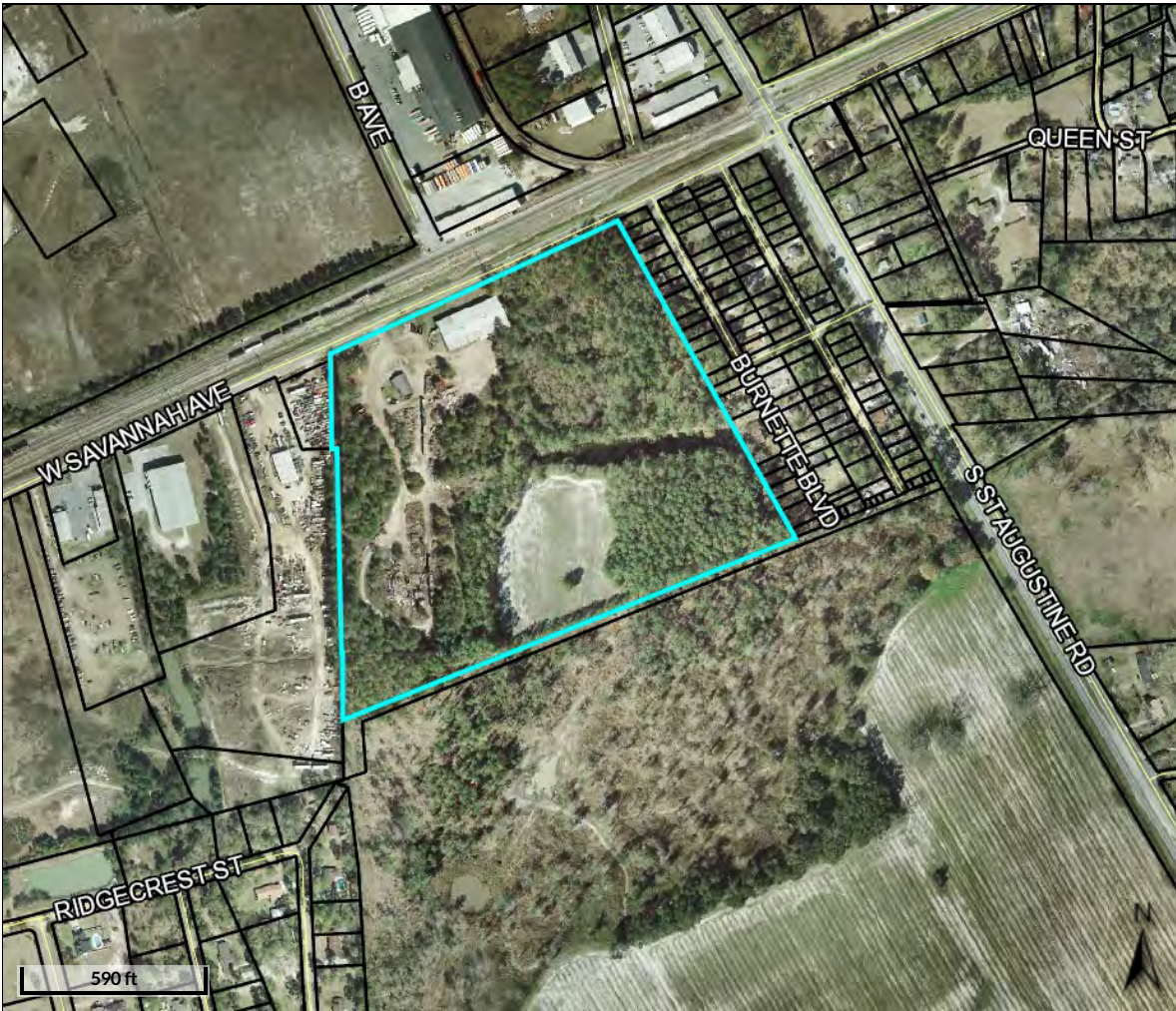
<SIGNATURE BLOCK FOR HOLDER OR OTHER APPLICABLE PARTIES>

Exhibit A
Legal Description



qPublic.net™

Lowndes County, GA



Overview



Legend

- Parcels
- Roads

Parcel ID 0121A026
Class Code Commercial
Taxing District 02-Lowndes County
02-Lowndes County
Acres 27.57

Owner JAMES WARREN & ASSOCIATES INC
519 CONLEY AVENUE
VALDOSTA GA 31602
Physical Address 2000 W SAVANNAH AVE
Assessed Value Value \$921849

Last 2 Sales			
Date	Price	Reason	Qual
12/22/2016	\$500000	FM	Q
10/11/2011	\$450000	FM	Q

(Note: Not to be used on legal documents)

Date created: 8/30/2017
Last Data Uploaded: 8/30/2017 1:50:56 AM



Developed by
The Schneider Corporation

Prepared By and Return To:

William C. Nijem, Esq.
Langdale Vallotton, LLP
1007 N. Patterson Street
Valdosta, Georgia 31602

Parcel Identification No.: 0121A 026

LIMITED WARRANTY DEED

For valuable consideration, the receipt of which is hereby acknowledged, TRADEMARK METALS RECYCLING LLC, a Delaware limited liability company having a mailing address of 400 N. Ashley Drive, Suite 1300, Tampa, Florida 33602 ("**Grantor**"), grants and conveys to JAMES WARREN AND ASSOCIATES, INC., a Georgia corporation, having a mailing address of 519 Conley Avenue, Valdosta, Georgia 31602 ("**Grantee**"), its successors and assigns, with covenant of LIMITED WARRANTY, IN FEE SIMPLE, the real property located in Lowndes County, Georgia and more particularly described on **Exhibit A** attached hereto and made a part hereof (the "**Property**"), together with all improvements thereon and appurtenances thereto.

TO HAVE AND TO HOLD the above-described property with all and singular the rights, members and appurtenances thereof, to the same being, belonging or in anywise appertaining to the only proper use, benefit and behoof of the said Grantee, its heirs, administrators, successors and assigns, forever, in FEE SIMPLE.

AND THE SAID GRANTOR, for its successors and assigns, covenants specially that the Property conveyed hereby is free from all liens and encumbrances arising from the actions of Grantor and any persons claiming by, through or under Grantor. Grantor will warrant and forever defend the right and title to the Property against lawful claims of all persons claiming by, through or under Grantor, but against none others.

PROVIDED, HOWEVER, that notwithstanding that this deed is made with covenants of limited warranty, there is excepted from such covenants and warranties, and the Property and this conveyance is made subject to: [i] any easements, restrictions, covenants and stipulations of record affecting the Property (including, without limitation, those items described on **Exhibit B** attached hereto and made a part hereof), [ii] applicable planning and zoning rules and regulations, [iii] real estate taxes and assessments, if any, assessed but not yet due and payable, which have been adjusted between Grantor and Grantee, and all real estate taxes and assessments due and payable thereafter, which real estate taxes and assessments Grantee hereby assumes and agrees to pay and [iv] those matters that would be disclosed by an inspection and accurate survey of the Property.

The foregoing conveyance is also made subject to the following restrictions (the "**Restrictions**"), and Grantee, by its acceptance of this Deed, agrees that at no time hereafter shall Grantee or any subsequent owner, tenant or occupant of the Property engage in (or permit to be engaged in) at or from the Property or any portion thereof (a) for residential purposes, whether single family, multi-family or otherwise, (b) as a used auto parts business (whether full or self-service), (c) for the purpose of purchasing or selling used cars for recycling or for an auto body purchasing and sales business, or (d) as a ferrous or non-ferrous scrap processing business or a ferrous or non-ferrous feeder yard. The foregoing Restrictions shall be a covenant running with the land, shall be binding upon Grantee and all successor owners and occupants of the Property and shall inure to the benefit of, and be enforceable by action at law or in equity, by Grantor and its successors and assigns. In the event of a legal proceeding to enforce the provisions of the Restrictions, the prevailing party shall be entitled to recover all reasonable legal fees and costs incurred by it in such proceeding.

The Restrictions hereunder shall be covenants running with the Property that shall be binding upon any and all successors or assigns in interest of Grantee and any other persons or entities who acquire any right or interest in the Property, and run to the benefit of Grantor and shall continue without limitation unless otherwise restricted under the laws of the State of Georgia.

Grantee and any other persons or entities who acquire any right or interest in the Property, expressly acknowledge and agree that each such party is taking the Property (or any part or interest thereof) subject to the Restrictions set forth above.

This Deed may be executed in counterparts, each of which, when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same documents.

IN WITNESS WHEREOF, Grantor and Grantee have executed and delivered this instrument under their hand and seal as of the date of their acknowledgements below.

Signed, sealed and delivered in the presence of:

GRANTOR:
TRADEMARK METALS RECYCLING
LLC, a Delaware limited liability company

Witness and Notary (As to Grantor):

Karen Alsept
Printed Name: Karen Alsept

By: [Signature] (SEAL)
Printed Name: Bradley Ford
Title: President and General Manager

[Signature]
Notary Public, State of Florida
Printed Name: Susan Elizabeth Broussard
My Commission Expires: 01/11/2019

[NOTARY SEAL]



Signed, sealed and delivered in the presence of:

GRANTEE:
JAMES WARREN AND ASSOCIATES,
INC., a Georgia corporation

Witness and Notary (As to Grantee):

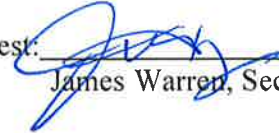


Printed Name: Nicky Balanis

By:  (SEAL)

Printed Name: James Warren
Title: President


Notary Public, State of Georgia
Printed Name: William Nijem, Jr.
My Commission Expires: _____

Attest: 
James Warren, Secretary

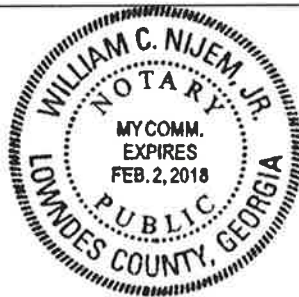


EXHIBIT A TO DEED

Legal Description

SURVEY LEGAL DESCRIPTION

ALL THAT TRACT OR PARCEL OF LAND LYING AND BEING IN LAND LOT NO. 30 IN THE 11TH LAND DISTRICT OF LOWNDES COUNTY, GEORGIA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE WEST LINE OF LAND LOT 30 AND THE SOUTHERN MARGIN OF THE RIGHT-OF-WAY OF WEST SAVANNAH AVENUE, SAID POINT BEING THE POINT OF BEGINNING;

THENCE, N 63° 31' 44" E FOR A DISTANCE OF 993.37 FEET TO A 5/8" REBAR FOUND, THENCE, S 31° 00' 00" E FOR A DISTANCE OF 1128.06 FEET TO AN AXLE FOUND, THENCE, S 67° 38' 12" W FOR A DISTANCE OF 1500.76 FEET TO AN AXLE FOUND, THENCE, N 04° 17' 58" W A DISTANCE OF 1098.24 FEET TO 1/2" REBAR WITH CAP SET, SAID POINT BEING THE POINT OF BEGINNING.

SAID PARCEL CONTAINS 30.81 ACRES. THIS PARCEL BEING THE SAME AS DESCRIBED IN DEED BOOK 89, PAGE 600, LESS AND EXCEPT RIGHTS OF THE COUNTY OF LOWNDES AND THE PUBLIC TO THE USE OF A GRADED ROAD AS LISTED IN VESTING DEED IN DEED BOOK 89, PAGE 600 AND RIGHT-OF-WAY AS GRANTED IN DEED BOOK 933, PAGE 346.

ALSO BEING DESCRIBED AS:

RECORD LEGAL DESCRIPTION

ALL THAT TRACT OR PARCEL OF LAND LYING AND BEING IN LAND LOT NO. 30 IN THE 11TH LAND DISTRICT OF LOWNDES COUNTY, GEORGIA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

ALL THAT TRACT OR PARCEL OF LAND SITUATE, LYING AND BEING IN LAND LOT NO. 30 IN THE 11TH LAND DISTRICT OF LOWNDES COUNTY, GEORGIA CONTAINING 32.16 ACRES, MORE OR LESS AND BEING PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE ORIGINAL WEST LINE OF SAID LAND LOT, WHICH POINT IS THE INTERSECTION OF SAID LAND LOT LINE WITH THE SOUTHERN MARGIN OF THE RIGHT-OF-WAY OF THE ATLANTIC COAST LINE RAILROAD AND FROM SAID POINT OF BEGINNING RUNNING NORTH 63 DEGREES 32 MINUTES EAST ALONG THE SOUTH MARGIN OF SAID RAILROAD RIGHT-OF-WAY A DISTANCE OF 964.2 FEET; THENCE RUNNING SOUTH 31 DEGREES EAST 1187.9 FEET; THENCE RUNNING SOUTH 67 DEGREES 37 MINUTES WEST 1501.5 FEET TO THE WEST LINE OF SAID LAND LOT; AND THENCE RUNNING NORTH 4 DEGREES 16 MINUTES WEST ALONG THE SAID LAND LOT LINE A DISTANCE OF 1163.4 FEET TO THE POINT OF BEGINNING.

EXHIBIT B TO DEED

Specific Title Exceptions

1. Ad valorem taxes for the year 2017 and subsequent years.
2. Right of Way Deed from Rice Iron Metal, Inc., to Lowndes County, Georgia, dated November 6, 1992, and recorded November 12, 1992, in Book 933, Page 346, Lowndes County, Georgia Records.
3. Right of Way and terms and conditions as set forth in Warranty Deed from J. Ryce Martin to in Rice Iron & Metal, Inc., dated January 02, 1964, recorded January 07, 1964, in Book 89, Page 600, Lowndes County Georgia Records. Rights of others in and to the railroad spur line on the subject property.
4. Rights of others in and to the railroad spur line on the subject property.
5. That certain Right of Way Easement between Georgia Power Company and Trademark Metals Recycling, LLC, dated January 11, 2012, and recorded on February 2, 2012, in Deed Book 4952, Page 96, aforesaid records.

Prepared By and Return To:

William C. Nijem, Esq.
Langdale Vallotton, LLP
1007 N. Patterson Street
Valdosta, Georgia 31602

Parcel Identification No.: 0121A 026

LIMITED WARRANTY DEED

For valuable consideration, the receipt of which is hereby acknowledged, TRADEMARK METALS RECYCLING LLC, a Delaware limited liability company having a mailing address of 400 N. Ashley Drive, Suite 1300, Tampa, Florida 33602 ("**Grantor**"), grants and conveys to JAMES WARREN AND ASSOCIATES, INC., a Georgia corporation, having a mailing address of 519 Conley Avenue, Valdosta, Georgia 31602 ("**Grantee**"), its successors and assigns, with covenant of LIMITED WARRANTY, IN FEE SIMPLE, the real property located in Lowndes County, Georgia and more particularly described on **Exhibit A** attached hereto and made a part hereof (the "**Property**"), together with all improvements thereon and appurtenances thereto.

TO HAVE AND TO HOLD the above-described property with all and singular the rights, members and appurtenances thereof, to the same being, belonging or in anywise appertaining to the only proper use, benefit and behoof of the said Grantee, its heirs, administrators, successors and assigns, forever, in FEE SIMPLE.

AND THE SAID GRANTOR, for its successors and assigns, covenants specially that the Property conveyed hereby is free from all liens and encumbrances arising from the actions of Grantor and any persons claiming by, through or under Grantor. Grantor will warrant and forever defend the right and title to the Property against lawful claims of all persons claiming by, through or under Grantor, but against none others.

PROVIDED, HOWEVER, that notwithstanding that this deed is made with covenants of limited warranty, there is excepted from such covenants and warranties, and the Property and this conveyance is made subject to: [i] any easements, restrictions, covenants and stipulations of record affecting the Property (including, without limitation, those items described on **Exhibit B** attached hereto and made a part hereof), [ii] applicable planning and zoning rules and regulations, [iii] real estate taxes and assessments, if any, assessed but not yet due and payable, which have been adjusted between Grantor and Grantee, and all real estate taxes and assessments due and payable thereafter, which real estate taxes and assessments Grantee hereby assumes and agrees to pay and [iv] those matters that would be disclosed by an inspection and accurate survey of the Property.

The foregoing conveyance is also made subject to the following restrictions (the "**Restrictions**"), and Grantee, by its acceptance of this Deed, agrees that at no time hereafter shall Grantee or any subsequent owner, tenant or occupant of the Property engage in (or permit to be engaged in) at or from the Property or any portion thereof (a) for residential purposes, whether single family, multi-family or otherwise, (b) as a used auto parts business (whether full or self-service), (c) for the purpose of purchasing or selling used cars for recycling or for an auto body purchasing and sales business, or (d) as a ferrous or non-ferrous scrap processing business or a ferrous or non-ferrous feeder yard. The foregoing Restrictions shall be a covenant running with the land, shall be binding upon Grantee and all successor owners and occupants of the Property and shall inure to the benefit of, and be enforceable by action at law or in equity, by Grantor and its successors and assigns. In the event of a legal proceeding to enforce the provisions of the Restrictions, the prevailing party shall be entitled to recover all reasonable legal fees and costs incurred by it in such proceeding.

The Restrictions hereunder shall be covenants running with the Property that shall be binding upon any and all successors or assigns in interest of Grantee and any other persons or entities who acquire any right or interest in the Property, and run to the benefit of Grantor and shall continue without limitation unless otherwise restricted under the laws of the State of Georgia.

Grantee and any other persons or entities who acquire any right or interest in the Property, expressly acknowledge and agree that each such party is taking the Property (or any part or interest thereof) subject to the Restrictions set forth above.

This Deed may be executed in counterparts, each of which, when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same documents.

IN WITNESS WHEREOF, Grantor and Grantee have executed and delivered this instrument under their hand and seal as of the date of their acknowledgements below.

Signed, sealed and delivered in the presence of:

GRANTOR:
TRADEMARK METALS RECYCLING
LLC, a Delaware limited liability company

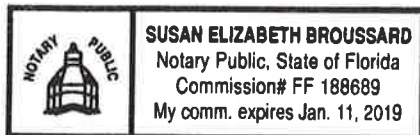
Witness and Notary (As to Grantor):

Karen Alsept
Printed Name: Karen Alsept

By: [Signature] (SEAL)
Printed Name: Bradley Ford
Title: President and General Manager

[Signature]
Notary Public, State of Florida
Printed Name: Susan Elizabeth Broussard
My Commission Expires: 01/11/2019

[NOTARY SEAL]



Signed, sealed and delivered in the presence of:

GRANTEE:
JAMES WARREN AND ASSOCIATES,
INC., a Georgia corporation

Witness and Notary (As to Grantee):



Printed Name: Nicky Balanis



By: _____ (SEAL)

Printed Name: James Warren
Title: President



Notary Public, State of Georgia
Printed Name: William Nijem, Jr.
My Commission Expires: _____

Attest:  _____
James Warren, Secretary

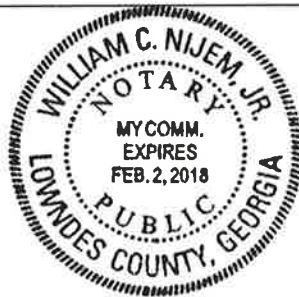


EXHIBIT A TO DEED

Legal Description

SURVEY LEGAL DESCRIPTION

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ALSO BEING DESCRIBED AS:

RECORD LEGAL DESCRIPTION

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ALL THAT TRACT OR PARCEL OF LAND SITUATE, LYING AND BEING IN LAND LOT NO. 30 IN THE 11TH LAND DISTRICT OF LOWNDES COUNTY, GEORGIA CONTAINING 32.16 ACRES, MORE OR LESS AND BEING PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE ORIGINAL WEST LINE OF SAID LAND LOT, WHICH POINT IS THE INTERSECTION OF SAID LAND LOT LINE WITH THE SOUTHERN MARGIN OF THE RIGHT-OF-WAY OF THE ATLANTIC COAST LINE RAILROAD AND FROM SAID POINT OF BEGINNING RUNNING NORTH 63 DEGREES 32 MINUTES EAST ALONG THE SOUTH MARGIN OF SAID RAILROAD RIGHT-OF-WAY A DISTANCE OF 964.2 FEET; THENCE RUNNING SOUTH 31 DEGREES EAST 1187.9 FEET; THENCE RUNNING SOUTH 67 DEGREES 37 MINUTES WEST 1501.5 FEET TO THE WEST LINE OF SAID LAND LOT; AND THENCE RUNNING NORTH 4 DEGREES 16 MINUTES WEST ALONG THE SAID LAND LOT LINE A DISTANCE OF 1163.4 FEET TO THE POINT OF BEGINNING.

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Specific Title Exceptions

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3. Right of Way and terms and conditions as set forth in Warranty Deed from J. Ryce Martin to in Rice Iron & Metal, Inc., dated January 02, 1964, recorded January 07, 1964, in Book 89, Page 600, Lowndes County Georgia Records. Rights of others in and to the railroad spur line on the subject property.
4. Rights of others in and to the railroad spur line on the subject property.
5. That certain Right of Way Easement between Georgia Power Company and Trademark Metals Recycling, LLC, dated January 11, 2012, and recorded on February 2, 2012, in Deed Book 4952, Page 96, aforesaid records.

APPENDIX C

Form FD 9000-24
GROUNDWATER SAMPLING LOG

AMBIENT FIELD CONDITIONS:		STILLWATER PROJECT INFO: 216-026	
SITE NAME: Rice Iron & Metals		SITE LOCATION: Valdosta, Georgia	
WELL NO:	SAMPLE ID: <i>ML-4</i>	DATE: <i>10-5-11</i>	

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 9.66 feet to 19.66 feet	STATIC DEPTH TO WATER (feet): 13.60	PURGE PUMP TYPE OR BAILER:
CASING TYPE:: PVC	TUBING LENGTH: 24	TUBING MATERIAL CODE: PE	OTHER NOTES:	

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)

= (19.66 feet - 13.60 feet) X 0.04 gallons/foot = 0.24 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

	=	gallons + (	gallons/foot X	feet) +	gallons =	gallon
--	---	-------------	----------------	---------	-----------	--------

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 17	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 17.5	PURGING INITIATED AT: 1647	PURGING ENDED AT: 1704	TOTAL VOLUME PURGED (gallons): 0.6
--	--	-------------------------------	---------------------------	---------------------------------------

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.18; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>Nam Phu / Stillwater</i>	SAMPLER(S) SIGNATURES: <i>[Signature]</i>	SAMPLING INITIATED AT: <i>1705</i>	SAMPLING ENDED AT: <i>1708</i>
PUMP OR TUBING DEPTH IN WELL (feet): <i>17.5</i>	SAMPLE PUMP FLOW RATE (mL per minute): <i>0.04</i>	TUBING MATERIAL CODE: <i>PE</i>	
FIELD DECONTAMINATION: ☒ Y ☐ N	FIELD-FILTERED: ☒ Y ☐ N Filtration Equipment Type: _____	FILTER SIZE: _____ μ m	DUPLICATE: ☐ Y ☒ N

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

NOTES. 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

REVISION 04



REMARKS:									
MATERIAL CODES:		AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)							
SAMPLING/PURGING EQUIPMENT CODES:		APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)							

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Form FD 9000-24
GROUNDWATER SAMPLING LOG

AMBIENT FIELD CONDITIONS:		STILLWATER PROJECT INFO: 216-026	
SITE NAME: Rice Iron & Metals		SITE LOCATION: Valdosta, Georgia	
WELL NO: MW-11	SAMPLE ID: MW-11	DATE: 10-7-11	

PURGING DATA

WELL DIAMETER (inches): 1"	TUBING DIAMETER (inches): 1/4"	WELL SCREEN INTERVAL DEPTH: 9.65 feet to 19.69 feet	STATIC DEPTH TO WATER (feet): 10.37	PURGE PUMP TYPE OR BAILER: PP
CASING TYPE: PVC	TUBING LENGTH: 42	TUBING MATERIAL CODE: PE	OTHER NOTES:	

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (19.65 feet - 10.37 feet) X 0.04 gallons/foot = 0.37 gallon

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME									
(only fill out if applicable)									
	=	gallons + (	gallons/foot X	feet) +	gallons =	gallon			

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 18.56	PURGING INITIATED AT: 110	PURGING ENDED AT: 1128	TOTAL VOLUME PURGED (gallons): 0.96
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[illegible]

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>Nam Phu</i> <i>David Pickers / STJ</i>	SAMPLER(S) SIGNATURES: <i>[Signature]</i>	SAMPLING INITIATED AT: <i>1129</i>	SAMPLING ENDED AT: <i>1134</i>
PUMP OR TUBING DEPTH IN WELL (feet): <i>16.56</i>	SAMPLE PUMP FLOW RATE (mL per minute): <i>0.05</i>	TUBING MATERIAL CODE: <i>PE</i>	
FIELD DECONTAMINATION: ☒ Y ☐ N	FIELD-FILTERED: Y ☒ N ☐ FILTER SIZE: _____ μ m Filtration Equipment Type: _____	DUPLICATE: Y ☒ N ☐	

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

NOTES. 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

REVISION 04

Form FD 9000-24
GROUNDWATER SAMPLING LOG

AMBIENT FIELD CONDITIONS:		STILLWATER PROJECT INFO: 216-026	
SITE NAME: Rice Iron & Metals		SITE LOCATION: Valdosta, Georgia	
WELL NO: <i>MW-7</i>	SAMPLE ID: <i>MW-7</i>	DATE: <i>10-6-11</i>	

PURGING DATA

WELL DIAMETER (inches): <i>1"</i>	TUBING DIAMETER (inches): <i>1/4"</i>	WELL SCREEN INTERVAL DEPTH: <i>9.41</i> feet to <i>19.41</i> feet	STATIC DEPTH TO WATER (feet): <i>10.06</i>	PURGE PUMP TYPE OR BAILER: <i>PE</i>
CASING TYPE: <i>PVC</i>	TUBING LENGTH: <i>42</i>	TUBING MATERIAL CODE: <i>PE</i>	OTHER NOTES:	
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (19.41 \text{ feet} - 10.06 \text{ feet}) \times 0.04 \text{ gallons/foot} = 0.37 \text{ gallons}$				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallon}$				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <i>13</i>		FINAL PUMP OR TUBING DEPTH IN WELL (feet): <i>15</i>		PURGING INITIATED AT: <i>1825</i>		PURGING ENDED AT: <i>1841</i>		TOTAL VOLUME PURGED (gallons): <i>0.61</i>			
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
<i>1835</i>	<i>0.40</i>	<i>0.40</i>	<i>0.04</i>	<i>12.96</i>	<i>4.23</i>	<i>23.40</i>	<i>360</i>	<i>1.58</i>	<i>8.31</i>	<i>CLR</i>	<i>—</i>
<i>1838</i>	<i>0.12</i>	<i>0.52</i>	<i>0.04</i>	<i>12.96</i>	<i>4.21</i>	<i>23.36</i>	<i>359</i>	<i>1.43</i>	<i>9.98</i>	<i>"</i>	<i>—</i>
<i>1841</i>	<i>0.12</i>	<i>0.64</i>	<i>0.04</i>	<i>12.96</i>	<i>4.21</i>	<i>23.40</i>	<i>359</i>	<i>1.32</i>	<i>7.81</i>	<i>"</i>	<i>—</i>

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>Nam Phu</i> <i>David Dickens, STI</i>				SAMPLER(S) SIGNATURES: <i>MM</i>				SAMPLING INITIATED AT: <i>1842</i>		SAMPLING ENDED AT: <i>1850</i>	
PUMP OR TUBING DEPTH IN WELL (feet): <i>15</i>				SAMPLE PUMP FLOW RATE (mL per minute): <i>0.04</i>				TUBING MATERIAL CODE: <i>PE</i>			
FIELD DECONTAMINATION: Y ☒ (N)				FIELD-FILTERED: Y ☒ (N) FILTER SIZE: _____ µm				DUPLICATE: Y ☒ (N)			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
							<i>Pb</i>				

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

NOTES: 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Field Instrument Calibration Records

INSTRUMENT : YSI 556 Multimeter

INSTRUMENT #: Stillwater

PARAMETERS:

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ pH ☐ ORP ☐ TURBIDITY ☐ DO

STANDARD	SUPPLIER	TYPE	STANDARD VALUE	LOT #:	EXPIRATION:
A	OAKTON	pH	4.01	2007238	6-12
B	OAKTON	pH	7.0	2005446	5-12
C	OAKTON	pH	10.0		
D	OAKTON	CONDUCTIVITY	447 μ s	PR1	9/12
E	OAKTON	CONDUCTIVITY	1500 μ s	PV1	5/12
F	---	DISSOLVED OXYGEN	100%		
G	OAKTON	DISSOLVED OXYGEN	0%		

DATE	TIME	STD	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT, END)	SAMPLER INITIALS
10-6-11	701	A	4.01	4.01	0	Yes	Init	NP
	703	B	7.0	7.0	0	Yes	Init	NP
	707	D	447	447	0	Yes	Init	NP
	711	E	1500	1439	4.1	No	Init	NP
	718	F	100	101.1	1.1	Yes	Init	NP
10-7-11	645	A	4.01	4.01	0	No	Cont	NP
	648	B	7.0	7.0	0	No	Cont	NP
	652	D	447	450	0.1	No	Cont	NP
	656	E	1500	1449	3.4	No	Cont	NP
	703	F	100	100.9	0.9	No	Cont	NP
10-7-11	1904	A	4.01	4.01	0	No	End	NP
	1908	B	7	7.0	0	No	End	NP
	1911	D	447	452	0.1	No	End	NP
	1915	DE	1500	1432	4.3	No	End	NP
	1921	EF	100	101.9	1.9	No	End	NP

Field Instrument Calibration Records

INSTRUMENT: LAMOTTE 2020E TURBIDIMETER**INSTRUMENT #: S-2**

TURBIDITY

[illegible]

GROUNDWATER SAMPLING LOG

SITE NAME: <u>TMR Valdosta</u>	SITE LOCATION: <u>2000 W. Savannah Ave., Valdosta</u>
WELL NO: <u>mw-10</u>	SAMPLE ID: <u>FA16876-1</u> DATE: <u>7/22/14</u>

PURGING DATA

WELL DIAMETER (inches): <u>1</u>	TUBING DIAMETER (inches): <u>1/4</u>	WELL SCREEN INTERVAL DEPTH: <u>9.53</u> feet to <u>19.53</u> feet	STATIC DEPTH TO WATER (feet): <u>8.51</u>	PURGE PUMP TYPE OR BAILER: <u>PP</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (<u>19.53</u> feet - <u>8.51</u> feet) X <u>0.04</u> gallons/foot = <u>0.44</u> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>10.5</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>10.5</u>	PURGING INITIATED AT: <u>0802</u>	PURGING ENDED AT: <u>0824</u>	TOTAL VOLUME PURGED (gallons): <u>1.10</u>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVE D OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	(ODOR describe)	ORP (Mv)
0812	0.50	0.50	0.05	9.63	4.15	24.2	23.6	2.52	2.49	Clen	NONE	349.0
0815	0.15	0.65	↓	9.68	4.13	24.0	41.0	3.70	7.72	↓	↓	364.3
0818	0.15	0.80	↓	9.71	4.17	24.0	49.0	3.96	5.22	↓	↓	368.7
0821	0.15	0.95	↓	9.74	4.22	24.0	49.7	4.06	2.54	↓	↓	368.8
0824	0.15	1.10	↓	9.76	4.24	24.0	51.2	4.09	2.24	↓	↓	367.9

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>J. S. Stevens / GF</u>				SAMPLER(S) SIGNATURE(S): <u>J. S. Stevens</u>				SAMPLING INITIATED AT: <u>0825</u>		SAMPLING ENDED AT: <u>0830</u>	
PUMP OR TUBING DEPTH IN WELL (feet): <u>10.5</u>				TUBING MATERIAL CODE: <u>HDPE</u>		FIELD-FILTERED: Y ☒ (N)			FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP Y ☒ (N)				TUBING Y ☒ (N) (replaced)				DUPLICATE: Y ☒ (N)			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
876-1	3	CG	40mL	HCl	—	6.2	8260 Vol's	RFPP	<100
↓	1	PE	250mL	HNO3	—	6.2	8010 AS	APP	<1000

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 W. Savannah Ave., Valdosta	
WELL NO: mw-4	SAMPLE ID: FA16876-2		DATE: 7/22/14

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH 9.66 feet to 19.66 feet	STATIC DEPTH TO WATER (feet): 8.68	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (19.66 \text{ feet} - 8.68 \text{ feet}) \times 0.04 \text{ gallons/foot} = 0.44 \text{ gallons}$				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 11	PURGING INITIATED AT: 0845	PURGING ENDED AT: 0900	TOTAL VOLUME PURGED (gallons): 0.86

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Scott Stearns / Gf				SAMPLER(S) SIGNATURE(S): J. S. Stearns			SAMPLING INITIATED AT: 0901		SAMPLING ENDED AT: 0906	
PUMP OR TUBING DEPTH IN WELL (feet): 11				TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y ☒ N ☐		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y ☒ N ☐ TUBING Y ☒ N (replaced) ☐							DUPLICATE: Y ☒ N ☐			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
8762	3	CG	40mL	HCl	—	22	8260 VOCs	RFPP	<100	
↓	1	PE	250mL	HNO3	—	22	8010 As	APP	<1000	
REMARKS: .										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally $+ 5$ NTU or $\pm 10\%$ (whichever is greater)

105.6

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2600 W. Savannah Ave., Valdosta	
WELL NO: mw-3	SAMPLE ID: FA16876-3		DATE: 7/22/14

PURGING DATA

WELL DIAMETER (inches): 1		TUBING DIAMETER (inches): 1/4		WELL SCREEN INTERVAL DEPTH: feet to feet		STATIC DEPTH TO WATER (feet): 7.26		PURGE PUMP TYPE OR BAILER: PP				
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (19.53 feet - 7.26 feet) X 0.04 gallons/foot = 0.49 gallons												
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons												
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 9.2		FINAL PUMP OR TUBING DEPTH IN WELL (feet): 12		PURGING INITIATED AT: 0920		PURGING ENDED AT: 0940		TOTAL VOLUME PURGED (gallons): 0.95				
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) $\mu\text{mhos/cm}$ or $\mu\text{S/cm}$	DISSOLVE D OXYGEN (circle units) mg/l or % saturation	TURBIDITY (NTUs)	COLOR (describe)	(ODOR describe)	ORP (Mv)
0931	0.50	0.50	0.05	10.58	4.08	24.4	243.0	0.32	1.57	Clear	NONE	348.2
0934	0.15	0.65	↓	10.85	4.05	24.2	223.0	0.50	1.41	↓	↓	344.5
0937	0.15	0.80	↓	11.00	4.08	24.0	218.6	0.65	1.15	↓	↓	323.1
0940	0.15	0.95	↓	11.18	4.06	24.2	215.1	0.86	0.97	↓	↓	319.8
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016												
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)												

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Scott Stevens / GF				SAMPLER(S) SIGNATURE(S): J. S. Stevens			SAMPLING INITIATED AT: 0941		SAMPLING ENDED AT: 0946	
PUMP OR TUBING DEPTH IN WELL (feet): 12				TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y (N)		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (Replaced)							DUPLICATE: Y (N)			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
8763	3	CG	40ml	HCl	—	<2	8260 VOC's	RFPP	<100	
	1	PE	250ml	HNO3	—	<2	8010 AS	APP	<1000	
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 W. Savannah Ave., Valdosta	
WELL NO: mw-11	SAMPLE ID: FA16876-4		DATE: 7/22/14

PURGING DATA

WELL DIAMETER (inches): 1		TUBING DIAMETER (inches): 1/4		WELL SCREEN INTERVAL DEPTH: 9.65 feet to 19.65 feet		STATIC DEPTH TO WATER (feet): ~6.0		PURGE PUMP TYPE OR BAILER: PP				
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (19.65 feet - ~6.0 feet) X 0.04 gallons/foot = 0.55 gallons												
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons												
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 8.0		FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8.0		PURGING INITIATED AT: 1000		PURGING ENDED AT: 1019		TOTAL VOLUME PURGED (gallons): 0.79				
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μ mhos/cm or μ S/cm	DISSOLVE D OXYGEN (circle units) mg/l or % saturation	TURBIDITY (NTUs)	COLOR (describe)	(ODOR describe)	ORP (Mv)
1013	0.55	0.55	0.04	—	3.57	23.4	55.8	1.90	6.39	Clear	None	379.1
1016	0.12	0.67	↓	—	3.60	22.9	55.8	1.92	4.05	↓	↓	379.3
1019	0.12	0.79		—	3.64	23.2	56.0	1.87	3.01			375.4
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016												
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)												

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Scott Stevens / GF				SAMPLER(S) SIGNATURE(S): J. S. Stevens			SAMPLING INITIATED AT: 1020		SAMPLING ENDED AT: 1024	
PUMP OR TUBING DEPTH IN WELL (feet): 8.0				TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y (N)		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N replaced)							DUPLICATE: Y (N)			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
8764	3	CG	40ml	HCl	—	~2	8260 Voc's	RFPP	< 100	
REMARKS: well is bent, couldn't place 2' probe down well. Placed tubing down to find water column. Approx. 6.0' b/s.										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $\pm 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 W. Savannah Ave., Valdosta	
WELL NO: MW-6	SAMPLE ID: FA/6876-5	DATE: 7/22/14	

PURGING DATA

WELL DIAMETER (inches): 1		TUBING DIAMETER (inches): 1/4		WELL SCREEN INTERVAL DEPTH: 9.3 feet to 79.3 feet		STATIC DEPTH TO WATER (feet): 5.47		PURGE PUMP TYPE OR BAILER: PP				
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (19.30 \text{ feet} - 5.47 \text{ feet}) \times 0.04 \text{ gallons/foot} = 0.55 \text{ gallons}$												
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$												
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 7.4		FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8.0		PURGING INITIATED AT: 1040		PURGING ENDED AT: 1058		TOTAL VOLUME PURGED (gallons): 0.85				
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVE D OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	(ODOR describe)	ORP (Mv)
1052	1052 0.55	0.55	0.05	7.46	3.80	21.7	246.0	0.24	1.80	Clear	None	364.2
1055	0.15	0.70		7.45	3.81	21.7	245.5	0.21	1.39			361.9
1058	0.15	0.85	↓	7.45	3.84	22.0	244.7	0.20	2.09	↓	↓	359.6
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)												

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. S. Stevens / GF				SAMPLER(S) SIGNATURE(S): J. S. Stevens			SAMPLING INITIATED AT: 1059		SAMPLING ENDED AT: 1104	
PUMP OR TUBING DEPTH IN WELL (feet): 8.0				TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y (N) Filtration Equipment Type:		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N Replaced)							DUPLICATE: Y (N)			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
8765	3	CG	40ml	HCl	—	42	8260 Voc's	RFPP	< 100	
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES:

1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $\pm 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 W. Savannah Ave., Valdosta	
WELL NO: mw-5	SAMPLE ID: FA16826-6	DATE: 7/22/14	

PURGING DATA

WELL DIAMETER (inches): 1		TUBING DIAMETER (inches): 7/8		WELL SCREEN INTERVAL DEPTH: 9.63 feet to 19.63 feet		STATIC DEPTH TO WATER (feet): 5.18		PURGE PUMP TYPE OR BAILER: PP				
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (\cancel{19.63} \text{ feet} - 5.18 \text{ feet}) \times 0.04 \text{ gallons/foot} = 0.58 \text{ gallons}$												
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$												
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 7.1		FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8.0		PURGING INITIATED AT: 1116		PURGING ENDED AT: 1133		TOTAL VOLUME PURGED (gallons): 0.90				
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) <u>µmhos/cm</u> or µS/cm	DISSOLVE D OXYGEN (circle units) <u>mg/L or</u> % saturation	TURBIDITY (NTUs)	COLOR (describe)	(ODOR describe)	ORP (Mv)
1127	0.60	0.60	0.05	7.31	3.95	22.8	486.2	0.23	1.27	Clear	NONE	205.0
1130	0.15	0.75	↓	7.44	3.89	22.6	495.3	0.23	1.18	↓	↓	219.6
1133	0.15	0.90		7.44	3.88	22.7	499.0	0.19	1.10	↓	↓	237.1
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016												
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)												

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J.S.H Stevens / GF						SAMPLER(S) SIGNATURE(S): <i>J.S.H Stevens</i>							SAMPLING INITIATED AT: 1134								SAMPLING ENDED AT: 1139																												
PUMP OR TUBING DEPTH IN WELL (feet): 8.0										TUBING MATERIAL CODE: HDPE										FIELD-FILTERED: Y N Filtration Equipment Type:										FILTER SIZE: ____ μm																			
FIELD DECONTAMINATION:																				PUMP Y N										TUBING Y N (replaced)										DUPLICATE: Y N									
SAMPLE CONTAINER SPECIFICATION										SAMPLE PRESERVATION										INTENDED ANALYSIS AND/OR METHOD										SAMPLING EQUIPMENT CODE										SAMPLE PUMP FLOW RATE (mL per minute)									
SAMPLE ID CODE		# CONTAINERS		MATERIAL CODE		VOLUME		PRESERVATIVE USED		TOTAL VOL ADDED IN FIELD (mL)		FINAL pH																																					
nbl		3		CG		40ml		HCl		—		CZ		8260 Voc's										RFPP										<100															
REMARKS:																																																	
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)																																																	
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)																																																	

NOTES. 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $\pm 10\%$ (whichever is greater)

510.5

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2600 W. Savannah Ave., Valdosta	
WELL NO: mw-8	SAMPLE ID: FA16876-7	DATE: 7/22/14	

PURGING DATA

WELL DIAMETER (inches): 1		TUBING DIAMETER (inches): 1/4		WELL SCREEN INTERVAL DEPTH: feet to feet		STATIC DEPTH TO WATER (feet): 6.67		PURGE PUMP TYPE OR BAILER: PP				
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (19.49 feet - 6.67) feet X 0.04 gallons/foot = 0.51 gallons												
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons												
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 8.5		FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8.5		PURGING INITIATED AT: 1202		PURGING ENDED AT: 1221		TOTAL VOLUME PURGED (gallons):				
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) $\mu\text{mhos/cm}$ or $\mu\text{S/cm}$	DISSOLVE D OXYGEN (circle units) mg/L or % saturation	TURBIDIT Y (NTUs)	COLOR (describe)	(ODOR describe)	ORP (Mv)
1215	0.75	0.75	0.06	8.03	6.27	24.5	612	0.18	2.27	clear	NONE	-77.9
1218	0.18	0.93	↓	8.03	6.27	24.5	612	0.17	2.11	↓	↓	-74.9
1221	0.18	1.11		8.03	6.30	24.3	611	0.17	2.13			-73.6
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016												
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)												

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. S. 4 Stars / OF				SAMPLER(S) SIGNATURE(S): J. S. H. S.			SAMPLING INITIATED AT: 1222		SAMPLING ENDED AT: 1227	
PUMP OR TUBING DEPTH IN WELL (feet): 8.5				TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y (N)		FILTER SIZE: ____ µm	
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N replaced)						DUPLICATE: Y (N)				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
8767	3	CG	40ml	HCl	—	12	8260VOC's	RFPP	2100	
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $\pm 10\%$ (whichever is greater)

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKER/MODEL#) YSI ProPlus

INSTRUMENT # 10C101377

PARAMETER: *[check only one]*

☐ TEMPERATURE ☒ CONDUCTIVITY ☐ SALINITY ☒ pH ☐ ORP
☒ TURBIDITY ☐ RESIDUAL Cl ☒ DO ☐ OTHER _____

STANDARDS: [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A _____

Standard B _____

Standard C

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
140722	0715	DO	$\frac{DI}{H_2O}$	105.8/100.0		Yes	Init	(S)
		pH	7.0	7.17/7.00				
		pH	10.0	10.19/10.00				
		pH	4.0	4.03/4.00				
		Cond	2764	2525/2764				
		Cond	84	102.3/84				
		Turb	10.0	10.06/10.00				
		Turb	0.0	0.0/0.0				
140722	1400	pH	10.0	10.03		NO	Post	(S)
		pH	4.0	4.02				
		Cond	2764	2752				
		Cond	84	91				
		Turb	10.0	10.02				
		Turb	0.0	0.0				

GROUNDWATER SAMPLING LOG

SITE NAME: Tm2 Valdosta		SITE LOCATION: 2000 W. Savannah Ave, Valdosta, GA	
WELL NO: mw-13	SAMPLE ID: FA17334-1		DATE: 8/11/14

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet	STATIC DEPTH TO WATER (feet): 6.83	PURGE PUMP TYPE OR BAILER: PP
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WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (20.0 feet - 6.83 feet) X 0.16 gallons/foot = 2.11 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 8.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8.5	PURGING INITIATED AT: 1428	PURGING ENDED AT: 1452	TOTAL VOLUME PURGED (gallons): 3.03
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[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. S. Stevens / Gf	SAMPLER(S) SIGNATURE(S): 	SAMPLING INITIATED AT: 1453	SAMPLING ENDED AT: 1457
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PUMP OR TUBING DEPTH IN WELL (feet):	8.5	TUBING MATERIAL CODE: HDPE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: _____ μm
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FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced)

DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION	SAMPLE PRESERVATION	INTENDED	SAMPLING	SAMPLE PUMP FLOW RATE (mL per
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[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump;
 RFPP = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 W. Savannah Ave., Valdosta, GA	
WELL NO: mw-5D	SAMPLE ID: FA17334-2	DATE: 8/11/14	

PURGING DATA

WELL	TUBING	SCREEN INTERVAL						STATIC DEPTH		PURGE PUMP TYPE			
DIAMETER (inches): 2	DIAMETER (inches): 3/8	DEPTH: 35 feet to 40 feet						TO WATER (feet): 8.83		OR BAILER: PP			
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (40 feet – 8.83 feet) x 0.16 gallons/foot = 4.99 gallons													
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons													
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10.5		FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10.5		PURGING INITIATED AT: 1506		PURGING ENDED AT: 1542		TOTAL VOLUME PURGED (gallons):					
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVE OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	(ODOR describe)	ORP (Mv)	
1536	5.00	5.00	0.17	8.93	4.78	22.4	125.0	0.70	5.44	Clear	NONE	152.9	
1539	0.51	5.51	↓	8.93	4.80	22.3	124.9	0.71	6.56	↓	↓	147.9	
1542	0.51	6.02	↓	8.93	4.79	22.4	123.8	0.71	5.68	↓	↓	147.9	
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016													
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)													

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J.S. Stevens / BF				SAMPLER(S) SIGNATURE(S): J.S. Stevens			SAMPLING INITIATED AT: 1543		SAMPLING ENDED AT: 1547	
PUMP OR TUBING DEPTH IN WELL (feet): 10.5				TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y (N) Filtration Equipment Type:		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N replaced)						DUPLICATE: Y (N)				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
334-2	3	CG	40ml	HCl	—	<2	8260 Full 1.5+	RFPP	<100	
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 W. Savannah Ave., Valdosta, GA	
WELL NO: MW-12	SAMPLE ID: FA17334-3	DATE: 8/11/14	

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	3/8	WELL SCREEN INTERVAL DEPTH:	10 feet to 20 feet	STATIC DEPTH TO WATER (feet):	7.26	PURGE PUMP TYPE OR BAILER:	PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (20 \text{ feet} - 7.26 \text{ feet}) \times 0.16 \text{ gallons/foot} = 2.04 \text{ gallons}$																
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$																
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):		9.0		FINAL PUMP OR TUBING DEPTH IN WELL (feet):		9.0		PURGING INITIATED AT:		1554	PURGING ENDED AT:		1612	TOTAL VOLUME PURGED (gallons):		3.07
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) $\mu\text{mhos/cm}$ or $\mu\text{S/cm}$	DISSOLVE D OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	(ODOR describe)	ORP (Mv)				
1606	2.05	2.05	0.17	8.62	4.26	22.7	171.3	3.03	1.43	Clear	NONE	204.1				
1609	0.51	2.56	↓	8.70	4.25	22.6	169.5	2.99	1.54	↓	↓	196.5				
1612	0.51	3.07	↓	8.79	4.22	22.4	167.6	2.97	0.88	↓	↓	196.3				
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016																
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)																

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. S. Stevens / GT				SAMPLER(S) SIGNATURE(S): J. S. Stevens			SAMPLING INITIATED AT: 1613		SAMPLING ENDED AT: 1616				
PUMP OR TUBING DEPTH IN WELL (feet): 9.0				TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y (N)		FILTER SIZE: _____ µm				
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N (replaced))							DUPLICATE: Y (N)						
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH							
334-3	3	CG	40ml	HCl	—	C2	8260 Full L.S.T.		RFPP		<100		
REMARKS:													
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)													
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)													

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

352 536 5256

10.15

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 W. Savannah Ave., Valdosta, GA	
WELL NO: mw-2R	SAMPLE ID: FA 17334-4		DATE: 8/12/14

PURGING DATA

WELL DIAMETER (inches): 2		TUBING DIAMETER (inches): 3/8		CHECKED HOLE INTERVAL DEPTH: 10 feet to 20 feet		STATIC DEPTH TO WATER (feet): 9.75		PURGE PUMP TYPE OR BAILER: PP				
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (20.0 feet - 9.75 feet) X 0.16 gallons/foot = 1.64 gallons												
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons												
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 11.5		FINAL PUMP OR TUBING DEPTH IN WELL (feet): 11.5		PURGING INITIATED AT: 0835		PURGING ENDED AT: 0852		TOTAL VOLUME PURGED (gallons): 2.71				
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) <u>µmhos/cm</u> or µS/cm	DISSOLVE D OXYGEN (circle units) <u>mg/L</u> or % saturation	TURBIDIT Y (NTUs)	COLOR (describe)	(ODOR describe)	ORP (Mv)
0846	1.75	1.75	0.16	10.16	4.53	22.8	667	0.51	5.57	Clear	NONE	326.8
0849	0.48	2.23	↓	10.16	4.58	22.7	671	0.45	6.72	↓	↓	323.3
0852	0.48	2.71	↓	10.17	4.54	22.7	672	0.37	7.75	↓	↓	316.6
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)												

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Scott Starnes/GPR						SAMPLER(S)/ SIGNATURE(S): 				SAMPLING INITIATED AT: 0853		SAMPLING ENDED AT: 0858		
PUMP OR TUBING DEPTH IN WELL (feet): 11.5						TUBING MATERIAL CODE: HDPE				FIELD-FILTERED: Y (N)		Filtration Equipment Type:		FILTER SIZE: _____ µm
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N replaced)									DUPLICATE: Y (N)					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION							INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH								
3344	3	CG	40ml	HCl	—	<2	8260 Full.	RFP	C100					
✓	1	PE	250ml	HNO3	—	<2	AS 6010	APP	C1000					
REMARKS:														
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)														
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)														

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 W. Savannah Ave, Valdosta, GA	
WELL NO: mw-1R	SAMPLE ID: FA17334-5	DATE: 8/12/14	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Stevens / Gf				SAMPLER(S) SIGNATURE(S): J. Stevens				SAMPLING INITIATED AT: 0931		SAMPLING ENDED AT: 0936	
PUMP OR TUBING DEPTH IN WELL (feet): 12				TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y ☒ N ☐ Filtration Equipment Type:		FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP Y ☒ N ☐ TUBING Y ☒ N ☐ (replaced)							DUPLICATE: Y ☒ N ☐				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
334-5	3	CG	40ml	HCl	—	22	8260 Full	RFPF	2100		
↓	1	PE	250ml	HNO3	—	22	6010 AS	APP	21000		
REMARKS:											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

TM2 Valdosta

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKER/MODEL#) YSI Pro Plus

INSTRUMENT # 10C101377

PARAMETER: [check only one] Conductivity meter 2020e

☐ TEMPERATURE

☒ CONDUCTIVITY

☐ SALINITY

☒ pH

☐ ORP

☒ TURBIDITY

☐ RESIDUAL CI

☒ DO

☐ OTHER

STANDARDS: [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A

Standard B

Standard C

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
140811	1312	DO	7.0	72.4/100.0		Yes	Init	(8)
		pH	7.0	6.99/7.00				
		pH	10.0	9.96/10.00				
		pH	4.0	3.96/4.00				
		Cond	2764	2564/2764				
		Cond	84	88.1/84.0				
		Turb	10.0	10.02/10.00				
		Turb	0.0	0.0/0.0				
140811	1630	pH	10.0	10.04		No	Post	(8)
		pH	4.0	4.03				
		Cond	2764	2697				
		Cond	84	88				
		Turb	10.0	9.96				
		Turb	0.0	0.0				
140812	0745	pH	7.0	7.01		No	Cont	(8)
		pH	10.0	9.98				
		pH	4.0	4.02				
		Cond	2764	2614				
		Cond	84	87.3				
		Turb	10.0	10.07				
		Turb	0.0	0.0				

Field Instrument Calibration Records

[illegible]

GROUNDWATER SAMPLING LOG

SITE NAME: <u>TMR Valdosta</u>	SITE LOCATION: <u>Valdosta, GA.</u>
WELL NO: <u>MN-14</u>	SAMPLE ID: <u>FA18589-1</u> DATE: <u>9/22/14</u>

PURGING DATA

WELL DIAMETER (inches): <u>2</u>	TUBING DIAMETER (inches): <u>3/8</u>	WELL SCREEN INTERVAL DEPTH: <u>10</u> feet to <u>20</u> feet	STATIC DEPTH TO WATER (feet): <u>8.90</u>	PURGE PUMP TYPE OR BAILER: <u>PP</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (<u>20</u> feet - <u>8.90</u> feet) X <u>0.16</u> gallons/foot = <u>1.7</u> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + (_____ gallons/foot X _____ feet) + _____ gallons = _____ gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>10.5</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>10.5</u>	PURGING INITIATED AT: <u>1451</u>	PURGING ENDED AT: <u>1522</u>	TOTAL VOLUME PURGED (gallons): <u>2.12</u>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVE OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	(ODOR describe)	ORP (Mv)
1515	1.7	1.7	0.07	9.10	7.49	25.5	97.7	7.7	1.80	None	None	109.2
1518	0.21	1.91	0.07	9.10	7.50	25.5	97.4	7.1	1.71	u	u	120.0
1521	0.21	2.12	0.07	9.12	7.50	25.5	97.3	6.8	1.71	u	u	109.8

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>Dan Dennis / GPR</u>				SAMPLER(S) SIGNATURE(S): <u>Dan Dennis</u>				SAMPLING INITIATED AT: <u>1523</u>		SAMPLING ENDED AT: <u>1528</u>	
PUMP OR TUBING DEPTH IN WELL (feet): <u>10.5</u>				TUBING MATERIAL CODE: <u>HDPE</u>		FIELD-FILTERED: Y ☒ N ☐			FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP Y ☒ N ☐ TUBING Y ☒ N ☐ (replaced)				DUPLICATE: Y ☒ N ☐							

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
89-1	3	CG	40mL	HCL	—	~2	18260510	APP	<100
+	1	PE	250mL	HNO3	—	~2	As-6010	APP	<100

REMARKS: _____
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: Valdosta, GA	
WELL NO: MW-15	SAMPLE ID: FA18589-2	DATE: 9/22/14	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Dan Dennis / GR				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: 1616		SAMPLING ENDED AT: 1623	
PUMP OR TUBING DEPTH IN WELL (feet): 10.00				TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y <i>(N)</i> Filtration Equipment Type:		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y <i>(N)</i> TUBING Y <i>(N (replaced))</i>							DUPLICATE: Y <i>(N)</i>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	
SAMPLE ID CODE		# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			SAMPLE PUMP FLOW RATE (mL per minute)
802		3	EG	40 mL	HCL	—	12	V8260 STD		APP
↓		1	PP	250 mL	HNO3	—	12	AS-6010		APP
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $\pm 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME:	DMR Valdosta		SITE LOCATION:	Valdosta, GA	
WELL NO:	MM-1A	SAMPLE ID:	FA 18589-3	DATE:	9/22/14

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Dan Dennis / GR				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: 1728		SAMPLING ENDED AT: 1735		
PUMP OR TUBING DEPTH IN WELL (feet): 10.5				TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y ☒ N ☐		Filtration Equipment Type: _____		
FIELD DECONTAMINATION: PUMP Y ☒ N ☐ TUBING Y ☒ N (replaced) ☐							DUPLICATE: Y ☒ N ☐				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
803	3	CG	40ml	HCL	—	2.2	V6260 STD		APP		100
5	1	PE	250ml	HNO3	—	2.2	AS-6010		APP		100
REMARKS:											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKER/MODEL#)

INSTRUMENT # 106101377

PARAMETER: *[check only one]*

Lamotte Turbidity Meter 2020 e

☐ TEMPERATURE

CONDUCTIVITY

☐ SALINITY

☒ pH

☐ ORP

☒ TURBIDITY

☐ RESIDUAL CI☒ DO☐ OTHER

STANDARDS: [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A

Standard B

Standard C

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
14/09/22	1430	DO	DI H ₂ O	97.1/100.0		yes	Init	DD
		pH	7.0	7.4/7.0				
		pH	10.0	9.78/10.0				
		pH	4.0	4.02/4.0				
		Cond	2764	2598/2764				
		Cond	100	98.7/100.0				
		Turb	10.0	10.03/10.0				
		Turb	0.0	0.1/0.0				
14/09/22	1745	DO	DI H ₂ O	100/100		NO	Post	DD
		pH	7.0	7.0/7.0				
		pH	10.0	10.0/10.0				
		pH	4.0	4.0/4.0				
		Cond	2764	2769/2764		yes		
		Cond	100	107/100		yes		
		Turb	10.0	10.0/10.0		NO		
		Turb	0.0	0.0/0.0				

GROUNDWATER SAMPLING LOG

SITE NAME: TMR valdosta		SITE LOCATION: 2000 West Savannah Ave Valdosta GA	
WELL NO: mw-1 DD	SAMPLE ID: FA198894	DATE: 11/11/14	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>R Todd Finken / GF</i>				SAMPLER(S) SIGNATURE(S): <i>R Todd Finken</i>			SAMPLING INITIATED AT: <i>1535</i>		SAMPLING ENDED AT: <i>1537</i>		
PUMP OR TUBING DEPTH IN WELL (feet): <i>74.90</i>				TUBING MATERIAL CODE: <i>HDIE</i>			FIELD-FILTERED: Y ☒ N ☐		FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP ☒ Y N				TUBING Y ☒ N (replaced)			DUPLICATE: Y ☒ N				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
<i>49-1</i>	<i>3</i>	<i>CG</i>	<i>400mL</i>	<i>HCL</i>	<i>-</i>	<i><2</i>	<i>8260</i>		<i>ESP</i>		<i>240</i>
<i>J</i>	<i>1</i>	<i>PE</i>	<i>250mL</i>	<i>HNO3</i>	<i>-</i>	<i><2</i>	<i>6010 AS</i>		<i>ESP</i>		<i>21000</i>
REMARKS: <i>- could not take DTW, water level started to go dry in well, took one reading of parameters and sampled, well is slow to recharge</i>											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

INSTRUMENT # ^{10C 101 377} 52ME 14370

☐ TEMPERATURE ☒ CONDUCTIVITY ☐ SALINITY ☒ pH ☐ ORP
☒ TURBIDITY ☐ RESIDUAL Cl ☒ DO ☐ OTHER _____

Standard C _____

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
14/11/11	1400	D _O	D ± H _{2O}	100.2/100.0		Yes	Init	KTC
		pH	10	9.96/10.00				
		pH	7	6.98/7.00				
		pH	4	3.92/4.00				
		cond	2764	2754/2764				
		Cond	84	99/84				
		turb	10	10.08/10.00				
		turb	1	1.06/1.00				
14/11/11	1545	D _O	D ± H _{2O}	100.1/100.0		Yes	Cont/Final	KTF
		pH	10	10.01/10.00				
		pH	7	7.01/7.00				
		pH	4	4.00/4.00				
		cond	2764	2760/2764				
		Cond	84	83/84				
		turb	10	9.98/10.00				
		turb	1	0.99/1.00				

SOIL BORING LOG

BORING NO. B-1

LOCATION TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA		WATER LEVEL MEASURED N/A	PROJECT NUMBER 57524.012
SCIENTIST TODD FALKNER	SAMPLE INTERVAL CONTINUOUS	SAMPLE TYPE Soil	TOTAL DEPTH 50.0 Feet
DRILLER MIKE NICHOLSON	DRILLING CONTRACTOR PARTRIDGE WELL DRILLING	DRILLING METHOD DPT	DATE COMPLETED 8/7/14

LITHOLOGY

Land Surface

Feet Below Land Surface

3		SAND, Fine-Grained, Lt. Gray/Tan
6		SANDY CLAY, Mottled, Tan/Orange
9		
12		
15		SANDY CLAY, Medium-Grained, Lt. Gray/Tan
18		
21		
24		
27		SANDY CLAY, Medium-Grained, Mottled, Tan/Orange
30		
33		
36		
39		
42		CLAY, Mottled, Stiff, Orange/Tan
45		
48		CLAY, Gray, Soft
51		
54		
57		
60		

SOIL BORING LOG			BORING NO. B-3
LOCATION TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA		WATER LEVEL MEASURED N/A	PROJECT NUMBER 57524.012
SCIENTIST TODD FALKNER	SAMPLE INTERVAL CONTINUOUS	SAMPLE TYPE Soil	TOTAL DEPTH 50.0 Feet
DRILLER MIKE NICHOLSON	DRILLING CONTRACTOR PARTRIDGE WELL DRILLING	DRILLING METHOD DPT	DATE COMPLETED 8/6/14
		LITHOLOGY	
Land Surface			
3		SAND, Fine-Grained, Lt. Gray/Tan	
6		SANDY CLAY, Fine-Grained, Mottled, Orange/Gray	
9			
12			
15			
18			
21		SANDY CLAY, Medium-Grained, Mottled, Orange/Tan	
24			
27			
30			
33			
36		SANDY CLAY, Medium-Grained, Mottled, Tan/Orange	
39			
42			
45			
48			
51			
54			
57			
60			

Feet Below Land Surface

SOIL BORING LOG			BORING NO. B-4
LOCATION TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA		WATER LEVEL MEASURED N/A	PROJECT NUMBER 57524.012
SCIENTIST TODD FALKNER	SAMPLE INTERVAL CONTINUOUS	SAMPLE TYPE Soil	TOTAL DEPTH 50.0 Feet
DRILLER MIKE NICHOLSON	DRILLING CONTRACTOR PARTRIDGE WELL DRILLING	DRILLING METHOD DPT	DATE COMPLETED 8/6/14
		LITHOLOGY	
Land Surface			
3		SAND, Fine-Grained, Lt. Gray/Dk. Brown	
6		SAND, Fine-Grained, Tan	
9		SANDY CLAY, Medium-Grained, Soft-Medium Stiff, Gray/Orange	
12			
15			
18			
21		SANDY CLAY/CLAY, Medium-Grained, Mottled Clay, Orange/Tan	
24			
27			
30			
33			
36			
39			
42			
45			
48			
51			
54			
57			
60			

Feet Below Land Surface

SOIL BORING LOG

BORING NO. B-5

LOCATION TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA		WATER LEVEL MEASURED N/A	PROJECT NUMBER 57524.012
SCIENTIST TODD FALKNER	SAMPLE INTERVAL CONTINUOUS	SAMPLE TYPE Soil	TOTAL DEPTH 16.0 Feet
DRILLER MIKE NICHOLSON	DRILLING CONTRACTOR PARTRIDGE WELL DRILLING	DRILLING METHOD DPT	DATE COMPLETED 9/17/14

LITHOLOGY

Land Surface		OVA Result	
1			SAND, Fine-Grained, Gray
2		1.9	SAND, Fine-Grained, Tan
3		2.3	
4			
5		8.7	SANDY CLAY, Fine-Grained, Mottled, Tan/Orange
6			
7		10.4	
8			
9		11.5	
10			
11		53.3	SANDY CLAY, Fine-Grained, Mottled, Lt. Gray/Tan
12			
13		98.6	
14			
15		119.3	
16			

Feet Below Land Surface

SOIL BORING LOG

BORING NO. B-6

 LOCATION TRADEMARK METALS RECYCLING
2000 WEST SAVANNAH AVENUE
VALDOSTA, GEORGIA

 WATER LEVEL MEASURED
N/A

 PROJECT NUMBER
57524.012

SCIENTIST

TODD FALKNER

SAMPLE INTERVAL

CONTINUOUS

SAMPLE TYPE

Soil

TOTAL DEPTH

16.0 Feet

DRILLER

MIKE NICHOLSON

DRILLING CONTRACTOR

PARTRIDGE WELL DRILLING

DRILLING METHOD

DPT

DATE COMPLETED

9/17/14

LITHOLOGY

	Land Surface	OVA Result	
Feet Below Land Surface			SAND, Fine-Grained, Gray
	1	0.0	SAND, Fine-Grained, Tan
	2		
	3	0.0	
	4		SANDY CLAY, Fine-Grained, Mottled, Tan/Orange
	5	0.0	
	6		
	7	0.0	
	8		
	9	0.0	
	10		
	11	0.0	SANDY CLAY, Fine-Grained, Mottled, Lt. Gray/Tan
	12		
	13	0.0	
	14		
	15	0.0	
16			

SOIL BORING LOG

 BORING NO. **B-7**

LOCATION TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA		WATER LEVEL MEASURED N/A	PROJECT NUMBER 57524.012
SCIENTIST TODD FALKNER	SAMPLE INTERVAL CONTINUOUS	SAMPLE TYPE Soil	TOTAL DEPTH 16.0 Feet
DRILLER MIKE NICHOLSON	DRILLING CONTRACTOR PARTRIDGE WELL DRILLING	DRILLING METHOD DPT	DATE COMPLETED 9/17/14

LITHOLOGY

Land Surface		OVA Result	
Feet Below Land Surface	1		SAND, Fine-Grained, Lt. Gray
	2	0.0	
	3	0.0	
	4		
	5	0.0	
	6		SAND, Fine-Grained, (Fill Dirt), Gray
	7	0.0	
	8		
	9	0.0	
	10		
	11	0.0	
	12		SANDY CLAY, Fine-Grained, Mottled, Lt. Gray/Tan
	13	0.0	
	14		
	15	0.0	
	16		

SOIL BORING LOG

 BORING NO. **B-8**

LOCATION TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA		WATER LEVEL MEASURED N/A	PROJECT NUMBER 57524.012
SCIENTIST TODD FALKNER	SAMPLE INTERVAL CONTINUOUS	SAMPLE TYPE Soil	TOTAL DEPTH 16.0 Feet
DRILLER MIKE NICHOLSON	DRILLING CONTRACTOR PARTRIDGE WELL DRILLING	DRILLING METHOD DPT	DATE COMPLETED 9/17/14

LITHOLOGY

Land Surface		OVA Result	
Feet Below Land Surface	1		SAND, Fine-Grained, Gray
	2	0.0	SAND, Fine-Grained, Tan
	3	0.0	
	4		
	5	0.0	SANDY CLAY, Fine-Grained, Mottled, Tan/Orange
	6		
	7	0.0	
	8		
	9	0.0	
	10		SANDY CLAY, Fine-Grained, Mottled, Lt. Gray/Tan
	11	0.0	
	12		
	13	0.0	
	14		
	15	0.0	
	16		

SOIL BORING LOG

BORING NO. B-9

LOCATION TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA		WATER LEVEL MEASURED N/A	PROJECT NUMBER 57524.012
SCIENTIST TODD FALKNER	SAMPLE INTERVAL CONTINUOUS	SAMPLE TYPE Soil	TOTAL DEPTH 16.0 Feet
DRILLER MIKE NICHOLSON	DRILLING CONTRACTOR PARTRIDGE WELL DRILLING	DRILLING METHOD DPT	DATE COMPLETED 9/17/14

LITHOLOGY

Land Surface		OVA Result	
1		0.0	SAND, Fine-Grained, Gray
2			
3		0.0	SAND, Fine-Grained, Tan
4			
5		0.0	
6			
7		0.0	SANDY CLAY, Fine-Grained, Mottled, Tan/Orange
8			
9		0.0	
10			
11		0.0	
12			
13		0.0	SANDY CLAY, Fine-Grained, Mottled, Lt. Gray/Tan
14			
15		0.0	
16			

Feet Below Land Surface

GROUNDWATER SAMPLING LOG

SITE NAME: <u>TMR Valdosta</u>	SITE LOCATION: <u>2000 west Savannah Avenue Valdosta GA</u>
WELL NO: <u>mw-13</u>	SAMPLE ID: <u>FA23685-1</u> DATE: <u>4/14/15</u>

PURGING DATA

WELL DIAMETER (inches): <u>2</u>	TUBING DIAMETER (inches): <u>1/4</u>	WELL SCREEN INTERVAL DEPTH: <u>10</u> feet to <u>20</u> feet	STATIC DEPTH TO WATER (feet): <u>2.42</u>	PURGE PUMP TYPE OR BAILER: <u>PP</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (<u>20</u> feet - <u>2.42</u> feet) X <u>0.16</u> gallons/foot = <u>2.81</u> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>4</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>4</u>	PURGING INITIATED AT: <u>1335</u>	PURGING ENDED AT: <u>1409</u>	TOTAL VOLUME PURGED (gallons): <u>3.41</u>
---	---	-----------------------------------	-------------------------------	--

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVE OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	(ODOR describe)	ORP (Mv)
1403	2.81	2.81	0.1003	2.70	4.31	18.26	59	17.9	0.74	clear	None	309.9
1406	0.30	3.11	↓	2.70	4.30	18.22	60	16.4	0.81	11	11	313.3
1409	0.30	3.41	↓	2.70	4.29	18.27	61	15.6	0.90	11	11	312.6

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>R Todd Fickner / GF</u>	SAMPLER(S) SIGNATURE(S): <u>R Todd Fickner</u>	SAMPLING INITIATED AT: <u>1410</u>	SAMPLING ENDED AT: <u>1412</u>
PUMP OR TUBING DEPTH IN WELL (feet): <u>4</u>	TUBING MATERIAL CODE: <u>HDPE</u>	FIELD-FILTERED: Y <u>(N)</u>	FILTER SIZE: _____ μm
FIELD DECONTAMINATION: PUMP Y <u>(N)</u>	TUBING Y <u>(N (replaced))</u>	DUPLICATE: Y <u>(N)</u>	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
85-1	3	CG	40 mL	HCL	—	2.2	8260	RFPP	<100

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 West Savannah Ave. Valdosta, GA.	
WELL NO: MW-12	SAMPLE ID: FA 23685-2	DATE: 4/14/15	

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	1/4	WELL SCREEN INTERVAL DEPTH:	10 feet to 20 feet	STATIC DEPTH TO WATER (feet):	2.32	PURGE PUMP TYPE OR BAILER:	PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (20.0 \text{ feet} - 2.32 \text{ feet}) \times .16 \text{ gallons/foot} = 2.8 \text{ gallons}$									
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$									
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	4.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	4.0	PURGING INITIATED AT:	1340	PURGING ENDED AT:	1417	TOTAL VOLUME PURGED (gallons):	3.34

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $\pm 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 West Savannah Ave Valdosta, GA	
WELL NO: MW-5	SAMPLE ID: FA 23685-3	DATE: 4/14/81	

PURGING DATA

[illegible]

SAMPLING DATA

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES. 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: MW-5D TMR Valdosta	SITE LOCATION: 2000 West Savannah Ave Valdosta GA
WELL NO: MW-5D	SAMPLE ID: FA2385-4 DATE: 4/14/2015

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 35 feet to 40 feet	STATIC DEPTH TO WATER (feet): 4.77	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (40 feet - 4.77 feet) X 0.16 gallons/foot = 5.64 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 6	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 6	PURGING INITIATED AT: 1425	PURGING ENDED AT: 1533	TOTAL VOLUME PURGED (gallons): 6.18

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVE D OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	(ODOR describe)	ORP (Mv)
1527	5.64	5.64	0.0909	4.81	4.65	20.33	102	9.2	0.98	clear	None	276.3
1530	0.27	5.91	↓	4.81	4.65	20.29	102	9.0	1.10	clear	None	271.1
1533	0.27	6.18	↓	4.81	4.62	20.27	102	8.8	1.07	clear	None	269.9

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: R. TODD Falkner / GF				SAMPLER(S) SIGNATURE(S): <i>R. Todd Falkner</i>			SAMPLING INITIATED AT: 1534		SAMPLING ENDED AT: 1536	
PUMP OR TUBING DEPTH IN WELL (feet): 6				TUBING MATERIAL CODE: HDE			FIELD-FILTERED: Y (N)		FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP Y (N)				TUBING Y (N (replaced))			DUPLICATE: Y (N)			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
85-4	3	CG	40 mL	HCL	-	<2	8260	RFPP	<100	

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 West Savannah Ave. Valdosta, GA	
WELL NO: MW-6	SAMPLE ID: FA23685-5	DATE: 4/14/15	

PURGING DATA

WELL DIAMETER (inches):	1	TUBING DIAMETER (inches):	1/4	WELL SCREEN INTERVAL DEPTH:	10 feet to 20 feet	STATIC DEPTH TO WATER (feet):	1.88	PURGE PUMP TYPE OR BAILER:	PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (20.0 \text{ feet} - 1.88 \text{ feet}) \times 0.04 \text{ gallons/foot} = 0.7 \text{ gallons}$									
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$									
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	3.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	3.5	PURGING INITIATED AT:	1510	PURGING ENDED AT:	1534	TOTAL VOLUME PURGED (gallons):	0.94

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>Dan Dennis / GF</i>		SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>		SAMPLING INITIATED AT: <i>1535</i>	SAMPLING ENDED AT: <i>1540</i>
PUMP OR TUBING DEPTH IN WELL (feet): <i>3.5</i>		TUBING MATERIAL CODE: <i>ADPE</i>	FIELD-FILTERED: Y <i>(N)</i> Filtration Equipment Type: <i>(N)</i>	FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y <i>(N)</i> TUBING Y <i>(N (replaced))</i>			DUPLICATE: Y <i>(N)</i>		

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 West Savannah Ave. Valdosta, GA	
WELL NO: MW-100	SAMPLE ID: FA23685-6	DATE: 4/15/15	

PURGING DATA

WELL DIAMETER (inches): <u>2</u>	TUBING DIAMETER (inches): <u>3/8</u>	WELL SCREEN INTERVAL DEPTH: <u>70</u> feet to <u>75</u> feet	STATIC DEPTH TO WATER (feet): <u>33.64</u>	PURGE PUMP TYPE OR BAILER: <u>ESP</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (\underline{75.0} \text{ feet} - \underline{33.64} \text{ feet}) \times \underline{0.16} \text{ gallons/foot} = \underline{6.61} \text{ gallons}$				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>35</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>74.38</u>	PURGING INITIATED AT: <u>0805</u>	PURGING ENDED AT: <u>0830</u>	TOTAL VOLUME PURGED (gallons): <u>4.50</u>

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

[illegible]

REMARKS: Well pumped dry, it was left to recharge then sample was collected.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
 RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $\pm 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta	SITE LOCATION: 2000 West Savannah Ave Valdosta GA
WELL NO: mw-1D	SAMPLE ID: FA23685-7 DATE: 4/15/15

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1.5	WELL SCREEN INTERVAL DEPTH: 35 feet to 40 feet	STATIC DEPTH TO WATER (feet): 6.43	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (40 feet - 6.43 feet) X 0.16 gallons/foot = 5.37 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 7	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 7.5	PURGING INITIATED AT: 0755	PURGING ENDED AT: 0856	TOTAL VOLUME PURGED (gallons): 5.37

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVE OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	(ODOR describe)	ORP (Mv)
0850	5.37	5.37	0.0976	6.73	4.80	22.21	91	13.9	0.95	clear	None	275.1
0853	0.29	5.08	↓	6.73	4.80	22.21	91	13.8	0.91	clear	None	279.8
0856	0.29	5.37	↓	6.73	4.82	22.22	91	13.8	0.90	clear	None	281.9

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: R Todd Fisher (GF)	SAMPLER(S) SIGNATURE(S): <i>R Todd Fisher</i>	SAMPLING INITIATED AT: 0857	SAMPLING ENDED AT: 0859
PUMP OR TUBING DEPTH IN WELL (feet): 7.5	TUBING MATERIAL CODE: HDPE	FIELD-FILTERED: Y ☒ N ☐	FILTER SIZE: _____ μm
FIELD DECONTAMINATION: PUMP Y ☒ N ☐ TUBING Y ☒ N (replaced) ☐		DUPLICATE: Y ☒ N ☐	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
85-7	3	CG	40 mL	HCL	-	<2	8260	RFPP	<100
↓	1	PE	250 mL	HNO3	-	<2	6010	APP	<1000

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 West Savannah Ave Valdosta Georgia	
WELL NO: MW-1R	SAMPLE ID: FA 23688-8	DATE: 4/15/15	

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	1 1/4	WELL SCREEN INTERVAL DEPTH:	10 feet to 20 feet	STATIC DEPTH TO WATER (feet):	5.25	PURGE PUMP TYPE OR BAILER:	PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (20 feet - 5.25 feet) X 0.16 gallons/foot = 2.36 gallons									
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)									

		=	gallons + (	gallons/foot X	feet) +	gallons =	gallons
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	6		FINAL PUMP OR TUBING DEPTH IN WELL (feet):	6	PURGING INITIATED AT: 0907	PURGING ENDED AT: 0937	TOTAL VOLUME PURGED (gallons): 2.98

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: R Todd Fisk (GF)		SAMPLER(S) SIGNATURE(S): R Todd Fisk		SAMPLING INITIATED AT: 0937		SAMPLING ENDED AT: 0940	
PUMP OR TUBING DEPTH IN WELL (feet): 6		TUBING MATERIAL CODE: HDPE		FIELD-FILTERED: Y (N) Filtration Equipment Type:		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y (N)		TUBING Y (N (replaced))		DUPLICATE: Y (N)			

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 W. Savannah Ave. Valdosta GA.	
WELL NO: MW-2R	SAMPLE ID: FA23685-9	DATE: 4/15/15	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet	STATIC DEPTH TO WATER (feet): 4.87	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (20.0 \text{ feet} - 4.87 \text{ feet}) \times 0.16 \text{ gallons/foot} = 2.4 \text{ gallons}$				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 6.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 6.5	PURGING INITIATED AT: 0907	PURGING ENDED AT: 0942	TOTAL VOLUME PURGED (gallons): 2.88

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>Dan Dennis / GF</i>				SAMPLER(S) SIGNATURE(S): <i>Dan Dennis</i>			SAMPLING INITIATED AT: <i>0943</i>		SAMPLING ENDED AT: <i>0948</i>		
PUMP OR TUBING DEPTH IN WELL (feet): <i>6.5</i>				TUBING MATERIAL CODE: <i>HDPE</i>		FIELD-FILTERED: Y <i>N</i> Filtration Equipment Type:		FILTER SIZE: _____ µm			
FIELD DECONTAMINATION: PUMP Y <i>N</i>				TUBING Y <i>N (replaced)</i>		DUPLICATE: Y <i>N</i>					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
<i>859</i>	<i>3</i>	<i>CG</i>	<i>40ml</i>	<i>HCL</i>	<i>—</i>	<i>22</i>	<i>8260</i>		<i>RFPP</i>		<i><100</i>
<i>↓</i>	<i>1</i>	<i>Poly</i>	<i>250ml</i>	<i>HNO3</i>	<i>—</i>	<i>22</i>	<i>AS</i>		<i>APP</i>		<i><1000</i>

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TRK Vldoste		SITE LOCATION: 2000 west Jackson Ave Vldoste GA	
WELL NO: MW-14	SAMPLE ID: FA23685-10	DATE: 4/15/15	

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	1/4	WELL SCREEN INTERVAL DEPTH:	10 feet to 20 feet	STATIC DEPTH TO WATER (feet):	6.07	PURGE PUMP TYPE OR BAILER:	PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (20 \text{ feet} - 6.07 \text{ feet}) \times 0.16 \text{ gallons/foot} = 2.29 \text{ gallons}$									
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$									
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	7	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	7	PURGING INITIATED AT:	1000	PURGING ENDED AT:	1039	TOTAL VOLUME PURGED (gallons):	2.71

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: A Todd Fulker (GF)		SAMPLER(S) SIGNATURE(S): A Todd Fulker		SAMPLING INITIATED AT: 1040		SAMPLING ENDED AT: 1043	
PUMP OR TUBING DEPTH IN WELL (feet): 7		TUBING MATERIAL CODE: HDPE		FIELD-FILTERED: Y ☒ N ☒		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y ☒ N ☒		TUBING Y ☒ N (replaced) ☒		DUPLICATE: Y ☒ N ☒			

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: IMR Valdosta		SITE LOCATION: 2000 W. Savannah Ave. Valdosta, GA.	
WELL NO: MW-15	SAMPLE ID: FA 2368541	DATE: 4/15/15	

PURGING DATA

WELL DIAMETER (inches): <u>2</u>	TUBING DIAMETER (inches): <u>1/4</u>	WELL SCREEN INTERVAL DEPTH: <u>10</u> feet to <u>20</u> feet	STATIC DEPTH TO WATER (feet): <u>4.67</u>	PURGE PUMP TYPE OR BAILER: <u>PP</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= (<u>20.0</u> feet - <u>4.67</u> feet) X <u>0.16</u> gallons/foot = <u>2.5</u> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= gallons + (gallons/foot X feet) + gallons = gallons				

[illegible]

SAMPLING DATA

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
 RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR rd Dosta		SITE LOCATION: 2000 West Savannah Ave Valdosta GA	
WELL NO: mw-4	SAMPLE ID: FA 23685-12	DATE: 4/15/15	

PURGING DATA

WELL DIAMETER (inches):	1	TUBING DIAMETER (inches):	4	WELL SCREEN INTERVAL DEPTH:	10 feet to 20 feet	STATIC DEPTH TO WATER (feet):	5.29	PURGE PUMP TYPE OR BAILER:	PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (20 feet - 5.29 feet) X 0.04 gallons/foot = 0.59 gallons									
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons									
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	6.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	7.5	PURGING INITIATED AT:	1100	PURGING ENDED AT:	1120	TOTAL VOLUME PURGED (gallons):	1.42

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta	SITE LOCATION: 2000 W. Savannah Ave. Valdosta, GA.
WELL NO: MW-10	SAMPLE ID: FA 23685-13 DATE: 4/15/15

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet	STATIC DEPTH TO WATER (feet): 6.43	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (20.0 feet - 6.43 feet) X 0.04 gallons/foot = 0.54 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 7	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 7.5	PURGING INITIATED AT: 1119	PURGING ENDED AT: 1136	TOTAL VOLUME PURGED (gallons): 0.84

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVE D OXYGEN (circle units) (mg/L) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	(ODOR describe)	ORP (Mv)
1130	0.54	0.54	0.04909	6.95	5.17	22.2	30.9	1.09	7.36	None	None	320.6
1133	0.15	0.69	↓	6.98	5.17	22.2	30.8	1.05	7.20	12	11	322.0
1136	0.15	0.84	↓	6.98	5.17	22.2	30.8	1.04	7.21	11	11	322.4

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Dan Dennis / GF				SAMPLER(S) SIGNATURE(S): <i>Dan Dennis</i>				SAMPLING INITIATED AT: 1137		SAMPLING ENDED AT: 1142	
PUMP OR TUBING DEPTH IN WELL (feet): 7.5				TUBING MATERIAL CODE: HDPE				FIELD-FILTERED: Y ☒ Filtration Equipment Type: ①		FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP Y ☒ N				TUBING Y ☒ N (replaced)				DUPLICATE: Y ☒ N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
85-13	3	CG	40ml	HCL	—	~2	8260		RFPP		~100
↓	1	Poly	250ml	HNO3	—	~2	As		APP		~1000

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 W. Savannah Ave. Valdosta, GA.	
WELL NO: water well	SAMPLE ID: FA 23685-14	DATE: 4/15/15	

PURGING DATA

WELL DIAMETER (inches): 4	TUBING DIAMETER (inches): NA	WELL SCREEN INTERVAL DEPTH: — feet to — feet	STATIC DEPTH TO WATER (feet): NA	PURGE PUMP TYPE OR BAILER: Spigot
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
$= (\quad \text{feet} - \quad \text{feet}) \times \quad \text{gallons/foot} = \quad \text{gallons}$				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
$= \quad \text{gallons} + (\quad \text{gallons/foot} \times \quad \text{feet}) + \quad \text{gallons} = \quad \text{gallons}$				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): NA	FINAL PUMP OR TUBING DEPTH IN WELL (feet): NA	PURGING INITIATED AT: 1145	PURGING ENDED AT: 1200	TOTAL VOLUME PURGED (gallons): 15.0

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88									
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016									

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Dan Dennis / GP		SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>		SAMPLING INITIATED AT: 1200	SAMPLING ENDED AT: 1205
PUMP OR TUBING DEPTH IN WELL (feet): N/A		TUBING MATERIAL CODE: N/A		FIELD-FILTERED: Y ☒ N ☒	FILTER SIZE: _____ µm
FIELD DECONTAMINATION: PUMP Y ☒ N ☒		TUBING Y ☒ N (replaced) ☒		DUPLICATE: Y ☒ N ☒	

[illegible]

REMARKS: Could not measure depth to water in the water well

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: <u>TMR Valdosta</u>	SITE LOCATION: <u>2000 West Savannah Avenue Valdosta, GA</u>
WELL NO: <u>NW-3</u>	SAMPLE ID: <u>FA 23685-15</u> DATE: <u>4/15/15</u>

PURGING DATA

WELL DIAMETER (inches): <u>1</u>	TUBING DIAMETER (inches): <u>1/4</u>	WELL SCREEN INTERVAL DEPTH: <u>10</u> feet to <u>20</u> feet	STATIC DEPTH TO WATER (feet): <u>3.68</u>	PURGE PUMP TYPE OR BAILER: <u>PP</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (<u>20</u> feet - <u>3.68</u> feet) X <u>0.04</u> gallons/foot = <u>0.65</u> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>5</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>11</u>	PURGING INITIATED AT: <u>1145</u>	PURGING ENDED AT: <u>1202</u>	TOTAL VOLUME PURGED (gallons): <u>1.15</u>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVE D OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	(ODOR describe)	ORP (Mv)
1156	0.75	0.75	0.048	10.5	5.01	20.83	124	11.5	0.90	Clear	None	229.2
1159	0.20	0.95	↓	10.15	4.96	20.89	119	11.4	0.95	11	11	231.8
1202	0.20	1.15	↓	10.24	4.95	20.85	120	11.4	0.96	11	11	232.5

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>R. Todd Feltner (GF)</u>				SAMPLER(S) SIGNATURE(S): <u>R. Todd Feltner</u>				SAMPLING INITIATED AT: <u>1203</u>		SAMPLING ENDED AT: <u>1206</u>	
PUMP OR TUBING DEPTH IN WELL (feet): <u>11</u>				TUBING MATERIAL CODE: <u>HDPE</u>		FIELD-FILTERED: Y <u>(N)</u>		Filtration Equipment Type: _____			
FIELD DECONTAMINATION: PUMP Y <u>(N)</u> TUBING Y <u>(N)</u> <u>(replaced)</u>				DUPLICATE: Y <u>(N)</u>							
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
<u>8515</u>	<u>3</u>	<u>CG</u>	<u>40mL</u>	<u>HCL</u>	<u>-</u>	<u><2</u>	<u>8260</u>	<u>RFPP</u>	<u><100</u>		
<u>↓</u>	<u>1</u>	<u>PE</u>	<u>250mL</u>	<u>HNO3</u>	<u>-</u>	<u><2</u>	<u>6010</u>	<u>APP</u>	<u><1000</u>		

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 West Savannah Ave Valdosta GA	
WELL NO: MW-8	SAMPLE ID: FA23285-16	DATE: 4/15/15	

PURGING DATA

WELL DIAMETER (inches):	1	TUBING DIAMETER (inches):	1.75	WELL SCREEN INTERVAL DEPTH:	10 feet to 20 feet	STATIC DEPTH TO WATER (feet):	4.30	PURGE PUMP TYPE OR BAILER:	
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (20 \text{ feet} - 4.30 \text{ feet}) \times 0.04 \text{ gallons/foot} = 0.63 \text{ gallons}$									
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$									
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	5	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	5.5	PURGING INITIATED AT:	1380	PURGING ENDED AT:	1341	TOTAL VOLUME PURGED (gallons):	1.4

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

RTJ

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 West Savannah Avenue Valdosta GA	
WELL NO: mw-11	SAMPLE ID: FA23685-17	DATE: 4/15/15	

PURGING DATA

WELL DIAMETER (inches):	1	TUBING DIAMETER (inches):	4	WELL SCREEN INTERVAL DEPTH:	10 feet to 20 feet	STATIC DEPTH TO WATER (feet):	2.48	PURGE PUMP TYPE OR BAILER:	PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)									
= (20 feet - 2.48 feet) X 0.04 gallons/foot = 0.70 gallons									
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)									
= gallons + (gallons/foot X feet) + gallons = gallons									

[illegible]

SAMPLING DATA

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES. 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
15/04/05	0800	DO	D _{I/F20}	100.1/100.0		Yes	Cont	RTF
		pH	10	10.02/10.00				
		pH	7	7.01/7.00				
		pH	4	3.99/4.00				
		cond	2764	2771/2764				
		cond	100	101/100				
		turb	10	9.96/10.00				
		turb	1	0.98/1.00				
15/04/05	1520	DO	D _{I/F20}	100.0		Yes	Cont/Finel	RTF
		pH	10	10.02				
		pH	7	7.01				
		pH	4	4.00				
		cond	2764	2766				
		cond	100	101				
		turb	10	9.98				
		turb	1	0.99				

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKER/MODEL#) YSI Pro Plus

INSTRUMENT # 10C701377

PARAMETER: [check only one] *LaMotte 2020c*

SN - ME 14370

☐ TEMPERATURE

SALINITY

☒ 20H

☐ ORP

TURBIDITY

☐ RESIDUAL CI☒ DO☐ OTHER

STANDARDS: [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A

Standard B

Standard C

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
15/04/14	1345	DO	12.0	97.8/100.0		Yes	INIT	DRD
		PH	7.0	6.87/7.0				
		PH	10.0	9.87/10.0				
		PH	4.0	3.97/4.0				
		Cond	2764	2681/2764				
		Cond	84	87/84				
		Turb	0.0	0.0/0.0				
		Turb	10.0	9.91/10.0				
15/04/14	1550	PH	10.0	9.98/10.0		NO	CONT	DRD
		PH	4.0	4.01/4.0				
		Cond	2764	2751/2764				
		Cond	84	84/84				
		Turb	0.0	0.0/0.0				
		Turb	10.0	10.0/10.0				

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKER/MODEL#) VSI Pro Plus

INSTRUMENT # 106701377

PARAMETER: [check only one] *La Motte 2020e*

SN-ME/4370

☐ TEMPERATURE

☒ CONDUCTIVITY☐ SALINITY

☒ pH

☐ ORP

☒ TURBIDITY

☐ RESIDUAL CI☒ DO☐ OTHER

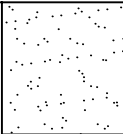
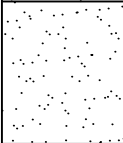
STANDARDS: [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A

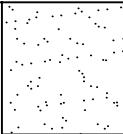
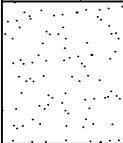
Standard B

Standard C

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
15/04/15	0800	AT 00 DT H2O	DT H2O	98.2/100.0		yes	cont	DRD
		PH	10.0	9.95/10.0		↓	↓	↓
		PH	4.0	4.10/4.0		↓	↓	↓
		Cond	2764	2789/2764		↓	↓	↓
		Cond	84	79/84		↓	↓	↓
		Turb	0.0	0.0/0.0		↓	↓	↓
		Turb	10.0	10.0/10.0		↓	↓	↓
15/04/15	1230	PH	10.0	9.98/10.0		NO	Post	DRD
		PH	4.0	3.91		↓	↓	↓
		Cond	2764	2759		↓	↓	↓
		Cond	84	81		↓	↓	↓
		Turb	0.0	0.0		↓	↓	↓
		Turb	10.0	10.0		↓	↓	↓

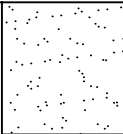
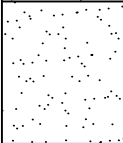
SOIL BORING LOG			BORING NO. SB-1
LOCATION TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA		WATER LEVEL MEASURED N/A	PROJECT NUMBER 57524.018
SCIENTIST Todd Falkner	SAMPLE INTERVAL CONTINUOUS	SAMPLE TYPE Soil	TOTAL DEPTH 4.0 Feet
DRILLER Dan Dennis	DRILLING CONTRACTOR Gannett Fleming	DRILLING METHOD Hand Auger	DATE COMPLETED 4/14/15
		LITHOLOGY	
Land Surface			
1		SAND, Fine-Grained, Dk. Brown/Black. Dry	
2		SAND, Fine-Grained, Gray, Moist	
3			
4			

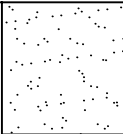
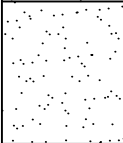
Feet Below Land Surface

SOIL BORING LOG			BORING NO. SB-2
LOCATION TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA		WATER LEVEL MEASURED N/A	PROJECT NUMBER 57524.018
SCIENTIST Todd Falkner	SAMPLE INTERVAL CONTINUOUS	SAMPLE TYPE Soil	TOTAL DEPTH 4.0 Feet
DRILLER Dan Dennis	DRILLING CONTRACTOR Gannett Fleming	DRILLING METHOD Hand Auger	DATE COMPLETED 4/14/15
		LITHOLOGY	
Land Surface			
1		SAND, Fine-Grained, Dk. Brown/Black. Dry	
2		SAND, Fine-Grained, Gray, Moist	
3			
4			

Feet Below Land Surface

SOIL BORING LOG			BORING NO. SB-3
LOCATION TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA		WATER LEVEL MEASURED N/A	PROJECT NUMBER 57524.018
SCIENTIST Todd Falkner	SAMPLE INTERVAL CONTINUOUS	SAMPLE TYPE Soil	TOTAL DEPTH 4.0 Feet
DRILLER Dan Dennis	DRILLING CONTRACTOR Gannett Fleming	DRILLING METHOD Hand Auger	DATE COMPLETED 4/14/15
		LITHOLOGY	
Land Surface			
1		SAND, Fine-Grained, Dk. Brown/Black. Dry	
2		SAND, Fine-Grained, Gray, Moist	
3			
4			
Feet Below Land Surface			

SOIL BORING LOG			BORING NO. SB-4
LOCATION TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA		WATER LEVEL MEASURED N/A	PROJECT NUMBER 57524.018
SCIENTIST Todd Falkner	SAMPLE INTERVAL CONTINUOUS	SAMPLE TYPE Soil	TOTAL DEPTH 4.0 Feet
DRILLER Dan Dennis	DRILLING CONTRACTOR Gannett Fleming	DRILLING METHOD Hand Auger	DATE COMPLETED 4/14/15
		LITHOLOGY	
Land Surface			
1		SAND, Fine-Grained, Dk. Brown/Black. Dry	
2		SAND, Fine-Grained, Gray, Moist	
3			
4			
Feet Below Land Surface			

SOIL BORING LOG			BORING NO. SB-5
LOCATION TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA		WATER LEVEL MEASURED N/A	PROJECT NUMBER 57524.018
SCIENTIST Todd Falkner	SAMPLE INTERVAL CONTINUOUS	SAMPLE TYPE Soil	TOTAL DEPTH 4.0 Feet
DRILLER Dan Dennis	DRILLING CONTRACTOR Gannett Fleming	DRILLING METHOD Hand Auger	DATE COMPLETED 4/14/15
		LITHOLOGY	
Land Surface			
1		SAND, Fine-Grained, Dk. Brown/Black. Dry	
2		SAND, Fine-Grained, Gray, Moist	
3			
4			
Feet Below Land Surface			

GROUNDWATER SAMPLING LOG

SITE NAME: TNR Valdosta	SITE LOCATION: Valdosta GA
WELL NO: MW-10	SAMPLE ID: FA28653-1 DATE: 10/19/15

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 35 feet to 40 feet	STATIC DEPTH TO WATER (feet): 7.26	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (40 feet - 7.26 feet) X 0.16 gallons/foot = 5.24 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + (_____ gallons/foot X _____ feet) + _____ gallons = _____ gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 9	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 9	PURGING INITIATED AT: 1420	PURGING ENDED AT: 1536	TOTAL VOLUME PURGED (gallons): 5.68

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1530	5.24	5.24	0.074	7.44	4.59	23.43	99	71.7	2.49	clear	None
1533	0.22	5.46	↓	7.44	4.57	23.43	99	71.9	2.49	ll	ll
1536	0.22	5.68	↓	7.44	4.56	23.43	99	71.8	2.51	ll	ll

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Darin Myers / TNR (CG)				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: 1537		SAMPLING ENDED AT: 1540	
PUMP OR TUBING DEPTH IN WELL (feet): 9				TUBING MATERIAL CODE: HDPE		FIELD-FILTERED: Y ☒ (N)		FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP Y ☒ (N)				TUBING Y ☒ (N) (replaced)		DUPLICATE: Y ☒ (N)				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
53-1	3	CG	40mL	HCL	-	<2	8260	APP	<40	
↓	1	PE	250mL	HNO3	-	<2	6010 AS	APP	<1000	

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: Valdosta GA	
WELL NO: MW-1DD	SAMPLE ID: FA 28653-2		DATE: 10/19/15

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	$\frac{1}{4}$	WELL SCREEN INTERVAL DEPTH: 70 feet to 5 feet	STATIC DEPTH TO WATER (feet): 35.40	PURGE PUMP TYPE OR BAILER:	PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (75 \text{ feet} - 35.40 \text{ feet}) \times 0.16 \text{ gallons/foot} = 6.34 \text{ gallons}$							
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$							

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 37	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 73	PURGING INITIATED AT: 1440	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
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[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>(GF) Darin Myers / Todd Falkner</i>		SAMPLER(S) SIGNATURE(S): <i>L. [Signature] Darin D. Myers</i>		SAMPLING INITIATED AT: <i>1545</i>	SAMPLING ENDED AT: <i>1548</i>
PUMP OR TUBING DEPTH IN WELL (feet): <i>75</i>		TUBING MATERIAL CODE: <i>HDPE</i>		FIELD-FILTERED: Y <i>(N)</i>	FILTER SIZE: _____ µm
FIELD DECONTAMINATION: PUMP Y <i>(N)</i>		TUBING Y <i>(N (replaced))</i>		DUPLICATE: Y <i>(N)</i>	

[illegible]

REMARKS:

Well is going dry dirty purging

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally, ± 5 NTU or $\pm 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta	SITE LOCATION: 2000 west Savannah Ave Valdosta GA
WELL NO: mw - 1R	SAMPLE ID: FA28653-3 DATE: 10/20/19

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 6 feet to 20 feet	STATIC DEPTH TO WATER (feet): 5.67	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (20 feet - 5.67 feet) X 0.16 gallons/foot = 2.29 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 7	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 7	PURGING INITIATED AT: 0815	PURGING ENDED AT: 0851	TOTAL VOLUME PURGED (gallons): 2.75
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TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
0845	2.29	2.29	0.0769	5.92	4.92	24.0	334.6	2.7	3.91	clear	chem
0848	0.23	2.52	↓	5.92	4.91	24.0	334.3	2.5	3.85	"	"
0851	0.23	2.75	↓	5.92	4.90	24.0	333.4	2.4	3.81	"	"

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: R Todd Baker / Davis Myers	SAMPLER(S) SIGNATURE(S): R Todd Baker / Davis Myers	SAMPLING INITIATED AT: 0852	SAMPLING ENDED AT: 0855
PUMP OR TUBING DEPTH IN WELL (feet): 7	TUBING MATERIAL CODE: HDPE	FIELD-FILTERED: Y ☒ NO	FILTER SIZE: _____ μm
FIELD DECONTAMINATION: PUMP Y ☒ NO TUBING Y ☒ NO (replaced)		DUPLICATE: Y ☒ NO	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
53-3	3	CG	40mL	HCL	-	6.2	8260	APP	260
↓	1	PE	250mL	HNO3	-	6.2	6010 AS	APP	1000

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TNR Valdosta		SITE LOCATION: Valdosta GA	
WELL NO. MW2R	SAMPLE ID: FA282534		DATE: 10/20/15

PURGING DATA

WELL DIAMETER (inches): <u>2"</u>	TUBING DIAMETER (inches): <u>1 1/4</u>	WELL SCREEN INTERVAL DEPTH: <u>10</u> feet to <u>20</u> feet	STATIC DEPTH TO WATER (feet): <u>5.42</u>	PURGE PUMP TYPE OR BAILER: <u>PP</u>
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WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (feet - feet) X 14.58 gallons/foot = 2.33 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME										
(only fill out if applicable)										
=	gallons	+	(	gallons/foot	X	feet)	+	gallons	=	gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	71	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	71	PURGING INITIATED AT:	0836	PURGING ENDED AT:	0928	TOTAL VOLUME PURGED (gallons):	2.60
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[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: (GC) Dash Myers / Todd Falkner	SAMPLER(S) SIGNATURE(S): L. Cook / D. D. Dm	SAMPLING INITIATED AT: 0929	SAMPLING ENDED AT: 0931
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PUMP OR TUBING DEPTH IN WELL (feet):	7'	TUBING MATERIAL CODE: HDPE	FIELD-FILTERED: Y <u>N</u> Filtration Equipment Type:	FILTER SIZE: _____ μm
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FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced) DUPLICATE: Y N

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: Valdosta GA	
WELL NO: mw-14	SAMPLE ID: FA28653-5	DATE: 10/20/15	

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	1/4	WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet	STATIC DEPTH TO WATER (feet):	6.58	PURGE PUMP TYPE OR BAILER:	PP
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WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

(only fill out if applicable)

$$= (20 \text{ feet} - 6.58 \text{ feet}) \times 0.16 \text{ gallons/foot} = 2.15 \text{ gallons}$$

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME

(only fill out if applicable)

$$= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$$

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 8	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8	PURGING INITIATED AT: 0925	PURGING ENDED AT: 0953	TOTAL VOLUME PURGED (gallons): 2.73
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[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: (GC) Darin Myers / Todd Feltner	SAMPLER(S) SIGNATURE(S): L. Feltner / Devin D. Myers	SAMPLING INITIATED AT: 0954	SAMPLING ENDED AT: 0957
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PUMP OR TUBING DEPTH IN WELL (feet):	8	TUBING MATERIAL CODE:	HDPE	FIELD-FILTERED: Y ☒ N ☐	FILTER SIZE: _____ μm
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FIELD DECONTAMINATION:	PUMP	Y	N	TUBING	Y	N (replaced)	DUPLICATE:	Y	N
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[illegible]

REMARKS:

MATERIAL CODES:	AG = Amber Glass;	CG = Clear Glass;	PE = Polyethylene;	PP = Polypropylene;	S = Silicone;	T = Teflon;	O = Other (Specify)
SAMPLING EQUIPMENT CODES:	APP = After Peristaltic Pump;	B = Bailer;	BP = Bladder Pump;	ESP = Electric Submersible Pump;			
	RFPP = Reverse Flow Peristaltic Pump;	SM = Straw Method (Tubing Gravity Drain);	O = Other (Specify)				

STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:

pH: ± 0.2 units Temperature: $\pm 0.2^{\circ}\text{C}$ Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TNR Valdosta	SITE LOCATION: Valdosta GA
WELL NO: MW-4	SAMPLE ID: F28053-L DATE: 10/20/15

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet	STATIC DEPTH TO WATER (feet): 5.95	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (20 feet - 5.95 feet) X 0.04 gallons/foot = 0.56 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 7	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 9	PURGING INITIATED AT: 1015	PURGING ENDED AT: 1029	TOTAL VOLUME PURGED (gallons): 0.98

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1023	0.56	0.56	0.07	7.85	6.71	25.5	458.4	9.7	5.50	clear	none
1026	0.21	0.77	↓	7.86	6.71	25.5	452.2	8.0	5.73	"	"
1029	0.21	0.98	↓	7.87	6.71	25.5	449.8	6.7	5.42	"	"

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Darin Myers / TNR (CG)				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: 1030		SAMPLING ENDED AT: 1033	
PUMP OR TUBING DEPTH IN WELL (feet): 9				TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y (N)		FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)				DUPLICATE: Y (N)						
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
53-4	3	CG	40mL	HCL	-	<2	8260	APP	<40	
↓	1	PE	250mL	HNO3	-	<2	6010 AS	APP	<1000	

REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TNR Valdosta		SITE LOCATION: Valdosta GA	
WELL NO: MW15	SAMPLE ID: FA28653-7		DATE: 10/2/15

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet	STATIC DEPTH TO WATER (feet): 4.87	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (\text{20 feet} - \text{4.87 feet}) \times \text{15.13 gallons/foot} = \text{2.42 gallons}$				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	6'	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	7'	PURGING INITIATED AT:	0945	PURGING ENDED AT:	1031	TOTAL VOLUME PURGED (gallons)	2.26
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[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>(GF)</i> <i>Darin Myers / Todd Falkner</i>		SAMPLER(S) SIGNATURE(S): <i>L. [Signature] D. [Signature]</i>		SAMPLING INITIATED AT: <i>1032</i>	SAMPLING ENDED AT: <i>1034</i>
PUMP OR TUBING DEPTH IN WELL (feet): <i>7.1</i>		TUBING MATERIAL CODE: <i>HDPE</i>		FIELD-FILTERED: Y <i>(N)</i>	FILTER SIZE: _____ µm
FIELD DECONTAMINATION: PUMP Y <i>(N)</i>		TUBING Y <i>(N (replaced))</i>		DUPLICATE: Y <i>(N)</i>	

[illegible]

REMARKS:

Sample # 1032

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally, ± 5 NTU or $\pm 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TNR Valdosta		SITE LOCATION: Valdosta GA	
WELL NO. MW10	SAMPLE ID: FA28653-8		DATE: 10/20/15

PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet	STATIC DEPTH TO WATER (feet): 4.53	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (20 feet - 4.53 = 15.47 feet) X 0.04 gallons/foot = 0.62 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 6'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 7'	PURGING INITIATED AT: 1050	PURGING ENDED AT: 1111	TOTAL VOLUME PURGED (gallons): 0.84

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

[illegible]

REMARKS

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings < 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION 2000 W Savannah Ave Valdosta GA	
WELL NO: MW-3	SAMPLE ID: FA28653-9		DATE: 10/20/15

PURGING DATA

WELL DIAMETER (inches):	1	TUBING DIAMETER (inches):	4	WELL SCREEN INTERVAL DEPTH:	10 feet to 20 feet	STATIC DEPTH TO WATER (feet):	364	PURGE PUMP TYPE OR BAILER:	18
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (20 \text{ feet} - 364 \text{ feet}) \times 0.16 \text{ gallons/foot} = 0.65 \text{ gallons}$									
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$									
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	5	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	11	PURGING INITIATED AT:	1108	PURGING ENDED AT:	1118	TOTAL VOLUME PURGED (gallons):	1.31

[illegible]

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

[illegible]

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: Valdosta GA	
WELL NO. Water Well (spicket)	SAMPLE ID: FA25653-10		DATE: 10/20/15

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>Darin Myers / Todd Falkner</i>	(GF)	SAMPLER(S) SIGNATURE(S): <i>L. [Signature]</i>	SAMPLING INITIATED AT:	<i>1142</i>	SAMPLING ENDED AT:	<i>1145</i>			
PUMP OR TUBING DEPTH IN WELL (feet): na.	TUBING MATERIAL CODE: HDPE	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE:	_____ µm					
FIELD DECONTAMINATION: PUMP Y N	TUBING Y N (replaced)	DUPLICATE:	Y N						
SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<i>S3-0</i>	<i>3</i>	<i>CG</i>	<i>90ML</i>	<i>HCL</i>	<i>-</i>	<i><2</i>	<i>8260</i>	<i>APP</i>	<i><40</i>
<i>+ </i>	<i>1</i>	<i>PE</i>	<i>250ML</i>	<i>HNO3</i>	<i>-</i>	<i><2</i>	<i>6010 AS</i>	<i>APP</i>	<i><1000</i>
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally, ± 5 NTU or $\pm 10\%$ (whichever is greater)

SITE NAME: TNR Valdosta		SITE LOCATION: Valdosta GA	
WELL NO: MW-5	SAMPLE ID: FA28653-11		DATE: 10/20/15

WELL DIAMETER (inches): 1"	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet	STATIC DEPTH TO WATER (feet): 2.48	PURGE PUMP TYPE OR BAILER: PP
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EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME									
(only fill out if applicable)									
	=	gallons + (	gallons/foot X	feet) +	gallons =	gallons			

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 4	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 4	PURGING INITIATED AT: 1245	PURGING ENDED AT: 1309	TOTAL VOLUME PURGED (gallons): 0.96
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WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLED BY (PRINT) / AFFILIATION: (GF) Dash Myers / Todd Walker	SAMPLER(S) SIGNATURE(S): [Signature] [Signature]	SAMPLING INITIATED AT: 1310	SAMPLING ENDED AT: 1313
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PUMP OR TUBING DEPTH IN WELL (feet):	5	TUBING MATERIAL CODE:	HDPE	FIELD-FILTERED: Y ☒ N ☐	FILTER SIZE: _____ µm
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FIELD DECONTAMINATION:	PUMP	Y	N	TUBING	Y	N (replaced)	DUPLICATE:	Y	N
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REMARKS

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally, $+ 5$ NTU or $+ 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TNR Valdosta		SITE LOCATION: Valdosta GA	
WELL NO: mw-5D	SAMPLE ID: FA28653-12		DATE: 10/20/15

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	$\frac{1}{4}$	WELL SCREEN INTERVAL DEPTH: 25 feet to 40 feet	STATIC DEPTH TO WATER (feet):	5.51	PURGE PUMP TYPE OR BAILER:	PP	
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (40 feet - 5.51 feet) X 0.16 gallons/foot = 5.52 gallons									
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons									
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	7.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	7.5	PURGING INITIATED AT:	1245	PURGING ENDED AT:	1336	TOTAL VOLUME PURGED (gallons):	6.26

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Darsh Myers / Todd Falkner				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: 1337	SAMPLING ENDED AT: 1339	
PUMP OR TUBING DEPTH IN WELL (feet): 7.5				TUBING MATERIAL CODE: HDPE		FIELD-FILTERED: Y ☒ N ☐	FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP Y ☒ N ☐ TUBING Y ☒ N ☐ (replaced)						DUPLICATE: Y ☒ N ☐			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
53-12	3	CG	40mL	HCL	-	<2	8260	APP	<40
↓	1	PC	250mL	NaOH	-	<2	6010 AS	APP	<400

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump;
 RFPP = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally, $+ 5$ NTU or $+ 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: Valdosta, GA 2000 W Savannah Ave	
WELL NO: MW-6	SAMPLE ID: FA2865313	DATE: 10/20/15	

PURGING DATA

WELL DIAMETER (inches):	1	TUBING DIAMETER (inches):	1/4	WELL SCREEN INTERVAL DEPTH: 17 feet to 20 feet	STATIC DEPTH TO WATER (feet):	2.99	PURGE PUMP TYPE OR BAILER:	PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)								
= (20 feet - 17.01 feet) X 0.04 gallons/foot = 0.68 gallons								
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)								
= gallons + (gallons/foot X feet) + gallons = gallons								

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15'	PURGING INITIATED AT: 1326	PURGING ENDED AT: 1355	TOTAL VOLUME PURGED (gallons): 0.87
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[illegible]

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: (GF) Darin Myers / Todd Falkner	SAMPLER(S) SIGNATURE(S): L. Todd / Darin D. Myers	SAMPLING INITIATED AT: 1356	SAMPLING ENDED AT: 1358
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PUMP OR TUBING DEPTH IN WELL (feet):	15'	TUBING MATERIAL CODE:	HDPE	FIELD-FILTERED: Y <u>N</u>	FILTER SIZE: _____ μm
Filtration Equipment Type:					

FIELD DECONTAMINATION:	PUMP	Y	N	TUBING	Y	N (replaced)	DUPLICATE:	Y	N
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SAMPLE CONTAINER SPECIFICATION	SAMPLE PRESERVATION	INTENDED	SAMPLING	SAMPLE PUMP
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SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	ANALYSIS AND/OR METHOD	EQUIPMENT CODE	FLOW RATE (mL per minute)
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53-13	3	CG	40ML	HCL	-	CZ	8260	APP	C4A
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~~Ag 250mL HNO₃ - 62 600 Ag APP 61000~~[illegible][illegible][illegible][illegible]

REMARKS:									
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MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;

RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally, ± 5 NTU or $\pm 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta	SITE LOCATION: 2000 W Savannah Ave Valdosta FL
WELL NO: mw-12	SAMPLE ID: PT28653-14
	DATE: 10/20/15

PURGING DATA

WELL DIAMETER (inches): <u>2</u>		TUBING DIAMETER (inches): <u>1/4</u>		WELL SCREEN INTERVAL DEPTH: <u>10</u> feet to <u>20</u> feet		STATIC DEPTH TO WATER (feet): <u>2.65</u>		PURGE PUMP TYPE OR BAILER: <u>11</u>			
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (<u>20</u> feet - <u>2.65</u> feet) X <u>0.16</u> gallons/foot = <u>2.78</u> gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + (_____ gallons/foot X _____ feet) + _____ gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>4</u>		FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>5</u>		PURGING INITIATED AT: <u>1:350</u>		PURGING ENDED AT: <u>1:26</u>		TOTAL VOLUME PURGED (gallons): <u>3.34</u>			
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
<u>1:20</u>	<u>2.78</u>	<u>2.78</u>	<u>0.09266</u>	<u>3.78</u>	<u>4.74</u>	<u>22.4</u>	<u>113.4</u>	<u>18.1</u>	<u>18.1</u>	<u>slight yellow</u>	<u>None</u>
<u>1:23</u>	<u>0.28</u>	<u>3.06</u>	<u>↓</u>	<u>3.78</u>	<u>4.75</u>	<u>22.4</u>	<u>113.1</u>	<u>18.2</u>	<u>19.7</u>	<u>11</u>	<u>11</u>
<u>1:26</u>	<u>0.28</u>	<u>3.34</u>		<u>3.78</u>	<u>4.76</u>	<u>22.4</u>	<u>112.8</u>	<u>18.2</u>	<u>19.9</u>	<u>11</u>	<u>11</u>
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

SAMPLING DATA

[illegible]

STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

SITE NAME: TNR Valdosta		SITE LOCATION: Valdosta GA	
WELL NO: MW41	SAMPLE ID: FA28653-15		DATE: 10/20/15

WELL DIAMETER (inches):	1	TUBING DIAMETER (inches):	1 1/4	WELL SCREEN INTERVAL DEPTH: 10 feet to 30 feet	STATIC DEPTH TO WATER (feet): 3.11	PURGE PUMP TYPE OR BAILER: PP
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(only fill out if applicable)

$$= (20 \text{ feet} - 3.11 \text{ feet}) \times 0.04 \text{ gallons/foot} = 0.68 \text{ gallons}$$

(only fill out if applicable)

$$= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$$

INITIAL PUMP OR TUBING
DEPTH IN WELL (feet):

FINAL PUMP OR TUBING
DEPTH IN WELL (feet): 4'

PURGING
INITIATED AT: 1400

PURGING
ENDED AT: 1433

TOTAL VOLUME
PURGED (gallons): 0.92

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02: 1" = 0.04: 1.25" = 0.06: 2" = 0.16: 3" = 0.37: 4" = 0.65: 5" = 1.02: 6" = 1.47: 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./Ft.) 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLED BY (PRINT) / AFFILIATION: (GF) Darin Myers / Todd Falkner	SAMPLER(S) SIGNATURE(S): [Signature] D.D. [Signature]	SAMPLING INITIATED AT: 1434	SAMPLING ENDED AT: 1436
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PUMP OR TUBING
DEPTH IN WELL (feet):

TUBING MATERIAL CODE: HDPE

SAMPLING INITIATED AT: 1434

SAMPLING
ENDED AT: 1436

PUMP OR TUBING
DEPTH IN WELL (feet):

TUBING MATERIAL CODE: HDPE

FIELD-FILTERED: Y N
Filtration Equipment Type:

FILTER SIZE: μm

FIELD DECONTAMINATION:

PUMP

TUBIN

N (répl

DUPLICATE: Y

[illegible]

REMARKS

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally, ± 5 NTU or $\pm 10\%$ (whichever is greater)

GROUNDWATER SAMPLING LOG

SITE NAME: TNR Valdosta		SITE LOCATION: Valdosta GA	
WELL NO: MW-8	SAMPLE ID: FA28653-16		DATE: 10/20/15

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:						SAMPLER(S) SIGNATURE(S)			SAMPLING INITIATED AT:	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):						TUBING MATERIAL CODE:	FIELD-FILTERED:	Filtration Equipment Type:	FILTER SIZE: _____ µm	
FIELD DECONTAMINATION:						PUMP Y	TUBING Y	DUPLICATE:		
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
53-16	3	CG	40 mL	HCL	-	<2	8260	APP	<400	
		PE	250 mL	HNO₃	-	<2	6010 As	APP	<7000	
									(D.)	
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally, $+ 5$ NTU or $\pm 10\%$ (whichever is greater)

SITE NAME: TMR Valdosta		SITE LOCATION: Valdosta GA	
WELL NO: MW-12	SAMPLE ID: FA 28653-17		DATE: 10/20/15

WELL DIAMETER (inches): <u>2</u>	TUBING DIAMETER (inches): <u>1 1/4</u>	WELL SCREEN INTERVAL DEPTH: <u>10</u> feet to <u>25</u> feet	STATIC DEPTH TO WATER (feet): <u>3.25</u>	PURGE PUMP TYPE OR BAILER. <u>PP</u>
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EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME									
(only fill out if applicable)									
	=	gallons + (	gallons/foot X	feet) +	gallons =	gallons			

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
5	5	1445	1524	3.16

[illegible]

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLED BY (PRINT) / AFFILIATION: (GF) Dash Myers / Toledo Police	SAMPLER(S) SIGNATURE(S): [Signature] / [Signature]	SAMPLING INITIATED AT: 1525	SAMPLING ENDED AT: 1537
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PUMP OR TUBING DEPTH IN WELL (feet):	5	TUBING MATERIAL CODE:	HDPE	FIELD-FILTERED: Y ☒ N ☐	FILTER SIZE: _____ µm
Filtration Equipment Type:					

FIELD DECONTAMINATION:	PUMP	Y	N	TUBING	Y	N (replaced)	DUPLICATE:	Y	N
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[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally, $+ 5$ NTU or $+ 10\%$ (whichever is greater)

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS
 INSTRUMENT (MAKER/MODEL#) YSI 556 INSTRUMENT # 130101142
 PARAMETER: [check only one] Laureate 2020 SN-722-0811

☐ TEMPERATURE ☒ CONDUCTIVITY ☐ SALINITY ☒ pH ☐ ORP
☒ TURBIDITY ☐ RESIDUAL Cl ☒ DO ☐ OTHER _____

STANDARDS: [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A pH 10 lot 140820c exp 3/16 pH 7 lot 1410088 exp 4/16 pH 4 lot 141125B exp 12/15

Standard B Cond 2764 lot 140811c exp 8/16 Cond 84 lot 5AB719 exp 2/16

Standard C 10 NTU lot C576942 exp 8/16 0 NTU lot 75822 exp 6/16

DATE (yy/mm/dd)	TIME (hr:min)	STD. (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INT, CONT)	SAMPLER INITIALS
15/10/19	1400	DO	DT 15.0	100.2/100.0		Yes	Init	DM
		pH	10	9.97/10.00				
		pH	7	6.99/7.00				
		pH	4	4.01/7.00				
		Cond	2764	2770/2764				
		Cond	84	85/84				
		turb	10	10.02/10.00				
		turb	0	0/0				
15/10/19	0745	DO	DT 15.0	100.0		Yes	cont	DM
		pH	10	9.99				
		pH	7	7.00				
		pH	4	4.01				
		Cond	2764	2766				
		Cond	84	83				
		turb	10	9.98				
		turb	0	0				

Equipment calibrated by R. Todd Fulkner of GF, Environmental
 Scientist and lead in the field

13D101142

INSTRUMENT #

Like the 2020 we

5U-722-0811

☐ ORP☐ OTHER

Standard C 10NTU lot C576942 exp 8/16 6NTU 0475822 exp 6/16

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT., CONT.)	SAMPLER INITIALS
15/10/20	1600	D _O	pH	100.2		Pes	Cont / Final	DM
↓	↓	pH	10	9.97		↓		↓
		pH	7	6.87				
		pH	4	3.97				
		cond	2764	2762				
		cond	84	82				
		turb	10	9.96				
		turb	0	0				

Equipment calibrated by Dr Todd Fulkner of GF, Environmental Scientist and head in the field

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKER/MODEL#) YSI Pro plusINSTRUMENT # 10D101442PARAMETER: [check only one] Remotely 2020CSU4134-024☐ TEMPERATURE☒ CONDUCTIVITY☐ SALINITY☒ pH☐ ORP☒ TURBIDITY☐ RESIDUAL☒ DO☐ OTHER

STANDARDS: [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A pH 10 lot 140820C exp 3/16 pH 7 lot 1410088 exp 4/16 pH 4 lot 141125B exp 12/15Standard B Cond 2764 lot 140811C exp 8/16 Cond 84 lot 5A0719 exp 2/16Standard C 10 NTU lot C576942 exp 8/16 10 NTU lot 75822 exp 6/16

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
15/10/19	1400	DO	DI 4.00	100.1/100.0		YES	Init	RTE
		pH	10	10.04/10.00				
		pH	7	7.02/7.00				
		pH	4	4.02/4.00				
		Cond	2764	2771/2764				
		Cond	84	87/84				
		turb	10	9.97/10.00				
		turb	0	0/0				
15/10/20	0745	DO	DI 4.00	100.0		YES	Cont	RTE
		pH	10	9.99				
		pH	7	7.01				
		pH	4	4.00				
		Cond	2764	2763				
		Cond	84	83				
		turb	10	10.01				
		turb	0	0				

equipment calibrated by RTE

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKER/MODEL#)	<u>YSI ProPlus</u>	INSTRUMENT #	<u>10D101442</u>
PARAMETER: [check only one]	<u>Unsat. 220mc</u>		<u>5N4034-0214</u>

Standard C 10NTU 104 C576942 exp 8/16 6NTU 0475822 exp 6/16

DATE (yy/mm/dd)	TIME (hr min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
15/10/20	1600	D-	PI 140	100.1		YES	Cont/Fail	ATE
		1H	60	9.97				
		1H	7	6.78				
		1H	4	3.97				
		Cond	2764	2762				
		Cond	84	83				
		turb	10	9.98				
		turb	0	0				

Equipment Calibrated by ATF

GROUNDWATER SAMPLING LOG

SITE NAME: <i>THR Valdosta</i>		SITE LOCATION: <i>2000 west Silvernash Avenue</i>	
WELL NO: <i>nw-1R</i>	SAMPLE ID: <i>FA32993-1</i>	DATE: <i>4/6/16</i>	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>R. Tall Fikner, Dan Dennis/GF</i>				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: <i>0842</i>		SAMPLING ENDED AT: <i>0845</i>		
PUMP OR TUBING DEPTH IN WELL (feet): <i>4.0</i>				TUBING MATERIAL CODE: <i>HDPE</i>			FIELD-FILTERED: Y <i>(N)</i> Filtration Equipment Type:		FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP Y <i>(N)</i> TUBING Y <i>(N replaced)</i>							DUPLICATE: Y <i>(N)</i>				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
<i>93-1</i>	<i>3</i>	<i>CG</i>	<i>40 mL</i>	<i>HCL</i>	<i>-</i>	<i><2</i>	<i>8260</i>	<i>APP</i>	<i><600</i>		
<i>↓</i>	<i>1</i>	<i>PE</i>	<i>250 mL</i>	<i>HNO3</i>	<i>-</i>	<i><2</i>	<i>Arsenic</i>	<i>APP</i>	<i><1000</i>		
REMARKS:											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 10\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta	SITE LOCATION: 2000 West Savannah Avenue
WELL NO: MW-100	SAMPLE ID: FA32993.2
	DATE: 4/6/16

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: A Tall Fikner, Dug Dunn's/GF				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: 0937	SAMPLING ENDED AT: 0942	
PUMP OR TUBING DEPTH IN WELL (feet): 49.5				TUBING MATERIAL CODE: HOPE	FIELD-FILTERED: Y N		FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced)						DUPLICATE: Y N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
93-2	3	CG	40 mL	HCL	-	<2	BZGO	ESP	<400
↓	1	PE	250 mL	HNO3	-	<2	Arsenic	ESP	<1000
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** $\pm 10\%$ $^{\circ}\text{C}$ **Specific Conductance:** $\pm 10\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: <u>THUR Valdosta</u>		SITE LOCATION: <u>2000 west Silverbrook Avenue</u>	
WELL NO: <u>MW-1 D</u>	SAMPLE ID: <u>FA 32993-3</u>		DATE: <u>4/6/16</u>

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION				SAMPLER(S) SIGNATURE(S)			SAMPLING INITIATED AT:	SAMPLING ENDED AT:	
A Tall Finner, Dan Dennis/GF				[Signature]			0852	0958	
PUMP OR TUBING DEPTH IN WELL (feet): 5.5				TUBING MATERIAL CODE: HDPE		FIELD-FILTERED: Y N	FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP [X] N TUBING Y [N (replaced)]							DUPLICATE: Y [N]		
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
93-3	3	CG	40 mL	HCL	-	<2	BZCO	CSP	<60
↓	1	PE	250 mL	HNO ₃	-	<2	Arsenic	ESP	<100
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 10\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta	SITE LOCATION: 2000 West Savannah Avenue
WELL NO: MW-15	SAMPLE ID: FA32913+4 DATE: 4/6/16

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet	STATIC DEPTH TO WATER (feet): 2.38	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (20 feet - 2.38 feet) X 0.16 gallons/foot = 2.82 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVE O ₂ OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	(ODOR describe)	ORP (Mv)
1049	2.82	2.82	0.1044	3.20	6.20	20.26	99	10.0	6.25	clear	none	143.9
1052	0.31	3.13	↓	3.20	6.24	20.25	99	9.9	6.18	"	"	143.2
1055	0.31	3.44	↓	3.20	6.21	20.28	100	9.7	6.39	"	"	142.7

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: R. Tall Fikar, Dan Davis/GF	SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>	SAMPLING INITIATED AT: 1056	SAMPLING ENDED AT: 1103
PUMP OR TUBING DEPTH IN WELL (feet): 4.5	TUBING MATERIAL CODE: HDPE	FIELD FILTERED: Y ☒ N ☐	FILTER SIZE: _____ μm
FIELD DECONTAMINATION: PUMP Y ☒ N ☐ TUBING Y ☒ N (replaced) ☐		DUPLICATE: Y ☒ N ☐	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
9348	3	CG	40mL	HCL	—	<2	8260		<60
↓	1	PE	250mL	HNO3	—	<2	Arsenic		<1000

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units Temperature: ± 10% °C Specific Conductance: ± 10% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: <u>THR Valdosta</u>		SITE LOCATION: <u>2000 west Silvernash Avenue</u>	
WELL NO: <u>MW-2R</u>	SAMPLE ID: <u>FA32993-S</u>	DATE: <u>4/6/16</u>	

PURGING DATA

WELL DIAMETER (inches): <u>2</u>	TUBING DIAMETER (inches): <u>4</u>	WELL SCREEN INTERVAL DEPTH: <u>10</u> feet to <u>20</u> feet	STATIC DEPTH TO WATER (feet): <u>2.57</u>	PURGE PUMP TYPE OR BAILER: <u>PP</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= (<u>20</u> feet - <u>2.57</u> feet) X <u>0.16</u> gallons/foot = <u>2.78</u> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= gallons + (gallons/foot X feet) + gallons = gallons				

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 10\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: <u>THR Valdosta</u>		SITE LOCATION: <u>2500 west Silvernash Avenue</u>	
WELL NO: <u>MW-4</u>	SAMPLE ID: <u>FA 32993-6</u>		DATE: <u>4/6/16</u>

PURGING DATA

[illegible]

SAMPLING DATA

[illegible]

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 10\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: <u>THR Valdosta</u>		SITE LOCATION: <u>2000 west Savannah Avenue</u>	
WELL NO: <u>mw-14</u>	SAMPLE ID: <u>FA32993-7</u>	DATE: <u>4/6/16</u>	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: R. Dale Ficker, Don Dennis/GF				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: 1152		SAMPLING ENDED AT: 1158	
PUMP OR TUBING DEPTH IN WELL (feet): 4.5				TUBING MATERIAL CODE: HDPE		FIELD-FILTERED: Y ☒ N			FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y ☒ N				TUBING Y ☒ N (replaced)			DUPLICATE: Y ☒ N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
937	3	CG	40 mL	HCL	—	<2	5260	APP	< 600	
4	1	PE	250 mL	HNO3	—	<2	Arsenic	APP	< 1000	
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units Temperature: $\pm 10\%$ °C Specific Conductance: $\pm 10\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings < 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2500 West Savannah Avenue	
WELL NO: mhw-10	SAMPLE ID: FA32993-8	DATE: 4/6/16	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Arlene Kiker, Dan Dennis/GF				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: 1333		SAMPLING ENDED AT: 1338	
PUMP OR TUBING DEPTH IN WELL (feet): 4.8				TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y ☒ N ☐ Filtration Equipment Type:		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y ☒ N ☐ TUBING Y ☒ N (replaced)							DUPLICATE: Y ☒ N ☐			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
938	3	CG	40 mL	HCL	—	<2	5260	APP	<600	
↓	1	PE	250 mL	HNO3	—	<2	Arsenic	APP	<1000	
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 10\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: <u>TRK Valdosta</u>		SITE LOCATION: <u>2000 West Silvernash Avenue</u>	
WELL NO: <u>mw-3</u>	SAMPLE ID: <u>FA 32993-9</u>	DATE: <u>4/4/16</u>	

PURGING DATA

WELL DIAMETER (inches):	1	TUBING DIAMETER (inches):	$\frac{1}{4}$	WELL SCREEN INTERVAL DEPTH:	10 feet to 20 feet	STATIC DEPTH TO WATER (feet):	2.28	PURGE PUMP TYPE OR BAILER:	PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)									
= (20 feet - 2.28 feet) X 0.04 gallons/foot = 0.71 gallons									
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)									
= gallons + (gallons/foot X feet) + gallons = gallons									
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	2.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	8.0	PURGING INITIATED AT:	1338	PURGING ENDED AT:	1352	TOTAL VOLUME PURGED (gallons):	1.25

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 10\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: <u>TRK Valdosta</u>		SITE LOCATION: <u>2000 West Silvernash Avenue</u>	
WELL NO: <u>Water well</u>	SAMPLE ID: <u>FA 32993-10</u>	DATE: <u>4/6/16</u>	

PURGING DATA

WELL DIAMETER (inches): <i>NA</i>	TUBING DIAMETER (inches): <i>NA</i>	WELL SCREEN INTERVAL DEPTH: <i>NA</i> feet to <i>NA</i> feet	STATIC DEPTH TO WATER (feet): <i>NA</i>	PURGE PUMP TYPE OR BAILER: <i>NA</i>
--------------------------------------	--	---	--	---

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

(only fill out if applicable)

$$= (\text{ } \text{feet} - \text{ } \text{feet}) \times \text{ } \text{gallons/foot} = \text{ } \text{gallons}$$

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME

(only fill out if applicable)

$$= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$$

INITIAL PUMP OR TUBING
DEPTH IN WELL (feet):

FINAL PUMP OR TUBING
DEPTH IN WELL (feet):

PURGING
INITIATED AT: 1355

PURGING
ENDED AT: 1410

TOTAL VOLUME PURGED (gallons) **~26.25**

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02: 1" = 0.04: 1.25" = 0.06: 2" = 0.16: 3" = 0.37: 4" = 0.65: 5" = 1.02: 6" = 1.47: 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>R. Dale Fisker, Dura Dennis / GF</i>		SAMPLER(S) SIGNATURE(S): <i>R. Dale Fisker, Dura Dennis</i>		SAMPLING INITIATED AT: <i>1410</i>	SAMPLING ENDED AT: <i>1413</i>
PUMP OR TUBING DEPTH IN WELL (feet): <i>NA</i>		TUBING MATERIAL CODE: <i>NA</i>		FIELD-FILTERED: Y ☒ N ☐	FILTER SIZE: _____ μ m
FIELD DECONTAMINATION: PUMP Y N <i>NA</i>		TUBING Y <i>NA (replaced)</i> N <i>NA</i>		DUPLICATE: Y ☒ N ☐	

[illegible]

REMARKS: purged for 15 minutes from closest spigot, sampled off of spigot

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
 RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units Temperature: $\pm 10\%$ °C Specific Conductance: $\pm 10\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings < 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: <u>TRR Valdosta</u>		SITE LOCATION: <u>2000 West Silvernash Avenue</u>	
WELL NO: <u>Mw-8</u>	SAMPLE ID: <u>FA32993-11</u>	DATE: <u>4/6/16</u>	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>R. Tal Fikse, Dan Dennis/GF</i>				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: 1508	SAMPLING ENDED AT: 1515	
PUMP OR TUBING DEPTH IN WELL (feet): 65				TUBING MATERIAL CODE: HDPE	FIELD-FILTERED: Y ☒ N ☒ Filtration Equipment Type:		FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP Y ☒ N ☒				TUBING Y ☒ N (replaced)		DUPLICATE: Y ☒ N ☒			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
G311 ↓	3	CG	40 mL	HCL	-	<2	8260	APP	<400
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 10\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: <u>THUR Valdosta</u>		SITE LOCATION: <u>2000 west Silvernash Avenue</u>	
WELL NO: <u>mw-11</u>	SAMPLE ID: <u>FA3293-12</u>	DATE: <u>4/6/16</u>	

PURGING DATA

[illegible]

SAMPLING DATA

[illegible]

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units Temperature: $\pm 10\%$ °C Specific Conductance: $\pm 10\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: <i>THR Valdosta</i>	SITE LOCATION: <i>2000 west Silvernash Avenue</i>	
WELL NO: <i>mw-12</i>	SAMPLE ID: <i>FA32993-13</i>	DATE: <i>4/7/16</i>

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: A Tall Finner, Dan Dennis/GF				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: 0837		SAMPLING ENDED AT: 0840		
PUMP OR TUBING DEPTH IN WELL (feet): 3.5				TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y N Filtration Equipment Type:		FILTER SIZE: ____ µm		
FIELD DECONTAMINATION: PUMP Y N				TUBING Y N (replaced)			DUPLICATE: Y N				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
93-13	3	CG	40 mL	HCL	-	<2	5260	PP	<400		
REMARKS:											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 10\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 west Savannah Avenue	
WELL NO: mw-13	SAMPLE ID: FA32993-14	DATE: 4/7/16	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: A. Tall Finner, Dan Davis/GF				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: 085Z	SAMPLING ENDED AT: 0900	
PUMP OR TUBING DEPTH IN WELL (feet): 1.5				TUBING MATERIAL CODE: HDPE	FIELD-FILTERED: Y N Filtration Equipment Type:		FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced)						DUPLICATE: Y N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
93-14	3	CG	40 mL	HCL	-	<2	5260	APP	Cen
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 10\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: <u>TRR Valdosta</u>		SITE LOCATION: <u>2000 west Silvernash Avenue</u>	
WELL NO: <u>MW-5</u>	SAMPLE ID: <u>FA32993-15</u>	DATE: <u>4/7/16</u>	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: A. Tall Finner, Dana Dennis/GF				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: 0932	SAMPLING ENDED AT: 0937	
PUMP OR TUBING DEPTH IN WELL (feet): 3.0				TUBING MATERIAL CODE: HDPE	FIELD FILTERED: Y <u>N</u> Filtration Equipment Type:		FILTER SIZE: <u>2</u> µm		
FIELD DECONTAMINATION: PUMP Y <u>N</u>				TUBING Y <u>N (replaced)</u>		DUPLICATE: Y <u>N</u>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
93-15	3	CG	40 mL	HCL	-	<2	8260	APP	< 400
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.2 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 10\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 10 NTU

[illegible]

(MAKER/MODEL#) Y5I 05L

PARAMETER: *[check only one]*

☐ TEMPERATURE ☒ CONDUCTIVITY ☐ SALINITY ☒ pH ☐ ORP
☒ TURBIDITY ☐ RESIDUAL Cl ☒ DO ☐ OTHER _____

Standard A PH 10 lot 56H725 exp 8/17 PH 7 lot 56H5426 exp 8/17 PH 4 lot 59H467 exp 8/17

Standard B (cont) 1000 1045g H/1149 exp 8/16

Standard C for 0 NTU lot C472437 10 NTU C471805 exp 5/16

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
16/04/16	0725	DO	DT 11.2	100.8/100.0		Yes	cont	DED
		pH	10	10.04/10.00				
		pH	7	7.02/7.00				
		pH	4	4.01/4.00				
		cond	1000	1003/1000				
		turb	10	10.03/10.00				
		turb	0	0.0/0.0				
16/04/16	1525	DO	DT 11.2	100.4/100.0		Yes	Cont/Final	DRD
		pH	10	10.07/10.00				
		pH	7	7.04/7.00				
		pH	4	4.08/4.00				
		cond	1000	199/1000				
		turb	10	9.78/10.00				
		turb	0	0.0/0.0				

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
16/04/07	0730	DO	DF H ₂ O	100.4/100.0		Yes	cont	RTF
		pH	10	9.99/10.00				
		pH	7	6.99/7.00				
		pH	4	4.00/4.00				
		cond	1000	1010/1000				
		turb	10	10.02/10.00				
		turb	0	0.0/0.0				
16/04/07	1000	DO	DF H ₂ O	100.4/100.0		Yes	cont/fin	RTF
		pH	10	9.99/10.00				
		pH	7	6.99/7.00				
		pH	4	4.00/4.00				
		cond	1000	1004/1000				
		turb	10	10.03/10.00				
		turb	0	0.0/0.0				

INSTRUMENT # 090/00184
240-4/10

☐ TEMPERATURE ☒ CONDUCTIVITY ☐ SALINITY ☒ pH ☐ ORP
☒ TURBIDITY ☐ RESIDUAL Cl ☒ DO ☐ OTHER _____

Standard C for 0 NTU lot C472437 10 NTU C471805 exp 5/16

[illegible]

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta	SITE LOCATION: 2000 West Savannah Ave Valdosta GA
WELL NO: MW-8	SAMPLE ID: FA 37966-4
	DATE: 10-17-16

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: RTDD Folkner / GF				SAMPLER(S) SIGNATURE(S): <i>R Zabel</i>			SAMPLING INITIATED AT: 0837	SAMPLING ENDED AT: 0842	
PUMP OR TUBING DEPTH IN WELL (feet): 15				TUBING MATERIAL CODE: RPE	FIELD-FILTERED: Y ☒ N		FILTRATION EQUIPMENT TYPE:	FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y ☒ N TUBING Y ☒ N (replaced)						DUPLICATE: Y ☒ N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
G-4	3	CG	49 mL	HCL	-	< 2	BZ60	APP	< 400
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: <u>THE VILLAGES</u>		SITE LOCATION: <u>2000 West Savannah Ave Vidosta GA</u>	
WELL NO: <u>MW-1R</u>	SAMPLE ID: <u>FA37966-1</u>	DATE: <u>10-17-16</u>	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: R Todd Falkner / GF				SAMPLER(S) SIGNATURE(S): R Todd Falkner			SAMPLING INITIATED AT: 1537		SAMPLING ENDED AT: 1542	
PUMP OR TUBING DEPTH IN WELL (feet): 15				TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y (N)		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y (N)				TUBING Y (N (replaced))			DUPLICATE: Y (N)			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
66-1	3	CG	40mL	HCL	-	12	8220	APP	4400	
+	1	PE	250mL	H2O3	-	12	Arsenic	APP	10000	
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = Alter Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: 4MR Veldosta		SITE LOCATION: 2000 West Sengstack Ave Veldosta GA	
WELL NO: MW-1DD	SAMPLE ID: FA3796-2	DATE: 10-17-16	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S), SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:					
Dan Dennis Todd Fulkner / GF	[Signature]	1502	1600					
PUMP OR TUBING DEPTH IN WELL (feet): 72.5	TUBING MATERIAL CODE: HDPE	FIELD-FILTERED: Y Filtration Equipment Type:	FILTER SIZE: _____ µm					
FIELD DECONTAMINATION: PUMP N TUBING Y N (replaced)		DUPLICATE: Y						
SAMPLE CONTAINER SPECIFICATION		INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	SAMPLE PUMP FLOW RATE (mL per minute)	
GK-2	3	CG	400ml	HCL	-	L2	AESP	2400
↓	1	PE	250ml	HNO3	-	L2	AESF	21000
REMARKS:								
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)								
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)								

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: <u>TUR Valdosz</u>		SITE LOCATION: <u>2010 West Savannah Ave, Valdosz GA</u>	
WELL NO: <u>new-ID</u>	SAMPLE ID: <u>FA 3796-3</u>	DATE: <u>10-17-16</u>	

PURGING DATA

[illegible]

SAMPLING DATA

[illegible]

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 West Savannah Ave Valdosta GA	
WELL NO: mw-2k	SAMPLE ID: FA 37466-5	DATE: 10-18-76	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>R. Todd Falker (GF)</i>				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: <i>900</i>	SAMPLING ENDED AT: <i>0908.</i>	
PUMP OR TUBING DEPTH IN WELL (feet): <i>15</i>				TUBING MATERIAL CODE: <i>HDI E</i>	FIELD-FILTERED: Y ☒ D Filtration Equipment Type:			FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y ☒ N ☐						TUBING Y ☒ N(replaced)		DUPLICATE: Y ☒ N ☐	
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<i>G65</i>	<i>3</i>	<i>CG</i>	<i>40ML</i>	<i>HCL</i>	<i>-</i>	<i><2</i>	<i>SPLO</i>	<i>APP</i>	<i><400</i>
<i>↓</i>	<i>1</i>	<i>IE</i>	<i>250 ML</i>	<i>KNO3</i>	<i>-</i>	<i><2</i>	<i>Arsenic</i>	<i>↓</i>	<i><1000</i>
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ $^{\circ}\text{C}$ **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 West Savannah Ave Valdosta GA	
WELL NO: mw-15	SAMPLE ID: F437966-6	DATE: 10-18-16	

PURGING DATA

[illegible]

SAMPLING DATA

[illegible]

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: TMA Valdosta	SITE LOCATION: 2000 West Sycamore Ave Valdosta GA
WELL NO: MW-3	SAMPLE ID: FA37966-7
	DATE: 10-18-16

PURGING DATA

WELL DIAMETER (inches):	1	TUBING DIAMETER (inches):	1/4	WELL SCREEN INTERVAL DEPTH:	10 feet to 20 feet	STATIC DEPTH TO WATER (feet):	9.95	PURGE PUMP TYPE OR BAILER:	PP				
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (20 \text{ feet} - 9.95 \text{ feet}) \times 0.04 \text{ gallons/foot} = 0.40 \text{ gallons}$													
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$													
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):		15		FINAL PUMP OR TUBING DEPTH IN WELL (feet):		17		PURGING INITIATED AT: 0936		PURGING ENDED AT: 0949		TOTAL VOLUME PURGED (gallons): 0.24	
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) $\mu\text{mhos/cm}$ or $\mu\text{S/cm}$	DISSOLVE D OXYGEN (circle units) mg/L or % saturation	TURBIDIT Y (NTUs)	COLOR (describe)	(ODOR describe)	ORP (Mv)	
0949	0.40	0.40	0.0574	16.25	6.01	26.53	73	1.30	9.87	Clear	none	106.7	
0946	0.17	0.57	↓	16.43	6.02	26.55	72	1.29	9.79	ll	"	102.8	
0944	0.17	0.74	↓	16.62	6.04	26.58	70	1.25	9.83	ll	ll	99.6	
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016													
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)													

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Dan Dennis / GF				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: 0950		SAMPLING ENDED AT: 0957	
PUMP OR TUBING DEPTH IN WELL (feet): 17				TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y (N)		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y (N)				TUBING Y N (replaced)			DUPLICATE: Y (N)			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
667	3	CG	40mL	HCL	—	6.2	5260	APP	6400	
↓	1	PE	250mL	Itwog	—	6.2	Argonite	↓	61000	
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: TMA Valdosta	SITE LOCATION: 2000 West Savannah Ave Valdosta GA
WELL NO: MW-14	SAMPLE ID: FA37946-8
	DATE: 10-18-66

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: R Todd Fisher (GF)				SAMPLER(S) SIGNATURE(S): R Todd Fisher			SAMPLING INITIATED AT: 1007		SAMPLING ENDED AT: 1011	
PUMP OR TUBING DEPTH IN WELL (feet): 15				TUBING MATERIAL CODE: HDPE			FIELD-FILTERED: Y ☒ N ☐		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y ☒ TUBING Y ☒ N (replaced)							DUPLICATE: Y ☒ N ☐			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
66-8	3	CG	810mL	HCL	-	<2	8260	APP	<400	
↓	1	PE	250mL	HNO3	-	<2	Arsenic	↓	<1000	
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: TMA Valdosta		SITE LOCATION: 2000 West Savannah Ave Valdosta GA	
WELL NO: MW-16	SAMPLE ID: FA 37966-9		DATE: 10-18-16

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Dan Dennis / Todd Falkner / GF / 12/2/03				SAMPLE(S) SIGNATURE(S): <i>[Signature]</i>		SAMPLING INITIATED AT: 1027		SAMPLING ENDED AT: 1033	
PUMP OR TUBING DEPTH IN WELL (feet): 15				TUBING MATERIAL CODE: HOPE		FIELD-FILTERED: Y		FILTER SIZE: ____ µm	
FIELD DECONTAMINATION: PUMP Y N				TUBING Y N (replaced)		DUPLICATE: Y N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
669	3	CG	40ml	HCL	—	2.2	8260	APP	400
		PE	250ml	HNO3		2.2			
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES. 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ $^{\circ}\text{C}$ **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: <u>Tank Vg/doste</u>		SITE LOCATION: <u>2000 west Savannah Ave Valdosta GA</u>	
WELL NO: <u>mw-11</u>	SAMPLE ID: <u>FA37966-1D</u>	DATE: <u>10-18-16</u>	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>R Todd Fawcett</i>	SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>	SAMPLING INITIATED AT: <i>P29</i>	SAMPLING ENDED AT: <i>1234</i>						
PUMP OR TUBING DEPTH IN WELL (feet): <i>15</i>	TUBING MATERIAL CODE: <i>HDPG</i>	FIELD-FILTERED: Y ☒ N Filtration Equipment Type:	FILTER SIZE: _____ μm						
FIELD DECONTAMINATION: PUMP Y ☒ TUBING Y ☒ <i>(replaced)</i>		DUPLICATE: Y ☒							
SAMPLE CONTAINER SPECIFICATION		INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE (mL per minute)						
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	SAMPLING EQUIPMENT CODE		
<i>G-10</i>	<i>3</i>	<i>CG</i>	<i>40 mL</i>	<i>AEL</i>	<i>-</i>	<i>< 2</i>	<i>B260</i>	<i>APP</i>	<i>C400</i>
REMARKS: <i>Cannot type DTW as well casing is bent</i>									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = Alter Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 10 NTU

(MAKER/MODEL#) YSI 556

INSTRUMENT # 03L0628 AE

PARAMETER: *[check only one]*

HF Scientific Turbometer Microflu
back only one!

201509119

☐ TEMPERATURE

☒ CONDUCTIVITY

☐ SALINITY

☒ pH

☐ ORP☒ TURBIDITY☐ RESIDUAL CI☒ DO☐ OTHER

Standard A pH 12 6+66C061 exp. 12-12 / A 4 10+66B646 exp. Feb 13

Standard B Cons 1000 us for lot CGL 1100 exp March 17

Standard C trials 10-11 lot 51905 exp Sep 2017 trials 2 lot 51901 exp Sep 2017

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
12/16/18	0730	DO	Pt #20	100.3/100.0		Yes	Cont	RTP
		pH	10	10.11/10.00				
		pH	7	7.04/7.00				
		pH	4	4.01/4.00				
		Cond	1000	1013/1000				
		turb	1000	1011/1000				
		turb	0.02	0.07/0.02		✓	✓	✓
16/10/18	1245	DO	Pt #20	100.2/100.0		Yes	Cont/Final	RTP
		pH	10	10.05/10.00				
		pH	7	7.03/7.00				
		pH	4	4.01/4.00				
		Cond	1000	1012/1000				
		turb	1000	1018/1000				
		turb	0.02	0.07/0.02		✓	✓	✓

(MAKER/MODEL#) YSI Proplus

24-410

☐ TEMPERATURE ☒ CONDUCTIVITY ☐ SALINITY ☒ pH ☐ ORP
☒ TURBIDITY ☐ RESIDUAL CI ☒ DO ☐ OTHER _____

Standard A pH 10 lot 56K419 exp 12/17 pH 7 lot 56K328 exp 12/17 pH 4 lot 56K141 exp 12/17

Standard B Cond 1000 us/cm lot SGK588 exp Nov 16

Standard C 10 NTU and 0 NTU provided by US Environmental Temp. FC

[illegible]

(MAKER/MODEL#) YSI 556

INSTRUMENT # 03L0628AE

PARAMETER: *[check only one]*

HF Scientific Turbimeter Microflu
ok only anal

201509119

☐ TEMPERATURE

☒ CONDUCTIVITY

☐ SALINITY

☒ PA

☐ ORP☒ TURBIDITY☐ RESIDUAL CI

☒ DO

☐ OTHER

STANDARDS: [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A pH 10 6+66C06i Csp. Nr 18 pH 7 6+66C06i Csp. Nr 18 pH 4 6+66C06i Csp. Nr 18

Standard B Cond 1000.02 km lot GGC 1100 Exp March 17

Standard C trials 10-11 lot 51915 GEP Sep 2017 trials 2 lot 51901 eff Sep 2017

[illegible]

(MAKER/MODEL#) YSI Proplus

29-410

PARAMETER: *La Motte Turbidity meter 2020* [check only one]

☐ TEMPERATURE ☒ CONDUCTIVITY ☐ SALINITY ☒ pH ☐ ORP
☒ TURBIDITY ☐ RESIDUAL Cl ☒ DO ☐ OTHER

STANDARDS: [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A pH 10 lot 56K419 exp 10/17 pH 7 lot 56K328 exp 10/17 pH 4 lot 56K141 exp 10/17

Standard B Cond 1000 us/cm lot 56K588 exp Nov 16

Standard C is NTU and 0 NTU provided by US Environmental Trade FC

[illegible]

GROUNDWATER SAMPLING LOG

SITE NAME: TMA Vallosta		SITE LOCATION: 2000 W. Savannah Ave Vallosta, GA	
WELL NO: mw-3	SAMPLE ID: FA41299-1	DATE: 2-15-17	

PURGING DATA

WELL DIAMETER (inches):	1	TUBING DIAMETER (inches):	3 8	WELL SCREEN INTERVAL DEPTH:	10 feet to 20 feet	STATIC DEPTH TO WATER (feet):	5.55	PURGE PUMP TYPE OR BAILER:	PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)									
= (20 feet - 5.55 feet) X 0.04 gallons/foot = 0.58 gallons									
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)									
= gallons + (gallons/foot X feet) + gallons = gallons									

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15	PURGING INITIATED AT: 1450	PURGING ENDED AT: 1508	TOTAL VOLUME PURGED (gallons): 0.88
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[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>August + Short / GF</i>		SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>		SAMPLING INITIATED AT: <i>1509</i>	SAMPLING ENDED AT: <i>1520</i>
PUMP OR TUBING DEPTH IN WELL (feet): <i>15</i>		TUBING MATERIAL CODE: <i>Teflon</i>		FIELD-FILTERED: Y ☒ <i>(N)</i>	FILTER SIZE: ____ μ m
FIELD DECONTAMINATION: PUMP Y ☒ <i>(N)</i>		TUBING Y ☒ <i>(N (replaced))</i>		DUPLICATE: Y ☒ <i>(N)</i>	

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
 RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 West Savannah Ave Valdosta FL	
WELL NO: MV-14	SAMPLE ID: FAY1299-2		DATE: 2-15-17

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	3/8	WELL SCREEN INTERVAL DEPTH:	10 feet to 20 feet	STATIC DEPTH TO WATER (feet):	6.85	PURGE PUMP TYPE OR BAILER:	PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)									
= (20 feet - 6.85 feet) X 0.16 gallons/foot = 2.10 gallons									
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)									
= gallons + (gallons/foot X feet) + gallons = gallons									
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	15	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	15	PURGING INITIATED AT:	1534	PURGING ENDED AT:	1634	TOTAL VOLUME PURGED (gallons):	2.38

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.) 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>August Short / GF</i>		SAMPLER(S) SIGNATURE(S): <i>August Short</i>		SAMPLING INITIATED AT: <i>1627</i>	SAMPLING ENDED AT: <i>1637</i>
PUMP OR TUBING DEPTH IN WELL (feet): <i>15</i>		TUBING MATERIAL CODE: <i>Teflon</i>		FIELD-FILTERED: Y ☒ N ☐ Filtration Equipment Type: _____	FILTER SIZE: _____ μ m
FIELD DECONTAMINATION: PUMP Y ☒ N ☐		TUBING Y ☒ N (replaced) ☐		DUPLICATE: Y ☒ N ☐	

[illegible]

REMARKS

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 W. Savannah Ave Valdosta Ave	
WELL NO: Mw-15	SAMPLE ID: FA41343-1	DATE: 2-16-17	

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	$\frac{3}{8}$	WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet	STATIC DEPTH TO WATER (feet):	5.84	PURGE PUMP TYPE OR BAILER:	PP	
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)									
= (20 feet - 5.84 feet) X 0.16 gallons/foot = 2.27 gallons									
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)									
= gallons + (gallons/foot X feet) + gallons = gallons									
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	15	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	15	PURGING INITIATED AT:	0805	PURGING ENDED AT:	0926	TOTAL VOLUME PURGED (gallons):	2.46

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: August Short (GF)		SAMPLER(S) SIGNATURE(S): 		SAMPLING INITIATED AT: 0927	SAMPLING ENDED AT: 0934
PUMP OR TUBING DEPTH IN WELL (feet): 15		TUBING MATERIAL CODE: Teflon	FIELD-FILTERED: Y ☒	FILTER SIZE: ____ µm	
FIELD DECONTAMINATION: PUMP Y ☒ TUBING Y ☒ (replaced)			DUPLICATE: Y ☒		

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
43-1	3	CG	40mL	HCL	-	<2	8260	RFPF	<HOD
↓	3	CG	40mL	HCL	-	<2	CH4	↓	↓
↓	2	AG	40mL	HCL	-	<2	TOC	↓	↓
↓	1	PE	250mL	HN03	-	<2	AS	APP	<1000
✓	1	PE	125mL	None	-	-	NO30, CHL	↓	↓

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: TMD Valdosta		SITE LOCATION: 2000 West Savannah Ave Valdosta GA	
WELL NO: M-1R	SAMPLE ID: FAY1343-2	DATE: 2-16-17	

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	3/8	WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet	STATIC DEPTH TO WATER (feet):	6.30	PURGE PUMP TYPE OR BAILER:	PP	
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (20 \text{ feet} - 6.30 \text{ feet}) \times 0.16 \text{ gallons/foot} = 2.19 \text{ gallons}$									
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$									
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	15	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	15	PURGING INITIATED AT:	10/11	PURGING ENDED AT:	11/26	TOTAL VOLUME PURGED (gallons):	2.39

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88									
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016									

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: August Short (GF)				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 1127		SAMPLING ENDED AT: 1138	
PUMP OR TUBING DEPTH IN WELL (feet): 15				TUBING MATERIAL CODE: Teflon			FIELD-FILTERED: Y (N) Filtration Equipment Type:		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y (N)				TUBING Y (N (replaced))			DUPLICATE: Y (N)			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
43-2	3	CG	40mL	HCL	-	<2	8260	RFPP	<400	
↓	3	CG	40mL	HCL	-	<2	CH4	↓	↓	
↓	2	AG	40mL	HCL	-	<2	TOC	↓	↓	
↓	1	PE	250mL	HNO3	-	<2	AS	APP	<1000	
↓	1	PE	125mL	None	-	-	NO30, CHL	↓	↓	

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 West Savannah Ave Valdosta GA	
WELL NO: MW-1D	SAMPLE ID: FA49343-3	DATE: 2-16-17	

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	$\frac{3}{8}$	WELL SCREEN INTERVAL DEPTH: 35 feet to 40 feet	STATIC DEPTH TO WATER (feet):	7.62	PURGE PUMP TYPE OR BAILER:	BP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= 1 \times 40 \text{ feet} - 7.62 \text{ (feet)} \times 0.16 \text{ gallons/foot} = 5.18 \text{ gallons}$								
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$								

[illegible]

SAMPLING DATA

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 West Savannah Ave Valdosta GA	
WELL NO: Mus - 1DD	SAMPLE ID: FAY1343-4		DATE: 2-16-17

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	$\frac{3}{8}$	WELL SCREEN INTERVAL DEPTH: 70 feet to 75 feet	STATIC DEPTH TO WATER (feet):	37.21	PURGE PUMP TYPE OR BAILER:	ESP	
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)									
= (75 feet - 37.21 feet) X 0.16 gallons/foot = 6.04 gallons									
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)									
= gallons + (gallons/foot X feet) + gallons = gallons									
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	72.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	72.5	PURGING INITIATED AT:	1023	PURGING ENDED AT:	1321	TOTAL VOLUME PURGED (gallons):	6.26

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: August Short (GF)				SAMPLER(S) SIGNATURE(S): <i>August Short</i>			SAMPLING INITIATED AT: 1322		SAMPLING ENDED AT: 1329	
PUMP OR TUBING DEPTH IN WELL (feet): 72.5				TUBING MATERIAL CODE: tetlon			FIELD-FILTERED: Y (N) Filtration Equipment Type:		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP (Y) N TUBING Y (N (replaced))							DUPLICATE: Y (N)			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
43-4	3	CG	40mL	HCL	-	<2	B260	ESP	2400	
↓	3	CG	40mL	HCL	-	<2	CH4	↓	↓	
↓	3	AG	40mL	HCL	-	<2	TOL	↓	↓	
↓	1	PE	250 mL	HNO3	-	<2	As	↓	21000	
↓	1	PE	125 mL	Mnre	-	-	M30, CHL	↓	↓	

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 West Savannah Ave Valdosta GA	
WELL NO: mw-2R	SAMPLE ID: FA4343-5	DATE: 2-11-17	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH 10 feet to 20 feet	STATIC DEPTH TO WATER (feet): 6.15	PURGE PUMP TYPE OR BAILER: 1P
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (20 feet - 6.15 feet) X 0.16 gallons/foot = 2.22 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15	PURGING INITIATED AT 1430	PURGING ENDED AT: 1546	TOTAL VOLUME PURGED (gallons): 2.42

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>August Short (GF)</i>				SAMPLER(S) SIGNATURE(S): <i>August Short</i>			SAMPLING INITIATED AT: <i>1547</i>		SAMPLING ENDED AT: <i>1554</i>	
PUMP OR TUBING DEPTH IN WELL (feet): <i>15</i>				TUBING MATERIAL CODE: <i>Teflon</i>			FIELD FILTERED: Y ☒ N ☐		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y ☒ N ☐ TUBING Y ☒ N (replaced) ☐							DUPLICATE: Y ☒ N ☐			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
<i>475</i>	<i>3</i>	<i>CG</i>	<i>40mL</i>	<i>HCL</i>	<i>—</i>	<i><2</i>	<i>8260</i>	<i>RFPP</i>	<i>4000</i>	
<i>↓</i>	<i>3</i>	<i>CG</i>	<i>40mL</i>	<i>HCL</i>	<i>—</i>	<i><2</i>	<i>CH4</i>	<i>↓</i>	<i>↓</i>	
<i>↓</i>	<i>2</i>	<i>AG</i>	<i>40mL</i>	<i>HCL</i>	<i>—</i>	<i><2</i>	<i>TOC</i>	<i>↓</i>	<i>↓</i>	
<i>↓</i>	<i>1</i>	<i>PE</i>	<i>250mL</i>	<i>HNO3</i>	<i>—</i>	<i><2</i>	<i>As</i>	<i>APP</i>	<i>4000</i>	
<i>↓</i>	<i>1</i>	<i>PE</i>	<i>125mL</i>	<i>None</i>	<i>—</i>	<i>—</i>	<i>NO30, CAC</i>	<i>↓</i>	<i>↓</i>	

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: <u>tna Valdosta</u>	SITE LOCATION: <u>2000 West Savannah Ave Valdosta GA</u>
WELL NO: <u>MW-11</u>	SAMPLE ID: <u>FAY1343-6</u> DATE: <u>02/16/17</u>

PURGING DATA

WELL DIAMETER (inches): <u>1</u>	TUBING DIAMETER (inches): <u>3/8</u>	WELL SCREEN INTERVAL DEPTH: <u>10</u> feet to <u>20</u> feet	STATIC DEPTH TO WATER (feet): <u>3.62</u>	PURGE PUMP TYPE OR BAILER: <u>PP</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (<u>20</u> feet - <u>3.62</u> feet) X <u>0.04</u> gallons/foot = <u>0.65</u> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>15</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>15</u>	PURGING INITIATED AT: <u>1615</u>	PURGING ENDED AT: <u>1641</u>	TOTAL VOLUME PURGED (gallons): <u>0.85</u>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or <u>μS/cm</u>	DISSOLVE D OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	(ODOR describe)	ORP (Mv)
1638	0.65	0.65	0.0325	3.71	4.30	20.6	52.6	0.95	3.11	None	None	8.2
1638	0.10	0.75	↓	3.71	4.28	20.6	52.7	0.87	3.45	"	"	8.2
1641	0.10	0.85	↓	3.72	4.28	20.6	52.7	0.81	2.87	"	"	8.3

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>August Short / GF</u>				SAMPLER(S) SIGNATURE(S): <u>[Signature]</u>			SAMPLING INITIATED AT: <u>1642</u>		SAMPLING ENDED AT: <u>1650</u>		
PUMP OR TUBING DEPTH IN WELL (feet): <u>15</u>				TUBING MATERIAL CODE: <u>Teflon</u>			FIELD-FILTERED: Y <u>(N)</u>		FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP Y <u>(N)</u> TUBING Y <u>(N (replaced))</u>				DUPLICATE: Y <u>(N)</u>							
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
<u>43-6</u>	<u>3</u>	<u>CG</u>	<u>40mL</u>	<u>HCL</u>	<u>-</u>	<u><2</u>	<u>8260</u>	<u>RFPP</u>	<u><400</u>		
<u>↓</u>	<u>3</u>	<u>CG</u>	<u>40mL</u>	<u>HCL</u>	<u>-</u>	<u><2</u>	<u>CH4</u>	<u>↓</u>	<u>↓</u>		
<u>↓</u>	<u>1</u>	<u>PE</u>	<u>250mL</u>	<u>None</u>	<u>-</u>	<u>-</u>	<u>N. Tech, Kerns, S. Tech</u>	<u>APP</u>	<u><1000</u>		

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units Temperature: ± 10% °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation; optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: <u>THOR Valdosta</u>		SITE LOCATION: <u>2000 West Swannah Ave Valdosta GA</u>	
WELL NO: <u>MW-16</u>	SAMPLE ID: <u>FA41388-1</u>	DATE: <u>2-17-19</u>	

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	$\frac{3}{8}$	WELL SCREEN INTERVAL DEPTH: <u>10</u> feet to <u>20</u> feet	STATIC DEPTH TO WATER (feet): <u>5.35</u>	PURGE PUMP TYPE OR BAILER:	PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (\quad 20 \quad \text{feet} - \quad 5.35 \quad \text{feet}) \times \quad 0.16 \quad \text{gallons/foot} = \quad 2.34 \quad \text{gallons}$							
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \quad \text{gallons} + (\quad \text{gallons/foot} \times \quad \text{feet}) + \quad \text{gallons} = \quad \text{gallons}$							
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	15	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	15	PURGING INITIATED AT:	715	PURGING ENDED AT:	0901
						TOTAL VOLUME PURGED (gallons):	2.48

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
 RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 West Savannah Ave Valdosta GA	
WELL NO: MW-8R	SAMPLE ID: FAY1388-2		DATE: 2-17-19

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8	WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet	STATIC DEPTH TO WATER (feet): 4.95	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = 1 20 feet - 4.95 (feet) X 0.11 gallons/foot = 2.41 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15	PURGING INITIATED AT: 0725	PURGING ENDED AT: 0929	TOTAL VOLUME PURGED (gallons): 2.53

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: August Short (GF)				SAMPLER(S) SIGNATURE(S): 			PROBING DATE: 08/20/03 PROBING TIME: 0930 PROBING LOCATION: 0930		SAMPLING INITIATED AT: 0930		SAMPLING ENDED AT: 0938	
PUMP OR TUBING DEPTH IN WELL (feet): 15				TUBING MATERIAL CODE: Teflon			FIELD-FILTERED: Y ☒ N ☐ Filtration Equipment Type:		FILTER SIZE: _____ µm			
FIELD DECONTAMINATION: PUMP Y ☐ N ☒				TUBING Y ☐ N ☒ (replaced)			DUPLICATE Y ☐ N ☒					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH						
86-2	3	CG	40mL	HCL	-	~2	8260		AFPP		~400	
↓	3	CG	40mL	HCL	-	~2	CHY		↓		↓	
↓	1	PE	250mL	None	-	-	Nitric Perme Don Sol. 1/2		APP		~1000	

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10^\circ\text{C}$ **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 10 NTU

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
17/02/15	1420	DO	DI H ₂ O	100.3/100.0		Yes	Init	AS, RTF
		pH	10	10.09/10.00				
		pH	7	7.07/7.00				
		pH	4	4.03/4.00				
		Cond	1000	1021/1000				
		turb	1000	1017/1000				
		turb	0.02	0.03/0.02				
17/02/15	1640	DO	DI H ₂ O	100.1/100.1		Yes	Cont	AS, RTF
		pH	10	10.07/10.00				
		pH	7	7.03/7.00				
		pH	4	3.99/4.00				
		Cond	1000	1018/1000				
		turb	1000	1013/1000				
		turb	0.02	0.03/0.02				

FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKER/MODEL#) YSI Pro plus

INSTRUMENT # 10E100344

PARAMETER: [check only one] HF Scientific Micro TPW

201509119

- ☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A pH 10 lot 6GJ219 exp Oct 16 pH 7 lot 6GJ218 exp Oct 16 pH 4 lot 6GER2 exp Nov 16

Standard B Cond 1000 mS/cm lot 6GJ217 exp Oct 17

Standard C turb 1000 NTU lot 50903 exp Sep 2017 0.02 NTU lot 50901 exp Sep 2017

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
07/02/17	0630	DO	DI H ₂ O	100.1/100.0		YES	cont	AS RTF
		pH	10	10.05/10.00				
		pH	7	7.02/7.00				
		pH	4	3.98/4.00				
		Cond	1000	1014/1000				
		turb	1000	1010/1000				
		turb	0.02	0.03/0.02		YES		
07/02/17	0945	DO	DI H ₂ O	100.1/100.0		YES	cont/Final	AS RTF
		pH	10	10.04/10.00				
		pH	7	7.02/7.00				
		pH	4	4.01/4.00				
		Cond	1000	1010/1000				
		turb	1000	1008/1000				
		turb	0.02	0.03/0.02		YES		

FIELD INSTRUMENT CALIBRATION RECORDS
INSTRUMENT (MAKER/MODEL#) VSI Pro plus INSTRUMENT # 10E100344

INSTRUMENT # DE/W399

2-1509119

☐ TEMPERATURE

□ CONDUCTIVITY

☐ SALINITY

☐ pH

☐ ORP☐ TURBIDITY☐ RESIDUAL CI☐ DO☐ OTHER

STANDARDS: [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A 11/10 lot 6GJ29 exp Oct 16 11/7 lot 6GJ218 exp Oct 16 11/4 lot 6GER2 exp Nov 18

Standard B Cond 1000 psi/cm lot 6GJ217 exp Oct 17

Standard C ~~100~~ 100 NTU lot 50903 exp Sep 2017 0.02 NTU lot 50901 exp Sep 2017

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
17/02/16	0715	DO	DI H ₂ O	100.2/100.0		Yes	cont	AS ATF
		pH	10	10.09/10.00				
		pH	7	7.05/7.00				
		pH	4	4.07/4.00				
		cond	1000	1015/1000				
		turb	1000	1010/1000				
		turb	0.02	0.03/0.00				
17/02/16	1900	DO	DI H ₂ O	100.1/100.0		Yes	cont	AS ATF
		pH	10	10.07/10.00				
		pH	7	7.03/7.00				
		pH	4	4.02/4.00				
		cond	1000	1010/1000				
		turb	1000	1011/1000				
		turb	0.02	0.03/0.00				

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 West Savannah Ave Valdosta GA	
WELL NO: mw-11	SAMPLE ID: FA46276-4	DATE: 7/27/17	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: R Todd Falkner / GF				SAMPLER(S) SIGNATURE(S): R Todd Falkner			SAMPLING INITIATED AT: 1420		SAMPLING ENDED AT: 1423	
PUMP OR TUBING DEPTH IN WELL (feet): 15				TUBING MATERIAL CODE: teflon			FIELD-FILTERED: Y (N) Filtration Equipment Type:		FILTER SIZE: _____ µm	
FIELD DECONTAMINATION: PUMP Y (N)				TUBING Y (N (replaced))			DUPLICATE: Y (N)			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
2164	3	CG	40 mL	HCL	—	<2	8260	RFPP	<400	
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: TMK Valdosta		SITE LOCATION: 2000 West Savannah Ave Valdosta GA	
WELL NO: mw-8k	SAMPLE ID: FA46276-5		DATE: 7/27/17

PURGING DATA

[illegible]

SAMPLING DATA

[illegible]

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 10 NTU

GROUNDWATER SAMPLING LOG

SITE NAME: TMR Valdosta		SITE LOCATION: 2000 West Savannah Ave Valdosta GA	
WELL NO: mw-16	SAMPLE ID: FA46276-6	DATE: 7/28/17	

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	$\frac{3}{8}$	WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet	STATIC DEPTH TO WATER (feet):	7.45	PURGE PUMP TYPE OR BAILER:	PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)								
= (20 feet - 7.45 feet) X 0.16 gallons/foot = 2.01 gallons								
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)								
= gallons + (gallons/foot X feet) + gallons = gallons								

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15	PURGING INITIATED AT: 0705	PURGING ENDED AT: 0836	TOTAL VOLUME PURGED (gallons): 2.15
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[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: R Todd Falkner / GF		SAMPLER(S) SIGNATURE(S): R Todd Falkner		SAMPLING INITIATED AT: 0837	SAMPLING ENDED AT: 0840
PUMP OR TUBING DEPTH IN WELL (feet): 15		TUBING MATERIAL CODE: Teflon		FIELD-FILTERED: Y ☒ Filtration Equipment Type:	FILTER SIZE: _____ µm
FIELD DECONTAMINATION: PUMP Y ☒ (N)		TUBING Y ☒ (N (replaced))		DUPLICATE: Y ☒ (N)	

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS

pH: ± 0.1 units **Temperature:** $\pm 10\%$ °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation; optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 10 NTU

INSTRUMENT (MAKER/MODEL#) YSI Pro plus INSTRUMENT # 10C101277
 PARAMETER: [check only one] 4F Scientific turb meter
microturb 201509119
☐ TEMPERATURE ☒ CONDUCTIVITY ☐ SALINITY ☒ pH ☐ ORP
☒ TURBIDITY ☐ RESIDUAL CL ☒ DO ☐ OTHER _____

Standard A PH106GH456 Aug 18 PH76GH454 Aug 18 PH46GH452 Aug 18

Standard B Cond 1000 m/c - GH453 Aug 17

Standard C turbidity 10 NTU 50950 9/17 0.02 NTU 50901 9/17

[illegible]

INSTRUMENT (MAKER/MODEL#) YSI Pro plus INSTRUMENT # 10010377
PARAMETER: [check only one] #F Scientific turb meter 201509119
microTlw
☐ TEMPERATURE ☒ CONDUCTIVITY ☐ SALINITY ☒ pH ☐ ORP
☒ TURBIDITY ☐ RESIDUAL Cl ☒ DO ☐ OTHER _____

Standard A PH106GH456 Aug 18 PH266GH454 Aug 18 PH466GH452 Aug 18

Standard B Cont 1000 us/cm 6GH453 Aug 17

Standard C turbidity 0.02 NTU 50950 9/17 0.02 NTU 50911 9/17

[illegible]



Boring/Well B-5R Project No. Former Rice Iron (TMR Valdesta) Page 1 of 1
 Site Location 2000 West Savannah Ave Valdesta GA Drilling Started 2/16/17 Drilling Completed 2/16/17
 Total Depth 8 feet Hole Diameter 3 inches Type of Sample/ Coring Device Stainless Hand Auger
 Length and Diameter of Coring Device 8 feet bls 3 inch core Sampling Interval 0-8 feet
 Land Surface Elev. — feet ☐ Surveyed ☐ Estimated Datum —
 Drilling Fluid Used NA Drilling Method Hand Auger
 Drilling Contractor Gannett Fleming Driller R Todd Falkner Helper August Short
 Prepared By R. Todd Falkner Hammer Weight NA Hammer Drop NA inches

[illegible]



SAMPLE / CORE LOG

Prepared By R. Todd Falkner Hammer Weight NA Hammer Drop NA inches

[illegible]

Boring/Well B-11 Project No. Former Rice Iron (TMR Valdosta) Page 1 of 1

Site Location 2000 West Savannah Ave Valdosta GA Drilling Started 2/16/17 Drilling Completed 2/16/17

Total Depth 8 feet Hole Diameter 3 inches Type of Sample/
Drilled Stainless Hand Auger Coring Device

Length and Diameter of Coring Device 8 feet bls 3 inch core Sampling Interval 0-8 feet

Land Surface Elev. — feet ☐ Surveyed ☐ Estimated Datum —

Drilling Fluid Used NA Drilling Method Hand Auger

Drilling Contractor Gannett Fleming Driller R. Todd Falkner Helper August Short

Prepared By R. Todd Falkner Hammer Weight NA Hammer Drop NA inches

[illegible]



Boring/Well B-12 Project No. Former Rice Iron (GMR Veldostn) Page 1 of 1
 Site Location 2000 West Savannah Ave Veldostn GA Drilling Started 2/16/17 Drilling Completed 2/16/17
 Total Depth 8 feet Hole Diameter 3 inches Type of Sample/ Coring Device Stainless Hand Auger
 Length and Diameter of Coring Device 8 feet 61s 3 inch core Sampling Interval — feet
 Land Surface — feet ☐ Surveyed ☐ Estimated Datum —
 Drilling Fluid Used NA Drilling Method Hand Auger
 Drilling Contractor Gannett Fleming Driller R. Todd Fikner Helper August Short
 Prepared By R. Todd Fikner Hammer Weight NA Hammer Drop NA inches

[illegible]



Boring/Well SBFP-1 Project No. Former Rice Iron
Former TMR Valdosta Page 1 of 1

Site Location 2000 West Savannah Ave Valdosta GA Drilling Started 7/28/17 Drilling Completed 7/28/17

Total Depth Drilled 2 feet Hole Diameter 3 inches Type of Sample/ Coring Device Stainless Steel Hand Auger

Length and Diameter of Coring Device 2 feet bls 3 inch core Sampling Interval 0-2 feet

Land Surface Elev. — feet ☐ Surveyed ☐ Estimated Datum —

Drilling Fluid Used NA Drilling Method Hand Auger

Drilling Contractor Gannett Fleming Driller R Todd Falkner Helper Dan Dennis

Prepared By R Todd Falkner Hammer Weight NA Hammer Drop NA inches

[illegible]

Boring/Well SBFP-2 Project No. Former Rice Iron Page 1 of 1
 Site Location 2000 West Savannah Ave Valdosta GA Drilling Started 7/28/17 Drilling Completed 7/28/17
 Total Depth Drilled 2 feet Hole Diameter 3 inches Type of Sample/ Coring Device Stainless Steel Hand Auger
 Length and Diameter of Coring Device 2 feet bls 3 inch core Sampling Interval 0-2 feet
 Land Surface Elev. — feet ☐ Surveyed ☐ Estimated Datum —
 Drilling Fluid Used NA Drilling Method Hand Auger
 Drilling Contractor Gannett Fleming Driller R Todd Falkner Helper Dan Dennis
 Prepared By R Todd Falkner Hammer Weight NA Hammer Drop NA inches

[illegible]



Boring/Well SBFP- 3 Project No. Former Rice Iron
Former TMR Valdosta Page 1 of 1

Site Location 2000 West Savannah Ave Valdosta GA Drilling Started 7/28/17 Drilling Completed 7/28/17

Total Depth 2 feet Hole Diameter 3 inches Type of Sample/
Drilled _____ Coring Device Stainless Steel Hand Auger

Length and Diameter of 2 feet bts 3 inch core Sampling Interval 0 - 2 feet
Coring Device _____

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

Drilling Fluid Used NA Drilling Method Hand Auger

Drilling Contractor Gannett Fleming Driller R Todd Falkner Helper Dan Dennis

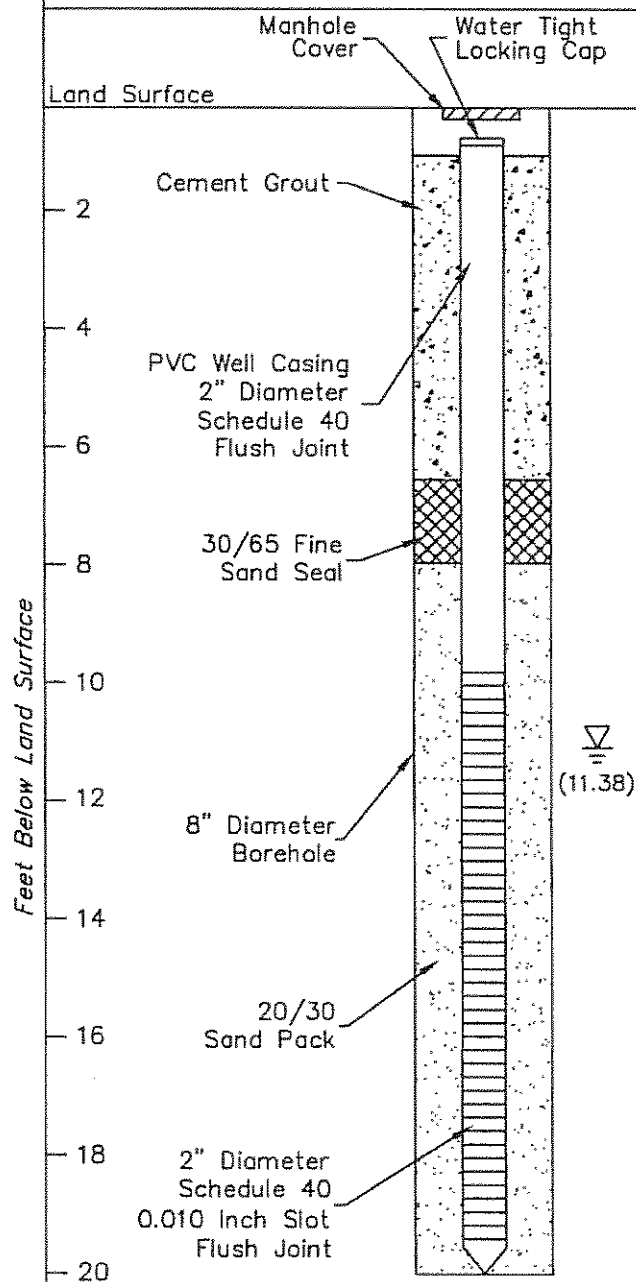
Prepared By R Todd Falkner Hammer Weight NA Hammer Drop NA inches

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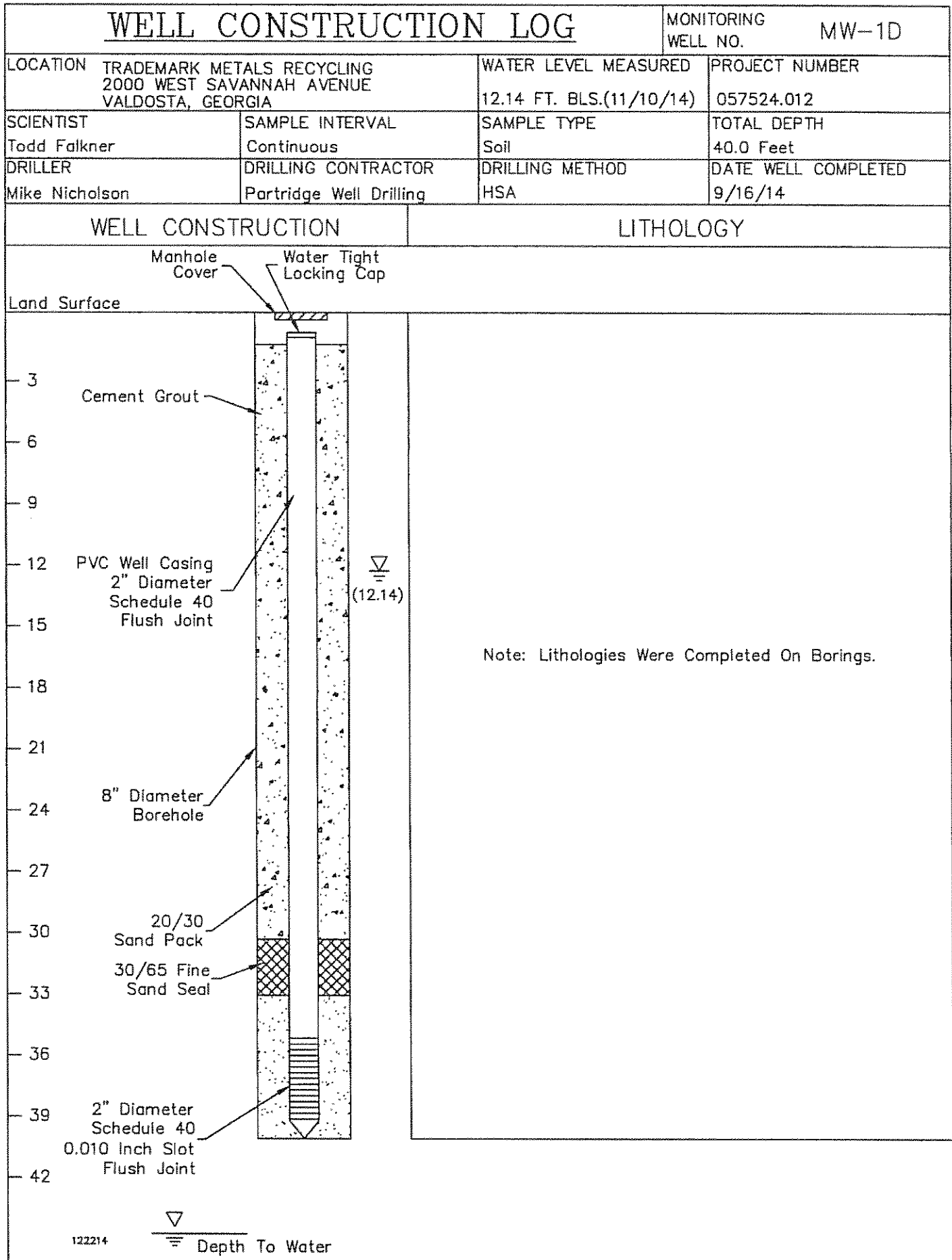
WELL CONSTRUCTION LOG		MONITORING WELL NO.	MW-1R
LOCATION	TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA	WATER LEVEL MEASURED	PROJECT NUMBER
		11.38 FT. BLS.(11/10/14)	057524.012
SCIENTIST	SAMPLE INTERVAL	SAMPLE TYPE	TOTAL DEPTH
Todd Falkner	Continuous	Soil	20.0 Feet
DRILLER	DRILLING CONTRACTOR	DRILLING METHOD	DATE WELL COMPLETED
Mike Nicholson	Partridge Well Drilling	HSA	8/5/14

WELL CONSTRUCTION

LITHOLOGY



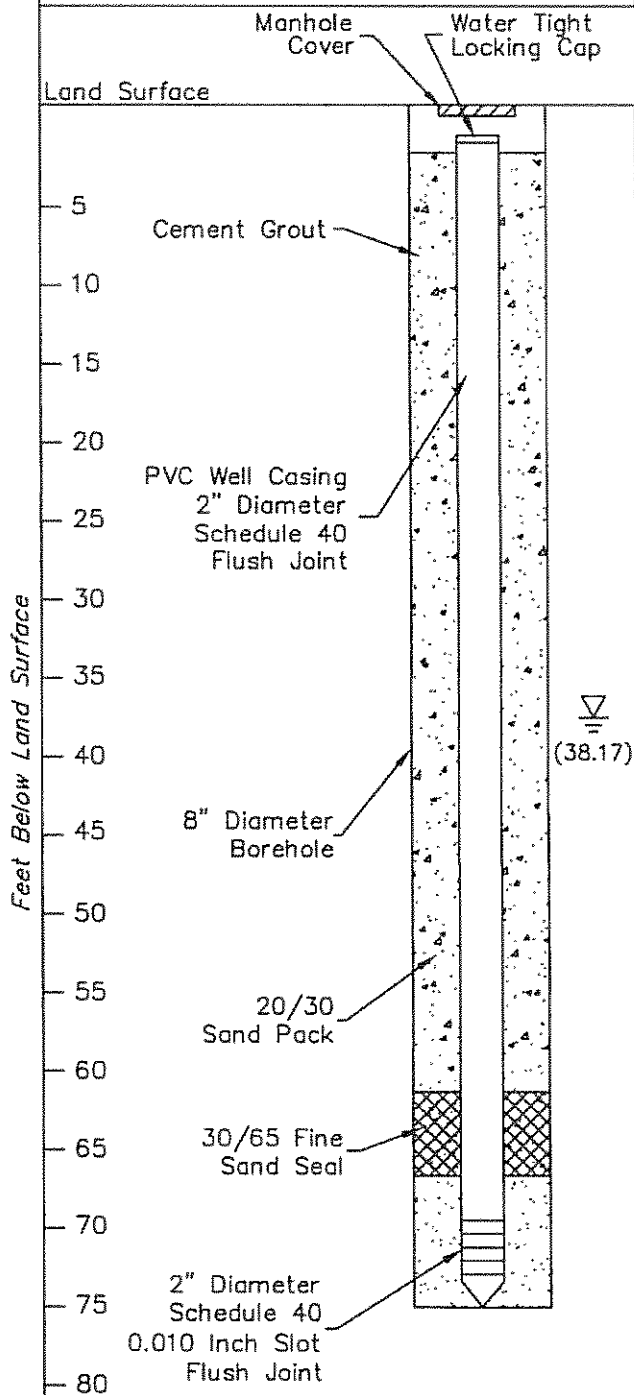
Note: Lithologies Were Completed On Borings.



WELL CONSTRUCTION LOG		MONITORING WELL NO.	MW-1DD
LOCATION TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA		WATER LEVEL MEASURED 38.17 FT. BLS.(11/10/14)	PROJECT NUMBER 057524.012
SCIENTIST Todd Falkner	SAMPLE INTERVAL Continuous	SAMPLE TYPE Soil	TOTAL DEPTH 75.0 Feet
DRILLER Billy Moss	DRILLING CONTRACTOR Groundwater Protection	DRILLING METHOD Sonic	DATE WELL COMPLETED 11/10/14

WELL CONSTRUCTION

LITHOLOGY

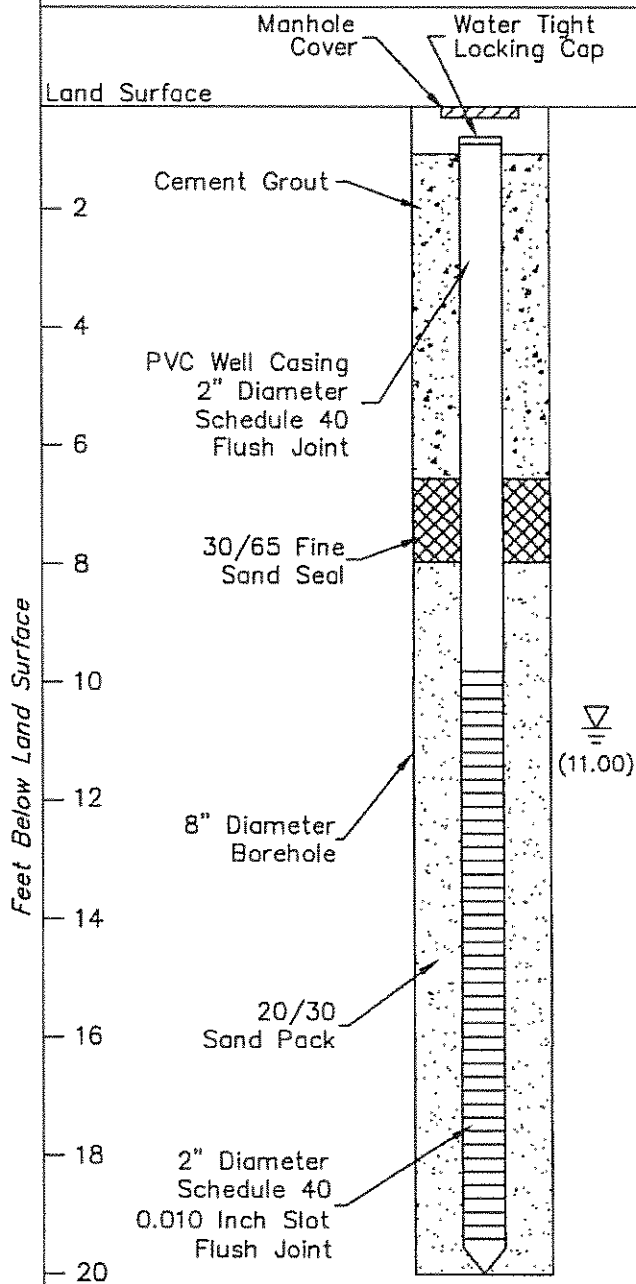


Note: Wells were Sonically Installed, Therefore Have No Lithology.

WELL CONSTRUCTION LOG		MONITORING WELL NO.	MW-2R
LOCATION	TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA	WATER LEVEL MEASURED	PROJECT NUMBER
		11.00 FT. BLS.(11/10/14)	057524.012
SCIENTIST	SAMPLE INTERVAL	SAMPLE TYPE	TOTAL DEPTH
Todd Falkner	Continuous	Soil	20.0 Feet
DRILLER	DRILLING CONTRACTOR	DRILLING METHOD	DATE WELL COMPLETED
Mike Nicholson	Partridge Well Drilling	HSA	8/6/14

WELL CONSTRUCTION

LITHOLOGY



Note: Lithologies Were Completed On Borings.

WELL COMPLETION LOG

Water Mgmt. Dist.:

Permit Number:

Work Order: 1011007

Type of Well: Monitor

Well Number: MW 3

Method Used: DP

Borehole Dia: 3"

Site Information:

Name: Rice Iron & Metal

Address: 2000 W. Savannah Ave.

C.S.Z.: Valdosta, GA

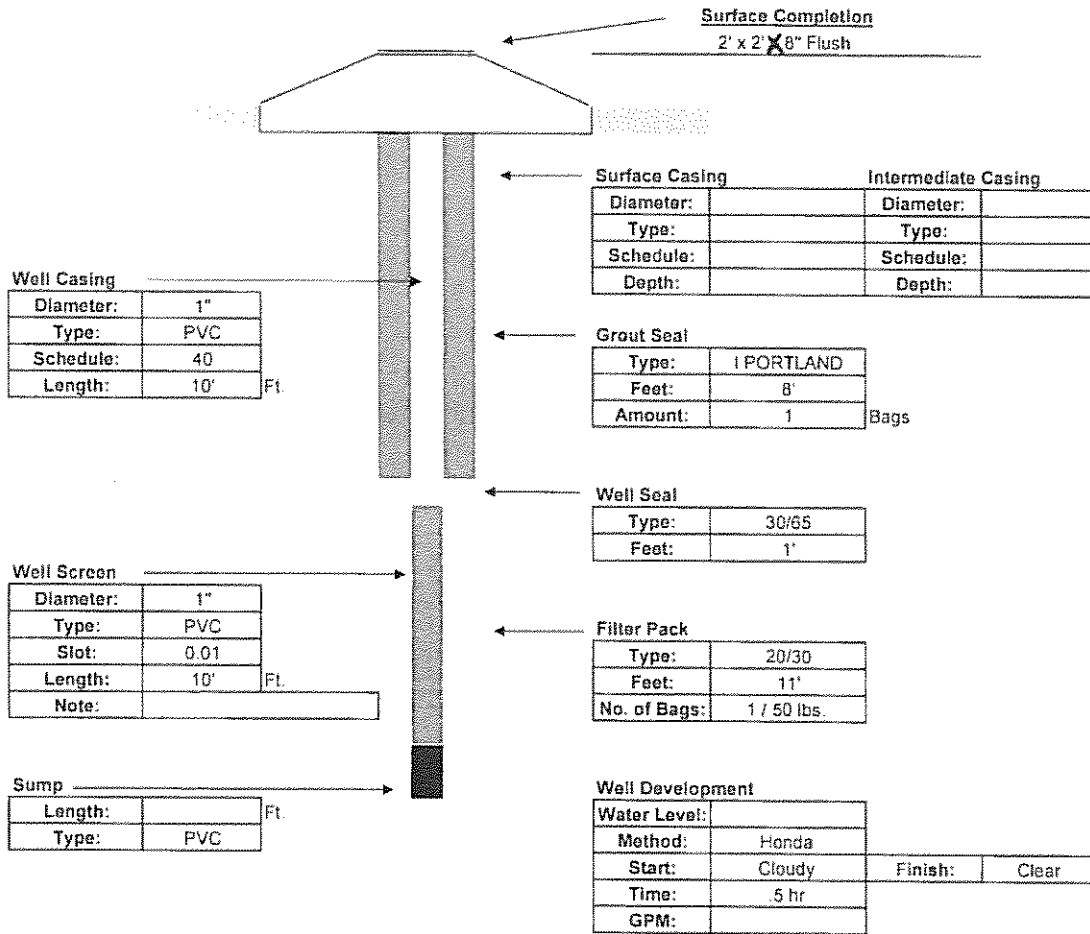
S/T/R:

Client / Consultant Information

Consultant: Stillwater

Field Rep: David Dickens

Well Diameter	Well Type	Well Depth	Screen Length	Casing Length	Bags Grout	Sand Bags/Weight	Filter Type	Well Seal
1"	PVC	20'	10'	10'	1	1 / 50 lbs.	20/30	30/65
40	Schedule	Slot Size: 0.01			8'	Feet	11'	1'



The diagram illustrates the well completion components and their depths. It shows a cross-section of the well with various materials and seals. Key components include the Surface Completion (2' x 2' x 8" Flush), Surface Casing, Intermediate Casing, Well Casing (1" Diameter, PVC, 40 Schedule, 10' Length), Well Screen (1" Diameter, PVC, 0.01 Slot, 10' Length), Sump (PVC, 10' Length), Grout Seal (1 PORTLAND, 8' Feet, 1 Bag), Well Seal (30/65, 1' Feet), Filter Pack (20/30, 11' Feet, 1 / 50 lbs. Bags), and Well Development (Water Level, Method: Honda, Start: Cloudy, Time: .5 hr, Finish: Clear, GPM).

Surface Completion
2' x 2' x 8" Flush

Surface Casing
Diameter:
Type:
Schedule:
Depth:

Intermediate Casing
Diameter:
Type:
Schedule:
Depth:

Well Casing
Diameter: 1"
Type: PVC
Schedule: 40
Length: 10' Ft.

Well Screen
Diameter: 1"
Type: PVC
Slot: 0.01
Length: 10' Ft.
Note:

Sump
Length:
Type: PVC
Ft.

Grout Seal
Type: 1 PORTLAND
Feet: 8'
Amount: 1 Bags

Well Seal
Type: 30/65
Feet: 1'

Filter Pack
Type: 20/30
Feet: 11'
No. of Bags: 1 / 50 lbs.

Well Development
Water Level:
Method: Honda
Start: Cloudy
Time: .5 hr
Finish: Clear
GPM:

Contractor Information

Contractor #:	9311
Completion:	10/6/2011
Driller:	Jon Yarema
Lead Hand:	Scott Neilson
3rd Man:	NA
Drill Rig:	7822

Company:	Drillpro LLC d/b/a Groundwater Protection
Address:	2300 Silver Star Road
C.S.Z.:	Orlando, Florida 32804-3310
Phone/FAX:	(407) 426-7885 / (407) 426-7586

WELL COMPLETION LOG

Water Mgmt. Dist.:

Permit Number:

Work Order: 1011007

Type of Well: Monitor

Well Number: MW 4

Method Used: DP

Borehole Diaz. 3"

Site Information:

Name: Rice Iron & Metal

Address: 2000 W. Savannah Ave.

C.S.Z: Valdosta, GA

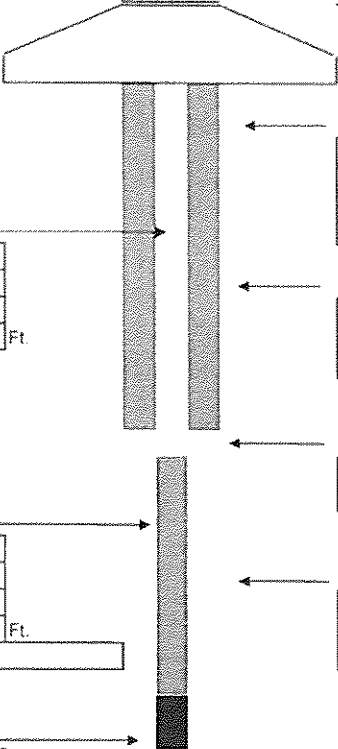
S/T/R:

Client / Consultant Information

Consultant: Stillwater

Field Rep: David Dickens

Well Diameter	Well Type	Well Depth	Screen Length	Casing Length	Bags Grout	Sand Bags/Weight	Filter Type	Well Seal
1"	PVC	20'	10'	10'	1	1 / 50 lbs.	20/30	30/65
40	← Schedule	Slot Size →	0.01		8'	← Feet →	11'	1'



The diagram illustrates the well completion assembly. At the top is the 'Surface Completion' (2' x 2' x 8" Flush). Below it is the 'Surface Casing' (Diameter: 1", Type: PVC, Schedule: 40, Length: 10' Ft.). This is followed by the 'Well Screen' (Diameter: 1", Type: PVC, Slot: 0.01, Length: 10' Ft.). Below the screen is the 'Well Seal' (Type: 30/65, Feet: 1'). The bottom section is the 'Sump' (Length: 10' Ft., Type: PVC). To the right of the well assembly are details for 'Intermediate Casing' (Diameter, Type, Schedule, Depth), 'Grout Seal' (Type: 1 PORTLAND, Feet: 8', Amount: 1 Bags), 'Filter Pack' (Type: 20/30, Feet: 11', No. of Bags: 1 / 50 lbs.), and 'Well Development' (Water Level, Method: Honda, Start: Cloudy, Time: .5 hr, GPM, Finish: Clear).

Surface Completion
2' x 2' x 8" Flush

Well Casing
Diameter: 1"
Type: PVC
Schedule: 40
Length: 10' Ft.

Well Screen
Diameter: 1"
Type: PVC
Slot: 0.01
Length: 10' Ft.
Note:

Sump
Length: 10' Ft.
Type: PVC

Intermediate Casing
Diameter:
Type:
Schedule:
Depth:

Grout Seal
Type: 1 PORTLAND
Feet: 8'
Amount: 1 Bags

Well Seal
Type: 30/65
Feet: 1'

Filter Pack
Type: 20/30
Feet: 11'
No. of Bags: 1 / 50 lbs.

Well Development
Water Level:
Method: Honda
Start: Cloudy
Time: .5 hr
GPM:
Finish: Clear

Contractor Information
Contractor #: 9311
Completion: 10/6/2011
Driller: Jon Yarema
Lead Hand: Scott Neilson
3rd Man: NA
Drill Rig: 7822

Company: Drillpro LLC d/b/a Groundwater Protection
Address: 2300 Silver Star Road
C.S.Z: Orlando, Florida 32804-3310
Phone/FAX: (407) 426-7885 / (407) 426-7586

WELL COMPLETION LOG

Water Mgmt. Dist.:

Permit Number:

Work Order: 1011007

Type of Well: Monitor

Well Number: MW 5

Method Used: DP

Borehole Diaz: 3"

Site Information:

Name: Rice Iron & Metal

Address: 2000 W. Savannah Ave.

C,S,Z: Valdosta, GA

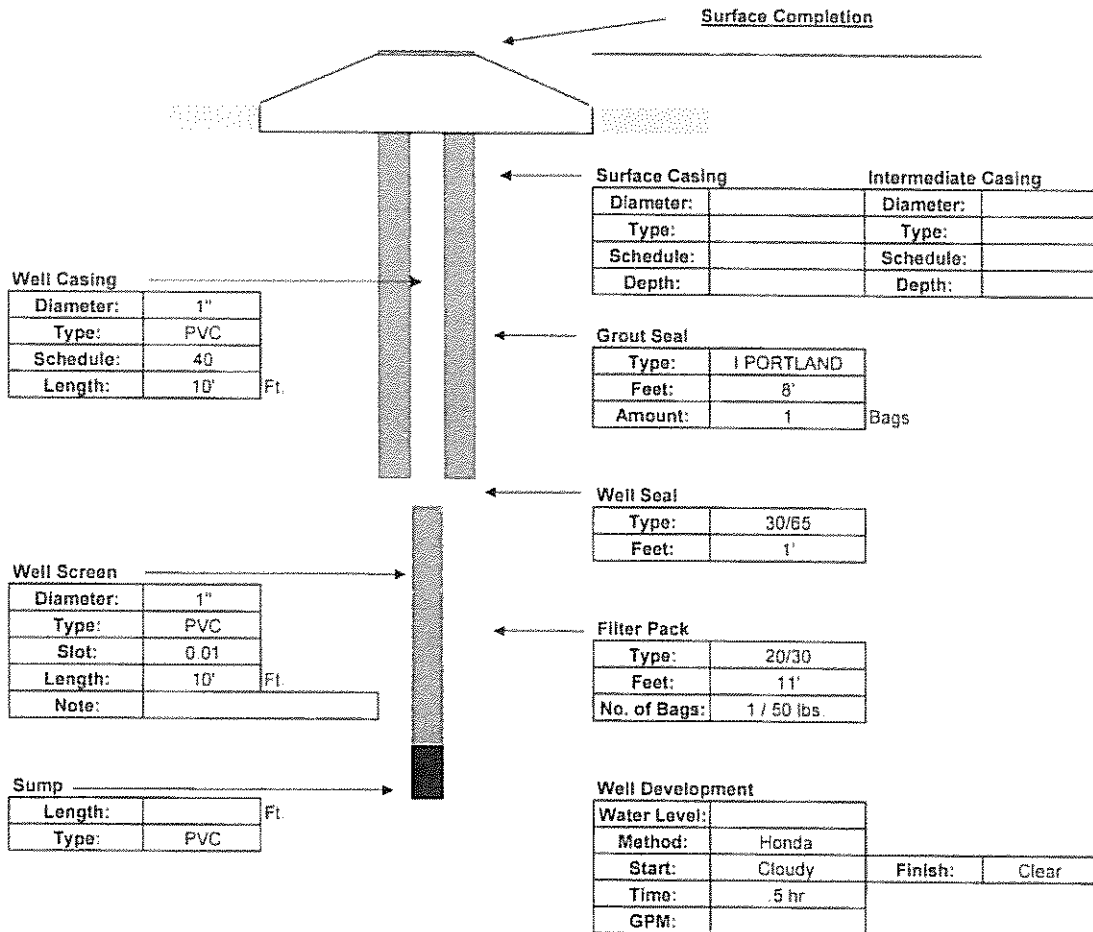
S/T/R:

Client / Consultant Information

Consultant: Stillwater

Field Rep: David Dickens

Well Diameter	Well Type	Well Depth	Screen Length	Casing Length	Bags Grout	Sand Bags/Weight	Filter Type	Well Seal
1"	PVC	20'	10'	10'	1	1 / 50 lbs.	20/30	30/65
40	Schedule	Slot Size:	0.01		8'	Feet	11'	1'



The diagram illustrates the well completion components and their depths. It shows a vertical well casing with a surface casing, intermediate casing, and a well screen. The well screen is located at a depth of 10 feet. The well seal is located at a depth of 1 foot. The filter pack is located at a depth of 11 feet. The well development is shown at the bottom of the well.

Surface Completion

Well Casing

Diameter:	1"
Type:	PVC
Schedule:	40
Length:	10' Ft.

Surface Casing

Diameter:	
Type:	
Schedule:	
Depth:	

Intermediate Casing

Diameter:	
Type:	
Schedule:	
Depth:	

Grout Seal

Type:	1 PORTLAND
Feet:	8'
Amount:	1 Bags

Well Seal

Type:	30/65
Feet:	1'

Well Screen

Diameter:	1"
Type:	PVC
Slot:	0.01
Length:	10' Ft.
Note:	

Filter Pack

Type:	20/30
Feet:	11'
No. of Bags:	1 / 50 lbs

Sump

Length:	
Type:	PVC

Well Development

Water Level:			
Method:	Honda		
Start:	Cloudy	Finish:	Clear
Time:	.5 hr		
GPM:			

Contractor Information

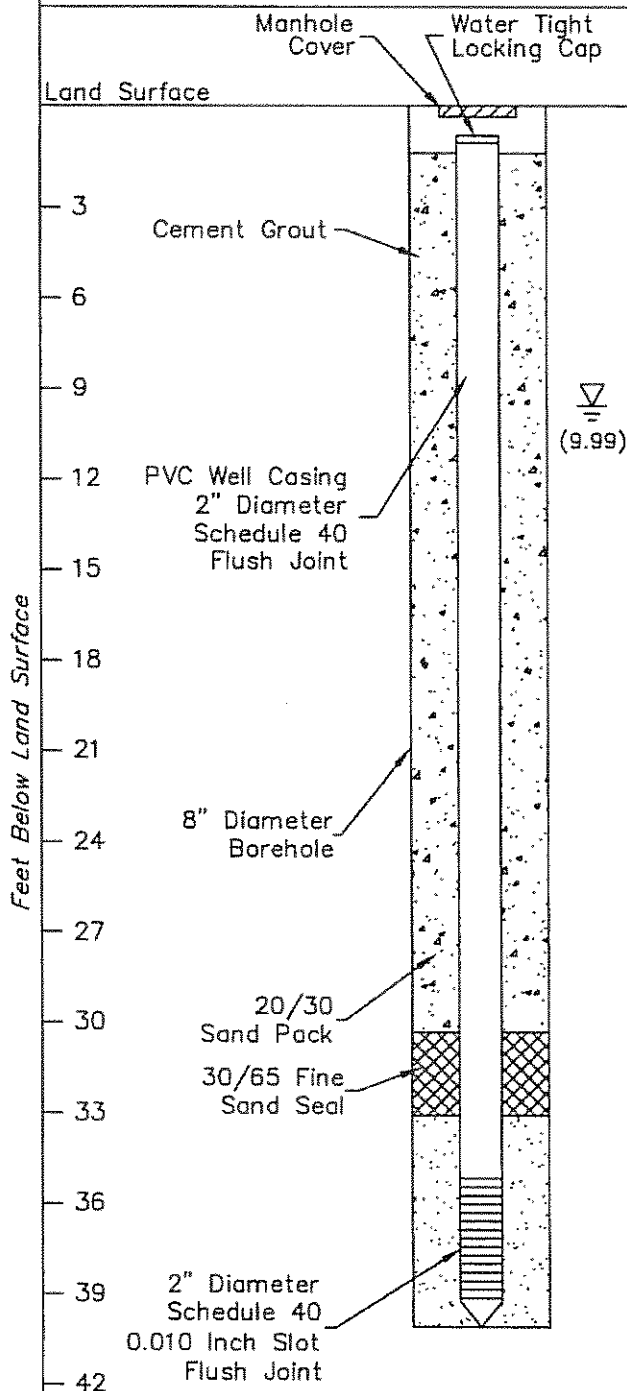
Contractor #:	9311
Completion:	10/6/2011
Driller:	Jon Yarema
Lead Hand:	Scott Neilson
3rd Man:	NA
Drill Rig:	7822

Company:	Drillpro LLC d/b/a Groundwater Protection
Address:	2300 Silver Star Road
C,S,Z:	Orlando, Florida 32804-3310
Phone/FAX:	(407) 426-7885 / (407) 426-7586

WELL CONSTRUCTION LOG		MONITORING WELL NO.	MW-5D
LOCATION TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA		WATER LEVEL MEASURED 9.99 FT. BLS.(11/10/14)	PROJECT NUMBER 057524.012
SCIENTIST Todd Falkner	SAMPLE INTERVAL Continuous	SAMPLE TYPE Soil	TOTAL DEPTH 40.0 Feet
DRILLER Mike Nicholson	DRILLING CONTRACTOR Partridge Well Drilling	DRILLING METHOD HSA	DATE WELL COMPLETED 8/7/14

WELL CONSTRUCTION

LITHOLOGY



Note: Lithologies Were Completed On Borings.

WELL COMPLETION LOG

Water Mgmt. Dist.:

Permit Number:

Work Order: 1011007

Type of Well: Monitor

Well Number: MW 6

Method Used: DP

Borehole Diaz: 3"

Site Information:

Name: Rice Iron & Metal

Address: 2000 W. Savannah Ave.

C,S,Z: Valdosta, GA

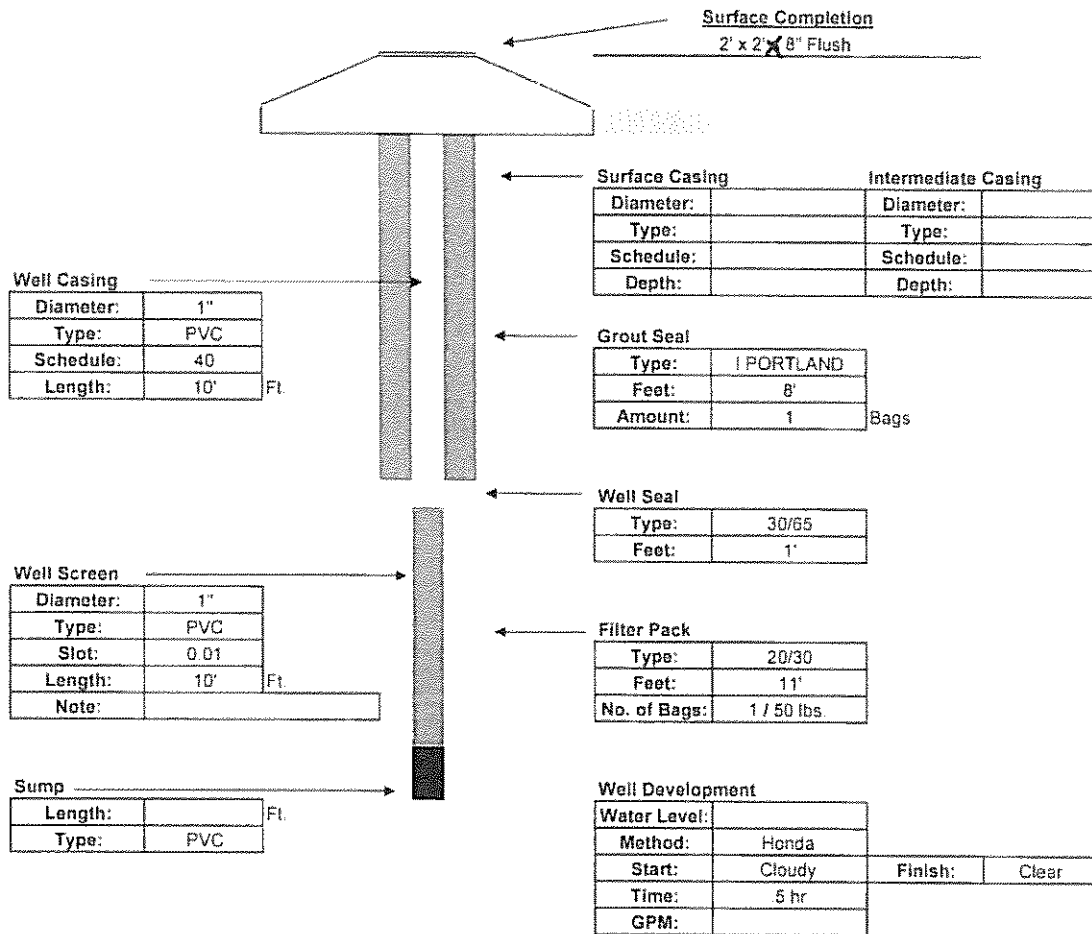
S/T/R:

Client / Consultant Information

Consultant: Stillwater

Field Rep: David Dickens

Well Diameter	Well Type	Well Depth	Screen Length	Casing Length	Bags Grout	Sand Bags/Weight	Filter Type	Well Seal
1"	PVC	20'	10'	10'	1	1 / 50 lbs.	20/30	30/65
40	← Schedule	Slot Size: →	0.01		8'	← Feet →	11'	1'



Contractor Information

Contractor #:	9311
Completion:	10/6/2011
Driller:	Jon Yarema
Lead Hand:	Scott Neilson
3rd Man:	NA
Drill Rig:	7822

Company:	Drillpro LLC d/b/a Groundwater Protection
Address:	2300 Silver Star Road
C,S,Z:	Orlando, Florida 32804-3310
Phone/FAX:	(407) 426-7885 / (407) 426-7686

WELL COMPLETION LOG

Water Mgmt. Dist.:

Permit Number:

Work Order: 1011007

Type of Well: Monitor

Well Number: MW 7

Method Used: DP

Borehole Diaz: 3"

Site Information:

Name: Rice Iron & Metal

Address: 2000 W. Savannah Ave.

C.S.Z: Valdosta, GA

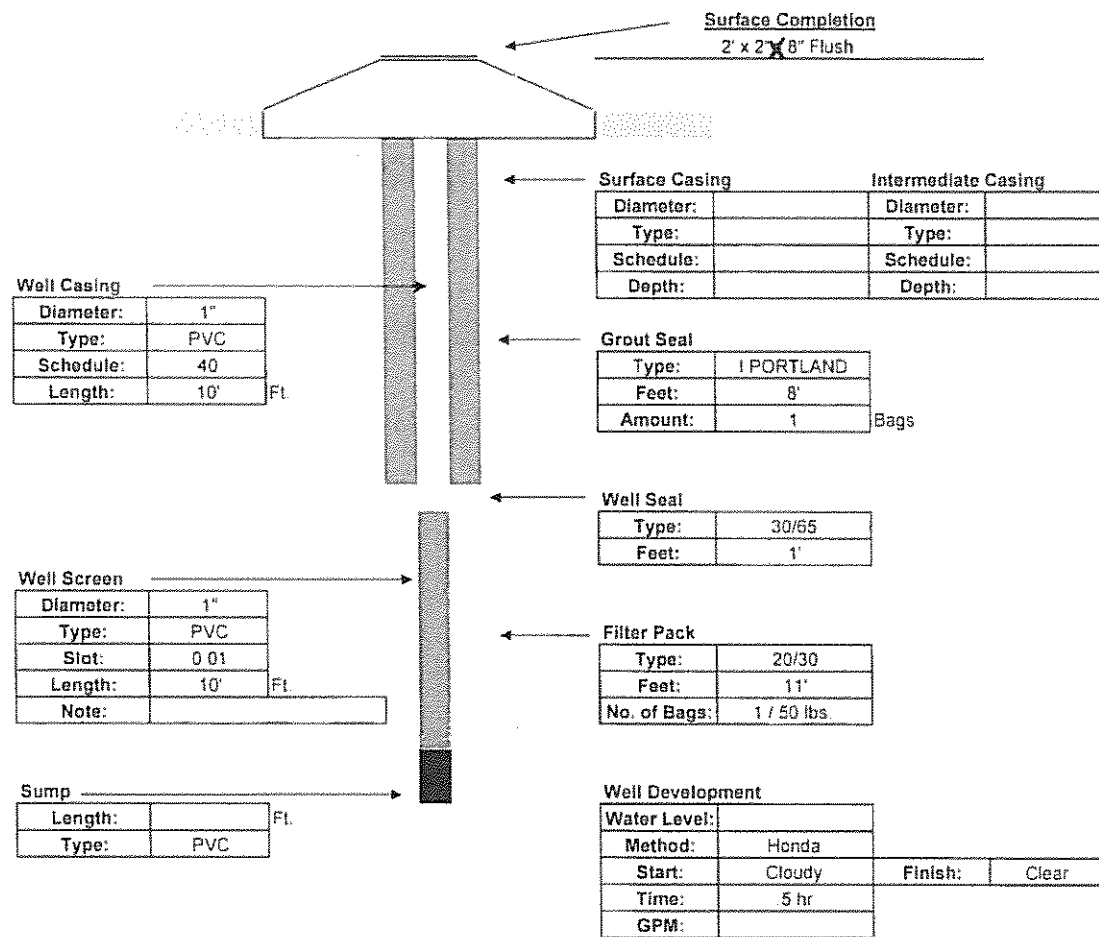
S/T/R:

Client / Consultant Information

Consultant: Stillwater

Field Rep: David Dickens

Well Diameter	Well Type	Well Depth	Screen Length	Casing Length	Bags Grout	Sand Bags/Weight	Filter Type	Well Seal
1"	PVC	20'	10'	10'	1	1 / 50 lbs.	20/30	30/65
40	Schedule	Slot Size:	0.01		8'	Feet	11'	1'



Contractor Information

Contractor #:	9311
Completion:	10/6/2011
Driller:	Jon Yarema
Lead Hand:	Scott Neilson
3rd Man:	NA
Drill Rig:	7822

Company:	Drillpro LLC d/b/a Groundwater Protection
Address:	2300 Silver Star Road
C.S.Z:	Orlando, Florida 32804-3310
Phone/FAX:	(407) 426-7885 / (407) 426-7586

WELL COMPLETION LOG

Water Mgmt. Dist.:
Permit Number:

Work Order: 1011007
Type of Well: Monitor
Well Number: MW 8
Method Used: DP
Borehole Diaz: 3"

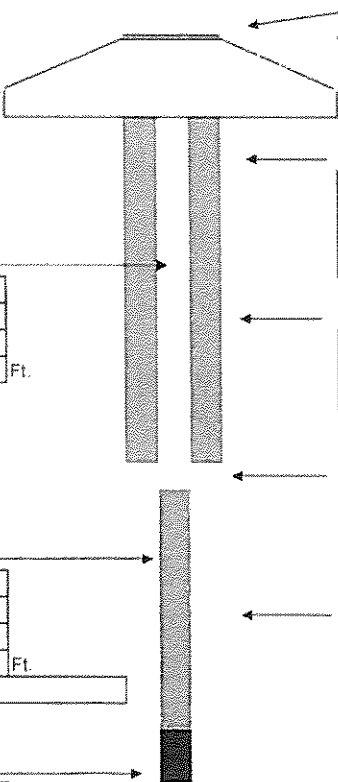
Site Information:

Name: Rice Iron & Metal
Address: 2000 W. Savannah Ave.
C,S,Z: Valdosta, GA
S/T/R:

Client / Consultant Information

Consultant: Stillwater
Field Rep: David Dickens

Well Diameter	Well Type	Well Depth	Screen Length	Casing Length	Bags Grout	Sand Bags/Weight	Filter Type	Well Seal
1"	PVC	20'	10'	10'	1	1 / 50 lbs.	20/30	30/65
40	Schedule	Slot Size:	0.01		8'	Feet	11'	1'



The diagram shows a cross-section of a well. At the top is the 'Surface Completion' with a '2' x 2' x 8" Flush' plate. Below this is the 'Surface Casing' and 'Intermediate Casing'. The 'Well Casing' is shown as a vertical pipe with a 'Well Screen' at the bottom. A 'Grout Seal' is located between the casing and the screen. Below the screen is a 'Well Seal'. At the very bottom is a 'Sump'. To the right of the well, there are tables for 'Grout Seal', 'Well Seal', 'Filter Pack', and 'Well Development'. At the bottom left, there is a table for 'Contractor Information'. At the bottom right, there is a table for 'Company' information.

Surface Completion
2' x 2' x 8" Flush

Well Casing

Diameter:	1"
Type:	PVC
Schedule:	40
Length:	10' Ft.

Well Screen

Diameter:	1"
Type:	PVC
Slot:	0.01
Length:	10' Ft.
Note:	

Sump

Length:		Ft.
Type:	PVC	

Surface Casing

Diameter:	
Type:	
Schedule:	
Depth:	

Intermediate Casing

Diameter:	
Type:	
Schedule:	
Depth:	

Grout Seal

Type:	I PORTLAND
Feet:	8'
Amount:	1 Bags

Well Seal

Type:	30/65
Feet:	1'

Filter Pack

Type:	20/30
Feet:	11'
No. of Bags:	1 / 50 lbs.

Well Development

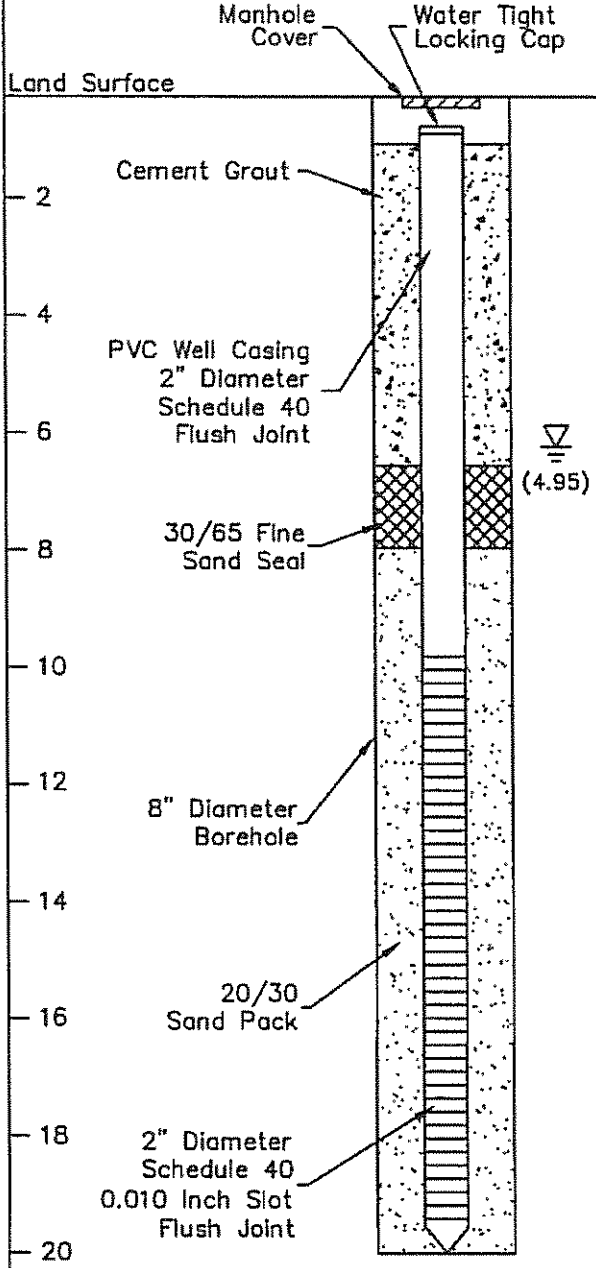
Water Level:			
Method:	Honda		
Start:	Cloudy	Finish:	Clear
Time:	.5 hr		
GPM:			

Contractor Information

Contractor #:	9311
Completion:	10/6/2011
Driller:	Jon Yarema
Lead Hand:	Scott Neilson
3rd Man:	NA
Drill Rig:	7822

Company

Company:	Drillpro LLC d/b/a Groundwater Protection
Address:	2300 Silver Star Road
C,S,Z:	Orlando, Florida 32804-3310
Phone/FAX:	(407) 426-7885 / (407) 426-7586

WELL CONSTRUCTION LOG		MONITORING WELL NO.	MW-8R
LOCATION TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA	WATER LEVEL MEASURED 4.95 FT. BLS.(2/17/17)	PROJECT NUMBER 057524	
SCIENTIST Todd Falkner	SAMPLE INTERVAL Continuous	SAMPLE TYPE Soil	TOTAL DEPTH 20.0 Feet
DRILLER Lance Partridge	DRILLING CONTRACTOR Partridge Well Drilling	DRILLING METHOD HSA	DATE WELL COMPLETED 2/16/17
WELL CONSTRUCTION		LITHOLOGY	
Land Surface  Feet Below Land Surface Note: Lithologies Were Completed On Borings.			
030317  Depth To Water			

WELL COMPLETION LOG

Water Mgmt. Dist.:
Permit Number:

Work Order: 1011007
Type of Well: Monitor
Well Number: MW 9
Method Used: DP
Borehole Diaz: 3"

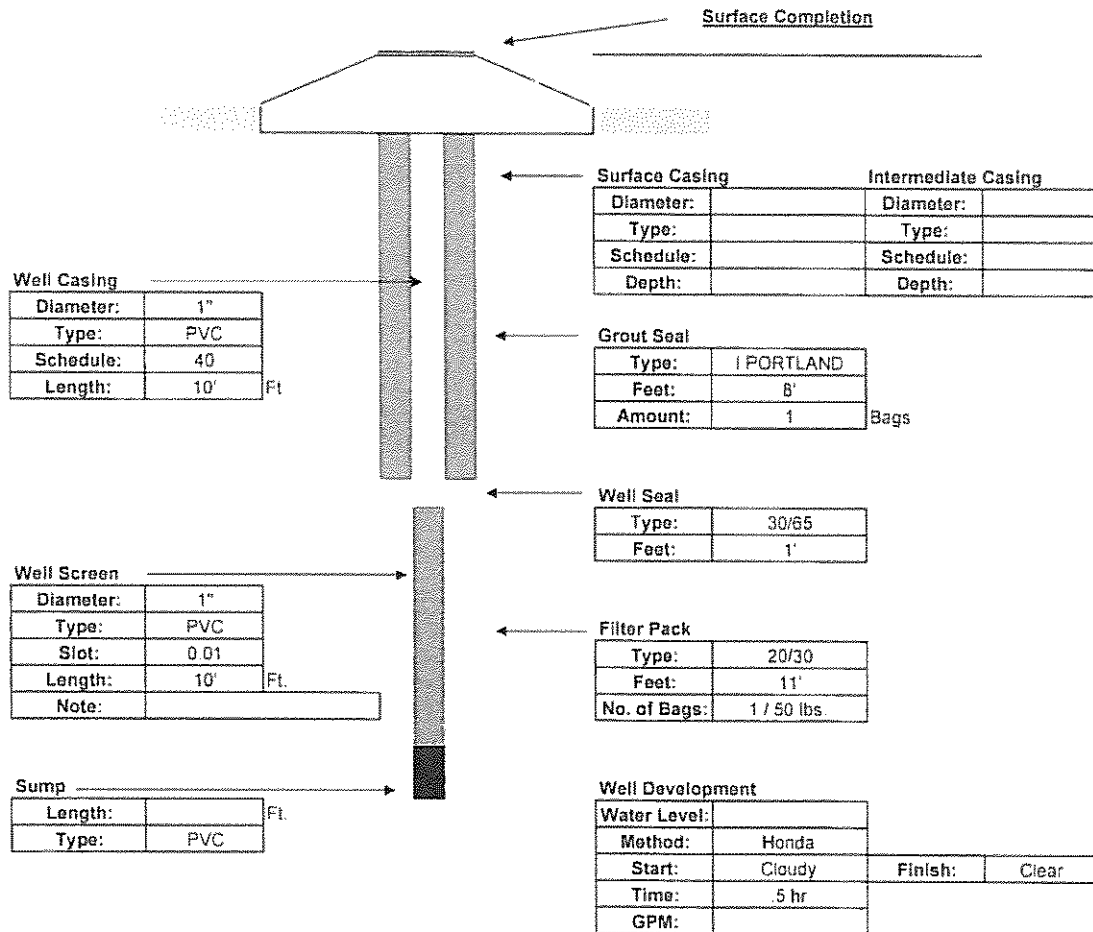
Site Information:

Name: Rice Iron & Metal
Address: 2000 W. Savannah Ave.
C.S.Z.: Valdosta, GA
S/T/R:

Client / Consultant Information

Consultant: Stillwater
Field Rep: David Dickens

Well Diameter	Well Type	Well Depth	Screen Length	Casing Length	Bags Grout	Sand Bags/Weight	Filter Type	Well Seal
1"	PVC	20'	10'	10'	1	1 / 50 lbs.	20/30	30/65
40	Schedule	Slot Size:	0.01		8'	Feet	11'	1'



Contractor Information

Contractor #:	9311
Completion:	10/6/2011
Driller:	Jon Yarema
Lead Hand:	Scott Neilson
3rd Man:	NA
Drill Rig:	7822

Company: Drillpro LLC d/b/a Groundwater Protection
Address: 2300 Silver Star Road
C,S,Z: Orlando, Florida 32804-3310
Phone/FAX: (407) 426-7885 / (407) 426-7586

WELL COMPLETION LOG

Water Mgmt. Dist.:

Permit Number:

Work Order: 1011007

Type of Well: Monitor

Well Number: MW 10

Method Used: DP

Borehole Diaz: 3"

Site Information:

Name: Rice Iron & Metal

Address: 2000 W. Savannah Ave.

C,S,Z: Valdosta, GA

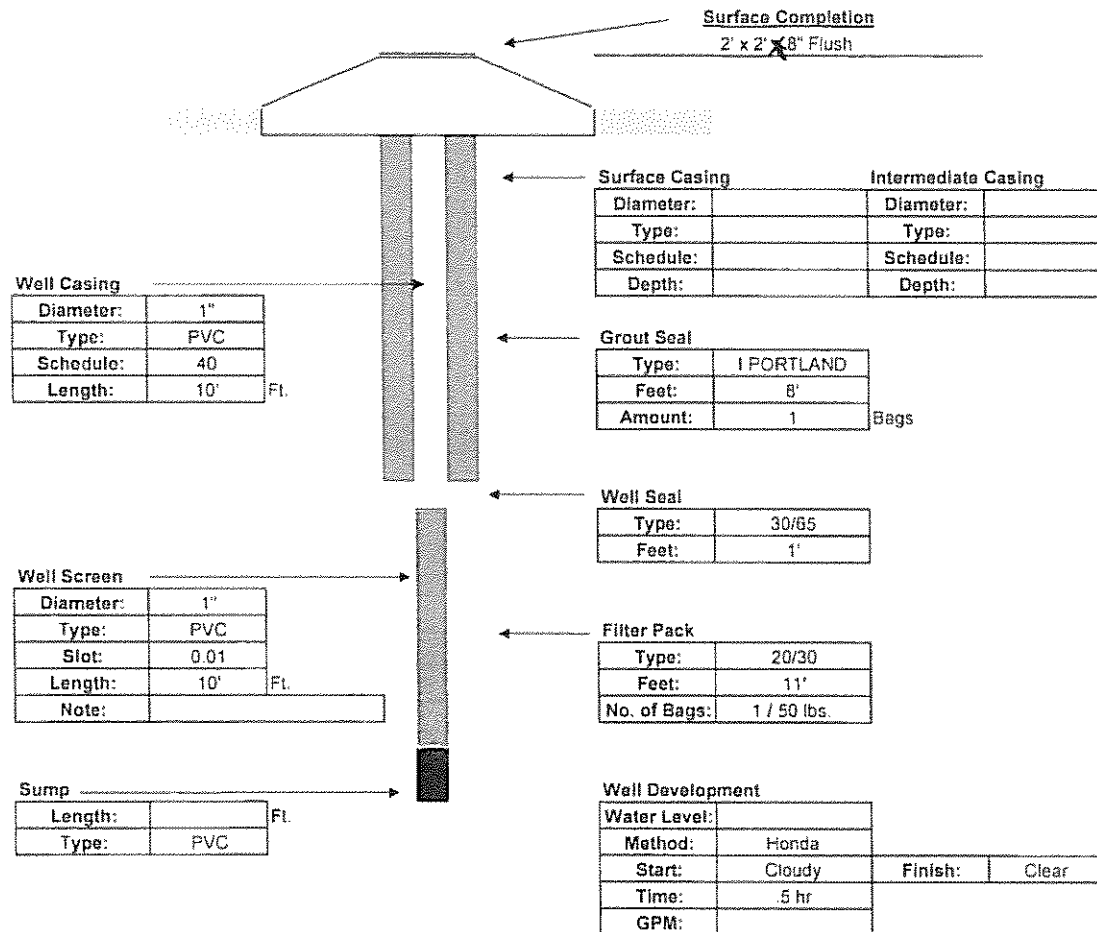
S/T/R:

Client / Consultant Information

Consultant: Stillwater

Field Rep: David Dickens

Well Diameter	Well Type	Well Depth	Screen Length	Casing Length	Bags Grout	Sand Bags/Weight	Filter Type	Well Seal
1"	PVC	20'	10'	10'	1	1 / 50 lbs.	20/30	30/65
40	← Schedule	Slot Size: →	0.01		8'	← Feet →	11'	1'



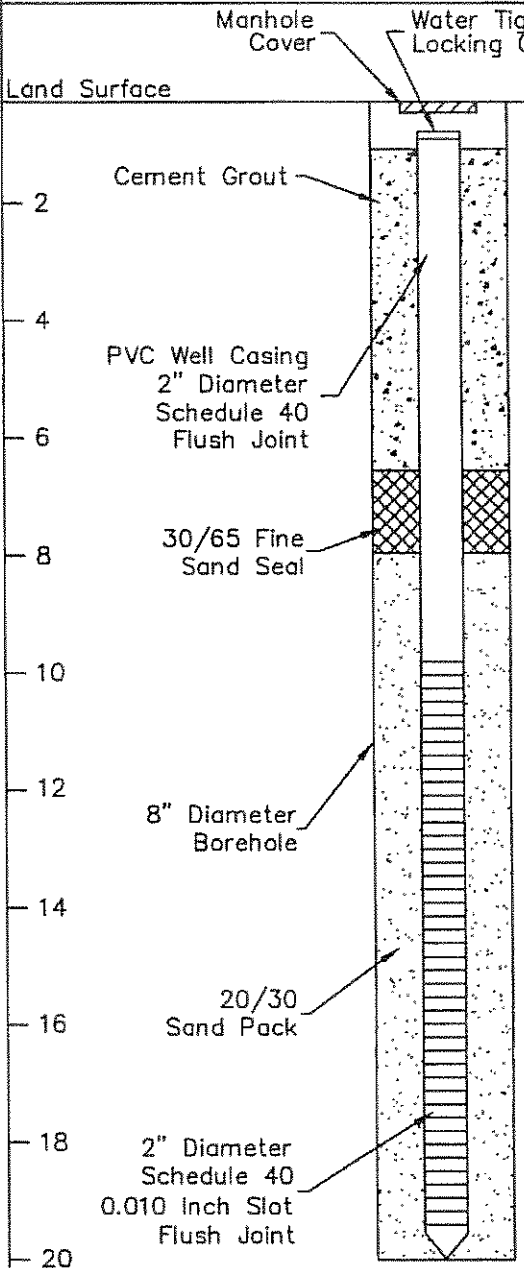
Contractor Information

Contractor #:	9311
Completion:	10/6/2011
Driller:	Jon Yarema
Lead Hand:	Scott Neilson
3rd Man:	NA
Drill Rig:	7822

Company:	Drillpro LLC d/b/a Groundwater Protection
Address:	2300 Silver Star Road
C,S,Z:	Orlando, Florida 32804-3310
Phone/FAX:	(407) 426-7885 / (407) 426-7586

WELL CONSTRUCTION LOG		MONITORING WELL NO. MW-11	
LOCATION TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA		WATER LEVEL MEASURED NA	PROJECT NUMBER NA
SCIENTIST NA	SAMPLE INTERVAL NA	SAMPLE TYPE NA	TOTAL DEPTH 20.0 Feet
DRILLER NA	DRILLING CONTRACTOR <i>Partridge Well Drilling</i>	DRILLING METHOD HSA	DATE WELL COMPLETED <i>September 2014</i>
WELL CONSTRUCTION		LITHOLOGY	

Land Surface



Feet Below Land Surface

122214

WELL CONSTRUCTION LOG

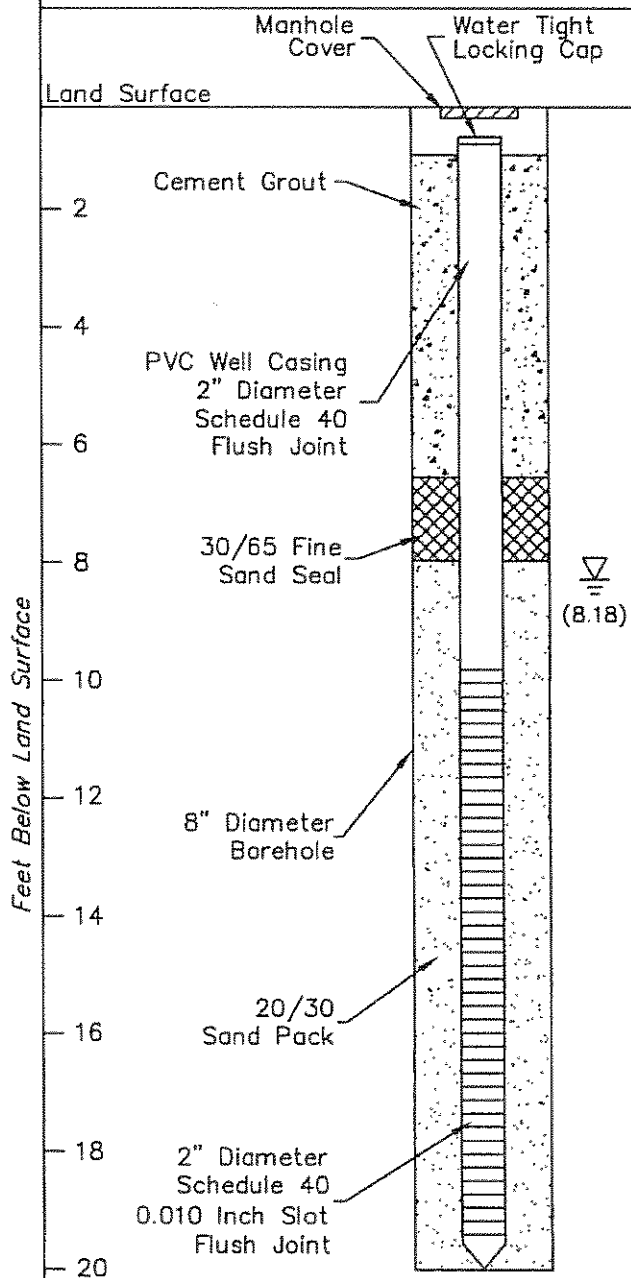
 MONITORING
WELL NO.

MW-12

LOCATION TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA		WATER LEVEL MEASURED 8.18 FT. BLS.(11/10/14)	PROJECT NUMBER 057524.012
SCIENTIST Todd Falkner	SAMPLE INTERVAL Continuous	SAMPLE TYPE Soil	TOTAL DEPTH 20.0 Feet
DRILLER Mike Nicholson	DRILLING CONTRACTOR Partridge Well Drilling	DRILLING METHOD HSA	DATE WELL COMPLETED 8/7/14

WELL CONSTRUCTION

LITHOLOGY



Note: Lithologies Were Completed On Borings.



WELL CONSTRUCTION LOG

 MONITORING
WELL NO.

MW-13

 LOCATION TRADEMARK METALS RECYCLING
2000 WEST SAVANNAH AVENUE
VALDOSTA, GEORGIA

 WATER LEVEL MEASURED
7.75 FT. BLS.(11/10/14)

 PROJECT NUMBER
057524.012

 SCIENTIST
Todd Falkner

 SAMPLE INTERVAL
Continuous

 SAMPLE TYPE
Soil

 TOTAL DEPTH
20.0 Feet

 DRILLER
Mike Nicholson

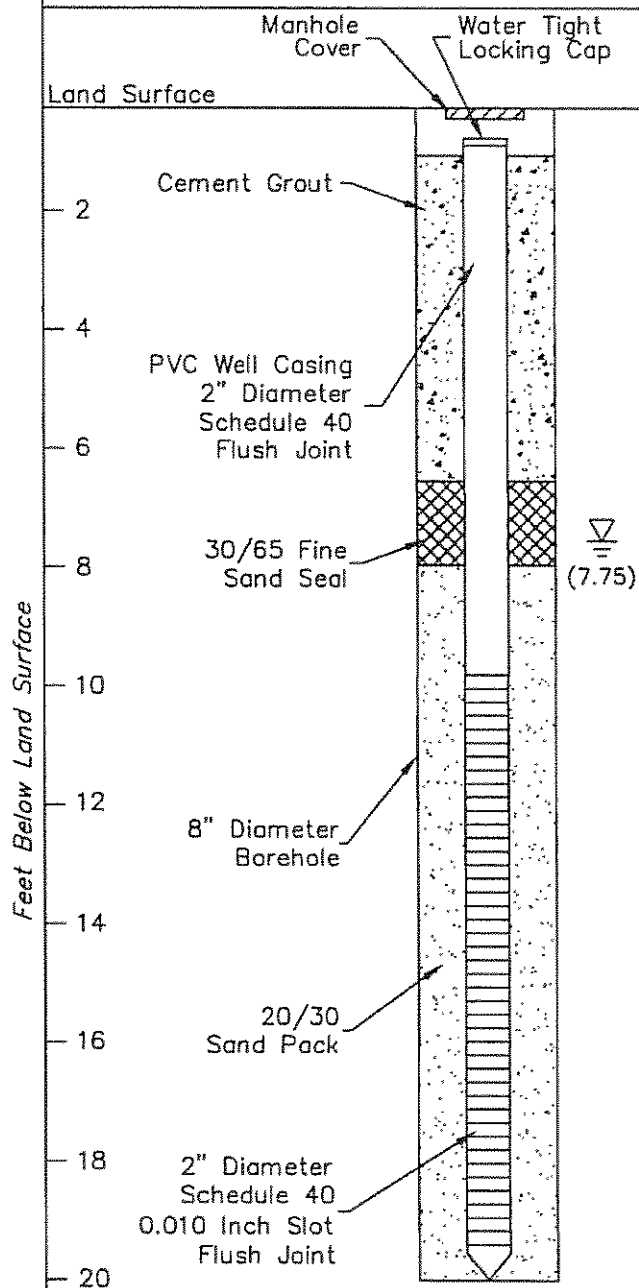
 DRILLING CONTRACTOR
Partridge Well Drilling

 DRILLING METHOD
HSA

 DATE WELL COMPLETED
8/7/14

WELL CONSTRUCTION

LITHOLOGY



Note: Lithologies Were Completed On Borings.

WELL CONSTRUCTION LOG			MONITORING WELL NO. MW-14
LOCATION	TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA	WATER LEVEL MEASURED NA	PROJECT NUMBER NA
SCIENTIST NA	SAMPLE INTERVAL NA	SAMPLE TYPE NA	TOTAL DEPTH 20.0 Feet
DRILLER NA	DRILLING CONTRACTOR Parkings Well Drilling	DRILLING METHOD HSA	DATE WELL COMPLETED September 2014
WELL CONSTRUCTION		LITHOLOGY	
Land Surface Manhole Cover Water Tight Locking Cap Cement Grout PVC Well Casing 2" Diameter Schedule 40 Flush Joint 30/65 Fine Sand Seal 8" Diameter Borehole 20/30 Sand Pack 2" Diameter Schedule 40 0.010 Inch Slot Flush Joint <!-- Lithology section is empty -->			

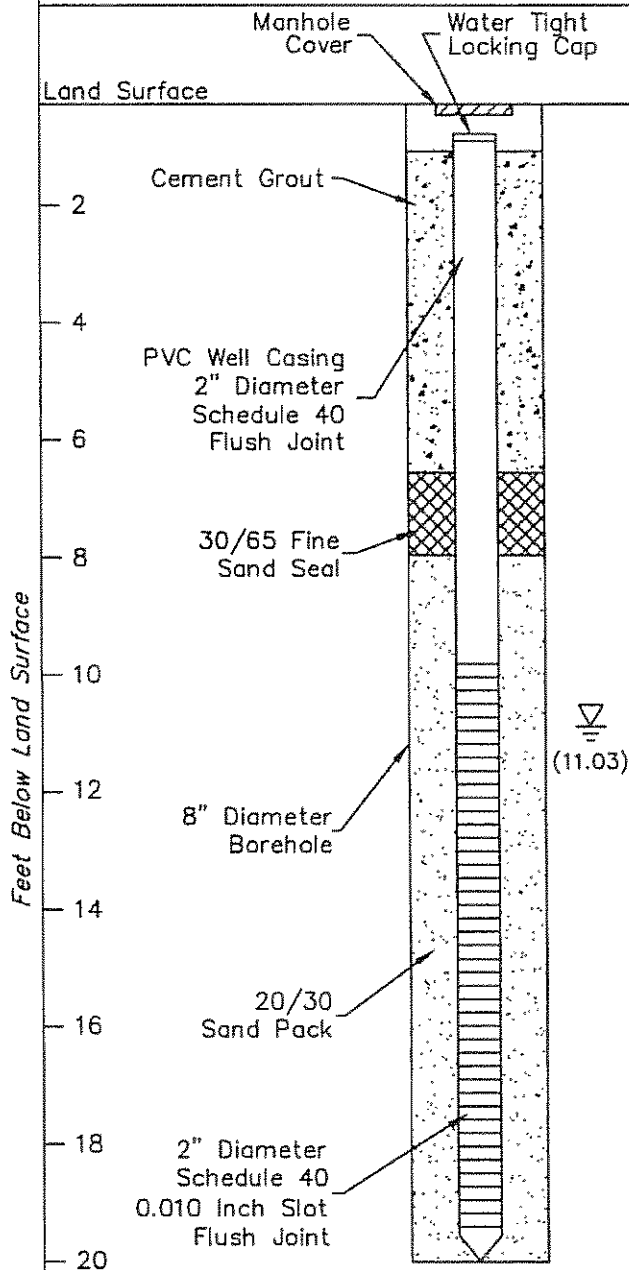
Feet Below Land Surface

2
4
6
8
10
12
14
16
18
20

WELL CONSTRUCTION LOG		MONITORING WELL NO.	MW-15
LOCATION TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA		WATER LEVEL MEASURED 11.03 FT. BLS.(11/10/14)	PROJECT NUMBER 057524.012
SCIENTIST Todd Falkner	SAMPLE INTERVAL Continuous	SAMPLE TYPE Soil	TOTAL DEPTH 20.0 Feet
DRILLER Mike Nicholson	DRILLING CONTRACTOR Partridge Well Drilling	DRILLING METHOD HSA	DATE WELL COMPLETED 9/16/14

WELL CONSTRUCTION

LITHOLOGY

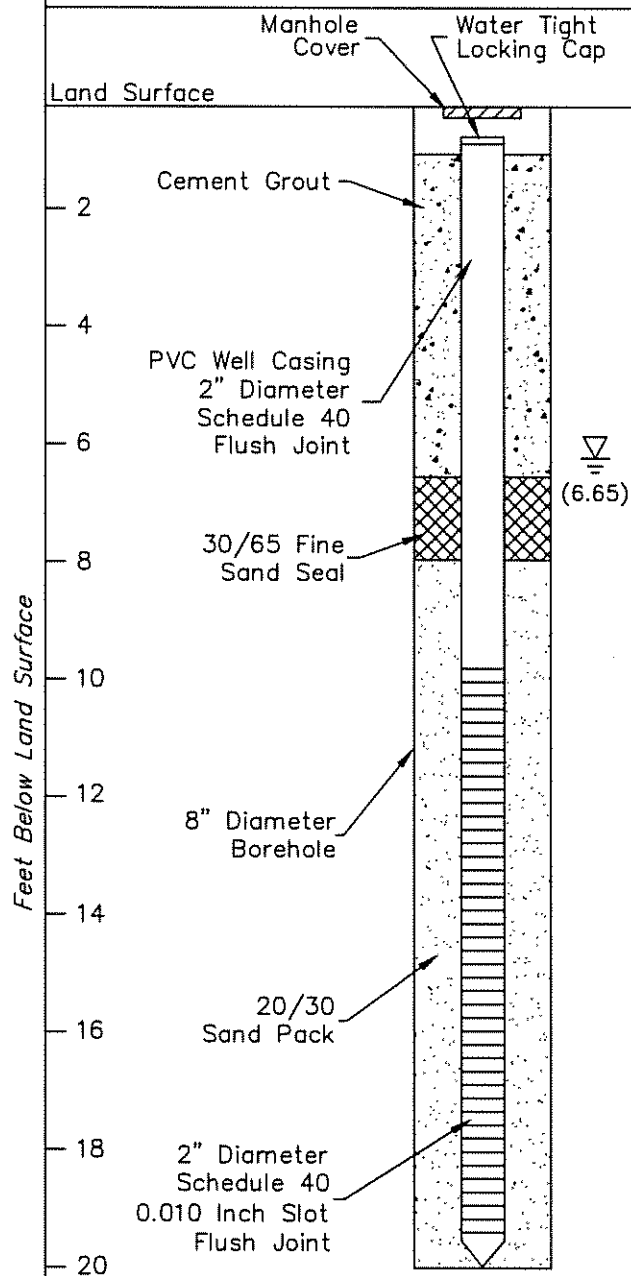


Note: Lithologies Were Completed On Borings.

WELL CONSTRUCTION LOG		MONITORING WELL NO.	MW-16
LOCATION TRADEMARK METALS RECYCLING 2000 WEST SAVANNAH AVENUE VALDOSTA, GEORGIA		WATER LEVEL MEASURED 6.65 FT. BLS.(7/27/16)	PROJECT NUMBER 057524.027
SCIENTIST Todd Falkner	SAMPLE INTERVAL Continuous	SAMPLE TYPE Soil	TOTAL DEPTH 20.0 Feet
DRILLER Lance Partridge	DRILLING CONTRACTOR Partridge Well Drilling	DRILLING METHOD HSA	DATE WELL COMPLETED 7/26/16

WELL CONSTRUCTION

LITHOLOGY



Note: Lithologies Were Completed On Borings.

APPENDIX D



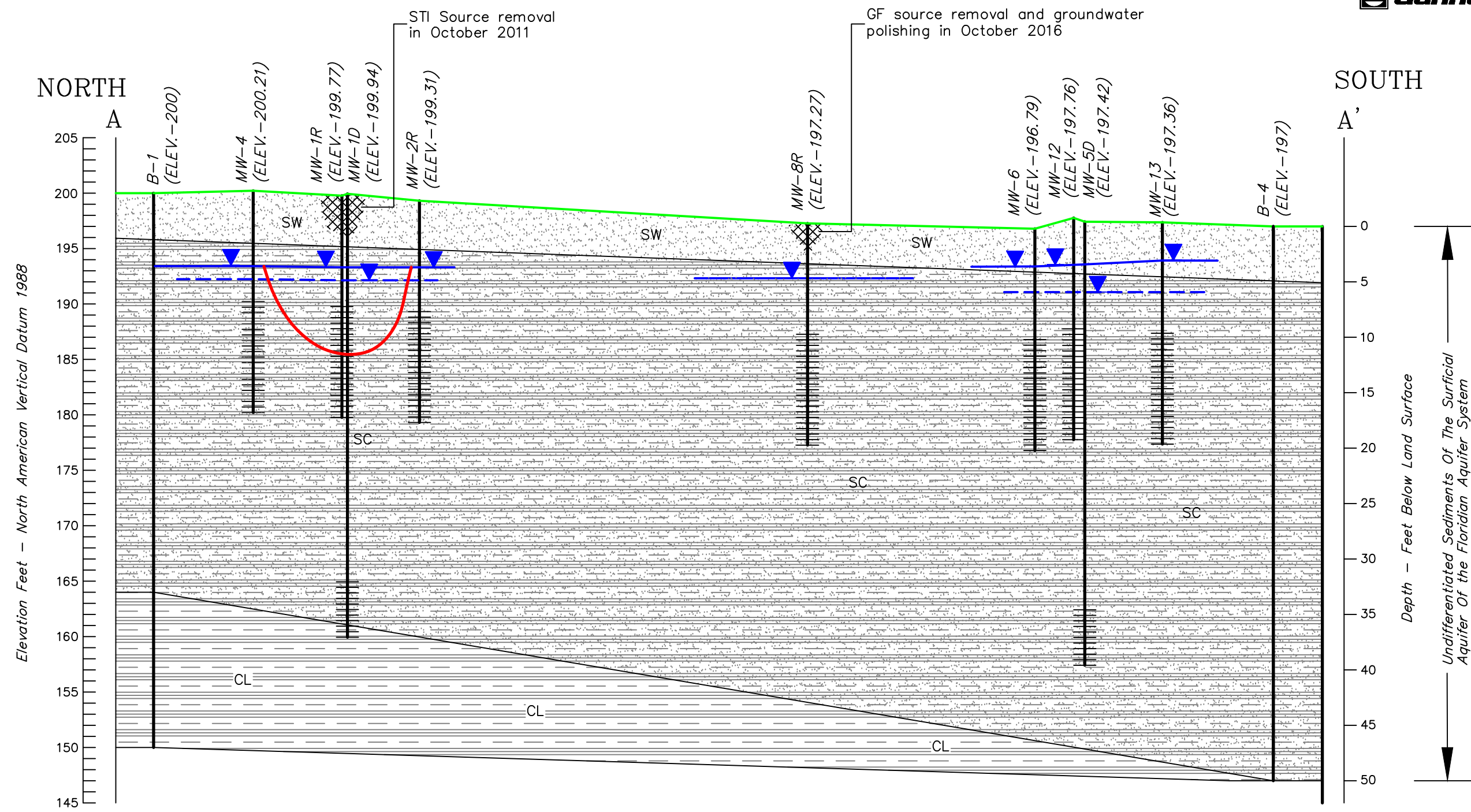
LEGEND

-  Monitoring Well Location
-  Soil Boring Location

0 200
Approximate
Scale in Feet

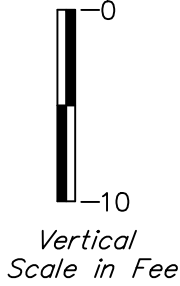
GEOLOGIC CROSS SECTION TRANSECTS

FORMER RICE IRON & METALS
2000 WEST SAVANNAH AVENUE
VALDOSTA, LOWNDES COUNTY, GEORGIA
FACILITY ID: HSI#10923/VRP1348601340



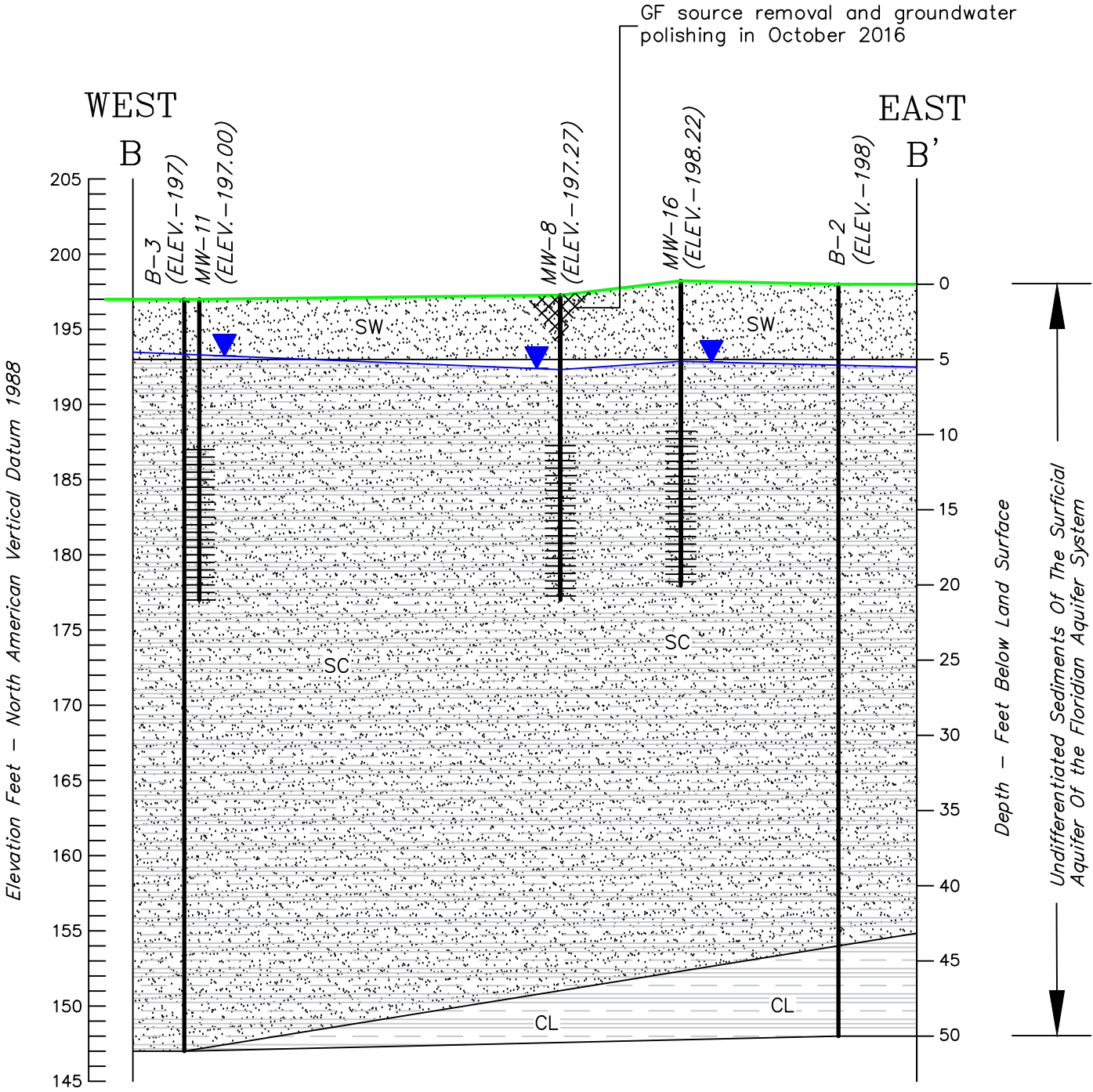
LEGEND

- Soil Boring
- SW Sand With Little Or No Fines
- SC Sand With Varying Amounts Of Clay
- CL Clay With Medium To Low Plasticity
- Monitoring Well Screened Interval
- Groundwater Elevation On February 17, 2017
- Potentiometric Surface
- Unconfined Surficial Aquifer Water Table
- Delineated Extent Of Chlorinated Solvent And Arsenic Impacted Groundwater To Type I RRS (February 16, 2017 Sampling Results)
- Presumed Source Areas



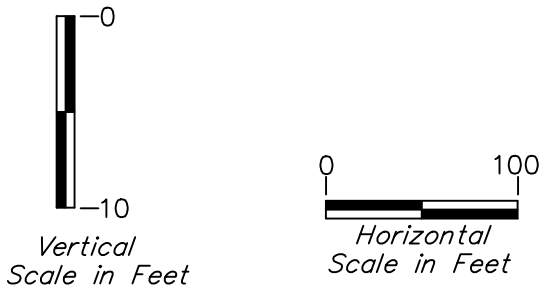
GEOLOGIC CROSS SECTION
NORTH TO SOUTH
A-A'

RICE IRON & METALS (FORMER)
2000 WEST SAVANNAH AVENUE
VALDOSTA, LOWNDES COUNTY, GEORGIA
FACILITY ID: HSI#10923/VRP1348601340



LEGEND

- Soil Boring
- SW Sand With Little Or No Fines
- SC Sand With Varying Amounts Of Clay
- CL Clay With Medium To Low Plasticity
- Monitoring Well Screened Interval
- Groundwater Elevation On February 17, 2017
- Unconfined Surficial Aquifer Water Table
- Presumed Source Area



GEOLOGIC CROSS SECTIONS
WEST TO EAST
B-B'

RICE IRON & METALS (FORMER)
2000 WEST SAVANNAH AVENUE
VALDOSTA, LOWNDES COUNTY, GEORGIA
FACILITY ID: HSI#10923/VRP1348601340

APPENDIX E

HORIZONTAL HYDRAULIC GRADIENT

Horizontal hydraulic gradient is often represented as i in finding the average linear groundwater flow velocity. The horizontal hydraulic gradient is an equation that is equal to rise in feet divided by run in feet (ft/ft).
 Directions: To find the horizontal hydraulic gradient between two wells (or between two contours) fill in the gray shaded areas below and the horizontal hydraulic gradient will appear in the yellow shaded bold box.

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{\text{High Well (ft)} - \text{Low Well (ft)}}{\text{Distance Between the High and Low (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{188.66 \text{ (ft)} - 188.39 \text{ (ft)}}{190 \text{ (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = 0.0014 \text{ (ft/ft)}$$

Well ID	MW-4	MW-1R	MW-15
11/11/14	188.66	188.39	188.16
04/14/15	194.92	194.52	194.52
07/27/16	192.42	192.21	191.91
10/17/16	191.97	190.08	189.74
07/27/17	191.46	190.98	190.68

Measurements in Feet NAVD 88

HORIZONTAL HYDRAULIC GRADIENT

Horizontal hydraulic gradient is often represented as i in finding the average linear groundwater flow velocity. The horizontal hydraulic gradient is an equation that is equal to rise in feet divided by run in feet (ft/ft). Directions: To find the horizontal hydraulic gradient between two wells (or between two contours) fill in the gray shaded areas below and the horizontal hydraulic gradient will appear in the yellow shaded bold box.

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{\text{High Well (ft)} - \text{Low Well (ft)}}{\text{Distance Between the High and Low (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{194.92 \text{ (ft)} - 194.52 \text{ (ft)}}{190 \text{ (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = 0.0021 \text{ (ft/ft)}$$

Well ID	MW-4	MW-1R	MW-15
11/11/14	188.66	188.39	188.16
04/14/15	194.92	194.52	194.52
07/27/16	192.42	192.21	191.91
10/17/16	191.97	190.08	189.74
07/27/17	191.46	190.98	190.68

Measurements in Feet NAVD 88

HORIZONTAL HYDRAULIC GRADIENT

Horizontal hydraulic gradient is often represented as i in finding the average linear groundwater flow velocity. The horizontal hydraulic gradient is an equation that is equal to rise in feet divided by run in feet (ft/ft). Directions: To find the horizontal hydraulic gradient between two wells (or between two contours) fill in the gray shaded areas below and the horizontal hydraulic gradient will appear in the yellow shaded bold box.

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{\text{High Well (ft)} - \text{Low Well (ft)}}{\text{Distance Between the High and Low (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{192.42 \text{ (ft)} - 192.21 \text{ (ft)}}{190 \text{ (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = 0.0011 \text{ (ft/ft)}$$

Well ID	MW-4	MW-1R	MW-15
11/11/14	188.66	188.39	188.16
04/14/15	194.92	194.52	194.52
07/27/16	192.42	192.21	191.91
10/17/16	191.97	190.08	189.74
07/27/17	191.46	190.98	190.68

Measurements in Feet NAVD 88

HORIZONTAL HYDRAULIC GRADIENT

Horizontal hydraulic gradient is often represented as i in finding the average linear groundwater flow velocity. The horizontal hydraulic gradient is an equation that is equal to rise in feet divided by run in feet (ft/ft).
 Directions: To find the horizontal hydraulic gradient between two wells (or between two contours) fill in the gray shaded areas below and the horizontal hydraulic gradient will appear in the yellow shaded bold box.

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{\text{High Well (ft)} - \text{Low Well (ft)}}{\text{Distance Between the High and Low (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{191.97 \text{ (ft)} - 190.08 \text{ (ft)}}{190 \text{ (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = 0.0099 \text{ (ft/ft)}$$

Well ID	MW-4	MW-1R	MW-15
11/11/14	188.66	188.39	188.16
04/14/15	194.92	194.52	194.52
07/27/16	192.42	192.21	191.91
10/17/16	191.97	190.08	189.74
07/27/17	191.46	190.98	190.68

Measurements in Feet NAVD 88

HORIZONTAL HYDRAULIC GRADIENT

Horizontal hydraulic gradient is often represented as i in finding the average linear groundwater flow velocity. The horizontal hydraulic gradient is an equation that is equal to rise in feet divided by run in feet (ft/ft). Directions: To find the horizontal hydraulic gradient between two wells (or between two contours) fill in the gray shaded areas below and the horizontal hydraulic gradient will appear in the yellow shaded bold box.

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{\text{High Well (ft)} - \text{Low Well (ft)}}{\text{Distance Between the High and Low (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{191.46 \text{ (ft)} - 190.98 \text{ (ft)}}{190 \text{ (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = 0.0025 \text{ (ft/ft)}$$

Well ID	MW-4	MW-1R	MW-15
11/11/14	188.66	188.39	188.16
04/14/15	194.92	194.52	194.52
07/27/16	192.42	192.21	191.91
10/17/16	191.97	190.08	189.74
07/27/17	191.46	190.98	190.68

Measurements in Feet NAVD 88

HORIZONTAL HYDRAULIC GRADIENT

Horizontal hydraulic gradient is often represented as i in finding the average linear groundwater flow velocity. The horizontal hydraulic gradient is an equation that is equal to rise in feet divided by run in feet (ft/ft).
 Directions: To find the horizontal hydraulic gradient between two wells (or between two contours) fill in the gray shaded areas below and the horizontal hydraulic gradient will appear in the yellow shaded bold box.

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{\text{High Well (ft)} - \text{Low Well (ft)}}{\text{Distance Between the High and Low (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{188.39 \text{ (ft)} - 188.16 \text{ (ft)}}{130 \text{ (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = 0.0018 \text{ (ft/ft)}$$

Well ID	MW-4	MW-1R	MW-15
11/11/14	188.66	188.39	188.16
04/14/15	194.92	194.52	194.52
07/27/16	192.42	192.21	191.91
10/17/16	191.97	190.08	189.74
07/27/17	191.46	190.98	190.68

Measurements in Feet NAVD 88

HORIZONTAL HYDRAULIC GRADIENT

Horizontal hydraulic gradient is often represented as i in finding the average linear groundwater flow velocity. The horizontal hydraulic gradient is an equation that is equal to rise in feet divided by run in feet (ft/ft). Directions: To find the horizontal hydraulic gradient between two wells (or between two contours) fill in the gray shaded areas below and the horizontal hydraulic gradient will appear in the yellow shaded bold box.

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{\text{High Well (ft)} - \text{Low Well (ft)}}{\text{Distance Between the High and Low (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{194.52 \text{ (ft)} - 194.52 \text{ (ft)}}{130 \text{ (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = 0.0000 \text{ (ft/ft)}$$

Well ID	MW-4	MW-1R	MW-15
11/11/14	188.66	188.39	188.16
04/14/15	194.92	194.52	194.52
07/27/16	192.42	192.21	191.91
10/17/16	191.97	190.08	189.74
07/27/17	191.46	190.98	190.68

Measurements in Feet NAVD 88

HORIZONTAL HYDRAULIC GRADIENT

Horizontal hydraulic gradient is often represented as i in finding the average linear groundwater flow velocity. The horizontal hydraulic gradient is an equation that is equal to rise in feet divided by run in feet (ft/ft).
 Directions: To find the horizontal hydraulic gradient between two wells (or between two contours) fill in the gray shaded areas below and the horizontal hydraulic gradient will appear in the yellow shaded bold box.

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{\text{High Well (ft)} - \text{Low Well (ft)}}{\text{Distance Between the High and Low (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{192.21 \text{ (ft)} - 191.91 \text{ (ft)}}{130 \text{ (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \mathbf{0.0023 \text{ (ft/ft)}}$$

Well ID	MW-4	MW-1R	MW-15
11/11/14	188.66	188.39	188.16
04/14/15	194.92	194.52	194.52
07/27/16	192.42	192.21	191.91
10/17/16	191.97	190.08	189.74
07/27/17	191.46	190.98	190.68

Measurements in Feet NAVD 88

HORIZONTAL HYDRAULIC GRADIENT

Horizontal hydraulic gradient is often represented as i in finding the average linear groundwater flow velocity. The horizontal hydraulic gradient is an equation that is equal to rise in feet divided by run in feet (ft/ft). Directions: To find the horizontal hydraulic gradient between two wells (or between two contours) fill in the gray shaded areas below and the horizontal hydraulic gradient will appear in the yellow shaded bold box.

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{\text{High Well (ft)} - \text{Low Well (ft)}}{\text{Distance Between the High and Low (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{190.08 \text{ (ft)} - 189.74 \text{ (ft)}}{130 \text{ (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = 0.0026 \text{ (ft/ft)}$$

Well ID	MW-4	MW-1R	MW-15
11/11/14	188.66	188.39	188.16
04/14/15	194.92	194.52	194.52
07/27/16	192.42	192.21	191.91
10/17/16	191.97	190.08	189.74
07/27/17	191.46	190.98	190.68

Measurements in Feet NAVD 88

HORIZONTAL HYDRAULIC GRADIENT

Horizontal hydraulic gradient is often represented as i in finding the average linear groundwater flow velocity. The horizontal hydraulic gradient is an equation that is equal to rise in feet divided by run in feet (ft/ft).
 Directions: To find the horizontal hydraulic gradient between two wells (or between two contours) fill in the gray shaded areas below and the horizontal hydraulic gradient will appear in the yellow shaded bold box.

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{\text{High Well (ft)} - \text{Low Well (ft)}}{\text{Distance Between the High and Low (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = \frac{190.98 \text{ (ft)} - 190.68 \text{ (ft)}}{130 \text{ (ft)}}$$

$$\text{Horizontal Hydraulic Gradient (ft/ft)} = 0.0023 \text{ (ft/ft)}$$

Well ID	MW-4	MW-1R	MW-15
11/11/14	188.66	188.39	188.16
04/14/15	194.92	194.52	194.52
07/27/16	192.42	192.21	191.91
10/17/16	191.97	190.08	189.74
07/27/17	191.46	190.98	190.68

Measurements in Feet NAVD 88

Vertical Gradient

Well Cluster MW-1R, MW-1D, and MW-1DD

Well ID	Water Elevation (ft, TOC)	Screen Elevation Midpoint (ft, TOC)	Vertical Gradient (ft/ft)
Gradient between the Upper Surficial Aquifer and Intermediate Surficial Aquifer			
MW-1R	190.98	184.77	0.04
MW-1D	190.09	162.44	
Gradient between the Intermediate Surficial Aquifer and the Lower Surficial Aquifer			
MW-1D	190.09	162.44	0.78
MW-1DD	162.65	127.35	

Notes:

1. Water level measurements were collected on 18 December 2006
2. TOC = Top of casing
3. Elevation referenced to the National Geodetic Vertical Datum of 1988
4. Positive vertical gradients indicates a downward flow direction.
5. Negative vertical gradients indicates a upward flow direction.

Vertical Gradient Calculation = difference in static water level elevations divided by the vertical distance between the bottoms of the well screens, Units in feet per foot (ft/ft).

Date	MW-1R	MW-1D	MW-1DD
11/11/14	188.39	187.80	161.68
04/14/15	194.52	193.51	166.21
10/19/15	194.1	192.68	164.45
04/05/16	196.76	195.83	166.84
07/27/16	192.21	191.08	165.19
10/17/16	190.08	190.34	162.9
02/15/17	193.47	192.32	162.64
02/17/17	193.41	192.24	162.52
07/27/17	190.98	190.09	162.65

Vertical Gradient

Well Cluster MW-1R, MW-1D, and MW-1DD

Well ID	Water Elevation (ft, TOC)	Screen Elevation Midpoint (ft, TOC)	Vertical Gradient (ft/ft)
Gradient between the Upper Surficial Aquifer and Intermediate Surficial Aquifer			
MW-1R	188.39	184.77	0.03
MW-1D	187.80	162.44	
Gradient between the Intermediate Surficial Aquifer and the Lower Surficial Aquifer			
MW-1D	187.80	162.44	0.74
MW-1DD	161.68	127.35	

Notes:

1. Water level measurements were collected on 18 December 2006
2. TOC = Top of casing
3. Elevation referenced to the National Geodetic Vertical Datum of 1988
4. Positive vertical gradients indicates a downward flow direction.
5. Negative vertical gradients indicates a upward flow direction.

Vertical Gradient Calculation = difference in static water level elevations divided by the vertical distance between the bottoms of the well screens, Units in feet per foot (ft/ft).

Date	MW-1R	MW-1D	MW-1DD
11/11/14	188.39	187.80	161.68
04/14/15	194.52	193.51	166.21
10/19/15	194.1	192.68	164.45
04/05/16	196.76	195.83	166.84
07/27/16	192.21	191.08	165.19
10/17/16	190.08	190.34	162.9
02/15/17	193.47	192.32	162.64
02/17/17	193.41	192.24	162.52
07/27/17	190.98	190.09	162.65

Vertical Gradient

Well Cluster MW-1R, MW-1D, and MW-1DD

Well ID	Water Elevation (ft, TOC)	Screen Elevation Midpoint (ft, TOC)	Vertical Gradient (ft/ft)
Gradient between the Upper Surficial Aquifer and Intermediate Surficial Aquifer			
MW-1R	194.52	184.77	0.05
MW-1D	193.51	162.44	
Gradient between the Intermediate Surficial Aquifer and the Lower Surficial Aquifer			
MW-1D	193.51	162.44	0.78
MW-1DD	166.21	127.35	

Notes:

1. Water level measurements were collected on 18 December 2006
2. TOC = Top of casing
3. Elevation referenced to the National Geodetic Vertical Datum of 1988
4. Positive vertical gradients indicates a downward flow direction.
5. Negative vertical gradients indicates a upward flow direction.

Vertical Gradient Calculation = difference in static water level elevations divided by the vertical distance between the bottoms of the well screens, Units in feet per foot (ft/ft).

Date	MW-1R	MW-1D	MW-1DD
11/11/14	188.39	187.80	161.68
04/14/15	194.52	193.51	166.21
10/19/15	194.1	192.68	164.45
04/05/16	196.76	195.83	166.84
07/27/16	192.21	191.08	165.19
10/17/16	190.08	190.34	162.9
02/15/17	193.47	192.32	162.64
02/17/17	193.41	192.24	162.52
07/27/17	190.98	190.09	162.65

Vertical Gradient

Well Cluster MW-1R, MW-1D, and MW-1DD

Well ID	Water Elevation (ft, TOC)	Screen Elevation Midpoint (ft, TOC)	Vertical Gradient (ft/ft)
Gradient between the Upper Surficial Aquifer and Intermediate Surficial Aquifer			
MW-1R	194.10	184.77	0.06
MW-1D	192.68	162.44	
Gradient between the Intermediate Surficial Aquifer and the Lower Surficial Aquifer			
MW-1D	192.68	162.44	0.80
MW-1DD	164.45	127.35	

Notes:

1. Water level measurements were collected on 18 December 2006
2. TOC = Top of casing
3. Elevation referenced to the National Geodetic Vertical Datum of 1988
4. Positive vertical gradients indicates a downward flow direction.
5. Negative vertical gradients indicates a upward flow direction.

Vertical Gradient Calculation = difference in static water level elevations divided by the vertical distance between the bottoms of the well screens, Units in feet per foot (ft/ft).

Date	MW-1R	MW-1D	MW-1DD
11/11/14	188.39	187.80	161.68
04/14/15	194.52	193.51	166.21
10/19/15	194.1	192.68	164.45
04/05/16	196.76	195.83	166.84
07/27/16	192.21	191.08	165.19
10/17/16	190.08	190.34	162.9
02/15/17	193.47	192.32	162.64
02/17/17	193.41	192.24	162.52
07/27/17	190.98	190.09	162.65

Vertical Gradient

Well Cluster MW-1R, MW-1D, and MW-1DD

Well ID	Water Elevation (ft, TOC)	Screen Elevation Midpoint (ft, TOC)	Vertical Gradient (ft/ft)
Gradient between the Upper Surficial Aquifer and Intermediate Surficial Aquifer			
MW-1R	196.76	184.77	0.04
MW-1D	195.83	162.44	
Gradient between the Intermediate Surficial Aquifer and the Lower Surficial Aquifer			
MW-1D	195.83	162.44	0.83
MW-1DD	166.84	127.35	

Notes:

1. Water level measurements were collected on 18 December 2006
2. TOC = Top of casing
3. Elevation referenced to the National Geodetic Vertical Datum of 1988
4. Positive vertical gradients indicates a downward flow direction.
5. Negative vertical gradients indicates a upward flow direction.

Vertical Gradient Calculation = difference in static water level elevations divided by the vertical distance between the bottoms of the well screens, Units in feet per foot (ft/ft).

Date	MW-1R	MW-1D	MW-1DD
11/11/14	188.39	187.80	161.68
04/14/15	194.52	193.51	166.21
10/19/15	194.1	192.68	164.45
04/05/16	196.76	195.83	166.84
07/27/16	192.21	191.08	165.19
10/17/16	190.08	190.34	162.9
02/15/17	193.47	192.32	162.64
02/17/17	193.41	192.24	162.52
07/27/17	190.98	190.09	162.65

Vertical Gradient

Well Cluster MW-1R, MW-1D, and MW-1DD

Well ID	Water Elevation (ft, TOC)	Screen Elevation Midpoint (ft, TOC)	Vertical Gradient (ft/ft)
Gradient between the Upper Surficial Aquifer and Intermediate Surficial Aquifer			
MW-1R	192.21	184.77	0.05
MW-1D	191.08	162.44	
Gradient between the Intermediate Surficial Aquifer and the Lower Surficial Aquifer			
MW-1D	191.08	162.44	0.74
MW-1DD	165.19	127.35	

Notes:

1. Water level measurements were collected on 18 December 2006
2. TOC = Top of casing
3. Elevation referenced to the National Geodetic Vertical Datum of 1988
4. Positive vertical gradients indicates a downward flow direction.
5. Negative vertical gradients indicates a upward flow direction.

Vertical Gradient Calculation = difference in static water level elevations divided by the vertical distance between the bottoms of the well screens, Units in feet per foot (ft/ft).

Date	MW-1R	MW-1D	MW-1DD
11/11/14	188.39	187.80	161.68
04/14/15	194.52	193.51	166.21
10/19/15	194.1	192.68	164.45
04/05/16	196.76	195.83	166.84
07/27/16	192.21	191.08	165.19
10/17/16	190.08	190.34	162.9
02/15/17	193.47	192.32	162.64
02/17/17	193.41	192.24	162.52
07/27/17	190.98	190.09	162.65

Vertical Gradient

Well Cluster MW-1R, MW-1D, and MW-1DD

Well ID	Water Elevation (ft, TOC)	Screen Elevation Midpoint (ft, TOC)	Vertical Gradient (ft/ft)
Gradient between the Upper Surficial Aquifer and Intermediate Surficial Aquifer			
MW-1R	190.08	184.77	-0.01
MW-1D	190.34	162.44	
Gradient between the Intermediate Surficial Aquifer and the Lower Surficial Aquifer			
MW-1D	190.34	162.44	0.78
MW-1DD	162.90	127.35	

Notes:

1. Water level measurements were collected on 18 December 2006
2. TOC = Top of casing
3. Elevation referenced to the National Geodetic Vertical Datum of 1988
4. Positive vertical gradients indicates a downward flow direction.
5. Negative vertical gradients indicates a upward flow direction.

Vertical Gradient Calculation = difference in static water level elevations divided by the vertical distance between the bottoms of the well screens, Units in feet per foot (ft/ft).

Date	MW-1R	MW-1D	MW-1DD
11/11/14	188.39	187.80	161.68
04/14/15	194.52	193.51	166.21
10/19/15	194.1	192.68	164.45
04/05/16	196.76	195.83	166.84
07/27/16	192.21	191.08	165.19
10/17/16	190.08	190.34	162.9
02/15/17	193.47	192.32	162.64
02/17/17	193.41	192.24	162.52
07/27/17	190.98	190.09	162.65

Vertical Gradient

Well Cluster MW-1R, MW-1D, and MW-1DD

Well ID	Water Elevation (ft, TOC)	Screen Elevation Midpoint (ft, TOC)	Vertical Gradient (ft/ft)
Gradient between the Upper Surficial Aquifer and Intermediate Surficial Aquifer			
MW-1R	193.47	184.77	0.05
MW-1D	192.32	162.44	
Gradient between the Intermediate Surficial Aquifer and the Lower Surficial Aquifer			
MW-1D	192.32	162.44	0.85
MW-1DD	162.64	127.35	

Notes:

1. Water level measurements were collected on 18 December 2006
2. TOC = Top of casing
3. Elevation referenced to the National Geodetic Vertical Datum of 1988
4. Positive vertical gradients indicates a downward flow direction.
5. Negative vertical gradients indicates a upward flow direction.

Vertical Gradient Calculation = difference in static water level elevations divided by the vertical distance between the bottoms of the well screens, Units in feet per foot (ft/ft).

Date	MW-1R	MW-1D	MW-1DD
11/11/14	188.39	187.80	161.68
04/14/15	194.52	193.51	166.21
10/19/15	194.1	192.68	164.45
04/05/16	196.76	195.83	166.84
07/27/16	192.21	191.08	165.19
10/17/16	190.08	190.34	162.9
02/15/17	193.47	192.32	162.64
02/17/17	193.41	192.24	162.52
07/27/17	190.98	190.09	162.65

Vertical Gradient

Well Cluster MW-1R, MW-1D, and MW-1DD

Well ID	Water Elevation (ft, TOC)	Screen Elevation Midpoint (ft, TOC)	Vertical Gradient (ft/ft)
Gradient between the Upper Surficial Aquifer and Intermediate Surficial Aquifer			
MW-1R	193.41	184.77	0.05
MW-1D	192.24	162.44	
Gradient between the Intermediate Surficial Aquifer and the Lower Surficial Aquifer			
MW-1D	192.24	162.44	0.85
MW-1DD	162.52	127.35	

Notes:

1. Water level measurements were collected on 18 December 2006
2. TOC = Top of casing
3. Elevation referenced to the National Geodetic Vertical Datum of 1988
4. Positive vertical gradients indicates a downward flow direction.
5. Negative vertical gradients indicates a upward flow direction.

Vertical Gradient Calculation = difference in static water level elevations divided by the vertical distance between the bottoms of the well screens, Units in feet per foot (ft/ft).

Date	MW-1R	MW-1D	MW-1DD
11/11/14	188.39	187.80	161.68
04/14/15	194.52	193.51	166.21
10/19/15	194.1	192.68	164.45
04/05/16	196.76	195.83	166.84
07/27/16	192.21	191.08	165.19
10/17/16	190.08	190.34	162.9
02/15/17	193.47	192.32	162.64
02/17/17	193.41	192.24	162.52
07/27/17	190.98	190.09	162.65

The Error Log identifies errors detected in your data set.
Choose this view when you see the "Check Errors" indicator on the status bar.

No errors detected in data set.

Tips for Analyzing Aquifer Tests with AQTESOLV for Windows

1. Enter Test Data
Choose options from the Edit menu to enter or modify test data.
2. Perform Diagnostic Analyses (Optional)
Choose diagnostic flow plot and derivative plot options from the View menu.
3. Perform Curve Matching or Prediction
Choose the Solution or Toolbox options from the Match menu to perform forward solution analysis.
Choose the Automatic, Visual or Toolbox options from the Match menu to perform curve matching.
4. Analysis of Residuals (Optional)
Choose residual plot and diagnostic report options from View menu to evaluate automatic curve fitting.
5. Reporting
Choose Format option from View menu to customize appearance of plots and reports.
Choose Print Preview and Print options from File menu to obtain hardcopy output.

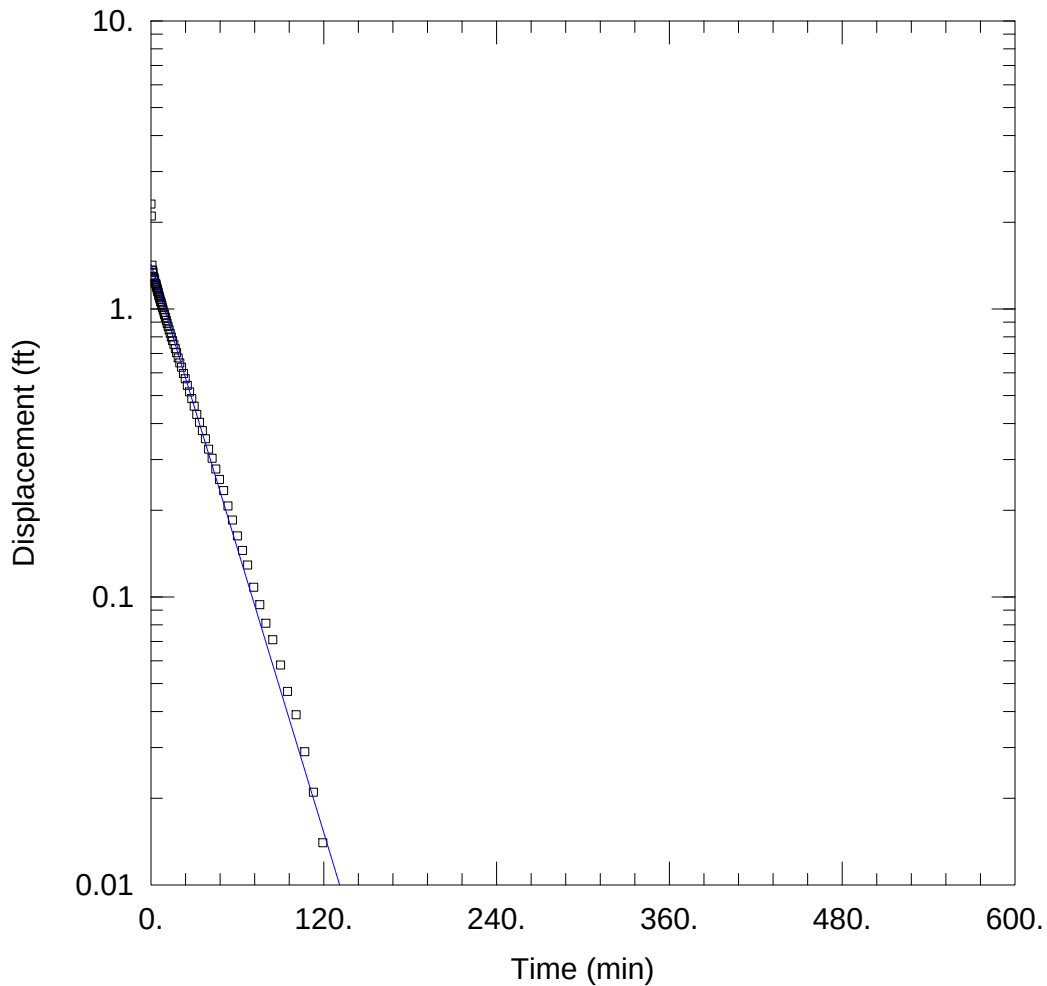
Data Set Summary

Slug Test

Total no. of observations: 103

Range of time readings in obs. well(s): 0.25 to 566.4 min

Range of displacement readings in obs. well(s): -0.029 to 2.101 ft



WELL TEST ANALYSIS

Data Set: S:\...\MW-1D.aqt
 Date: 12/30/14

Time: 11:52:19

PROJECT INFORMATION

Company: GF
 Client: TMR
 Project: Valdosta
 Location: Valdosta, FL
 Test Well: MW-1D
 Test Date: 9/23/14

AQUIFER DATA

Saturated Thickness: 27.86 ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-1D)

Initial Displacement: 2.314 ft
 Total Well Penetration Depth: 27.86 ft
 Casing Radius: 0.0833 ft

Static Water Column Height: 27.86 ft
 Screen Length: 5. ft
 Well Radius: 0.0833 ft
 Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined
 K = 8.196E-5 ft/min

Solution Method: Bouwer-Rice
 y0 = 1.427 ft

Data Set: S:\CF_ENVIRONMENTAL\57524-The David J Joseph Company\Working\TMR-Valdosta, Ga\TMR Valdosta
Date: 12/30/14
Time: 11:52:44

PROJECT INFORMATION

Company: GF
Client: TMR
Project: Valdosta
Location: Valdosta, FL
Test Date: 9/23/14
Test Well: MW-1D

AQUIFER DATA

Saturated Thickness: 27.86 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: MW-1D

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 2.314 ft
Static Water Column Height: 27.86 ft
Casing Radius: 0.0833 ft
Well Radius: 0.0833 ft
Well Skin Radius: 0.167 ft
Screen Length: 5. ft
Total Well Penetration Depth: 27.86 ft
Corrected Casing Radius (Bouwer-Rice Method): 0.07194 ft
Gravel Pack Porosity: 0.

No. of Observations: 103

Observation Data			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.25	2.101	31.86	0.43
0.5	1.295	33.72	0.404
0.75	1.418	35.76	0.378
1.	1.365	37.86	0.354
1.25	1.357	40.08	0.326
1.5	1.336	42.48	0.303
1.75	1.299	45.	0.278
2.214	1.288	47.64	0.256
2.434	1.269	50.46	0.234
2.654	1.26	53.46	0.207
2.873	1.231	56.64	0.185
3.233	1.227	60.	0.163
3.455	1.22	63.6	0.145
3.677	1.205	67.2	0.129
3.896	1.193	71.4	0.108
4.114	1.184	75.6	0.094
4.334	1.169	79.8	0.081
4.553	1.163	84.6	0.071
4.772	1.15	90.	0.058
5.	1.141	94.8	0.047
5.25	1.128	100.8	0.039
5.5	1.114	106.8	0.029
5.75	1.106	112.8	0.021
6.	1.091	119.4	0.014
6.36	1.076	126.6	0.008
6.72	1.06	134.4	0.004
7.14	1.049	142.2	-0.002
7.56	1.029	150.6	-0.005

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
7.98	1.011	159.6	-0.009
8.46	0.993	169.2	-0.007
9.	0.973	178.8	-0.015
9.48	0.954	189.6	-0.013
10.08	0.935	201.	-0.014
10.68	0.913	213.	-0.017
11.28	0.891	225.6	-0.017
11.94	0.869	238.8	-0.021
12.66	0.846	253.2	-0.02
13.44	0.823	268.2	-0.021
14.22	0.799	283.8	-0.021
15.06	0.776	300.6	-0.022
15.96	0.753	318.6	-0.025
16.92	0.728	337.2	-0.026
17.88	0.705	357.6	-0.027
18.96	0.676	378.6	-0.027
20.1	0.649	400.8	-0.028
21.3	0.627	424.8	-0.029
22.56	0.597	450.	-0.028
23.88	0.572	476.4	-0.027
25.32	0.543	504.6	-0.029
26.82	0.515	534.6	-0.029
28.38	0.488	566.4	-0.029
30.06	0.46		

SOLUTION

Slug Test
Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
 $\ln(R_e/r_w)$: 4.183

VISUAL ESTIMATION RESULTS

Estimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	8.196E-5	ft/min
y0	1.427	ft

$K = 4.164E-5$ cm/sec
 $T = K \cdot b = 0.002283$ ft²/min (0.03536 sq. cm/sec)

0	2.314
0.25	2.101
0.5	1.295
0.75	1.418
1	1.365
1.25	1.357
1.5	1.336
1.75	1.299
2.214	1.288
2.434	1.269
2.654	1.26
2.873	1.231
3.233	1.227
3.455	1.22
3.677	1.205
3.896	1.193
4.114	1.184
4.334	1.169
4.553	1.163
4.772	1.15
5	1.141
5.25	1.128
5.5	1.114
5.75	1.106
6	1.091
6.36	1.076
6.72	1.06
7.14	1.049
7.56	1.029
7.98	1.011
8.46	0.993
9	0.973
9.48	0.954
10.08	0.935
10.68	0.913
11.28	0.891
11.94	0.869
12.66	0.846
13.44	0.823
14.22	0.799
15.06	0.776
15.96	0.753
16.92	0.728
17.88	0.705
18.96	0.676
20.1	0.649
21.3	0.627

22.56	0.597
23.88	0.572
25.32	0.543
26.82	0.515
28.38	0.488
30.06	0.46
31.86	0.43
33.72	0.404
35.76	0.378
37.86	0.354
40.08	0.326
42.48	0.303
45	0.278
47.64	0.256
50.46	0.234
53.46	0.207
56.64	0.185
60	0.163
63.6	0.145
67.2	0.129
71.4	0.108
75.6	0.094
79.8	0.081
84.6	0.071
90	0.058
94.8	0.047
100.8	0.039
106.8	0.029
112.8	0.021
119.4	0.014
126.6	0.008
134.4	0.004
142.2	-0.002
150.6	-0.005
159.6	-0.009
169.2	-0.007
178.8	-0.015
189.6	-0.013
201	-0.014
213	-0.017
225.6	-0.017
238.8	-0.021
253.2	-0.02
268.2	-0.021
283.8	-0.021
300.6	-0.022
318.6	-0.025

337.2	-0.026
357.6	-0.027
378.6	-0.027
400.8	-0.028
424.8	-0.029
450	-0.028
476.4	-0.027
504.6	-0.029
534.6	-0.029
566.4	-0.029

The Error Log identifies errors detected in your data set.
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Correct The Following Errors Before Proceeding With Analysis
WARNING: Maximum displacement > initial displacement.

Tips for Analyzing Aquifer Tests with AQTESOLV for Windows

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5. Reporting
Choose Format option from View menu to customize appearance of plots and reports.
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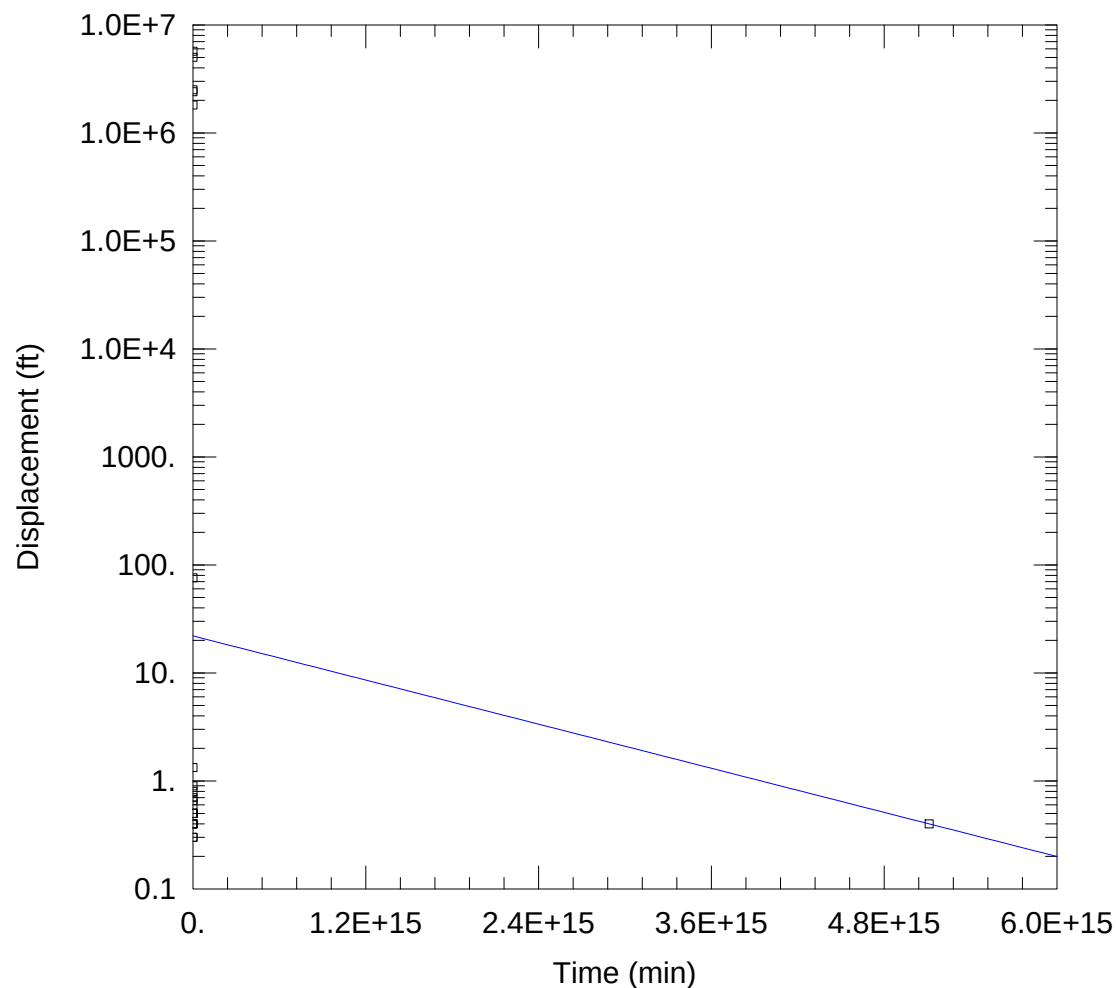
Data Set Summary

Slug Test

Total no. of observations: 23

Range of time readings in obs. well(s): 0.1 to 5.11311e+015 min

Range of displacement readings in obs. well(s): 0.3 to 5.71045e+006 ft



WELL TEST ANALYSIS

Data Set:

Date: 12/30/14

Time: 13:20:38

PROJECT INFORMATION

Company: GF

Client: TMR

Project: Valdosta

Location: Valdosta, FL

Test Well: MW-2R

Test Date: 9/23/14

AQUIFER DATA

Saturated Thickness: 12. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-2R)

Initial Displacement: 1.331 ft

Static Water Column Height: 12. ft

Total Well Penetration Depth: 12. ft

Screen Length: 10. ft

Casing Radius: 0.0833 ft

Well Radius: 0.0833 ft

Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

K = 7.727E-19 ft/min

y0 = 22. ft

Data Set:
Date: 12/30/14
Time: 13:21:05

PROJECT INFORMATION

Company: GF
Client: TMR
Project: Valdosta
Location: Valdosta, FL
Test Date: 9/23/14
Test Well: MW-2R

AQUIFER DATA

Saturated Thickness: 12. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: MW-2R

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 1.331 ft
Static Water Column Height: 12. ft
Casing Radius: 0.0833 ft
Well Radius: 0.0833 ft
Well Skin Radius: 0.167 ft
Screen Length: 10. ft
Total Well Penetration Depth: 12. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.07194 ft
Gravel Pack Porosity: 0.

No. of Observations: 23

Observation Data			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.1	0.5	3.	0.6564
0.2	2.41E+6	5.	0.5
0.3	0.5	6.	0.4
0.4	1.811E+6	7.	0.5
0.5	0.8	8.	0.4
0.6	2.511E+6	179.	0.3
0.65	0.4	1.402E+5	0.9
0.7	76.	9.801E+5	0.6
0.8	5.011E+6	3.41E+6	0.7
0.9	5.71E+6	3.61E+6	0.3
1.	0.4	5.113E+15	0.4
2.	0.5		

SOLUTION

Slug Test
Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
ln(Re/rw): 3.811

VISUAL ESTIMATION RESULTS

Estimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	7.727E-19	ft/min
y0	22.	ft

0.501	1.331
0.751	0.943
1.001	1.11
1.343	1.032
1.564	1.233
1.785	1.037
2.005	1.114
2.251	1.107
2.501	1.052
2.751	1.098
3.001	1.036
3.251	1.069
3.501	1.038
3.751	1.035
4.001	1.029
4.251	1.014
4.501	1.012
4.751	1
5.001	0.999
5.251	0.988
5.501	0.981
5.751	0.975
6.001	0.969
6.361	0.955
6.721	0.947
7.141	0.939
7.561	0.928
7.981	0.918
8.461	0.905
9.001	0.892
9.481	0.88
10.081	0.868
10.681	0.855
11.281	0.844
11.941	0.829
12.66	0.816
13.44	0.802
14.221	0.784
15.061	0.768
15.96	0.753
16.92	0.737
17.88	0.718
18.961	0.701
20.101	0.685
21.301	0.663
22.561	0.644
23.88	0.625

25.321	0.604
26.821	0.585
28.38	0.558
30.061	0.542
31.861	0.521
33.721	0.497
35.761	0.475
37.86	0.451
40.081	0.428
42.481	0.408
45	0.379
47.64	0.36
50.461	0.341
53.461	0.319
56.64	0.298
60	0.273
63.601	0.252
67.2	0.233
71.4	0.213
75.601	0.196
79.8	0.181
84.601	0.162
90	0.147
94.801	0.132
100.8	0.12
106.801	0.107
112.8	0.098
119.4	0.086
126.601	0.077
134.4	0.069
142.2	0.063
150.601	0.057
159.601	0.048
169.2	0.046
178.8	0.042
189.6	0.043
201	0.04
213.001	0.042
225.6	0.042
238.801	0.043
253.2	0.043
268.2	0.043
283.8	0.042
300.6	0.043
318.6	0.046
337.2	0.05
357.6	0.05

378.6	0.052
400.8	0.054
424.8	0.055
450	0.057
476.4	0.058
504.6	0.059
534.6	0.06
566.4	0.06
600	0.063

The Error Log identifies errors detected in your data set.
Choose this view when you see the "Check Errors" indicator on the status bar.

No errors detected in data set.

Tips for Analyzing Aquifer Tests with AQTESOLV for Windows

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4. Analysis of Residuals (Optional)
Choose residual plot and diagnostic report options from View menu to evaluate automatic curve fit.
5. Reporting
Choose Format option from View menu to customize appearance of plots and reports.
Choose Print Preview and Print options from File menu to obtain hardcopy output.

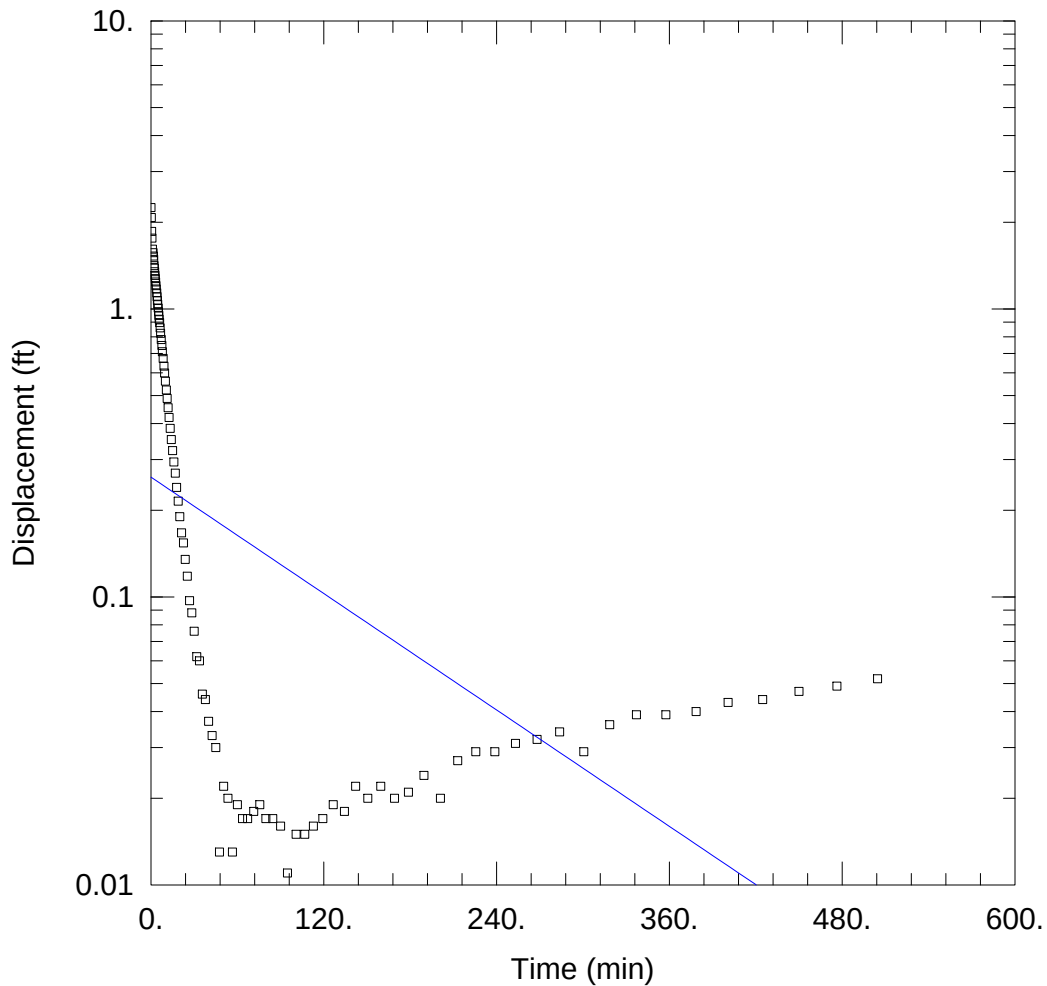
Data Set Summary

Slug Test

Total no. of observations: 101

Range of time readings in obs. well(s): 0.251 to 504.6 min

Range of displacement readings in obs. well(s): 0.011 to 2.077 ft



WELL TEST ANALYSIS

Data Set: S:\...\MW-5D.aqt

Date: 12/30/14

Time: 13:34:13

PROJECT INFORMATION

Company: GF

Client: TMR

Project: Valdosta

Location: Valdosta, FL

Test Well: MW-5D

Test Date: 9/23/14

AQUIFER DATA

Saturated Thickness: 31.17 ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-5D)

Initial Displacement: 2.25 ft

Total Well Penetration Depth: 31.17 ft

Casing Radius: 0.0833 ft

Static Water Column Height: 31.17 ft

Screen Length: 5. ft

Well Radius: 0.0833 ft

Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined

K = 1.705E-5 ft/min

Solution Method: Bouwer-Rice

y0 = 0.2606 ft

Data Set: S:\CF_ENVIRONMENTAL\57524-The David J Joseph Company\Working\TMR-Valdosta, Ga\TMR Valdo
Date: 12/30/14
Time: 13:33:59

PROJECT INFORMATION

Company: GF
Client: TMR
Project: Valdosta
Location: Valdosta, FL
Test Date: 9/23/14
Test Well: MW-5D

AQUIFER DATA

Saturated Thickness: 31.17 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: MW-5D

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 2.25 ft
Static Water Column Height: 31.17 ft
Casing Radius: 0.0833 ft
Well Radius: 0.0833 ft
Well Skin Radius: 0.167 ft
Screen Length: 5. ft
Total Well Penetration Depth: 31.17 ft
Corrected Casing Radius (Bouwer-Rice Method): 0.07194 ft
Gravel Pack Porosity: 0.

No. of Observations: 101

Observation Data			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.251	2.077	30.06	0.076
0.501	1.858	31.86	0.062
0.751	1.762	33.72	0.06
1.001	1.613	35.76	0.046
1.462	1.568	37.86	0.044
1.682	1.526	40.08	0.037
1.902	1.485	42.48	0.033
2.122	1.414	45.	0.03
2.43	1.385	47.64	0.013
2.649	1.347	50.46	0.022
2.868	1.308	53.46	0.02
3.087	1.274	56.64	0.013
3.307	1.24	60.	0.019
3.53	1.205	63.6	0.017
3.749	1.173	67.2	0.017
4.001	1.137	71.4	0.018
4.251	1.103	75.6	0.019
4.501	1.07	79.8	0.017
4.751	1.039	84.6	0.017
5.001	1.007	90.	0.016
5.251	0.978	94.8	0.011
5.501	0.949	100.8	0.015
5.751	0.921	106.8	0.015
6.001	0.896	112.8	0.016
6.361	0.859	119.4	0.017
6.721	0.823	126.6	0.019
7.141	0.783	134.4	0.018
7.561	0.747	142.2	0.022

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
7.981	0.71	150.6	0.02
8.461	0.673	159.6	0.022
9.001	0.633	169.2	0.02
9.481	0.599	178.8	0.021
10.08	0.561	189.6	0.024
10.68	0.523	201.	0.02
11.28	0.489	213.	0.027
11.94	0.454	225.6	0.029
12.66	0.42	238.8	0.029
13.44	0.385	253.2	0.031
14.22	0.352	268.2	0.032
15.06	0.322	283.8	0.034
15.96	0.294	300.6	0.029
16.92	0.269	318.6	0.036
17.88	0.24	337.2	0.039
18.96	0.215	357.6	0.039
20.1	0.19	378.6	0.04
21.32	0.167	400.8	0.043
22.56	0.154	424.8	0.044
23.88	0.135	450.	0.047
25.32	0.118	476.4	0.049
26.82	0.097	504.6	0.052
28.38	0.088		

SOLUTION

Slug Test
Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
ln(Re/rw): 4.247

VISUAL ESTIMATION RESULTSEstimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	1.705E-5	ft/min
y0	0.2606	ft

K = 8.659E-6 cm/sec
T = K*b = 0.0005313 ft²/min (0.008227 sq. cm/sec)

0	2.25
0.251	2.077
0.501	1.858
0.751	1.762
1.001	1.613
1.462	1.568
1.682	1.526
1.902	1.485
2.122	1.414
2.43	1.385
2.649	1.347
2.868	1.308
3.087	1.274
3.307	1.24
3.53	1.205
3.749	1.173
4.001	1.137
4.251	1.103
4.501	1.07
4.751	1.039
5.001	1.007
5.251	0.978
5.501	0.949
5.751	0.921
6.001	0.896
6.361	0.859
6.721	0.823
7.141	0.783
7.561	0.747
7.981	0.71
8.461	0.673
9.001	0.633
9.481	0.599
10.081	0.561
10.681	0.523
11.281	0.489
11.941	0.454
12.661	0.42
13.441	0.385
14.221	0.352
15.061	0.322
15.961	0.294
16.921	0.269
17.881	0.24
18.961	0.215
20.101	0.19
21.317	0.167

22.561	0.154
23.881	0.135
25.321	0.118
26.821	0.097
28.381	0.088
30.061	0.076
31.861	0.062
33.721	0.06
35.761	0.046
37.861	0.044
40.081	0.037
42.481	0.033
45	0.03
47.641	0.013
50.461	0.022
53.461	0.02
56.641	0.013
60	0.019
63.601	0.017
67.201	0.017
71.401	0.018
75.601	0.019
79.801	0.017
84.601	0.017
90	0.016
94.801	0.011
100.801	0.015
106.801	0.015
112.801	0.016
119.401	0.017
126.601	0.019
134.4	0.018
142.201	0.022
150.601	0.02
159.601	0.022
169.2	0.02
178.801	0.021
189.6	0.024
201	0.02
213	0.027
225.601	0.029
238.801	0.029
253.2	0.031
268.2	0.032
283.801	0.034
300.6	0.029
318.6	0.036

337.201	0.039
357.601	0.039
378.601	0.04
400.801	0.043
424.8	0.044
450.001	0.047
476.401	0.049
504.6	0.052

The Error Log identifies errors detected in your data set.
Choose this view when you see the "Check Errors" indicator on the status bar.

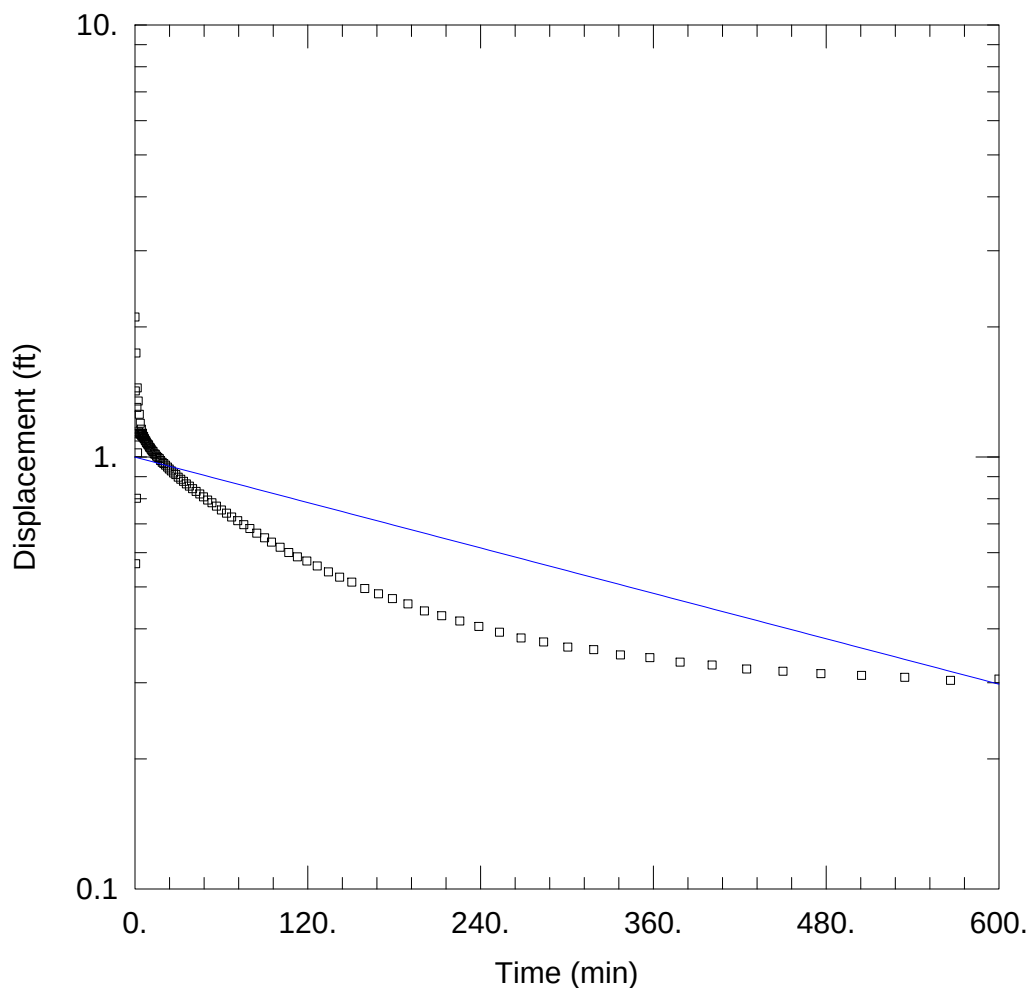
No errors detected in data set.

Tips for Analyzing Aquifer Tests with AQTESOLV for Windows

1. Enter Test Data
Choose options from the Edit menu to enter or modify test data.
2. Perform Diagnostic Analyses (Optional)
Choose diagnostic flow plot and derivative plot options from the View menu.
3. Perform Curve Matching or Prediction
Choose the Solution or Toolbox options from the Match menu to perform forward solution analysis.
Choose the Automatic, Visual or Toolbox options from the Match menu to perform curve matching.
4. Analysis of Residuals (Optional)
Choose residual plot and diagnostic report options from View menu to evaluate automatic curve fitting.
5. Reporting
Choose Format option from View menu to customize appearance of plots and reports.
Choose Print Preview and Print options from File menu to obtain hardcopy output.

Data Set Summary

Slug Test
Total no. of observations: 104
Range of time readings in obs. well(s): 0.251 to 600 min
Range of displacement readings in obs. well(s): 0.304 to 1.74 ft



WELL TEST ANALYSIS

Data Set: S:\...\MW-12.aqt

Date: 12/30/14

Time: 14:07:19

PROJECT INFORMATION

Company: GF

Client: TMR

Project: Valdosta

Location: Valdosta, FL

Test Well: MW-12

Test Date: 9/23/14

AQUIFER DATA

Saturated Thickness: 14. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-12)

Initial Displacement: 2.108 ft

Total Well Penetration Depth: 20. ft

Casing Radius: 0.0833 ft

Static Water Column Height: 14. ft

Screen Length: 20. ft

Well Radius: 0.0833 ft

Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

K = 1.564E-6 ft/min

y0 = 0.9988 ft

Data Set: S:\CF_ENVIRONMENTAL\57524-The David J Joseph Company\Working\TMR-Valdosta, Ga\TMR Valdosta
Date: 12/30/14
Time: 14:07:35

PROJECT INFORMATION

Company: GF
Client: TMR
Project: Valdosta
Location: Valdosta, FL
Test Date: 9/23/14
Test Well: MW-12

AQUIFER DATA

Saturated Thickness: 14. ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: MW-12

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 2.108 ft
Static Water Column Height: 14. ft
Casing Radius: 0.0833 ft
Well Radius: 0.0833 ft
Well Skin Radius: 0.167 ft
Screen Length: 20. ft
Total Well Penetration Depth: 20. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.07182 ft
Gravel Pack Porosity: 0.

No. of Observations: 104

Observation Data			
Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.251	1.422	31.86	0.888
0.501	0.566	33.72	0.878
0.751	1.74	35.76	0.866
1.001	0.802	37.86	0.856
1.394	1.302	40.08	0.844
1.614	1.445	42.48	0.832
1.835	1.022	45.	0.821
2.054	1.131	47.64	0.808
2.273	1.347	50.46	0.795
2.501	1.143	53.46	0.783
2.751	1.112	56.64	0.769
3.001	1.255	60.	0.754
3.251	1.134	63.6	0.741
3.501	1.134	67.2	0.726
3.751	1.197	71.4	0.712
4.001	1.127	75.6	0.697
4.251	1.133	79.8	0.683
4.501	1.159	84.6	0.666
4.751	1.12	90.	0.65
5.001	1.125	94.8	0.635
5.251	1.135	100.8	0.618
5.501	1.111	106.8	0.601
5.751	1.115	112.8	0.587
6.001	1.116	119.4	0.574
6.36	1.103	126.6	0.559
6.721	1.102	134.4	0.542
7.141	1.092	142.2	0.527
7.561	1.089	150.6	0.513

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
7.981	1.08	159.6	0.496
8.461	1.075	169.2	0.482
9.001	1.067	178.8	0.47
9.481	1.065	189.6	0.457
10.08	1.054	201.	0.44
10.68	1.049	213.	0.429
11.28	1.041	225.6	0.417
11.94	1.033	238.8	0.405
12.66	1.029	253.2	0.393
13.44	1.017	268.2	0.381
14.22	1.014	283.8	0.373
15.06	1.004	300.6	0.363
15.96	0.997	318.6	0.358
16.92	0.991	337.2	0.348
17.88	0.981	357.6	0.343
18.96	0.972	378.6	0.335
20.1	0.965	400.8	0.33
21.31	0.957	424.8	0.323
22.56	0.947	450.	0.319
23.88	0.938	476.4	0.315
25.32	0.928	504.6	0.312
26.82	0.918	534.6	0.309
28.38	0.91	566.4	0.304
30.06	0.898	600.	0.306

SOLUTION

Slug Test
Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
 $\ln(R_e/r_w)$: 4.299

VISUAL ESTIMATION RESULTS

Estimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	1.564E-6	ft/min
y0	0.9988	ft

$K = 7.944\text{E-}7$ cm/sec
 $T = K \cdot b = 2.189\text{E-}5$ ft²/min (0.000339 sq. cm/sec)

0	2.108
0.251	1.422
0.501	0.566
0.751	1.74
1.001	0.802
1.394	1.302
1.614	1.445
1.835	1.022
2.054	1.131
2.273	1.347
2.501	1.143
2.751	1.112
3.001	1.255
3.251	1.134
3.501	1.134
3.751	1.197
4.001	1.127
4.251	1.133
4.501	1.159
4.751	1.12
5.001	1.125
5.251	1.135
5.501	1.111
5.751	1.115
6.001	1.116
6.36	1.103
6.721	1.102
7.141	1.092
7.561	1.089
7.981	1.08
8.461	1.075
9.001	1.067
9.481	1.065
10.08	1.054
10.681	1.049
11.28	1.041
11.94	1.033
12.66	1.029
13.44	1.017
14.22	1.014
15.06	1.004
15.961	0.997
16.92	0.991
17.88	0.981
18.961	0.972
20.101	0.965
21.305	0.957

22.56	0.947
23.88	0.938
25.32	0.928
26.821	0.918
28.38	0.91
30.061	0.898
31.86	0.888
33.72	0.878
35.76	0.866
37.86	0.856
40.08	0.844
42.48	0.832
45	0.821
47.64	0.808
50.461	0.795
53.46	0.783
56.64	0.769
60	0.754
63.6	0.741
67.2	0.726
71.4	0.712
75.6	0.697
79.8	0.683
84.6	0.666
90	0.65
94.8	0.635
100.8	0.618
106.8	0.601
112.8	0.587
119.4	0.574
126.6	0.559
134.4	0.542
142.2	0.527
150.6	0.513
159.6	0.496
169.2	0.482
178.8	0.47
189.6	0.457
201	0.44
213	0.429
225.6	0.417
238.8	0.405
253.2	0.393
268.2	0.381
283.8	0.373
300.6	0.363
318.6	0.358

337.2	0.348
357.6	0.343
378.6	0.335
400.8	0.33
424.8	0.323
450	0.319
476.4	0.315
504.6	0.312
534.6	0.309
566.4	0.304
600	0.306

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No errors detected in data set.

Tips for Analyzing Aquifer Tests with AQTESOLV for Windows

1. Enter Test Data
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3. Perform Curve Matching or Prediction
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Choose the Automatic, Visual or Toolbox options from the Match menu to perform curve matching.
4. Analysis of Residuals (Optional)
Choose residual plot and diagnostic report options from View menu to evaluate automatic curve fit.
5. Reporting
Choose Format option from View menu to customize appearance of plots and reports.
Choose Print Preview and Print options from File menu to obtain hardcopy output.

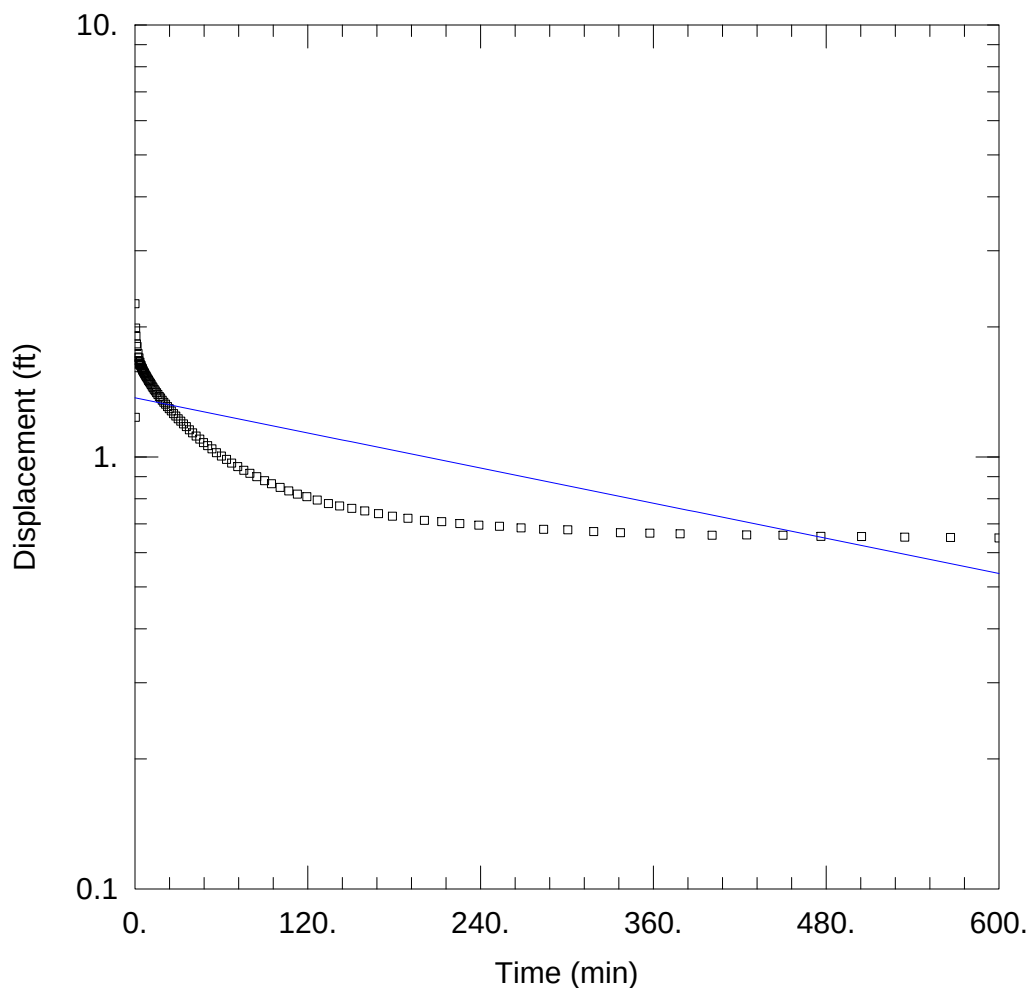
Data Set Summary

Slug Test

Total no. of observations: 104

Range of time readings in obs. well(s): 0.251 to 600 min

Range of displacement readings in obs. well(s): 0.649 to 1.988 ft



WELL TEST ANALYSIS

Data Set: S:\...\MW-13.aqt

Date: 12/30/14

Time: 14:12:16

PROJECT INFORMATION

Company: GF

Client: TMR

Project: Valdosta

Location: Valdosta, FL

Test Well: MW-13

Test Date: 9/23/14

AQUIFER DATA

Saturated Thickness: 15.37 ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-13)

Initial Displacement: 2.263 ft

Total Well Penetration Depth: 20. ft

Casing Radius: 0.0833 ft

Static Water Column Height: 15.37 ft

Screen Length: 20. ft

Well Radius: 0.0833 ft

Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

K = 1.111E-6 ft/min

y0 = 1.37 ft

Data Set: S:\CF_ENVIRONMENTAL\57524-The David J Joseph Company\Working\TMR-Valdosta, Ga\TMR Valdo
Date: 12/30/14
Time: 14:11:50

PROJECT INFORMATION

Company: GF
Client: TMR
Project: Valdosta
Location: Valdosta, FL
Test Date: 9/23/14
Test Well: MW-13

AQUIFER DATA

Saturated Thickness: 15.37 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: MW-13

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 2.263 ft
Static Water Column Height: 15.37 ft
Casing Radius: 0.0833 ft
Well Radius: 0.0833 ft
Well Skin Radius: 0.167 ft
Screen Length: 20. ft
Total Well Penetration Depth: 20. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.07194 ft
Gravel Pack Porosity: 0.

No. of Observations: 104

Observation Data			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.251	1.235	31.86	1.21
0.501	1.988	33.72	1.193
0.751	1.905	35.76	1.175
1.001	1.827	37.86	1.156
1.463	1.802	40.08	1.137
1.683	1.609	42.48	1.118
1.902	1.703	45.	1.1
2.121	1.736	47.64	1.079
2.383	1.64	50.46	1.062
2.623	1.671	53.46	1.044
2.842	1.696	56.64	1.023
3.06	1.646	60.	1.005
3.279	1.639	63.6	0.987
3.499	1.658	67.2	0.968
3.751	1.637	71.4	0.95
4.001	1.625	75.6	0.931
4.251	1.628	79.8	0.916
4.501	1.612	84.6	0.9
4.751	1.606	90.	0.881
5.001	1.605	94.8	0.867
5.251	1.594	100.8	0.85
5.501	1.587	106.8	0.834
5.751	1.581	112.8	0.82
6.001	1.574	119.4	0.809
6.361	1.568	126.6	0.795
6.721	1.56	134.4	0.78
7.141	1.549	142.2	0.77
7.561	1.541	150.6	0.76

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
7.981	1.534	159.6	0.75
8.461	1.523	169.2	0.739
9.001	1.513	178.8	0.729
9.481	1.503	189.6	0.721
10.08	1.492	201.	0.713
10.68	1.482	213.	0.708
11.28	1.471	225.6	0.701
11.94	1.459	238.8	0.695
12.66	1.446	253.2	0.691
13.44	1.434	268.2	0.685
14.22	1.422	283.8	0.68
15.06	1.408	300.6	0.678
15.96	1.395	318.6	0.672
16.92	1.38	337.2	0.668
17.88	1.369	357.6	0.666
18.96	1.353	378.6	0.664
20.1	1.338	400.8	0.659
21.3	1.325	424.8	0.66
22.56	1.308	450.	0.659
23.88	1.293	476.4	0.655
25.32	1.278	504.6	0.654
26.82	1.259	534.6	0.652
28.38	1.243	566.4	0.651
30.06	1.226	600.	0.649

SOLUTION

Slug Test
Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
 $\ln(Re/rw)$: 4.299

VISUAL ESTIMATION RESULTS

Estimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	1.111E-6	ft/min
y0	1.37	ft

$K = 5.645E-7$ cm/sec
 $T = K \cdot b = 1.708E-5$ ft²/min (0.0002645 sq. cm/sec)

0	2.263
0.251	1.235
0.501	1.988
0.751	1.905
1.001	1.827
1.463	1.802
1.683	1.609
1.902	1.703
2.121	1.736
2.383	1.64
2.623	1.671
2.842	1.696
3.06	1.646
3.279	1.639
3.499	1.658
3.751	1.637
4.001	1.625
4.251	1.628
4.501	1.612
4.751	1.606
5.001	1.605
5.251	1.594
5.501	1.587
5.751	1.581
6.001	1.574
6.361	1.568
6.721	1.56
7.141	1.549
7.561	1.541
7.981	1.534
8.461	1.523
9.001	1.513
9.481	1.503
10.081	1.492
10.681	1.482
11.281	1.471
11.941	1.459
12.661	1.446
13.441	1.434
14.221	1.422
15.061	1.408
15.961	1.395
16.921	1.38
17.881	1.369
18.961	1.353
20.101	1.338
21.301	1.325

22.561	1.308
23.881	1.293
25.321	1.278
26.821	1.259
28.381	1.243
30.061	1.226
31.861	1.21
33.721	1.193
35.761	1.175
37.861	1.156
40.081	1.137
42.481	1.118
45	1.1
47.641	1.079
50.461	1.062
53.461	1.044
56.641	1.023
60	1.005
63.601	0.987
67.2	0.968
71.401	0.95
75.601	0.931
79.801	0.916
84.601	0.9
90	0.881
94.801	0.867
100.801	0.85
106.801	0.834
112.801	0.82
119.401	0.809
126.601	0.795
134.4	0.78
142.2	0.77
150.601	0.76
159.601	0.75
169.2	0.739
178.801	0.729
189.6	0.721
201.001	0.713
213.001	0.708
225.601	0.701
238.801	0.695
253.2	0.691
268.201	0.685
283.8	0.68
300.601	0.678
318.6	0.672

337.2	0.668
357.601	0.666
378.601	0.664
400.801	0.659
424.8	0.66
450	0.659
476.401	0.655
504.601	0.654
534.6	0.652
566.4	0.651
600	0.649

The Error Log identifies errors detected in your data set.
Choose this view when you see the "Check Errors" indicator on the status bar.

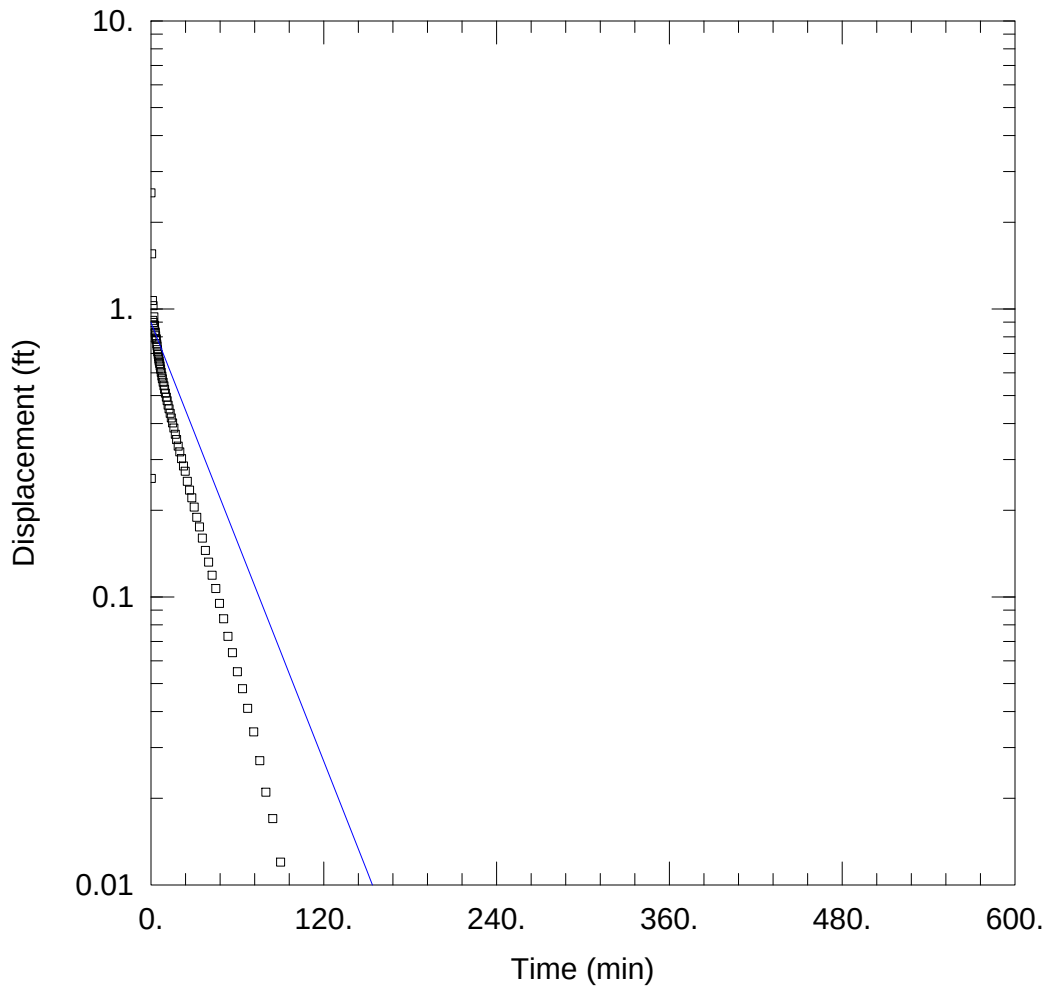
No errors detected in data set.

Tips for Analyzing Aquifer Tests with AQTESOLV for Windows

1. Enter Test Data
Choose options from the Edit menu to enter or modify test data.
2. Perform Diagnostic Analyses (Optional)
Choose diagnostic flow plot and derivative plot options from the View menu.
3. Perform Curve Matching or Prediction
Choose the Solution or Toolbox options from the Match menu to perform forward solution analysis.
Choose the Automatic, Visual or Toolbox options from the Match menu to perform curve matching.
4. Analysis of Residuals (Optional)
Choose residual plot and diagnostic report options from View menu to evaluate automatic curve fitting.
5. Reporting
Choose Format option from View menu to customize appearance of plots and reports.
Choose Print Preview and Print options from File menu to obtain hardcopy output.

Data Set Summary

Slug Test
Total no. of observations: 104
Range of time readings in obs. well(s): 0.251 to 600 min
Range of displacement readings in obs. well(s): -0.044 to 1.553 ft



WELL TEST ANALYSIS

Data Set: S:\...MW-14.aqt
Date: 12/30/14

Time: 14:16:12

PROJECT INFORMATION

Company: GF
Client: TMR
Project: Valdosta
Location: Valdosta, FL
Test Well: MW-14
Test Date: 9/23/14

AQUIFER DATA

Saturated Thickness: 11.55 ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-14)

Initial Displacement: 2.529 ft
Total Well Penetration Depth: 20. ft
Casing Radius: 0.0833 ft

Static Water Column Height: 11.55 ft
Screen Length: 20. ft
Well Radius: 0.0833 ft
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined
K = 2.728E-5 ft/min

Solution Method: Bouwer-Rice
y0 = 0.8965 ft

Data Set: S:\CF_ENVIRONMENTAL\57524-The David J Joseph Company\Working\TMR-Valdosta, Ga\TMR Valdo
Date: 12/30/14
Time: 14:15:45

PROJECT INFORMATION

Company: GF
Client: TMR
Project: Valdosta
Location: Valdosta, FL
Test Date: 9/23/14
Test Well: MW-14

AQUIFER DATA

Saturated Thickness: 11.55 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: MW-14

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 2.529 ft
Static Water Column Height: 11.55 ft
Casing Radius: 0.0833 ft
Well Radius: 0.0833 ft
Well Skin Radius: 0.167 ft
Screen Length: 20. ft
Total Well Penetration Depth: 20. ft
Corrected Casing Radius (Bouwer-Rice Method): 0.07194 ft
Gravel Pack Porosity: 0.

No. of Observations: 104

Observation Data			
<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
0.251	0.258	31.86	0.189
0.501	1.553	33.72	0.175
0.751	0.798	35.76	0.16
1.001	1.07	37.86	0.145
1.293	0.913	40.08	0.132
1.512	1.026	42.48	0.119
1.751	0.897	45.	0.107
2.001	0.939	47.64	0.095
2.251	0.872	50.46	0.084
2.501	0.877	53.46	0.073
2.751	0.839	56.64	0.064
3.001	0.828	60.	0.055
3.251	0.807	63.6	0.048
3.501	0.784	67.2	0.041
3.751	0.788	71.4	0.034
4.001	0.756	75.6	0.027
4.251	0.744	79.8	0.021
4.501	0.722	84.6	0.017
4.751	0.709	90.	0.012
5.001	0.694	94.8	0.008
5.251	0.683	100.8	0.005
5.501	0.67	106.8	0.002
5.751	0.659	112.8	-0.001
6.001	0.647	119.4	-0.002
6.361	0.634	126.6	-0.005
6.721	0.618	134.4	-0.007
7.141	0.602	142.2	-0.009
7.561	0.585	150.6	-0.011

<u>Time (min)</u>	<u>Displacement (ft)</u>	<u>Time (min)</u>	<u>Displacement (ft)</u>
7.981	0.572	159.6	-0.014
8.461	0.556	169.2	-0.015
9.001	0.541	178.8	-0.016
9.481	0.526	189.6	-0.017
10.08	0.51	201.	-0.018
10.68	0.494	213.	-0.019
11.28	0.48	225.6	-0.02
11.94	0.463	238.8	-0.021
12.66	0.45	253.2	-0.021
13.44	0.434	268.2	-0.022
14.22	0.418	283.8	-0.025
15.06	0.402	300.6	-0.026
15.96	0.386	318.6	-0.028
16.92	0.367	337.2	-0.027
17.88	0.352	357.6	-0.029
18.96	0.334	378.6	-0.03
20.1	0.319	400.8	-0.032
21.3	0.302	424.8	-0.033
22.56	0.285	450.	-0.033
23.88	0.273	476.4	-0.035
25.32	0.252	504.6	-0.035
26.82	0.235	534.6	-0.039
28.38	0.221	566.4	-0.04
30.06	0.205	600.	-0.044

SOLUTION

Slug Test
Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
 $\ln(R_e/r_w)$: 4.299

VISUAL ESTIMATION RESULTS

Estimated Parameters

<u>Parameter</u>	<u>Estimate</u>	
K	2.728E-5	ft/min
y0	0.8965	ft

$K = 1.386E-5$ cm/sec
 $T = K \cdot b = 0.0003151$ ft²/min (0.004879 sq. cm/sec)

0	2.529
0.251	0.258
0.501	1.553
0.751	0.798
1.001	1.07
1.293	0.913
1.512	1.026
1.751	0.897
2.001	0.939
2.251	0.872
2.501	0.877
2.751	0.839
3.001	0.828
3.251	0.807
3.501	0.784
3.751	0.788
4.001	0.756
4.251	0.744
4.501	0.722
4.751	0.709
5.001	0.694
5.251	0.683
5.501	0.67
5.751	0.659
6.001	0.647
6.361	0.634
6.721	0.618
7.141	0.602
7.561	0.585
7.981	0.572
8.461	0.556
9.001	0.541
9.481	0.526
10.081	0.51
10.681	0.494
11.281	0.48
11.941	0.463
12.661	0.45
13.441	0.434
14.221	0.418
15.061	0.402
15.961	0.386
16.921	0.367
17.881	0.352
18.961	0.334
20.101	0.319
21.301	0.302

22.561	0.285
23.881	0.273
25.321	0.252
26.821	0.235
28.381	0.221
30.061	0.205
31.861	0.189
33.721	0.175
35.761	0.16
37.861	0.145
40.081	0.132
42.481	0.119
45	0.107
47.641	0.095
50.461	0.084
53.461	0.073
56.641	0.064
60.001	0.055
63.601	0.048
67.2	0.041
71.401	0.034
75.601	0.027
79.801	0.021
84.601	0.017
90.001	0.012
94.801	0.008
100.801	0.005
106.801	0.002
112.801	-0.001
119.4	-0.002
126.601	-0.005
134.401	-0.007
142.2	-0.009
150.601	-0.011
159.601	-0.014
169.201	-0.015
178.801	-0.016
189.601	-0.017
201.001	-0.018
213	-0.019
225.601	-0.02
238.801	-0.021
253.201	-0.021
268.2	-0.022
283.801	-0.025
300.6	-0.026
318.601	-0.028

337.2	-0.027
357.601	-0.029
378.6	-0.03
400.8	-0.032
424.801	-0.033
450.001	-0.033
476.4	-0.035
504.6	-0.035
534.601	-0.039
566.401	-0.04
600	-0.044

APPENDIX F

Table F1:
Delineation Criteria For Soil
Rice Iron and Metals (Former)
2000 West Savannah Avenue, Valdosta, Lowndes County, Georgia

Detected Regulated Substance	CAS No.	Date	Maximum Concentration Detected (mg/kg)	Location (ID) & Depth (ft BLS) of Maximum Detection	Residential Type 1 Soil RRS (mg/Kg)	Criteria for Delineation Standard [(A),(B), (C), (D), (E), or (F)]	Extent Delineated (laterally and vertically)? (yes or no)	Notes/Comments/Justification
Acetone	67-64-1	7/26/2016	0.18	SB-3 0-2 ft BLS	400	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Benzene	71-43-2	7/26/2016	0.0102	SB-5 2-4 ft BLS	0.5	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
2-Butanone (MEK)	78-93-3	7/26/2016	0.27	SB-3 0-2 ft BLS	200	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Carbon disulfide	75-15-0	7/26/2016	0.0227	SB-3 0-2 ft BLS	400	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
cis-1,2-Dichloroethene	156-59-2	10/16/2011	0.006	Area 6-CSS-3 12 ft BLS	7	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Ethylbenzene	108-90-7	7/26/2016	0.13	SB-5 2-4 ft BLS	70	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Isopropylbenzene	98-82-8	7/26/2016	0.01	SB-3 0-2 ft BLS	21.88	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Methylene Chloride	75-09-2	2/16/2017	0.2860	B-5R 6-8 ft BLS	0.5	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Naphthalene	91-20-3	7/26/2016	0.0065	SB-3 0-2 ft BLS	60.4	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Styrene	100-42-5	7/26/2016	0.0106	SB-3 0-2 ft BLS	14	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Tetrachloroethylene	127-18-4	2/16/2017	2.11	B-5R 6-8 ft BLS	0.5	E	Yes	The maximum concentration detected at the Site is above the Type 1 RRS.
Toluene	108-88-3	7/26/2016	0.046	SB-1 4-6 ft BLS	100	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Trichloroethylene	79-01-6	2/16/2017	0.0051	B-5R 0-2 ft BLS	0.5	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
1,2,4-Trichlorobenzene	120-82-1	7/26/2016	0.0176	SB-3 0-2 ft BLS	10.83	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
xylene, total	1330-20-7	7/26/2016	1.124	SB-5 2-4 ft BLS	1000	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Acrolein	107-02-8	10/21/2015	ND (0.0094)	SB-4 0-2 ft BLS	0.0628	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Acrylonitrile	107-31-1	10/21/2015	ND (0.0050)	SB-4 0-2 ft BLS	1.37	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Dichlorodifluoromethane	75-71-8	10/21/2015	ND (0.0010)	SB-4 0-2 ft BLS	0.0803	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Vinyl Acetate	108-05-4	10/21/2015	ND (0.0085)	SB-4 0-2 ft BLS	0.51	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Vinyl Chloride	75-01-4	10/21/2015	ND (0.0011)	SB-4 0-2 ft BLS	0.2	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Chloroethane	75-00-3	10/21/2015	ND (0.0014)	SB-4 0-2 ft BLS	0.17	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Trichlorofluoromethane	75-69-4	10/21/2015	ND (0.0012)	SB-4 0-2 ft BLS	200	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
1,1-Dichloroethene	75-35-4	10/21/2015	ND (0.000094)	SB-4 0-2 ft BLS	0.7	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Methyl Bromide (Bromomethane)	74-83-9	10/21/2015	ND (0.0015)	SB-4 0-2 ft BLS	0.8	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Methyl Chloride (Chloromethane)	74-87-3	10/21/2015	ND (0.0014)	SB-4 0-2 ft BLS	0.04	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Methylene Bromide (Dibromomethane)	74-95-3	10/21/2015	ND (0.00071)	SB-4 0-2 ft BLS	1000	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Methylene Chloride (Dichloromethane)	75-09-2	10/21/2015	ND (0.0029)	SB-4 0-2 ft BLS	0.08	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
4-Methyl-2-pentanone (MIBK)	108-10-1	10/21/2015	ND (0.0038)	SB-4 0-2 ft BLS	3.3	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Trans-1,2-Dichloroethene	156-60-5	10/21/2015	ND (0.00071)	SB-4 0-2 ft BLS	10	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
1,1-Dichloroethane	75-34-3	10/21/2015	ND (0.00071)	SB-4 0-2 ft BLS	240	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Cis-1,2-Dichloroethene	156-59-2	10/21/2015	ND (0.00071)	SB-4 0-2 ft BLS	7	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Chloroform	67-66-3	10/21/2015	ND (0.00071)	SB-4 0-2 ft BLS	3.85	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Carbon Tetrachloride	56-23-5	10/21/2015	ND (0.00071)	SB-4 0-2 ft BLS	0.5	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
1,1,1-Trichloethane	71-55-6	10/21/2015	ND (0.00093)	SB-4 0-2 ft BLS	20	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
1,2-Dichloroethane	107-06-2	10/21/2015	ND (0.00071)	SB-4 0-2 ft BLS	0.5	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
1,2-Dichloropropane	78-87-5	10/21/2015	ND (0.00071)	SB-4 0-2 ft BLS	0.5	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Bromodichloromethane	75-27-4	10/21/2015	ND (0.00071)	SB-4 0-2 ft BLS	1.18	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
1,1,2-Trichloroethane	79-00-5	10/21/2015	ND (0.00090)	SB-4 0-2 ft BLS	0.5	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Dibromochloromethane	124-48-1	10/21/2015	ND (0.00071)	SB-4 0-2 ft BLS	1.63	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
1,3-Dichloropropane	142-28-9	10/21/2015	ND (0.00071)	SB-4 0-2 ft BLS	1000	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
1,2-Dibromoethane (EDB)	106-93-4	10/21/2015	ND (0.00071)	SB-4 0-2 ft BLS	0.01	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Chlorobenzene	108-90-7	10/21/2015	ND (0.00071)	SB-4 0-2 ft BLS	4.18	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
1,1,1,2-Tetrachloroethane	630-20-6	10/21/2015	ND (0.00071)	SB-4 0-2 ft BLS	7	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Bromoform	75-25-2	10/21/2015	ND (0.00071)	SB-4 0-2 ft BLS	80	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
1,1,2,2-Tetrachloroethane	79-34-5	10/21/2015	ND (0.00079)	SB-4 0-2 ft BLS	0.13	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
1,2,3-Trichloropropane	96-18-4	10/21/2015	ND (0.00098)	SB-4 0-2 ft BLS	0.478	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
1,3-Dichlorobenzene	541-73-1	10/21/2015	ND (0.00071)	SB-4 0-2 ft BLS	60	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
1,4-Dichlorobenzene	106-46-7	10/21/2015	ND (0.00071)	SB-4 0-2 ft BLS	7.5	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
1,2-Dichlorobenzene	95-50-1	10/21/2015	ND (0.00071)	SB-4 0-2 ft BLS	60	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Hexachlorobutadiene	87-68-3	10/21/2015	ND (0.00098)	SB-4 0-2 ft BLS	17.5	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Napthalene	91-20-3	10/21/2015	ND (0.0014)	SB-4 0-2 ft BLS	60.4	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Arsenic	7440-38-2	2/16/2017	540	B-5R 6-8 ft BLS	20	E	Yes	The maximum concentration detected at the Site is above the Type 1 RRS.
Cadmium	7440-43-9	10/6/2011	1.01	Area 3-CSS-1 3 ft BLS	2	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Chromium	7440-47-3	10/6/2011	1.44	Area 5-CSS-4	100	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Lead	7439-92-1	10/6/2011	3.10	SBFP-2 0-2 ft BLS	75	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard

Table F1:
Delineation Criteria For Soil
Rice Iron and Metals (Former)
2000 West Savannah Avenue, Valdosta, Lowndes County, Georgia

Detected Regulated Substance	CAS No.	Date	Maximum Concentration Detected (mg/kg)	Location (ID) & Depth (ft BLS) of Maximum Detection	Residential Type 1 Soil RRS (mg/Kg)	Criteria for Delineation Standard [(A),(B), (C), (D), (E), or (F)]	Extent Delineated (laterally and vertically)? (yes or no)	Notes/Comments/Justification
Aroclor 1016	12674-11-2	4/14/2015	ND (0.0077)	SB-4 0-2 ft BLS	1.55	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Aroclor 1221	11104-28-2	4/14/2015	ND (0.0096)	SB-4 0-2 ft BLS	1.55	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Aroclor 1232	11141-16-5	4/14/2015	ND (0.0096)	SB-4 0-2 ft BLS	1.55	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Aroclor 1242	53469-21-9	4/14/2015	ND (0.0077)	SB-4 0-2 ft BLS	1.55	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Aroclor 1248	12672-29-6	4/14/2015	0.0628	SB-4 0-2 ft BLS	1.55	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Aroclor 1254	11097-69-1	4/14/2015	0.0677	SB-4 0-2 ft BLS	1.55	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
Aroclor 1260	11096-82-5	4/14/2015	0.0269	SB-3 0-2 ft BLS	1.55	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	4/14/2015	ND 0.00000984	SB-5 (0-2 ft bls)	8.00E-05	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	40321-76-4	4/14/2015	ND 0.00000492	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227-28-6	4/14/2015	ND 0.00000492	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	57653-85-7	4/14/2015	ND 0.00000492	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3	4/14/2015	ND 0.00000492	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	25822-46-9	4/14/2015	0.0000215	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	3268-87-9	4/14/2015	0.000229	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	4/14/2015	ND 0.000000984	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	4/14/2015	ND 0.00000492	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	4/14/2015	ND 0.00000492	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	4/14/2015	ND 0.00000492	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	4/14/2015	ND 0.00000492	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	4/14/2015	ND 0.00000492	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	4/14/2015	ND 0.00000492	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	4/14/2015	ND 0.00000492	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	4/14/2015	ND 0.00000492	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
1,2,3,4,6,7,8,9-Octachlorodibenzofuran	39001-02-0	4/14/2015	ND 0.00000984	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
Total Tetrachlorodibenzo-p-dioxin	41903-57-5	4/14/2015	ND 0.000000984	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
Total Pentachlorodibenzo-p-dioxin	36088-22-9	4/14/2015	ND 0.00000492	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
Total Hexachlorodibenzo-p-dioxin	3465-46-8	4/14/2015	ND 0.00000492	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
Total Heptachlorodibenzo-p-dioxin	37871-00-4	4/14/2015	0.0000503	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
Total Tetrachlorodibenzofuran	30402-14-3	4/14/2015	ND 0.000000984	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
Total Pentachlorodibenzofuran	30402-15-4	4/14/2015	ND 0.00000492	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
Total Hexachlorodibenzofuran	55684-94-1	4/14/2015	ND 0.00000492	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
Total Heptachlorodibenzofuran	38998-75-3	4/14/2015	0.00000642	SB-5 (0-2 ft bls)	-	-	-	see Total PCDD and PCDFs
Total PCDDs and PCDFs (TEQ WHO2005 ND=0.5)	3333-30-1	4/14/2015	0.00000629	SB-5 (0-2 ft bls)	8.00E-05	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
3,3',4,4'-Tetrachlorobiphenyl (77)	32598-13-3	4/14/2015	0.000104	SB-5 (0-2 ft bls)	1.11	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
3,4,4',5-Tetrachlorobiphenyl (81)	70362-50-4	4/14/2015	0.00000432	SB-5 (0-2 ft bls)	0.32	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
2,3,3',4,4'-Pentachlorobiphenyl (105)	32598-14-4	4/14/2015	0.000942	SB-5 (0-2 ft bls)	1.55	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
2,3,4,4',5-Pentachlorobiphenyl (114)	74472-37-0	4/14/2015	0.0000521	SB-5 (0-2 ft bls)	1.55	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
2,3',4,4',5-Pentachlorobiphenyl (118)	31508-00-6	4/14/2015	0.00208	SB-5 (0-2 ft bls)	1.55	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
2',3,4,4',5-Pentachlorobiphenyl (123)	65510-44-3	4/14/2015	0.0000352	SB-5 (0-2 ft bls)	1.55	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
3,3',4,4',5-Pentachlorobiphenyl (126)	57465-28-8	4/14/2015	0.00000699	SB-5 (0-2 ft bls)	0.00	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
2,3,3',4,4',5-Hexachlorobiphenyl (156)	38380-08-4	4/14/2015	0.000342	SB-5 (0-2 ft bls)	1.55	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
2,3,3',4,4',5'-Hexachlorobiphenyl (157)	69782-90-7	4/14/2015	0.00000388	SB-5 (0-2 ft bls)	1.55	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	52663-72-6	4/14/2015	0.000109	SB-5 (0-2 ft bls)	1.55	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	32774-16-6	4/14/2015	ND 0.00000194	SB-5 (0-2 ft bls)	0.0036	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	39635-31-9	4/14/2015	0.0000289	SB-5 (0-2 ft bls)	1.55	E	Yes	The maximum concentration detected at the Site is below the Type 1 Risk Reduction Standard

Delineation Criteria Options:

Pursuant to the Georgia Voluntary Remediation Act [§12-8-108.(1)]

(A): Concentrations from appropriate number of samples representative of local ambient or anthropogenic background conditions not affected by the subject site release.

(B): For Soil Only, Notification Concentrations (NCs)

(C): 2X Laboratory Lower Detection Limit (Standard PQL for EPA Analytical Method used) if less than all cleanup standards - Cannot exceed (E).

(D): For metals in soil, concentrations reported for GA undisturbed native soil samples as reported in USGS Open File Report 8 1-197 (Boermgen and Shacklette, 1981) or such later version as may be adopted by rule or regulation of the board.

(E): Default Residential Standards/Type 1 RRS:

Pursuant to the Georgia Hazardous Site Response Rules [§391-3-19-.06(3)(b)]

(F): For soil only: Highest value between Type 1 or Type 2 RRS

Notes:

B a = value confirmed by dual column analysis

CAS = Chemical Abstract Service

COC = Constituent of Concern

ft BLS = feet below land surface

I = result between the method detection limit and peak quantitation limit

J = estimated value

mg/Kg = milligrams per Kilogram (parts per million)

V = surrogate recovery not within criteria

RRS indicates Risk Reduction Standard

Values highlighted yellow exceeded the Type 1 RRS

PCDDs = polychlorinated dibenzodioxins

PCDFs = polychlorinated dibenzofurans

ND indicates the analyte was non-detect and as such was below the method detection limit

Table F2:

Delineation Criteria For Groundwater

Rice Iron and Metals (Former)

2000 West Savannah Avenue, Valdosta, Lowndes County, Georgia

Detected Regulated Substance	CAS Number	Date	Maximum Concentration Detected (mg/L)	Location (ID) & Depth (well screen interval in ft BLS) of Maximum Detection	Type 1 RRS For Groundwater (mg/L)	Criteria for Delineation Standard [(A),(B), (C), (D), (E), or (F)]	Extent Delineated (laterally and vertically)? (yes or no)	Notes/Comments/Justification
Acetone	67-64-1	10/20/2015	ND (0.010)	MW-2/MW-2R screened 10-20 ft BLS	4	E	Yes	The maximum detection was below the Type 1 RRS.
Acrolein	107-02-8	10/20/2015	ND (0.0050)	MW-2/MW-2R screened 10-20 ft BLS	0.7	E	Yes	The maximum detection was below the Type 1 RRS.
Acrylonitrile	107-31-1	10/20/2015	ND (0.0020)	MW-2/MW-2R screened 10-20 ft BLS	0.0020 (a)	E	Yes	The maximum detection was below the Type 1 RRS.
Benzene	71-43-2	4/2/2016	1.6	MW-8/MW-8R screened 10-20 ft BLS	0.005	E	No	The area of MW-8 was excavated in October 2016 and benzene was not detected during sampling on 2/17/18 or 7/28/18.
Dichlorobromomethane	75-27-4	11/11/2014	0.0023	MW-1DD screened 70-75 ft BLS	Trihalomethane*	E	Yes	The maximum detection was below the Type 1 RRS.
Bromoform	75-25-2	11/11/2014	ND (0.00038)	MW-1DD screened 70-75 ft BLS	Trihalomethane*	E	Yes	The maximum detection was below the Type 1 RRS.
Carbon Disulfide	75-15-0	7/28/2017	ND (0.00053)	MW-8/MW-8R screened 10-20 ft BLS	4	E	Yes	The maximum detection was below the Type 1 RRS.
Carbon Tetrachloride	56-23-5	7/28/2017	ND (0.00036)	MW-8/MW-8R screened 10-20 ft BLS	0.005	E	Yes	The maximum detection was below the Type 1 RRS.
Chlorobenzene	108-90-7	10/7/2011	0.0007	MW-1/MW-1R screened 10-20 ft BLS	0.1	E	Yes	The maximum detection was below the Type 1 RRS.
Chloroform	67-66-3	11/11/2014	0.0267	MW-1DD screened 70-75 ft BLS	Trihalomethane*	E	Yes	The maximum detection was below the Type 1 RRS.
Dibromochloromethane	124-48-1	11/11/2014	ND (0.00036)	MW-1DD screened 70-75 ft BLS	Trihalomethane*	E	Yes	The maximum detection was below the Type 1 RRS.
Dichlorodifluoromethane	75-71-8	7/28/2017	ND (0.00050)	MW-8/MW-8R screened 10-20 ft BLS	1	E	Yes	The maximum detection was below the Type 1 RRS.
1,2-Dichlorobenzene	95-50-1	10/7/2011	0.0009	MW-1/MW-1R screened 10-20 ft BLS	0.6	E	Yes	The maximum detection was below the Type 1 RRS.
1,3-Dichlorobenzene	541-73-1	10/20/2015	0.00023	MW-5D screened 35-40 ft BLS	0.6	E	Yes	The maximum detection was below the Type 1 RRS.
1,4-Dichlorobenzene	106-46-7	10/7/2011	0.0005	MW-1/MW-1R screened 10-20 ft BLS	0.075	E	Yes	The maximum detection was below the Type 1 RRS.
1,1-Dichloroethane	75-34-3	10/17/2016	0.0051	MW-1DD screened 70-75 ft BLS	4	E	Yes	The maximum detection was below the Type 1 RRS.
1,1-Dichloroethene	75-35-4	8/12/2014	0.0248	MW-1/MW-1R screened 10-20 ft BLS	0.007	E	Yes	The maximum concentration detected was above the Type 1 RRS.
1,2-Dichloroethane	107-06-2	7/28/2017	ND (0.00031)	MW-8/MW-8R screened 10-20 ft BLS	0.005	E	Yes	The maximum detection was below the Type 1 RRS.
cis-1,2-Dichloroethene	156-59-2	8/12/2014	1.77	MW-1/MW-1R screened 10-20 ft BLS	0.07	E	Yes	The maximum concentration detected was above the Type 1 RRS.
trans-1,2-Dichloroethene	156-60-5	8/12/2014	0.0201	MW-1/MW-1R screened 10-20 ft BLS	0.1	E	Yes	The maximum detection was below the Type 1 RRS.
Ethylbenzene	100-41-4	7/27/2016	0.205	MW-8/MW-8R screened 10-20 ft BLS	0.7	E	Yes	The maximum detection was below the Type 1 RRS.
Hexachlorobutadiene	87-68-3	7/28/2017	ND (0.00030)	MW-8/MW-8R screened 10-20 ft BLS	0.00030 (a)	E	Yes	The maximum detection was below the Type 1 RRS.
1,2-Dichloropropane	78-87-5	10/7/2011	0.0014	MW-1/MW-1R screened 10-20 ft BLS	0.005	E	Yes	The maximum detection was below the Type 1 RRS.
1,3-Dichloropropane	142-28-9	7/28/2017	ND (0.00031)	MW-8/MW-8R screened 10-20 ft BLS	0.002	E	Yes	The maximum detection was below the Type 1 RRS.
Methyl Bromide	74-83-9	7/28/2017	ND (0.00059)	MW-8/MW-8R screened 10-20 ft BLS	0.01	E	Yes	The maximum detection was below the Type 1 RRS.
Methyl Chloride	74-87-3	7/28/2017	ND (0.00050)	MW-8/MW-8R screened 10-20 ft BLS	0.003	E	Yes	The maximum detection was below the Type 1 RRS.
Methylene Bromide	74-95-3	7/28/2017	ND (0.00037)	MW-8/MW-8R screened 10-20 ft BLS	0.4	E	Yes	The maximum detection was below the Type 1 RRS.
Methylene Chloride	75-09-2	7/28/2017	ND (0.0020)	MW-8/MW-8R screened 10-20 ft BLS	0.005	E	Yes	The maximum detection was below the Type 1 RRS.
Naphthalene	91-20-3	4/15/2015	0.0126	MW-1/MW-1R screened 10-20 ft BLS	0.02	E	Yes	The maximum detection was below the Type 1 RRS.
Styrene	100-42-5	7/28/2017	ND (0.00022)	MW-8/MW-8R screened 10-20 ft BLS	0.1	E	Yes	The maximum detection was below the Type 1 RRS.
Tetrachloroethene	127-18-4	10/20/2015	0.464	MW-1/MW-1R screened 10-20 ft BLS	0.005	E	Yes	The maximum concentration detected was above the Type 1 RRS.
1,1,1,2-Tetrachloroethane	630-20-6	7/28/2017	ND (0.00028)	MW-8/MW-8R screened 10-20 ft BLS	0.07	E	Yes	The maximum detection was below the Type 1 RRS.
1,1,2,2-Tetrachloroethane	79-34-5	7/28/2017	ND (0.00030)	MW-8/MW-8R screened 10-20 ft BLS	0.0002 (a)	E	Yes	The maximum detection was below the Type 1 RRS.
Toluene	108-88-3	4/2/2016	3.83	MW-8/MW-8R screened 10-20 ft BLS	1	E	No	The area of MW-8 was excavated in October 2016 and toluene was not detected during sampling on 2/17/18 or 7/28/18.
1,1,1-Trichloroethane	71-55-6	7/28/2017	ND (0.00025)	MW-8/MW-8R screened 10-20 ft BLS	0.2	E	Yes	The maximum detection was below the Type 1 RRS.
1,1,2-Trichloroethane	79-00-5	7/28/2017	ND (0.00047)	MW-8/MW-8R screened 10-20 ft BLS	0.005	E	Yes	The maximum detection was below the Type 1 RRS.
Trichloroethene	79-01-6	8/12/2014	3.06	MW-1/MW-1R screened 10-20 ft BLS	0.005	E	Yes	The maximum concentration detected was above the Type 1 RRS.
Trichlorofluoromethane	75-69-4	7/28/2017	ND (0.00050)	MW-8/MW-8R screened 10-20 ft BLS	2	E	Yes	The maximum detection was below the Type 1 RRS.

Table F2:
Delineation Criteria For Groundwater

Rice Iron and Metals (Former)

2000 West Savannah Avenue, Valdosta, Lowndes County, Georgia

Detected Regulated Substance	CAS Number	Date	Maximum Concentration Detected (mg/L)	Location (ID) & Depth (well screen interval in ft BLS) of Maximum Detection	Type 1 RRS For Groundwater (mg/L)	Criteria for Delineation Standard [(A),(B), (C), (D), (E), or (F)]	Extent Delineated (laterally and vertically)? (yes or no)	Notes/Comments/Justification
1,2,3-Trichloropropane	96-18-4	7/28/2017	ND (0.00063)	MW-8/MW-8R screened 10-20 ft BLS	0.04	E	Yes	The maximum detection was below the Type 1 RRS.
Trihalomethane, Total *	-	11/11/2014	0.03	MW-1DD screened 70-75 ft BLS	0.08	E	Yes	The maximum detection was below the Type 1 RRS.
Vinyl chloride	75-01-4	2/16/2017	0.0111	MW-1/MW-1R screened 10-20 ft BLS	0.002	E	Yes	The maximum concentration detected was above the Type 1 RRS.
Xylenes, total	1330-20-7	7/27/2016	1.266	MW-8/MW-8R screened 10-20 ft BLS	10	E	Yes	The maximum detection was below the Type 1 RRS.
Arsenic	7440-38-2	2/16/2017	0.366	MW-1/MW-1R screened 10-20 ft BLS	0.01	E	Yes	The maximum concentration detected was above the Type 1 RRS.
Chromium	7440-47-3	10/6/2011	0.00472	MW-5 screened 10-20 ft BLS	0.1	E	Yes	The maximum detection was below the Type 1 RRS.
Lead	7439-92-1	10/7/2011	0.00318	MW-10 screened 10-20 ft BLS	0.015	E	Yes	The maximum detection was below the Type 1 RRS.
Aroclor 1016	12674-11-2	10/6/2011	ND (0.0020)	MW-8/MW-8R screened 10-20 ft BLS	0.0005	E	Yes	The maximum detection was below the Type 1 RRS.
Aroclor 1221	11104-28-2	10/6/2011	ND (0.0020)	MW-8/MW-8R screened 10-20 ft BLS	0.0005	E	Yes	The maximum detection was below the Type 1 RRS.
Aroclor 1232	11141-16-5	10/6/2011	ND (0.0020)	MW-8/MW-8R screened 10-20 ft BLS	0.0005	E	Yes	The maximum detection was below the Type 1 RRS.
Aroclor 1242	53469-21-9	10/6/2011	ND (0.0020)	MW-8/MW-8R screened 10-20 ft BLS	0.0005	E	Yes	The maximum detection was below the Type 1 RRS.
Aroclor 1248	12672-29-6	10/6/2011	ND (0.0020)	MW-8/MW-8R screened 10-20 ft BLS	0.0005	E	Yes	The maximum detection was below the Type 1 RRS.
Aroclor 1254	11097-69-1	10/6/2011	ND (0.0020)	MW-8/MW-8R screened 10-20 ft BLS	0.0005	E	Yes	The maximum detection was below the Type 1 RRS.
Aroclor 1260	11096-82-5	10/6/2011	ND (0.0020)	MW-8/MW-8R screened 10-20 ft BLS	0.0005	E	Yes	The maximum detection was below the Type 1 RRS.

Delineation Criteria Options:

Pursuant to the Georgia Voluntary Remediation Act [§12-8-108.(1)]

(A): Concentrations from appropriate number of samples representative of local ambient or anthropogenic background conditions not affected by the subject site release.

(B): For Soil Only, Notification Concentrations (NCs) - Cannot exceed (E).

(C): 2X Laboratory Lower Detection Limit (Standard PQL for EPA Analytical Method used) if less than all cleanup standards - Cannot exceed (E).

(D): For metals in soil, concentrations reported for GA undisturbed native soil samples as reported in USGS Open File Report 8 1-197 (Boerngen and Shacklette, 1981) or such later version as may be adopted by rule or regulation of the board.

(E): Default Residential Standards/Type 1 RRS:

Pursuant to the Georgia Hazardous Site Response Rules [§391-3-19-.06(3)(b)]

(F): For soil only: Highest value between Type 1 or Type 2 RRS

Notes:

mg/L = miligramss per Liter (parts per million)

CAS = Chemical Abstract Service

ft BLS = feet below land surface

*Trihalomethanes, Total includes the summarized concentrations for dichlorobromomethane, dibromochloromethane, bromoform, and chloroform.

(a) indicates the current health-based drinking waster criterion for this substance is lower then the current method detection limit. According to Rule 391-3-19-.07(4)€, the detection limit or background will be the Type 1 groundwater concentration criterion for this substance/analyte.

RRS = Risk Reduction Standard

Yellow highlighted values exceed the Type 1 RRS

ND indicates the analyte was non-detect and as such was below the method detection limit

Table F3:
Type 1 Risk Reduction Standards for Regulated Chemicals In Soil
Rice Iron and Metals (Former)
2000 West Savannah Avenue, Valdosta, Lowndes County, Georgia

Detected Regulated Chemicals	CAS Number	Maximum Concentration Detected in Soil (mg/Kg)	TEF	Adjusted Maximum Concentration Using TEF (mg/Kg)	Location (ID) & Depth (ft BLS) of Maximum Detection	Table 2 of Appendix III from GA R&R 391-3-19 (mg/Kg)	Regulated Substance Trigger Notification Requirements (GA R&R 391-3-19) (mg/Kg)	Type 1 Groundwater Values multiplied by 100 (mg/Kg)	Equation 6 (mg/kg)	Equation 7 (mg/kg)	Residential Type 1 Soil Risk Reduction Standard (mg/Kg)
VOCs by EPA Method 8260B											
Acetone	67-64-1	0.18	-	-	SB-3 0-2 ft BLS	-	2.74	400	-	191,000	400
Benzene	71-43-2	0.0102	-	-	SB-5 2-4 ft BLS	-	0.02	0.5	17.7	177	0.5
2-Butanone (MEK)	78-93-3	0.267	-	-	SB-3 0-2 ft BLS	-	0.79	200	-	47600	200
Carbon disulfide	75-15-0	0.0227	-	-	SB-3 0-2 ft BLS	-	0.0008***	400	-	857	400
cis-1,2-Dichloroethylene	156-59-2	0.006	-	-	Area 6-CSS-3 12 ft BLS	-	0.53	7	-	-	7
Ethylbenzene	108-90-7	0.133	-	-	SB-5 2-4 ft BLS	-	20.00	70	92.7	9130	70
Isopropylbenzene	98-82-8	0.0058	-	-	SB-3 0-2 ft BLS	-	21.88	-	-	4280	21.88
Methylene Chloride	75-09-2	0.2860	-	-	B-5R 6-8 ft BLS	-	0.08	0.5	3570	1210	0.5
Naphthalene	91-20-3	0.0065	-	-	SB-3 0-2 ft BLS	-	100.00	2	60.4	259	60.4
Styrene	100-42-5	0.0106	-	-	SB-3 0-2 ft BLS	-	14.00	10	-	15400	14.00
Tetrachloroethylene	127-18-4	2.11	-	-	B-5R 6-8 ft BLS	-	0.18	0.5	314	141	0.5
Toluene	108-88-3	0.046	-	-	SB-1 4-6 ft BLS	-	14.40	100	-	22,100	100
Trichloroethylene	79-01-6	0.0051	-	-	B-5R 0-2 ft BLS	-	0.13	0.5	18.2	6.62	0.5
1,2,4-Trichlorobenzene	120-82-1	0.0176	-	-	SB-3 0-2 ft BLS	-	10.83	7	515	115	10.83
xylene (total)	1330-20-7	1.124	-	-	SB-5 2-4 ft BLS	-	20	1000	-	1050	1000
Acrolein	107-02-8	ND (0.0094)	-	-	SB-4 0-2 ft BLS	-	0.0094	70	-	6.28E-02	0.0628
Acrylonitrile	107-31-1	ND (0.0050)	-	-	SB-4 0-2 ft BLS	-	1.37	0.6	2.68	17.3	1.37
Dichlorodifluoromethane	75-71-8	ND (0.0010)	-	-	SB-4 0-2 ft BLS	-	1.49	100	8.03E-02	-	0.0803
Vinyl Acetate	108-05-4	ND (0.0085)	-	-	SB-4 0-2 ft BLS	-	0.51	-	-	823	0.51
Vinyl Chloride	75-01-4	ND (0.0011)	-	-	SB-4 0-2 ft BLS	-	0.04	0.2	3.52	76.6	0.2
Chloroethane	75-00-3	ND (0.0014)	-	-	SB-4 0-2 ft BLS	-	0.17	-	-	-	0.17
Trichlorofluoromethane	75-69-4	ND (0.0012)	-	-	SB-4 0-2 ft BLS	-	0.7	200	-	-	200
1,1-Dichloroethene	75-35-4	ND (0.000094)	-	-	SB-4 0-2 ft BLS	-	0.36	0.7	-	240	0.7
Methyl Bromide (Bromomethane)	74-83-9	ND (0.0015)	-	-	SB-4 0-2 ft BLS	-	0.80	-	-	6.96	0.8
Methyl Chloride (Chloromethane)	74-87-3	ND (0.0014)	-	-	SB-4 0-2 ft BLS	-	0.04	-	-	-	0.04
Methylene Bromide (Dibromomethane)	74-95-3	ND (0.00071)	-	-	SB-4 0-2 ft BLS	-	[1000]	-	-	-	1000
Methylene Chloride (Dichloromethane)	75-09-2	ND (0.0029)	-	-	SB-4 0-2 ft BLS	-	0.08	-	3570	1210	0.08
4-Methyl-2-pentanone (MIBK)	108-10-1	ND (0.0038)	-	-	SB-4 0-2 ft BLS	-	3.3	0	-	-	3.3
Trans-1,2-Dichloroethene	156-60-5	ND (0.00071)	-	-	SB-4 0-2 ft BLS	-	0.53	10	-	-	10
1,1-Dichloroethane	75-34-3	ND (0.00071)	-	-	SB-4 0-2 ft BLS	-	0.03	400	-	240	240
Cis-1,2-Dichloroethene	156-59-2	ND (0.00071)	-	-	SB-4 0-2 ft BLS	-	0.53	7	-	-	7
Chloroform	67-66-3	ND (0.00071)	-	-	SB-4 0-2 ft BLS	-	0.68	80	3.85	354	3.85
Carbon Tetrachloride	56-23-5	ND (0.00071)	-	-	SB-4 0-2 ft BLS	-	0.17	0.5	6.5	162	0.5
1,1,1-Trichloroethane	71-55-6	ND (0.00093)	-	-	SB-4 0-2 ft BLS	-	5.44	20	-	10700	20
1,2-Dichloroethane	107-06-2	ND (0.00071)	-	-	SB-4 0-2 ft BLS	-	0.02	0.5	6.24	49.9	0.5
1,2-Dichloropropane	78-87-5	ND (0.00071)	-	-	SB-4 0-2 ft BLS	-	0.02	0.5	14.2	25.3	0.5
Bromodichloromethane	75-27-4	ND (0.00071)	-	-	SB-4 0-2 ft BLS	-	1.18	-	3.73	-	1.18
1,1,2-Trichloroethane	79-00-5	ND (0.00090)	-	-	SB-4 0-2 ft BLS	-	0.5	0.5	16.8	2.45	0.5
Dibromochloromethane	124-48-1	ND (0.00071)	-	-	SB-4 0-2 ft BLS	-	1.63	-	178	-	1.63
1,3-Dichloropropane	142-28-9	ND (0.00071)	-	-	SB-4 0-2 ft BLS	-	[1000]	-	-	-	1000
1,2-Dibromoethane (EDB)	106-93-4	ND (0.00071)	-	-	SB-4 0-2 ft BLS	-	0.01	0	5.05E-01	1.23E+02	0.01
Chlorobenzene	108-90-7	ND (0.00071)	-	-	SB-4 0-2 ft BLS	-	4.18	-	-	565	4.18
1,1,1,2-Tetrachloroethane	630-20-6	ND (0.00071)	-	-	SB-4 0-2 ft BLS	-	1.03	7	29.4	-	7
Bromoform	75-25-2	ND (0.00071)	-	-	SB-4 0-2 ft BLS	-	1.000	80	271	-	80
1,1,2,2-Tetrachloroethane	79-34-5	ND (0.00079)	-	-	SB-4 0-2 ft BLS	-	0.13	0.02	9.4	-	0.13
1,2,3-Trichloropropane	96-18-4	ND (0.00098)	-	-	SB-4 0-2 ft BLS	-	0.54	4	4.98E-01	8.69	0.478
1,3-Dichlorobenzene	541-73-1	ND (0.00071)	-	-	SB-4 0-2 ft BLS	-	2.22	60	-	-	60
1,4-Dichlorobenzene	106-46-7	ND (0.00071)	-	-	SB-4 0-2 ft BLS	-	6.84	7.5	41.4	1.17E+04	7.5
1,2-Dichlorobenzene	95-50-1	ND (0.00071)	-	-	SB-4 0-2 ft BLS	-	25	60	-	4.10E+03	60
Hexachlorobutadiene	87-68-3	ND (0.00098)	-	-	SB-4 0-2 ft BLS	-	17.5	0.1	19.7	-	17.5
Napthalene	91-20-3	ND (0.0014)	-	-	SB-4 0-2 ft BLS	-	100	2	60.4	2.59E+02	60.4
Metals by EPA Method 6010B											
Arsenic	7440-38-2	540	-	-	B-5 6-8 ft BLS	20	41	1	9.96	192	20
Cadmium	7440-43-9	1.01	-	-	Area 3-CSS-1 3 ft BLS	2	39.00	0.5	83500	634	2
Chromium	7440-47-3	1.44	-	-	Area 5-CSS-4	100	1200.00	10	-	-	100
Lead	7439-92-1	3.10	-	-	SBFP-2 0-2 ft BLS	75	400.00	1.5	-	-	75
PCBs by EPA Method 8082A											
Aroclor 1016	12674-11-2	ND (0.0077)	-	-	SB-4 0-2 ft BLS	-	1.55	0.05	189	-	1.55
Aroclor 1221	11104-28-2	ND (0.0096)	-	-	SB-4 0-2 ft BLS	-	1.55	0.05	5.11	-	1.55
Aroclor 1232	11141-16-5	ND (0.0096)	-	-	SB-4 0-2 ft BLS	-	1.55	0.05	4.06	-	1.55
Aroclor 1242	53469-21-9	ND (0.0077)	-	-	SB-4 0-2 ft BLS	-	1.55	0.05	6.44	-	1.55
Aroclor 1248	12672-29-6	0.06	-	-	SB-4 0-2 ft BLS	-	1.55	0.05	6.5	-	1.55
Aroclor 1254	11097-69-1	0.0677	-	-	SB-4 0-2 ft BLS	-	1.55	0.05	6.72	-	1.55
Aroclor 1260	11096-82-5	0.0269	-	-	SB-3 0-2 ft BLS	-	1.55	0.05	6.97	-	1.55
Polychlorinated dibenzo-p-dioxins (PCDDs)											
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	< 0.000000984	1.0000	0.0000010	SB-5 (0-2 ft BLS)	-	8.00E-05	3.00E-06	1.10E-04	4.47E-04	8.00E-05
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	40321-76-4	< 0.000004920	1.0000	0.0000049	SB-5 (0-2 ft BLS)	-	-	-	-	-	see TEQ WHO2005
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227-28-6	< 0.000004920	0.1000	0.0000005	SB-5 (0-2 ft BLS)	-	-	-	-	-	see TEQ WHO2005
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	57653-85-7	< 0.000004920	0.1000	0.0000005	SB-5 (0-2 ft BLS)	-	-	-	-	-	see TEQ WHO2005
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3	< 0.000004920	0.1000	0.0000005	SB-5 (0-2 ft BLS)	-	-	-	-	-	see TEQ WHO2005
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	25822-46-9	0.0000215	0.0100	0.0000002	SB-5 (0-2 ft BLS)	-	-	-	-	-	see TEQ WHO2005
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	3268-87-9	0.000229	0.0003	0.0000001	SB-5 (0-2 ft BLS)	-	-	-	-	-	see TEQ WHO2005
Polychlorinated dibenzofurans (PCDFs)											
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	< 0.00000098	0.1000	0.00000010	SB-5 (0-2 ft BLS)	-	-	-	-	-	see TEQ WHO2005
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	< 0.00000492	0.0300	0.00000015	SB-5 (0-2 ft BLS)	-	-	-	-	-	see TEQ WHO2005
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	< 0.00000492	0.3000	0.00000148	SB-5 (0-2 ft BLS)	-	-	-	-	-	see TEQ WHO2005
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	< 0.00000492	0.1000	0.00000049	SB-5 (0-2 ft BLS)	-	-	-	-	-	see TEQ WHO2005
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	< 0.00000492	0.1000	0.00000049	SB-5 (0-2 ft BLS)	-	-	-	-	-	see TEQ WHO2005
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	< 0.00000492	0.1000	0.00000049	SB-5 (0-2 ft BLS)	-	-	-	-	-	see TEQ WHO2005
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	< 0.00000492	0.1000	0.00000049	SB-5 (0-2 ft BLS)	-	-	-	-	-	see TEQ WHO2005
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	< 0.00000492	0.1000	0.00000049	SB-5 (0-2 ft BLS)	-	-	-	-	-	see TEQ WHO2005
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	< 0.00000492	0.0100	0.00000005	SB-5 (0-2 ft BLS)	-	-	-	-	-	see TEQ WHO2005
1,2,3,4,6,7,8,9-Octachlorodibenzofuran	39001-02-0	< 0.00000984	0.0003	0.00000000	SB-5 (0-2 ft BLS)	-	-	-	-	-	see TEQ WHO2005
Total PCDDs and PCDFs											
Total Tetrachlorodibenzo-p-dioxin	41903-57-5	< 9.84E-07	-	9.84E-07	SB-5 (0-2 ft BLS)	-	8.00E-05	-	-	-	see TEQ WHO2005

Table F4:
Type 1 Risk Reduction Standards for Regulated Chemicals In Groundwater
Rice Iron and Metals (Former)
2000 West Savannah Avenue, Valdosta, Lowndes County, Georgia

Detected Regulated Chemicals	CAS Number	Maximum Concentration Detected in Groundwater (mg/L)	Location (ID) & Depth (well screen interval in ft BLS)	Table 1 of Appendix III (mg/L)	Residential Type 1 Groundwater Risk Reduction Standard (mg/L)
VOCs by EPA Method 8260B					
Acetone	67-64-1	ND (0.010)	MW-2/MW-2R screened 10-20 ft BLS	4	4
Acrolein	107-02-8	ND (0.0050)	MW-2/MW-2R screened 10-20 ft BLS	0.7	0.7
Acrylonitrile	107-31-1	ND (0.0020)	MW-2/MW-2R screened 10-20 ft BLS	0.0020 (a)	0.0020 (a)
Benzene	71-43-2	1.6	MW-8/MW-8R screened 10-20 ft BLS	0.005	0.005
Bromoform	75-25-2	ND (0.00038)	MW-1DD screened 70-75 ft BLS	Trihalomethane*	See Trihalomethane, Total
Carbon Disulfide	75-15-0	ND (0.00053)	MW-8/MW-8R screened 10-20 ft BLS	4	4
Carbon Tetrachloride	56-23-5	ND (0.00036)	MW-8/MW-8R screened 10-20 ft BLS	0.005	0.005
Dichlorobromomethane	75-27-4	0.0023	MW-1DD screened 70-75 ft BLS	Trihalomethane*	See Trihalomethane, Total
Chlorobenzene	108-90-7	0.0007	MW-1/MW-1R screened 10-20 ft BLS	0.1	0.1
Chloroform	67-66-3	0.0267	MW-1DD screened 70-75 ft BLS	Trihalomethane*	See Trihalomethane, Total
Dibromochloromethane	124-48-1	ND (0.00036)	MW-1DD screened 70-75 ft BLS	Trihalomethane*	See Trihalomethane, Total
Dichlorobromomethane	75-27-4	0.0023	MW-1DD screened 70-75 ft BLS	Trihalomethane*	See Trihalomethane, Total
Dichlorodifluoromethane	75-71-8	ND (0.00050)	MW-8/MW-8R screened 10-20 ft BLS	1	1
Trihalomethanes, total	-	0.050	MW-1DD screened 70-75 ft BLS	0.08	0.08
1,2-Dichlorobenzene	95-50-1	0.0009	MW-1/MW-1R screened 10-20 ft BLS	0.6	0.6
1,3-Dichlorobenzene	541-73-1	0.00023	MW-5D screened 35-40 ft BLS	0.6	0.6
1,4-Dichlorobenzene	106-46-7	0.0005	MW-1/MW-1R screened 10-20 ft BLS	0.075	0.075
1,1-Dichloroethane	75-34-3	0.0051	MW-1DD screened 70-75 ft BLS	4	4
1,1-Dichloroethene	75-35-4	0.0248	MW-1/MW-1R screened 10-20 ft BLS	0.007	0.007
1,2-Dichloroethane	107-06-2	ND (0.00031)	MW-8/MW-8R screened 10-20 ft BLS	0.005	0.005
cis-1,2-dichloroethene	156-59-2	1.77	MW-1/MW-1R screened 10-20 ft BLS	0.07	0.07
trans-1,2-dichloroethene	156-60-5	0.0201	MW-1/MW-1R screened 10-20 ft BLS	0.1	0.1
Ethylbenzene	100-41-4	0.205	MW-8/MW-8R screened 10-20 ft BLS	0.7	0.7
Hexachlorobutadiene	87-68-3	ND (0.00030)	MW-8/MW-8R screened 10-20 ft BLS	0.00030 (a)	0.00030 (a)
1,2-dichloropropane	78-87-5	0.0014	MW-1/MW-1R screened 10-20 ft BLS	0.005	0.005
Methyl Bromide	74-83-9	ND (0.00059)	MW-8/MW-8R screened 10-20 ft BLS	0.01	0.01
Methyl Chloride	74-87-3	ND (0.00050)	MW-8/MW-8R screened 10-20 ft BLS	0.003	0.003
Methylene Bromide	74-95-3	ND (0.00037)	MW-8/MW-8R screened 10-20 ft BLS	0.4	0.4
Methylene Chloride	75-09-2	ND (0.0020)	MW-8/MW-8R screened 10-20 ft BLS	0.005	0.005
Naphthalene	91-20-3	0.0126	MW-1/MW-1R screened 10-20 ft BLS	0.02	0.02
Styrene	100-42-5	ND (0.00022)	MW-8/MW-8R screened 10-20 ft BLS	0.1	0.1
Tetrachloroethylene	127-18-4	0.464	MW-1/MW-1R screened 10-20 ft BLS	0.005	0.005
1,1,1,2-Tetrachloroethane	630-20-6	ND (0.00028)	MW-8/MW-8R screened 10-20 ft BLS	0.07	0.07
1,1,2,2-Tetrachloroethane	79-34-5	ND (0.00030)	MW-8/MW-8R screened 10-20 ft BLS	0.0002 (a)	0.0002 (a)
1,1,1-Trichloroethane	71-55-6	ND (0.00025)	MW-8/MW-8R screened 10-20 ft BLS	0.2	0.2
1,1,2-Trichloroethane	79-00-5	ND (0.00047)	MW-8/MW-8R screened 10-20 ft BLS	0.005	0.005
Toluene	108-88-3	3.83	MW-8/MW-8R screened 10-20 ft BLS	1	1
1,2,4-Trichlorobenzene	120-82-1	0.0016	MW-5D screened 35-40 ft BLS	0.07	0.07
Trichloroethylene	79-01-6	3.06	MW-1/MW-1R screened 10-20 ft BLS	0.005	0.005
Trichlorofluoromethane	75-69-4	ND (0.00050)	MW-8/MW-8R screened 10-20 ft BLS	2	2
Trihalomethane, Total *	-	0.03	MW-1DD screened 70-75 ft BLS	0.08	0.08
1,2,3-Trichloropropane	96-18-4	ND (0.00063)	MW-8/MW-8R screened 10-20 ft BLS	0.04	0.04
Vinyl chloride	75-01-4	0.011	MW-1/MW-1R screened 10-20 ft BLS	0.002	0.002
xylene (total)	1330-20-7	1.266	MW-8/MW-8R screened 10-20 ft BLS	10	10
Metals by EPA Method 6010B					
Arsenic	7440-38-2	0.366	MW-1/MW-1R screened 10-20 ft BLS	0.01	0.01
Chromium	7440-47-3	0.00472	MW-5 screened 10-20 ft BLS	0.1	0.1
Lead	7439-92-1	0.00318	MW-10 screened 10-20 ft BLS	0.015	0.015
PCBs by EPA Method					
Aroclor 1016	12674-11-2	ND (0.0020)	MW-8/MW-8R screened 10-20 ft BLS	0.0005	0.0005
Aroclor 1221	11104-28-2	ND (0.0020)	MW-8/MW-8R screened 10-20 ft BLS	0.0005	0.0005
Aroclor 1232	11141-16-5	ND (0.0020)	MW-8/MW-8R screened 10-20 ft BLS	0.0005	0.0005
Aroclor 1242	53469-21-9	ND (0.0020)	MW-8/MW-8R screened 10-20 ft BLS	0.0005	0.0005
Aroclor 1248	12672-29-6	ND (0.0020)	MW-8/MW-8R screened 10-20 ft BLS	0.0005	0.0005
Aroclor 1254	11097-69-1	ND (0.0020)	MW-8/MW-8R screened 10-20 ft BLS	0.0005	0.0005
Aroclor 1260	11096-82-5	ND (0.0020)	MW-8/MW-8R screened 10-20 ft BLS	0.0005	0.0005

Notes:

EPA = Environmental Protection Agency

CAS = Chemical Abstracts Service

µg/l = micrograms per liter

mg/l = milligrams per liter

VOCs = volatile organic compounds

ft BLS = feet below land surface

Groundwater Default Residential Type 1 RRS's were obtained from Table 1 of Appendix III of Georgia's Rules and Regulations set in 391-3-19 of the Georgia Administrative Code.

Reference "Process Chart for the Development of RRS at HSRA, Brownfield, and VRP Sites (Rule 391-3-19-.07)".

Values highlighted yellow exceed the Type 1 and Type 3 RRS in Groundwater

*Trihalomethanes, Total includes the summarized concentrations for dichlorobromomethane, dibromochloromethane, bromoform, and chloroform.

(a) indicates the current health-based drinking water criterion for this substance is lower than the current method detection limit. According to Rule 391-3-19-.07(4), the detection limit or background will be the Type 1 groundwater concentration criterion for this substance/analyte.

Table F5:
Type 2 Risk Reduction Standards for Regulated Chemicals In Soil
 Rice Iron and Metals (Former)
 2000 West Savannah Avenue, Valdosta, Lowndes County, Georgia

Detected Regulated Chemicals	CAS Number	Maximum Concentration Detected in Soil (mg/kg)	Location (ID) & Depth (ft BLS) of Maximum Detection	Risk Based SSL for Leachate (mg/kg)	SSG Equation 10 (mg/kg)	Residential Type 2 Risk Reduction Standard Child		Residential Type 2 Risk Reduction Standard Adult		Residential Type 2 Soil Risk Reduction Standard (mg/kg)
						Equation 6 (mg/kg)	Equation 7 (mg/kg)	Equation 6 (mg/kg)	Equation 7 (mg/kg)	
VOCs by EPA Method 8260B										
Acetone	67-64-1	0.18	SB-3 0-2 ft BLS	2.9	1.87	-	32707	-	227000	2.9
Benzene	71-43-2	0.0102	SB-5 2-4 ft BLS	2.30E-04	3.50E-03	18.1	35.9	30.6	203.6	0.00023
2-Butanone (MEK)	78-93-3	0.267 J	SB-3 0-2 ft BLS	1.2	5.00E-01	-	9320	-	501000	1.2
Carbon disulfide	75-15-0	0.023	SB-3 0-2 ft BLS	2.40E-01	9.81E-01	-	182	-	982	0.24
cis-1,2-Dichloroethylene	156-59-2	0.006	Area 6-CSS-3 12 ft BLS	1.10E-02	1.96E-02	-	-	-	-	0.011
Ethylbenzene	108-90-7	0.13	SB-5 2-4 ft BLS	1.70E-03	7.70E-01	94.4	1767	160	10625	0.0017
Isopropylbenzene	98-82-8	0.0058 J	SB-3 0-2 ft BLS	7.40E-01	3.41E-01	-	874	-	4937	0.74
Methylene Chloride	75-09-2	0.02	SB-3 0-2 ft BLS	2.90E-03	2.20E-02	2810	209	6500	1433	0.0029
Naphthalene	91-20-3	0.0065	SB-3 0-2 ft BLS	5.40E-04	6.40E-02	64.8	54.6	104	297	0.00054
Styrene	100-42-5	0.0106	SB-3 0-2 ft BLS	1.3	1.66	-	3033	-	17910	1.3
Tetrachloroethylene	127-18-4	2.110	B-5R 6-8 ft BLS	5.10E-03	7.83E-03	325	29.4	540	162	0.0051
Toluene	108-88-3	0.046	SB-1 4-6 ft BLS	7.60E-01	6.87E-01	-	3571	-	26649	0.76
Trichloroethylene	79-01-6	0.01	Area 6-CSS-3 12 ft BLS	1.80E-04	1.61E-03	18.7	1.4	31.3	7.58	0.00018
m,p-Xylene	108-38-3/106-42-3	0.699	SB-5 2-4 ft BLS							0
o-Xylene	95-47-6	0.425	SB-5 2-4 ft BLS							0
xylene (total)	1330-20-7	1.124	SB-5 2-4 ft BLS	1.90E-01	9.61	-	25	-	1207	0.19
Metals by EPA Method 6010B										
Arsenic	7440-38-2	540	B-5 6-8 ft BLS	1.50E-03	2.92E-01	6.08	23.4	19.5	250	2.92E-01
Cadmium	7440-43-9	1.01	Area 3-CSS-1 3 ft BLS	6.90E-01	5.26E-01	89400	77.8	143000	825	5.26E-01
Chromium	7440-47-3	1.44	Area 5-CSS-4	-	2.47E-02	-	-	-	-	2.47E-02
Lead	7439-92-1	1.72	Area 3-CSS-1 3 ft BLS	-	6.3	-	-	-	-	418
PCBs by EPA Method 8082A										
Aroclor 1248	12672-29-6	0.06	SB-4 0-2 ft BLS	1.20E-03	1.08	4.2	-	12.5	-	1.20E-03
Aroclor 1254	11097-69-1	0.0677	SB-4 0-2 ft BLS	2.00E-03	1.82	4.29	-	12.9	-	2.00E-03
Aroclor 1260	11096-82-5	0.0269	SB-3 0-2 ft BLS	5.50E-03	4.9	4.38	-	13.5	-	5.50E-03

Notes:
 EPA = Environmental Protection Agency
 CAS = Chemical Abstracts Service
 µg/l = micrograms per liter (parts)
 VOCs = volatile organic compounds
 mg/Kg = milligrams per kilogram (parts per million)
 µg/L = micrograms per liter (parts per billion)
 Groundwater Default Non-residential Type 3 RRS's = Appendix III Table 1 Groundwater Criteria
 Trigger Notification = reference Rule 391-3-19-.04(3)(b)
 Reference "Process Chart for the Development of RRS at HSRA, Brownfield, and VRP Sites (Rule 391-3-19-.07)".
 - indicates a concentration could not be calculated as variables were undefined.
 SPLP data was collected at a depth interval of 0 to 2 feet below land surface
 Values highlighted yellow exceed the Type 2 Risk Reduction Standard.

Table F6:
Type 3 Risk Reduction Standards for Regulated Chemicals In Soil
 Rice Iron and Metals (Former)
 2000 West Savannah Avenue, Valdosta, Lowndes County, Georgia

Detected Regulated Chemicals	CAS Number	Maximum Concentration Detected in Soil (mg/Kg)	Location (ID) & Depth (ft BLS) of Maximum Detection	Regulated Substance Trigger Notification from Appendix (391-3-19) I (mg/Kg)	Type I Groundwater Values multiplied by 100 (mg/kg)	SPLP Associated Concentration in Soil (mg/Kg)	SPLP Leachate (mg/L)	SSG Equation 10 (mg/kg)	Equation 6 (mg/kg)	Equation 7 (mg/kg)	Type 3 Soil Risk Reduction Standard (mg/Kg)
VOCs by EPA Method 8260B											
Tetrachloroethylene	127-18-4	2.11	B-5R 6-8 ft BLS	0.18	0.5	2.11	0.0026	-	-	-	2.11
Arsenic by EPA Method 6010B											
Arsenic	7440-38-2	540	B-5 6-8 ft BLS	41	1	-	-	0.292	-	-	41

Notes:

EPA = Environmental Protection Agency

CAS = Chemical Abstracts Service

µg/l = micrograms per liter (parts

VOCs = volatile organic compounds

mg/Kg = milligrams per kilogram (parts per million)

µg/L = micrograms per liter (parts per billion)

Groundwater Default Non-residential Type 3 RRS's = Appendix III Table 1 Groundwater Criteria

Trigger Notification = reference Rule 391-3-19-.04(3)(b)

Reference "Process Chart for the Development of RRS at HSRA, Brownfield, and VRP Sites (Rule 391-3-19-.07)".

- indicates a concentration could not be calculated as variables were undefined.

SPLP data was collected at a depth interval of 0 to 2 feet below land surface

Values highlighted yellow exceed the Type 3 RRS for soil

Equation 6 and 7 were not calculated for Tetrachloroethylene and arsenic as the impact was detected below the top two feet.

Table F7:
Type 4 Risk Reduction Standards for Regulated Chemicals In Soil
 Rice Iron and Metals (Former)
 2000 West Savannah Avenue, Valdosta, Lowndes County, Georgia

Detected Regulated Chemicals	CAS Number	Maximum Concentration Detected in Soil (mg/Kg)	Location (ID) & Depth (ft BLS) of Maximum Detection	Risk Based SSL for Leachate (mg/kg)	SSG Equation 10 (mg/kg)	Outdoor Worker		Inside Worker		Type 4 Soil Risk Reduction Standard (mg/Kg)
						Equation 6 (mg/kg)	Equation 7 (mg/kg)	Equation 6 (mg/kg)	Equation 7 (mg/kg)	
VOCs by EPA Method 8260B										
Arsenic by EPA Method 6010B										
Arsenic	7440-38-2	540	B-5 6-8 ft BLS	1.50E-03	2.90E-01	2.42E+01	3.88E+02	4.36E+01	6.97E+02	0.29

Notes:

EPA = Environmental Protection Agency

CAS = Chemical Abstracts Service

µg/l = micrograms per liter (parts

VOCs = volatile organic compounds

mg/Kg = miligrams per kilogram (parts per million)

µg/L = micrograms per liter (parts per billion)

Groundwater Default Non-residential Type 3 RRS's = Appendix III Table 1 Groundwater Criteria

Trigger Notification = reference Rule 391-3-19-.04(3)(b)

Reference "Process Chart for the Development of RRS at HSRA, Brownfield, and VRP Sites (Rule 391-3-19-.07)".

- indicates a concentration could not be calculated as variables were undefined.

SPLP data was collected at a depht interval of 0 to 2 feet below land surface

Values highlighted yellow exceed Type 4 Risk Reduction Standard in soil.

**Table F8:
Type 2 Risk Reduction Standards for Regulated Chemicals In Groundwater**

Rice Iron and Metals (Former)
2000 West Savannah Avenue, Valdosta, Lowndes County, Georgia

Detected Regulated Chemicals	CAS Number	Maximum Concentration Detected in Groundwater (mg/L)	Location (ID) & Depth (well screen interval in ft BLS)	Child		Adult		Type II RRS (mg/L)
				Equation 1 (mg/L)	Equation 2 (mg/L)	Equation 1 (mg/L)	Equation 2 (mg/L)	
VOCs by EPA Method 8260B								
Benzene	71-43-2	1.600	MW-8/MW-8R screened 10-20 ft BLS	0.007	0.015	0.009	0.056	0.007
1,1-Dichloroethene	75-35-4	0.025	MW-1/MW-1R screened 10-20 ft BLS	-	0.107	-	0.460	0.107
cis-1,2-dichloroethene	156-59-2	1.770	MW-1/MW-1R screened 10-20 ft BLS	-	0.040	-	0.067	0.040
Tetrachloroethene	127-18-4	0.464	MW-1/MW-1R screened 10-20 ft BLS	0.216	0.020	0.242	0.078	0.020
Toluene	108-88-3	3.830	MW-8/MW-8R screened 10-20 ft BLS	-	1.040	-	2.290	1.040
Trichloroethene	79-01-6	3.060	MW-1/MW-1R screened 10-20 ft BLS	0.013	0.001	0.013	0.005	0.001
Vinyl chloride	75-01-4	0.011	MW-1/MW-1R screened 10-20 ft BLS	0.003	0.030	0.002	0.076	0.002
Metals by EPA Method 6010B								
Arsenic	7440-38-2	0.366	MW-1/MW-1R screened 10-20 ft BLS	0.002	0.006	0.001	0.010	0.001

Notes:

EPA = Environmental Protection Agency

CAS = Chemical Abstracts Service

ft BLS indicates feet below land surface

VOCs = volatile organic compounds

mg/L = milligrams per liter

Groundwater Default Non-residential Type 3 RRS's = Appendix III Table 1 Groundwater Criteria

Reference "Process Chart for the Development of RRS at HSRA, Brownfield, and VRP Sites (Rule 391-3-19-.07)".

- indicates a concentration could not be calculated as variables were undefined.

Values highlighted yellow exceed the Type 2 RRS for groundwater.

**Table F9:
Type 4 Risk Reduction Standards for Regulated Chemicals In Groundwater**

Rice Iron and Metals (Former)
2000 West Savannah Avenue, Valdosta, Lowndes County, Georgia

Detected Regulated Chemicals	CAS Number	Maximum Concentration Detected in Groundwater (mg/L)	Location (ID) & Depth (well screen interval in ft BLS)	Outdoor Worker		Indoor Worker		Type 4 RRS (mg/L)
				Equation 1 (mg/L)	Equation 2 (mg/L)	Equation 1 (mg/L)	Equation 2 (mg/L)	
VOCs by EPA Method 8260B								
Benzene	71-43-2	1.6	MW-8/MW-8R screened 10-20 ft BLS	0.011	0.092	0.010	0.082	0.010
1,1-Dichloroethene	75-35-4	0.0248	MW-1/MW-1R screened 10-20 ft BLS	-	0.666	-	0.599	0.599
cis-1,2-dichloroethene	156-59-2	1.77	MW-1/MW-1R screened 10-20 ft BLS	-	0.260	-	0.234	0.234
Tetrachloroethene	127-18-4	0.464	MW-1/MW-1R screened 10-20 ft BLS	0.324	0.125	0.292	0.112	0.112
Toluene	108-88-3	3.83	MW-8/MW-8R screened 10-20 ft BLS	-	6.660	-	5.990	5.990
Trichloroethene	79-01-6	3.06	MW-1/MW-1R screened 10-20 ft BLS	0.019	0.007	0.017	0.006	0.006
Vinyl chloride	75-01-4	0.0111	MW-1/MW-1R screened 10-20 ft BLS	0.004	0.190	0.004	0.002	0.002
Arsenic by EPA Method 6010B								
Arsenic	7440-38-2	0.366	MW-1/MW-1R screened 10-20 ft BLS	0.002	0.039	0.002	0.035	0.002

Notes:

EPA = Environmental Protection Agency

CAS = Chemical Abstracts Service

µg/l = micrograms per liter (parts

VOCs = volatile organic compounds

mg/Kg = milligrams per kilogram (parts per million)

mg/L = milligrams per liter (parts per million)

Groundwater Default Non-residential Type 3 RRS's = Appendix III Table 1 Groundwater Criteria

Trigger Notification = reference Rule 391-3-19-.04(3)(b)

Reference "Process Chart for the Development of RRS at HSRA, Brownfield, and VRP Sites (Rule 391-3-19-.07)".

- indicates a concentration could not be calculated as variables were undefined.

Values highlighted yellow exceed Type 4 Risk Reduction Standards in Groundwater.

1,1-Dichloroethane

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10^{-5} (10^{-4} for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SfO)(10^{-6} \text{ kg/mg})(IRs) + (SfI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	4.22E+01 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SfI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SfO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm·m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	2115.82	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0	mg/kg-day
* RfDo	0.2	mg/kg-day
* Sfi	0.0056	(mg/kg-day)-1
* Sfo	0.0057	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.004	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	5.94E-02	cm2/s
* Di	0.08	cm2/s
* E	0.35	unitless
* Kas	0.36	g soil/cm3 air
* HLC	0.01	atm-m3/mol
* Kd	0.64	cm3/g
* Koc	32.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016) Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

1,1-Dichloroethene

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SfO)(10^{-6} \text{ kg/mg})(IRs) + (SfI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	2.40E+02	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SfI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SfO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{as} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	868.87	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.057142857	mg/kg-day
* RfDo	0.05	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.015	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	6.08E-02	cm2/s
* Di	0.09	cm2/s
* E	0.35	unitless
* Kas	1.67	g soil/cm3 air
* HLC	0.03	atm-m3/mol
* Kd	0.64	cm3/g
* Koc	32.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

1,1,1-Trichloroethane

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.07E+04	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{as} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	1556.17	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	1.428571429	mg/kg-day
* RfDo	2	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.006	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	4.60E-02	cm2/s
* Di	0.07	cm2/s
* E	0.35	unitless
* Kas	0.79	g soil/cm3 air
* HLC	0.02	atm-m3/mol
* Kd	0.88	cm3/g
* Koc	44.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

1,1,1,2-Tetrachloroethane

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	2.94E+01 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
----	---------	-------	-------------------------------

C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{as} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	7070.67	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0	mg/kg-day
* RfDo	0.03	mg/kg-day
* Sfi	0.0259	(mg/kg-day)-1
* Sfo	0.026	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	3.39E-02	cm2/s
* Di	0.05	cm2/s
* E	0.35	unitless
* Kas	0.06	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	1.72	cm3/g
* Koc	86.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

1,1,2,2-Tetrachloroethane

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	9.40E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	19218.81	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0	mg/kg-day
* RfDo	0.022	mg/kg-day
* Sfi	0.203	(mg/kg-day)-1
* Sfo	0.2	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	3.47E-02	cm2/s
* Di	0.05	cm2/s
* E	0.35	unitless
* Kas	0.01	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	1.90	cm3/g
* Koc	95.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016) Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

1,1,2-Trichloroethane

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.68E+01 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	2.45E+00 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m³/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m³/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m³/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m³)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	8829.25	m ³ /kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m ³ /day
* RfDi	5.71429E-05	mg/kg-day
* RfDo	0.004	mg/kg-day
* Sfi	0.056	(mg/kg-day) ⁻¹
* Sfo	0.057	(mg/kg-day) ⁻¹
* PEF	4.63E+09	m ³ /kg
* Irw	2	L/day
* K	0.5	L/m ³

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm ²
* π	3.14	unitless

0.5 acres

* α	0.000	cm ² /s
* T	7.90E+08	s
* p	2.65	g/cm ³
* fOC	0.02	g/g
* Dei	4.74E-02	cm ² /s
* Di	0.07	cm ² /s
* E	0.35	unitless
* Kas	0.03	g soil/cm ³ air
* HLC	0.00	atm-m ³ /mol
* Kd	1.22	cm ³ /g
* Koc	61.00	cm ³ /g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

1,1-Dichloroethane

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	4.22E+01 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm·m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	2115.82	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0	mg/kg-day
* RfDo	0.2	mg/kg-day
* Sfi	0.0056	(mg/kg-day)-1
* Sfo	0.0057	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.004	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	5.94E-02	cm2/s
* Di	0.08	cm2/s
* E	0.35	unitless
* Kas	0.36	g soil/cm3 air
* HLC	0.01	atm-m3/mol
* Kd	0.64	cm3/g
* Koc	32.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016) Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

1,1-Dichloroethene

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SfO)(10^{-6} \text{ kg/mg})(IRs) + (SfI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	2.40E+02	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SfI – Inhalation cancer slope factor (mg/kg-day)-1

SfO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{as} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	868.87	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.057142857	mg/kg-day
* RfDo	0.05	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.015	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	6.08E-02	cm2/s
* Di	0.09	cm2/s
* E	0.35	unitless
* Kas	1.67	g soil/cm3 air
* HLC	0.03	atm-m3/mol
* Kd	0.64	cm3/g
* Koc	32.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

1,2 Dibromoethane

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	5.05E-01 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.23E+02 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	10018.20	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.002571429	mg/kg-day
* RfDo	0.009	mg/kg-day
* Sfi	2.1	(mg/kg-day)-1
* Sfo	2	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	3.04E-02	cm2/s
* Di	0.04	cm2/s
* E	0.35	unitless
* Kas	0.03	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	0.80	cm3/g
* Koc	40.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters. Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables. (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

1,2- Dichlorobenzene

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	4.10E+03	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	15862.98	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.057142857	mg/kg-day
* RfDo	0.09	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	3.96E-02	cm2/s
* Di	0.06	cm2/s
* E	0.35	unitless
* Kas	0.01	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	7.60	cm3/g
* Koc	380.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

1,2 Dichloropropane

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.42E+01 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	2.53E+01 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{as} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm·m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	4547.03	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.001142857	mg/kg-day
* RfDo	0.09	mg/kg-day
* Sfi	0.035	(mg/kg-day)-1
* Sfo	0.036	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.001	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	5.16E-02	cm2/s
* Di	0.07	cm2/s
* E	0.35	unitless
* Kas	0.09	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	1.22	cm3/g
* Koc	61.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

1,2,3-Trichloropropane

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	4.12E-01 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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C=	4.98E-01 mg/kg	EQUATION 6 NON-VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDi)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	8.69E+00 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{el} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{el} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{as} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	20896.48	m3/kg
* EF	350	days/year
* lrs	114	mg/day
* lra	15	m3/day
* RfDi	8.57143E-05	mg/kg-day
* RfDo	0.004	mg/kg-day
* Sfi	1	(mg/kg-day)-1
* Sfo	30	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* lrw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	4.03E-02	cm2/s
* Di	0.06	cm2/s
* E	0.35	unitless
* Kas	0.01	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	2.40	cm3/g
* Koc	120.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Paramters Table:

: U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters. Accessible online at:

[NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables. \(http://www.epa.gov/risk/risk-based-screening-table-generic-tables\).](http://www.epa.gov/risk/risk-based-screening-table-generic-tables)

A THQ of 1.0 was selected when using RSL tables.

1,2,3-Trichloropropane

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	4.98E-01 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	8.69E+00 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{as} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm·m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	20896.48	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	8.57143E-05	mg/kg-day
* RfDo	0.004	mg/kg-day
* Sfi	0	(mg/kg-day) ⁻¹
* Sfo	30	(mg/kg-day) ⁻¹
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	4.03E-02	cm2/s
* Di	0.06	cm2/s
* E	0.35	unitless
* Kas	0.01	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	2.40	cm3/g
* Koc	120.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

1,2-Dichloroethane

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	6.24E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	4.99E+01 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	5198.87	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.002	mg/kg-day
* RfDo	0.006	mg/kg-day
* Sfi	0.091	(mg/kg-day)-1
* Sfo	0.091	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.001	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	6.08E-02	cm2/s
* Di	0.09	cm2/s
* E	0.35	unitless
* Kas	0.06	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	0.80	cm3/g
* Koc	40.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

1,3- Dichlorobenzene

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{ei} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	#DIV/0!	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0	mg/kg-day
* RfDo	0	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	#DIV/0!	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	0.00E+00	cm2/s
* Di	0.00	cm2/s
* E	0.35	unitless
* Kas	#DIV/0!	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	0.00	cm3/g
* Koc	0.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

1,3-Dichloropropane

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{as} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm·m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	8348.82	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0	mg/kg-day
* RfDo	0.02	mg/kg-day
* Sfi	0	(mg/kg-day) ⁻¹
* Sfo	0	(mg/kg-day) ⁻¹
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	5.23E-02	cm2/s
* Di	0.07	cm2/s
* E	0.35	unitless
* Kas	0.03	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	1.44	cm3/g
* Koc	72.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.
(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

1,4- Dichlorobenzene

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	4.14E+01 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.17E+04 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	14238.03	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.228571429	mg/kg-day
* RfDo	0.07	mg/kg-day
* Sfi	0.0385	(mg/kg-day)-1
* Sfo	0.0054	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	3.89E-02	cm2/s
* Di	0.06	cm2/s
* E	0.35	unitless
* Kas	0.01	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	7.60	cm3/g
* Koc	380.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.
(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

1,2,4-Trichlorobenzene

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	5.15E+02 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.15E+02 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{as} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	42004.43	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.000571429	mg/kg-day
* RfDo	0.01	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0.029	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	2.83E-02	cm2/s
* Di	0.04	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	28.00	cm3/g
* Koc	1400.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

2,2-Dichloropropane

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10^{-5} (10^{-4} for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#VALUE!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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C=	#DIV/0!	mg/kg	EQUATION 6 NON-VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDi)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#VALUE!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
----	---------	-------	-------------------------------

C=	#VALUE!	mg/kg	EQUATION 7 NON-VOLATILE COMPOUNDS
----	---------	-------	-----------------------------------

C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{el} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{el} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{as} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

CALCULATED			
CHEMICAL SPECIFIC TABLE			
* THI	1	unitless	
* TR	1.00E-05	unitless	10 ⁻⁵ for Class A/B carcinogens; 10 ⁻⁴ for Class C carcinogens
* BW	70	kg	
* ED	30	years	25 for non-residential; 30 for residential
* AT	7.00E+01	years	**AT=ED, if non-cancer risk (Eqtn 7)**
* VF	#VALUE!	m3/kg	
* EF	350	days/year	250 for non-residential; 350 for residential
* lrs	114	mg/day	
* lra	15	m3/day	
* RfDi	0	mg/kg-day	
* RfDo	-	mg/kg-day	
* Sfi	0	(mg/kg-day)-1	
* Sfo	0	(mg/kg-day)-1	
* PEF	4.63E+09	m3/kg	
* lrw	2	L/day	
* K	0.5	L/m3	

* LS	45	m	
* V	2.25	m/s	
* DH	2	m	
* A	2.03E+07	cm2	0.5 acres
* π	3.14	unitless	

	α	#VALUE!	cm^2/s	
* T	T	7.90E+08	s	=25 years
* p	p	2.65	g/cm3	
* fOC	fOC	0.02	g/g	
* Dei	Dei	#VALUE!	cm2/s	
* Di	Di	-	cm2/s	
* E	E	0.35	unitless	
* Kas	Kas	#VALUE!	g soil/cm3 air	
* HLC	HLC	-	atm-m3/mol	
* Kd	Kd	#VALUE!	cm3/g	
* Koc	Koc	-	cm3/g	

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Paramters Table:

: U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters. Accessible online at:

[NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables. \(http://www.epa.gov/risk/risk-based-screening-table-generic-tables\).](http://www.epa.gov/risk/risk-based-screening-table-generic-tables)

A THQ of 1.0 was selected when using RSL tables.

2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SfO)(10^{-6} \text{ kg/mg})(IRs) + (SfI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.10E-04 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	4.47E-04 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SfI – Inhalation cancer slope factor (mg/kg-day)-1

SfO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{as} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	2740637.67	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	1.14286E-08	mg/kg-day
* RfDo	7E-10	mg/kg-day
* Sfi	133000	(mg/kg-day)-1
* Sfo	130000	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	3.32E-02	cm2/s
* Di	0.05	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	5000.00	cm3/g
* Koc	250000.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Paramters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

2-Butanone

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	4.76E+04	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	7805.86	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	1.428571429	mg/kg-day
* RfDo	0.6	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	6.44E-02	cm2/s
* Di	0.09	cm2/s
* E	0.35	unitless
* Kas	0.03	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	0.09	cm3/g
* Koc	4.50	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Acetone

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.91E+05	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	6614.18	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	8.857142857	mg/kg-day
* RfDo	0.9	mg/kg-day
* Sfi	0	(mg/kg-day) ⁻¹
* Sfo	0	(mg/kg-day) ⁻¹
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	7.78E-02	cm2/s
* Di	0.11	cm2/s
* E	0.35	unitless
* Kas	0.03	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	0.05	cm3/g
* Koc	2.40	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.
(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Acrolein

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	6.28E-02	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{ei} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	2257.03	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	5.71429E-06	mg/kg-day
* RfDo	0.0005	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.004	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	7.78E-02	cm2/s
* Di	0.11	cm2/s
* E	0.35	unitless
* Kas	0.25	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	0.02	cm3/g
* Koc	1.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Acrylonitrile

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SfO)(10^{-6} \text{ kg/mg})(IRs) + (SfI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	2.68E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.73E+01 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SfI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SfO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{as} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm·m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	6221.28	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.000571429	mg/kg-day
* RfDo	0.04	mg/kg-day
* Sfi	0.238	(mg/kg-day)-1
* Sfo	0.54	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.001	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	7.78E-02	cm2/s
* Di	0.11	cm2/s
* E	0.35	unitless
* Kas	0.03	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	0.17	cm3/g
* Koc	8.50	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Aroclor 1016

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.89E+02 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	998381.10	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0	mg/kg-day
* RfDo	0.00007	mg/kg-day
* Sfi	0.07	(mg/kg-day)-1
* Sfo	0.07	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	1.20E-02	cm2/s
* Di	0.02	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	960.00	cm3/g
* Koc	48000.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Aroclor 1221

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SfO)(10^{-6} \text{ kg/mg})(IRs) + (SfI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	5.11E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SfI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SfO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	283866.29	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDI	0	mg/kg-day
* RfDo	0	mg/kg-day
* Sfi	1.995	(mg/kg-day)-1
* Sfo	2	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	2.26E-02	cm2/s
* Di	0.03	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	168.00	cm3/g
* Koc	8400.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016) Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Aroclor 1232

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	4.06E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	155838.38	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0	mg/kg-day
* RfDo	0	mg/kg-day
* Sfi	1.995	(mg/kg-day)-1
* Sfo	2	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	2.33E-02	cm2/s
* Di	0.03	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	168.00	cm3/g
* Koc	8400.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016) Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Aroclor 1242

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	6.44E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	821518.59	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0	mg/kg-day
* RfDo	0	mg/kg-day
* Sfi	1.995	(mg/kg-day)-1
* Sfo	2	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	1.70E-02	cm2/s
* Di	0.02	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	1560.00	cm3/g
* Koc	78000.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016) Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Aroclor 1248

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	6.50E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	878767.70	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0	mg/kg-day
* RfDo	0	mg/kg-day
* Sfi	1.995	(mg/kg-day)-1
* Sfo	2	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	1.13E-02	cm2/s
* Di	0.02	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	1540.00	cm3/g
* Koc	77000.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Aroclor 1254

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SfO)(10^{-6} \text{ kg/mg})(IRs) + (SfI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	6.72E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SfI – Inhalation cancer slope factor (mg/kg-day)-1

SfO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{as} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	1168698.30	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0	mg/kg-day
* RfDo	0.00002	mg/kg-day
* Sfi	1.995	(mg/kg-day)-1
* Sfo	2	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	1.70E-02	cm2/s
* Di	0.02	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	2600.00	cm3/g
* Koc	130000.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016) Chemical Specific Parameters. Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables. (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Aroclor 1260

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SfO)(10^{-6} \text{ kg/mg})(IRs) + (SfI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	6.97E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SfI – Inhalation cancer slope factor (mg/kg-day)-1

SfO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	1817601.63	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0	mg/kg-day
* RfDo	0	mg/kg-day
* Sfi	1.995	(mg/kg-day)-1
* Sfo	2	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	1.56E-02	cm2/s
* Di	0.02	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	7000.00	cm3/g
* Koc	350000.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016) Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Arsenic

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	9.96E+00 mg/kg	EQUATION 6 NON-VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.92E+02 mg/kg	EQUATION 7 NON-VOLATILE COMPOUNDS	
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{ei} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

CALCULATED		
CHEMICAL SPECIFIC TABLE		
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	#VALUE!	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	4.28571E-06	mg/kg-day
* RfDo	0.0003	mg/kg-day
* Sfi	15.05	(mg/kg-day)-1
* Sfo	1.5	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	#VALUE!	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	#VALUE!	cm2/s
* Di	-	cm2/s
* E	0.35	unitless
* Kas	#VALUE!	g soil/cm3 air
* HLC	-	atm-m3/mol
* Kd	#VALUE!	cm3/g
* Koc	-	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables. (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Benzene

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.77E+01 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.77E+02 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	4548.78	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.008571429	mg/kg-day
* RfDo	0.004	mg/kg-day
* Sfi	0.0273	(mg/kg-day)-1
* Sfo	0.055	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.001	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	6.36E-02	cm2/s
* Di	0.09	cm2/s
* E	0.35	unitless
* Kas	0.08	g soil/cm3 air
* HLC	0.01	atm-m3/mol
* Kd	3.00	cm3/g
* Koc	150.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters. Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables. (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Bromodichloromethane

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	3.73E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm·m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	4324.45	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0	mg/kg-day
* RfDo	0.02	mg/kg-day
* Sfi	0.1295	(mg/kg-day)-1
* Sfo	0.062	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.001	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	3.96E-02	cm2/s
* Di	0.06	cm2/s
* E	0.35	unitless
* Kas	0.13	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	0.64	cm3/g
* Koc	32.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016) Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Bromoform

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	2.71E+02 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm·m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	10742.90	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0	mg/kg-day
* RfDo	0.022	mg/kg-day
* Sfi	0.00385	(mg/kg-day)-1
* Sfo	0.0079	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* ρ	2.65	g/cm3
* fOC	0.02	g/g
* Dei	2.55E-02	cm2/s
* Di	0.04	cm2/s
* E	0.35	unitless
* Kas	0.03	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	0.64	cm3/g
* Koc	32.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016) Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Cadmium

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10^{-5} (10^{-4} for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	8.35E+04 mg/kg	EQUATION 6 NON-VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	6.34E+02 mg/kg	EQUATION 7 NON-VOLATILE COMPOUNDS	
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{ei} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	#VALUE!	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	2.85714E-06	mg/kg-day
* RfDo	0.001	mg/kg-day
* Sfi	6.3	(mg/kg-day)-1
* Sfo	0	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

	α	#VALUE!	cm^2/s
* T	7.90E+08	s	
* p	2.65	g/cm3	
* fOC	0.02	g/g	
* Dei	#VALUE!	cm2/s	
* Di	-	cm2/s	
* E	0.35	unitless	
* Kas	#VALUE!	g soil/cm3 air	
* HLC	-	atm-m3/mol	
* Kd	#VALUE!	cm3/g	
* Koc	-	cm3/g	

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Carbon Disulfide

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	8.57E+02	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	892.91	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.2	mg/kg-day
* RfDo	0.1	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.016	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	7.78E-02	cm2/s
* Di	0.11	cm2/s
* E	0.35	unitless
* Kas	1.30	g soil/cm3 air
* HLC	0.01	atm-m3/mol
* Kd	0.44	cm3/g
* Koc	22.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Carbon Tetrachloride

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	6.50E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.62E+02 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	1240.42	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.028571429	mg/kg-day
* RfDo	0.004	mg/kg-day
* Sfi	0.021	(mg/kg-day)-1
* Sfo	0.07	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.008	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	4.03E-02	cm2/s
* Di	0.06	cm2/s
* E	0.35	unitless
* Kas	1.30	g soil/cm3 air
* HLC	0.03	atm-m3/mol
* Kd	0.88	cm3/g
* Koc	44.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Chlorobenzene

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	5.65E+02	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	8505.83	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.014285714	mg/kg-day
* RfDo	0.02	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	5.09E-02	cm2/s
* Di	0.07	cm2/s
* E	0.35	unitless
* Kas	0.03	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	4.60	cm3/g
* Koc	230.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables. (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Chloroethane (Ethyl Chloride)

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m³/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m³/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m³/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m³)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	1142.81	m ³ /kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m ³ /day
* RfDi	2.857142857	mg/kg-day
* RfDo	0	mg/kg-day
* Sfi	0	(mg/kg-day) ⁻¹
* Sfo	0	(mg/kg-day) ⁻¹
* PEF	4.63E+09	m ³ /kg
* Irw	2	L/day
* K	0.5	L/m ³

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm ²
* π	3.14	unitless

0.5 acres

* α	0.011	cm ² /s
* T	7.90E+08	s
* p	2.65	g/cm ³
* fOC	0.02	g/g
* Dei	7.07E-02	cm ² /s
* Di	0.10	cm ² /s
* E	0.35	unitless
* Kas	0.93	g soil/cm ³ air
* HLC	0.01	atm-m ³ /mol
* Kd	0.44	cm ³ /g
* Koc	22.00	cm ³ /g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Chloroform

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	3.85E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	3.54E+02 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	2750.62	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.028	mg/kg-day
* RfDo	0.01	mg/kg-day
* Sfi	0.0805	(mg/kg-day) ⁻¹
* Sfo	0.031	(mg/kg-day) ⁻¹
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.003	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	5.45E-02	cm2/s
* Di	0.08	cm2/s
* E	0.35	unitless
* Kas	0.24	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	0.64	cm3/g
* Koc	32.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Chromium, Total

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 NON-VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{ei} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm·m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	#VALUE!	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0	mg/kg-day
* RfDo	0	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	#VALUE!	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	#VALUE!	cm2/s
* Di	-	cm2/s
* E	0.35	unitless
* Kas	#VALUE!	g soil/cm3 air
* HLC	-	atm-m3/mol
* Kd	#VALUE!	cm3/g
* Koc	-	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters. Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables. (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Cis 1,2-DCE

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#VALUE!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#VALUE!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	2739.89	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	#VALUE!	mg/kg-day
* RfDo	0.002	mg/kg-day
* Sfi	#VALUE!	(mg/kg-day)-1
* Sfo	-	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.003	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	6.22E-02	cm2/s
* Di	0.09	cm2/s
* E	0.35	unitless
* Kas	0.21	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	0.80	cm3/g
* Koc	40.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Dibromochloromethane

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SfO)(10^{-6} \text{ kg/mg})(IRs) + (SfI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.78E+02 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SfI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SfO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	8803.37	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDI	0	mg/kg-day
* RfDo	0.02	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0.084	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	2.62E-02	cm2/s
* Di	0.04	cm2/s
* E	0.35	unitless
* Kas	0.05	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	0.64	cm3/g
* Koc	32.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016) Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Dibromochloropropane

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	2.24E-01 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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C=	1.87E+01 mg/kg	EQUATION 6 NON-VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDi)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.07E+01 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C=	1.28E+02 mg/kg	EQUATION 7 NON-VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{el} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{el} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{as} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_{oc} soil-water partition coefficient (cm³/g) = K_{oc} x OC (for chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

CALCULATED CHEMICAL SPECIFIC TABLE		
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	42002.25	m3/kg
* EF	350	days/year
* lrs	114	mg/day
* lra	15	m3/day
* RfDi	5.71429E-05	mg/kg-day
* RfDo	0.0002	mg/kg-day
* Sfi	21	(mg/kg-day)-1
* Sfo	0.8	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* lrw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	2.26E-02	cm2/s
* Di	0.03	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	2.40	cm3/g
* Koc	120.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Paramters Table:

: U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters. Accessible online at:

[NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables. \(http://www.epa.gov/risk/risk-based-screening-table-generic-tables\).](http://www.epa.gov/risk/risk-based-screening-table-generic-tables)

A THQ of 1.0 was selected when using RSL tables.

Dibromomethane

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	5823.62	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.001142857	mg/kg-day
* RfDo	0	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.001	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	3.89E-02	cm2/s
* Di	0.06	cm2/s
* E	0.35	unitless
* Kas	0.08	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	0.44	cm3/g
* Koc	22.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Dichlordiflouromethane

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDi)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{el} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{el} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{as} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (for chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

C=	23 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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	CALCULATED		
	CHEMICAL SPECIFIC TABLE		
* THI	1	unitless	
* TR	1.00E-05	unitless	10 ⁻⁵ for Class A/B carcinogens; 10 ⁻⁴ for Class C carcinogens
* BW	70	kg	
* ED	30	years	25 for non-residential; 30 for residential
* AT	7.00E+01	years	**AT=ED, if non-cancer risk (Eqtn 7)**
* VF	168.81	m3/kg	
* EF	350	days/year	250 for non-residential; 350 for residential
* lrs	114	mg/day	
* lra	15	m3/day	
* RfDi	0.028571429	mg/kg-day	
* RfDo	0.2	mg/kg-day	
* Sfi	0	(mg/kg-day) ⁻¹	
* Sfo	0	(mg/kg-day) ⁻¹	
* PEF	4.63E+09	m3/kg	
* lrw	2	L/day	
* K	0.5	L/m3	

* LS	45	m	
* V	2.25	m/s	
* DH	2	m	
* A	2.03E+07	cm2	0.5 acres
* π	3.14	unitless	

	α	0.041	cm^2/s	
* T	7.90E+08	s		=25 years
* p	2.65	g/cm3		
* fOC	0.02	g/g		
* Dei	5.37E-02	cm2/s		
* Di	0.08	cm2/s		
* E	0.35	unitless		
* Kas	15.84	g soil/cm3 air		
* HLC	0.34	atm-m3/mol		
* Kd	0.88	cm3/g		
* Koc	44.00	cm3/g		

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Paramters Table:

: U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters. Accessible online at:

[NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables. \(http://www.epa.gov/risk/risk-based-screening-table-generic-tables\).](http://www.epa.gov/risk/risk-based-screening-table-generic-tables)

A THQ of 1.0 was selected when using RSL tables.

Ethylbenzene

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	9.27E+01 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	9.13E+03 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	7662.52	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.285714286	mg/kg-day
* RfDo	0.1	mg/kg-day
* Sfi	0.00875	(mg/kg-day) ⁻¹
* Sfo	0.011	(mg/kg-day) ⁻¹
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	4.81E-02	cm2/s
* Di	0.07	cm2/s
* E	0.35	unitless
* Kas	0.04	g soil/cm3 air
* HLC	0.01	atm-m3/mol
* Kd	9.00	cm3/g
* Koc	450.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters. Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables. (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Hexachlorobutadiene

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SfO)(10^{-6} \text{ kg/mg})(IRs) + (SfI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.97E+01 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SfI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SfO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	14872.42	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0	mg/kg-day
* RfDo	0.001	mg/kg-day
* Sfi	0.077	(mg/kg-day)-1
* Sfo	0.078	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	1.91E-02	cm2/s
* Di	0.03	cm2/s
* E	0.35	unitless
* Kas	0.02	g soil/cm3 air
* HLC	0.01	atm-m3/mol
* Kd	17.00	cm3/g
* Koc	850.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Paramters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016) Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Isopropylbenzene (Cumene)

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	4.28E+03	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{ei} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	8255.69	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.114285714	mg/kg-day
* RfDo	0.1	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	4.24E-02	cm2/s
* Di	0.06	cm2/s
* E	0.35	unitless
* Kas	0.04	g soil/cm3 air
* HLC	0.01	atm-m3/mol
* Kd	14.00	cm3/g
* Koc	700.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Lead

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10^{-5} (10^{-4} for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDi)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m³/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m³/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m³/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m³)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{ei} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm·m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	#DIV/0!	m ³ /kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m ³ /day
* RfDi	0	mg/kg-day
* RfDo	0	mg/kg-day
* Sfi	0	(mg/kg-day) ⁻¹
* Sfo	0	(mg/kg-day) ⁻¹
* PEF	4.63E+09	m ³ /kg
* Irw	2	L/day
* K	0.5	L/m ³

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm ²
* π	3.14	unitless

0.5 acres

	α	#DIV/0!	cm ² /s
* T	7.90E+08	s	
* p	2.65	g/cm ³	
* fOC	0.02	g/g	
* Dei	0.00E+00	cm ² /s	
* Di	0.00	cm ² /s	
* E	0.35	unitless	
* Kas	#DIV/0!	g soil/cm ³ air	
* HLC	0.00	atm·m ³ /mol	
* Kd	0.00	cm ³ /g	
* Koc	0.00	cm ³ /g	

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Methyl Bromide

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	6.96E+00	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{as} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	1009.45	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.001428571	mg/kg-day
* RfDo	0.0014	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.013	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	7.07E-02	cm2/s
* Di	0.10	cm2/s
* E	0.35	unitless
* Kas	1.15	g soil/cm3 air
* HLC	0.01	atm-m3/mol
* Kd	0.26	cm3/g
* Koc	13.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Methyl Chloride

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	823.41	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.025714286	mg/kg-day
* RfDo	0	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.019	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	8.49E-02	cm2/s
* Di	0.12	cm2/s
* E	0.35	unitless
* Kas	1.39	g soil/cm3 air
* HLC	0.01	atm-m3/mol
* Kd	0.26	cm3/g
* Koc	13.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Paramters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Methylene Chloride

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	3.57E+03 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.21E+03 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	2104.79	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.171428571	mg/kg-day
* RfDo	0.006	mg/kg-day
* Sfi	0.000035	(mg/kg-day) ⁻¹
* Sfo	0.002	(mg/kg-day) ⁻¹
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.004	cm^2/s
* T	7.90E+08	s
* ρ	2.65	g/cm3
* fOC	0.02	g/g
* Dei	7.07E-02	cm2/s
* Di	0.10	cm2/s
* E	0.35	unitless
* Kas	0.31	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	0.44	cm3/g
* Koc	22.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables. (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

4-Methyl-2-pentanone

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
----	---------	-------	-------------------------------

C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm·m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	9656.11	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.857142857	mg/kg-day
* RfDo	0	mg/kg-day
* Sfi	0	(mg/kg-day) ⁻¹
* Sfo	0	(mg/kg-day) ⁻¹
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	4.95E-02	cm2/s
* Di	0.07	cm2/s
* E	0.35	unitless
* Kas	0.02	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	0.26	cm3/g
* Koc	13.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Naphthalene

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	6.04E+01 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	2.59E+02 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	63333.39	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.000857143	mg/kg-day
* RfDo	0.02	mg/kg-day
* Sfi	0.119	(mg/kg-day) ⁻¹
* Sfo	0	(mg/kg-day) ⁻¹
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	4.24E-02	cm2/s
* Di	0.06	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	30.00	cm3/g
* Koc	1500.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

PCB 77

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10^{-5} (10^{-4} for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.11E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	4.472025281 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m³/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m³/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m³/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m³)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	3457808.14	m ³ /kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m ³ /day
* RfDi	0.000114286	mg/kg-day
* RfDo	0.000007	mg/kg-day
* Sfi	13.3	(mg/kg-day) ⁻¹
* Sfo	13	(mg/kg-day) ⁻¹
* PEF	4.63E+09	m ³ /kg
* Irw	2	L/day
* K	0.5	L/m ³

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm ²
* π	3.14	unitless

0.5 acres

* α	0.000	cm ² /s
* T	7.90E+08	s
* p	2.65	g/cm ³
* fOC	0.02	g/g
* Dei	3.47E-02	cm ² /s
* Di	0.05	cm ² /s
* E	0.35	unitless
* Kas	0.00	g soil/cm ³ air
* HLC	0.00	atm-m ³ /mol
* Kd	1560.00	cm ³ /g
* Koc	78000.00	cm ³ /g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016) Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

PCB 81

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10^{-5} (10^{-4} for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	3.24E-01 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.456204456 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m³/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m³/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m³/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m³)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

CALCULATED		
CHEMICAL SPECIFIC TABLE		
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	714748.47	m ³ /kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m ³ /day
* RfDi	3.71429E-05	mg/kg-day
* RfDo	0.0000023	mg/kg-day
* Sfi	38.5	(mg/kg-day) ⁻¹
* Sfo	39	(mg/kg-day) ⁻¹
* PEF	4.63E+09	m ³ /kg
* Irw	2	L/day
* K	0.5	L/m ³

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm ²
* π	3.14	unitless

0.5 acres

* α	0.000	cm ² /s
* T	7.90E+08	s
* p	2.65	g/cm ³
* fOC	0.02	g/g
* Dei	3.47E-02	cm ² /s
* Di	0.05	cm ² /s
* E	0.35	unitless
* Kas	0.00	g soil/cm ³ air
* HLC	0.00	atm-m ³ /mol
* Kd	1560.00	cm ³ /g
* Koc	78000.00	cm ³ /g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016) Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

PCB 105

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	3.32E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	14.58574336 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{as} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	835139.65	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.000371429	mg/kg-day
* RfDo	0.000023	mg/kg-day
* Sfi	3.85	(mg/kg-day)-1
* Sfo	3.9	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	3.32E-02	cm2/s
* Di	0.05	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	2600.00	cm3/g
* Koc	130000.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

PCB 114

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	3.52E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	14.64613802 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{ei} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{as} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

CALCULATED		
CHEMICAL SPECIFIC TABLE		
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	1456948.96	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.000371429	mg/kg-day
* RfDo	0.000023	mg/kg-day
* Sfi	3.85	(mg/kg-day)-1
* Sfo	3.9	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	3.32E-02	cm2/s
* Di	0.05	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	2600.00	cm3/g
* Koc	130000.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

PCB 118

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	3.31E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	14.58324933 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	820614.36	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.000371429	mg/kg-day
* RfDo	0.000023	mg/kg-day
* Sfi	3.85	(mg/kg-day)-1
* Sfo	3.9	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* ρ	2.65	g/cm3
* fOC	0.02	g/g
* Dei	3.32E-02	cm2/s
* Di	0.05	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	2600.00	cm3/g
* Koc	130000.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

PCB 123

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	3.40E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	14.61062332 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	1013821.23	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.000371429	mg/kg-day
* RfDo	0.000023	mg/kg-day
* Sfi	3.85	(mg/kg-day)-1
* Sfo	3.9	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	3.32E-02	cm2/s
* Di	0.05	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	2600.00	cm3/g
* Koc	130000.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

PCB 126

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.01E-03 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	0.004447097 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	1013821.23	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	1.14286E-07	mg/kg-day
* RfDo	0.000000007	mg/kg-day
* Sfi	13300	(mg/kg-day)-1
* Sfo	13000	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	3.32E-02	cm2/s
* Di	0.05	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	2600.00	cm3/g
* Koc	130000.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

PCB 156

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	3.54E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	14.65110046 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm·m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	1551439.34	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.000371429	mg/kg-day
* RfDo	0.000023	mg/kg-day
* Sfi	3.85	(mg/kg-day) ⁻¹
* Sfo	3.9	(mg/kg-day) ⁻¹
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm ² /s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	3.11E-02	cm2/s
* Di	0.04	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	4200.00	cm3/g
* Koc	210000.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

PCB 157

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	3.52E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	14.64581754 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	1451238.59	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.000371429	mg/kg-day
* RfDo	0.000023	mg/kg-day
* Sfi	3.85	(mg/kg-day) ⁻¹
* Sfo	3.9	(mg/kg-day) ⁻¹
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* ρ	2.65	g/cm3
* fOC	0.02	g/g
* Dei	3.11E-02	cm2/s
* Di	0.04	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	4200.00	cm3/g
* Koc	210000.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016) Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

PCB 167

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	3.62E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	14.67394259 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	2209908.55	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.000371429	mg/kg-day
* RfDo	0.000023	mg/kg-day
* Sfi	3.85	(mg/kg-day)-1
* Sfo	3.9	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	3.11E-02	cm2/s
* Di	0.04	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	4200.00	cm3/g
* Koc	210000.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters. Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables. (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

PCB 169

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	3.62E-03 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	0.014673943 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	2209908.55	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	3.71429E-07	mg/kg-day
* RfDo	0.000000023	mg/kg-day
* Sfi	3850	(mg/kg-day)-1
* Sfo	3900	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	3.11E-02	cm2/s
* Di	0.04	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	4200.00	cm3/g
* Koc	210000.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

PCB 189

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10^{-5} (10^{-4} for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	3.69E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	14.69279882 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	3396564.33	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.000371429	mg/kg-day
* RfDo	0.000023	mg/kg-day
* Sfi	3.85	(mg/kg-day)-1
* Sfo	3.9	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	2.97E-02	cm2/s
* Di	0.04	cm2/s
* E	0.35	unitless
* Kas	0.00	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	7000.00	cm3/g
* Koc	350000.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

p-Isopropyltoluene

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{ei} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm·m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	#DIV/0!	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0	mg/kg-day
* RfDo	0	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	#DIV/0!	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	0.00E+00	cm2/s
* Di	0.00	cm2/s
* E	0.35	unitless
* Kas	#DIV/0!	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	0.00	cm3/g
* Koc	0.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Styrene

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.54E+04	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	12625.59	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.285714286	mg/kg-day
* RfDo	0.2	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	5.02E-02	cm2/s
* Di	0.07	cm2/s
* E	0.35	unitless
* Kas	0.01	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	9.00	cm3/g
* Koc	450.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Paramters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Tetrachloroethylene

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	3.14E+02 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.41E+02 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	2628.21	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.011428571	mg/kg-day
* RfDo	0.006	mg/kg-day
* Sfi	0.00091	(mg/kg-day)-1
* Sfo	0.0021	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.003	cm^2/s
* T	7.90E+08	s
* ρ	2.65	g/cm3
* fOC	0.02	g/g
* Dei	3.54E-02	cm2/s
* Di	0.05	cm2/s
* E	0.35	unitless
* Kas	0.39	g soil/cm3 air
* HLC	0.02	atm-m3/mol
* Kd	1.90	cm3/g
* Koc	95.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Toluene

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	2.21E+04	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm·m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	5583.16	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	1.428571429	mg/kg-day
* RfDo	0.08	mg/kg-day
* Sfi	0	(mg/kg-day) ⁻¹
* Sfo	0	(mg/kg-day) ⁻¹
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.001	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	5.52E-02	cm2/s
* Di	0.08	cm2/s
* E	0.35	unitless
* Kas	0.06	g soil/cm3 air
* HLC	0.01	atm-m3/mol
* Kd	4.60	cm3/g
* Koc	230.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Trans-1,2-Dichloroethene

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SfO)(10^{-6} \text{ kg/mg})(IRs) + (SfI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SfI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SfO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	1763.44	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0	mg/kg-day
* RfDo	0.02	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.006	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	6.22E-02	cm2/s
* Di	0.09	cm2/s
* E	0.35	unitless
* Kas	0.48	g soil/cm3 air
* HLC	0.01	atm-m3/mol
* Kd	0.80	cm3/g
* Koc	40.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016) Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Trichloroethylene

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.82E+01 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	6.62E+00 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)-1

SFO – Oral cancer slope factor (mg/kg-day)-1

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	2430.15	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.000571429	mg/kg-day
* RfDo	0.0005	mg/kg-day
* Sfi	0.01435	(mg/kg-day)-1
* Sfo	0.046	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.003	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	4.88E-02	cm2/s
* Di	0.07	cm2/s
* E	0.35	unitless
* Kas	0.33	g soil/cm3 air
* HLC	0.01	atm-m3/mol
* Kd	1.22	cm3/g
* Koc	61.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.
(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Trichloroflouromethane

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	105.50	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0	mg/kg-day
* RfDo	0.3	mg/kg-day
* Sfi	0	(mg/kg-day) ⁻¹
* Sfo	0	(mg/kg-day) ⁻¹
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.508	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	1.06E+00	cm2/s
* Di	1.50	cm2/s
* E	0.35	unitless
* Kas	4.52	g soil/cm3 air
* HLC	0.10	atm-m3/mol
* Kd	0.88	cm3/g
* Koc	44.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Paramters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Vinyl Acetate

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	8.23E+02	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	2964.35	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.057142857	mg/kg-day
* RfDo	1	mg/kg-day
* Sfi	0	(mg/kg-day)-1
* Sfo	0	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk (Eqtn 7)

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.002	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	6.01E-02	cm2/s
* Di	0.09	cm2/s
* E	0.35	unitless
* Kas	0.19	g soil/cm3 air
* HLC	0.00	atm-m3/mol
* Kd	0.11	cm3/g
* Koc	5.60	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Vinyl Chloride

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	3.52E+00 mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	7.66E+01 mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	574.10	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.028571429	mg/kg-day
* RfDo	0.003	mg/kg-day
* Sfi	0.0154	(mg/kg-day)-1
* Sfo	0.72	(mg/kg-day)-1
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.027	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	7.78E-02	cm2/s
* Di	0.11	cm2/s
* E	0.35	unitless
* Kas	2.61	g soil/cm3 air
* HLC	0.03	atm-m3/mol
* Kd	0.44	cm3/g
* Koc	22.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters.

Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables.

(<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

Xylene

TYPE 1 RRS

Equation 6

This is the concentration for which the upper bound excess cancer risk is less than or equal to 10⁻⁵ (10⁻⁴ for class C carcinogens) from soil ingestion and inhalation of volatiles and particulates using EQ 6 of RAGS Part B and residential assumptions in Table 3 of Appendix II of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(TR)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(SFO)(10^{-6} \text{ kg/mg})(IRs) + (SFI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	#DIV/0!	mg/kg	EQUATION 6 VOLATILE COMPOUNDS
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Equation 7

This is the concentration unlikely to cause non-cancer toxic effects from soil ingestion and inhalation of volatiles and particulates using EQ 7 of RAGS Part B and non-residential assumptions in Table 3 of Appendix III of Georgia Administrative Code 391-3-19-.07

$$C \text{ (mg/kg)} = \frac{(THI)(BW)(AT)(365 \text{ days/year})}{(EF)(ED)[(1/RfDo)(10^{-6} \text{ kg/mg})(IRs) + (1/RfDI)(IRa)\{(1/VF) + (1/PEF)\}]}$$

C=	1.05E+03	mg/kg	EQUATION 7 VOLATILE COMPOUNDS
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C – Concentration in soil (mg/kg)

THI – Target Hazard Index

TR– Target Excess Risk

BW – Body Weight (kg)

ED – Exposure Duration (years)

AT – Averaging Time (years)

VF – Soil to Air Volatilization Factor (m3/kg)

EF – Exposure Frequency (days/year)

IRs – Ingestion rate of soil (mg/day)

IRa – Ingestion rate of air (m3/day)

RfDi – Inhalation reference dose (mg/kg-day)

RfDo – Oral reference dose (mg/kg-day)

SFI – Inhalation cancer slope factor (mg/kg-day)⁻¹

SFO – Oral cancer slope factor (mg/kg-day)⁻¹

PEF – Particulate Emission Factor (m3/kg)

Daily water ingestion rate (L/day)

Water-to air volatilization factor (L/m3)

$$VF = \frac{LS * V * DH}{A} * \frac{(\pi * \alpha * T)^{1/2}}{(2 * D_{EI} * E * K_{as} * 10^{-3} \text{ Kg/g})}$$

WHERE:

LS length of side of contaminated area (m) = 45

V wind speed in mixing zone (m/s) = 2.25

DH diffusion height (m) = 2

A area of contamination (cm²) = 2.03 x 10⁷ (=0.5 acre)

[PI] pi = 3.14

$$\alpha = \frac{(D_{EI} * E)}{E + (p)(1 - E)/K_{as}}$$

T exposure interval (s) = 7.9 x 10⁸ (=25 yr)

[RHO]s density of soil solids (g/cm³) = 2.65

OC soil organic carbon content fraction (unitless) = 0.02

D_{ae} effective diffusivity (cm²/s) = D_i x E^{0.33}

D_i molecular diffusivity (cm²/s) (chemical-specific)

E total soil porosity (unitless) = 0.35

K_{oc} soil/air partition coefficient (g soil/cm³ air) = (H/K_a) x 41

H Henry's law constant (atm-m³/mol) (chemical-specific)

K_a soil-water partition coefficient (cm³/g) = K_{oc} x OC (or chemical specific)

K_{oc} organic carbon partition coefficient (cm³/g) (chemical-specific)

	CALCULATED	
	CHEMICAL SPECIFIC TABLE	
* THI	1	unitless
* TR	1.00E-05	unitless
* BW	70	kg
* ED	30	years
* AT	7.00E+01	years
* VF	7647.96	m3/kg
* EF	350	days/year
* Irs	114	mg/day
* Ira	15	m3/day
* RfDi	0.028571429	mg/kg-day
* RfDo	0.2	mg/kg-day
* Sfi	0	(mg/kg-day) ⁻¹
* Sfo	0	(mg/kg-day) ⁻¹
* PEF	4.63E+09	m3/kg
* Irw	2	L/day
* K	0.5	L/m3

10⁻⁵ for Class A/B carcinogens; 10⁻⁴ for Class C carcinogens

25 for non-residential; 30 for residential

AT=ED, if non-cancer risk [Eqtn 7]

250 for non-residential; 350 for residential

* LS	45	m
* V	2.25	m/s
* DH	2	m
* A	2.03E+07	cm2
* π	3.14	unitless

0.5 acres

* α	0.000	cm^2/s
* T	7.90E+08	s
* p	2.65	g/cm3
* fOC	0.02	g/g
* Dei	4.88E-02	cm2/s
* Di	0.07	cm2/s
* E	0.35	unitless
* Kas	0.04	g soil/cm3 air
* HLC	0.01	atm-m3/mol
* Kd	7.60	cm3/g
* Koc	380.00	cm3/g

=25 years

*values were taken from Table I of Appendix III (GAC 391-3-19)

Collect chemical-specific parameter values from EPA's Chemical Specific Parameters Table:

U.S. EPA (May 2016) Regional Screening Levels (RSLs) - Generic Tables (May 2016): Chemical Specific Parameters. Accessible online at:

NOTE: US EPA Region 4 has approved the use of the Regional Screening Level Tables. (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

A THQ of 1.0 was selected when using RSL tables.

APPENDIX G



Advanced Disposal

Central FL Service

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number WAF-16-01-10263		2. Page 1 of 1	3. Emergency Response Phone	4. Waste Tracking Number 162147		
5. Generator's Name and Mailing Address Trademark Metals 2000 W. Savannah Ave Valdosta, GA 31601				Generator's Site Address (if different than mailing address)				
Generator's Phone								
6. Transporter 1 Company Name Farmers Delomite				U.S. EPA ID Number				
7. Transporter 2 Company Name				U.S. EPA ID Number				
8. Designated Facility Name and Site Address Evergreen Landfill				U.S. EPA ID Number				
Facility's Phone 229-239-8157								
GENERATOR	9. Waste Shipping Name and Description			10. Containers		11. Total Quantity	12. Unit WL/Vol	
				No.	Type			
	1. 12. 8521							
	2.							
	3.							
	4.							
	5.							
6.								
13. Special Handling Instructions and Additional Information WAF #								
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.								
Generator's/Offoror's Printed/Typed Name ALLEN BLACKBURN				Signature 		Month Day Year 10 17 16		
INT'L	15. International Shipments ☐ Import to U.S. ☐ Export from U.S.				Port of entry/exit:			
	Transporter Signature (for exports only)				Date leaving U.S.			
TRANSPORTER	16. Transporter Acknowledgement of Receipt of Materials							
	Transporter 1 Printed/Typed Name Jim Yancy				Signature 		Month Day Year 10 17 16	
DESIGNATED FACILITY	Transporter 2 Printed/Typed Name				Signature 		Month Day Year	
17. Discrepancy								
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection								
17b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number								
Facility's Phone:								
17c. Signature of Alternate Facility (or Generator) Month Day Year								
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a								
Printed/Typed Name P. Jackson				Signature 		Month Day Year 10 17 16		

EVERGREEN LANDFILL
3163 WETHERINGTON LANE
VALDOSTA, GA 31601
2292938157

010263
CENTRAL FLORIDA ENVIRONMENTAL SERVICES
11227 McMULLEN ROAD
RIVERVIEW, FL 33569

INVOICE
INBOUND

SITE		OPERATOR		TICKET #	
Q4		46801		203950	
TRUCK		CONTAINER		LICENSE	
FDL5					
REFERENCE		IN		OUT	
		10/17/16 9:33 am		10/17/16 9:45 am	

CONTRACT: 16-01-10263 OTO		GROSS 103,580.00LBS Manual In		
BOL: 162147		TARE 29,540.00LBS Scale Out		
		NET 74,040.00LBS		
QTY	UNIT	DESCRIPTION	ORIGIN	%
37.02	TN	Contaminated Soil/Debr	L6	100.00
37.02	TN	Transportation	L6	100.00

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE: Jim Yancy



Advanced Disposal

Central FL Enviro

**NON-HAZARDOUS
WASTE MANIFEST**

1. Generator ID Number

WAF 16-01-00263

2. Page 1 of

3. Emergency Response Phone

4. Waste Tracking Number

162148

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

Trademark Metals
2000 W. Savannah Ave.
Valdosta GA 31401

Generator's Phone:

6. Transporter 1 Company Name

Farmers Dolomite

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

Evergreen Landfill

U.S. EPA ID Number

Facility's Phone

229-239-8157

9. Waste Shipping Name and Description

10. Containers

No.

Type

11. Total
Quantity

12. Unit
Wt./Vol.

1.

2.

C. SELL

3.

4.

5.

6.

13. Special Handling Instructions and Additional Information

WAF # 16-01-10263

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offor's Printed/Typed Name

Signature

Month Day Year

Allen Blackman

[Signature]

10 17 16

15. International Shipments

☐ Import to U.S.

☐ Export from U.S.

Port of entry/exit:

Transporter Signature (for exports only)

Date leaving U.S.

16. Transporter Acknowledgement of Receipt of Materials

Transporter 1 Printed/Typed Name

Signature

Month Day Year

Jim Yousey

[Signature]

10 17 16

Transporter 2 Printed/Typed Name

Signature

Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space

☐ Quantity

☐ Type

☐ Residue

☐ Partial Rejection

☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)

Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a

Printed/Typed Name

Signature

Month Day Year

[Signature]

[Signature]

10 17 16

EVERGREEN LANDFILL
3163 WETHERINGTON LANE
VALDOSTA, GA 31601
2292938157

010263
CENTRAL FLORIDA ENVIRONMENTAL SERVICES
11227 MCMULLEN ROAD
RIVERVIEW, FL 33569

INVOICE
INBOUND

SITE	CELL	OPERATOR	TICKET #
Q4		46801	203965
TRUCK	CONTAINER	LICENSE	
FDL5			
REFERENCE	IN	OUT	
	10/17/16 10:26 am	10/17/16 10:40 am	

CONTRACT: 16-01-10263 OTO
BOL: 162148

GROSS 104,080.00LBS Manual In
TARE 29,560.00LBS Scale Out
NET 74,520.00LBS

QTY	UNIT	DESCRIPTION	ORIGIN	%
37.26	TN	Contaminated Soil/Debr	YD	0.00
37.26	TN	Transportation	YD	0.00
			L6	100.00
			L6	100.00

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE: Jim Yancey

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number WAF 16-01-10268		2. Page 1 of		3. Emergency Response Phone		4. Waste Tracking Number 162146	
5. Generator's Name and Mailing Address Trademark Metals 201 W Savannah Ave Valdosta -					Generator's Site Address (if different than mailing address)				
Generator's Phone									
6. Transporter 1 Company Name Farmers Dilemite					U.S. EPA ID Number				
7. Transporter 2 Company Name					U.S. EPA ID Number				
8. Designated Facility Name and Site Address Evergreen Landfill					U.S. EPA ID Number				
Facility's Phone 229 293 8157									
9. Waste Shipping Name and Description					10. Containers		11. Total Quantity	12. Unit Wt./Vol.	
					No.	Type			
1. C. Soil									
2.									
3.									
4.									
5.									
6.									
13. Special Handling Instructions and Additional Information WAF #									
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.									
Generator's/Offor's Printed/Typed Name ALL FOR BROTHERS					Signature 		Month Day Year 10 11 16		
15 International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____									
16. Transporter Acknowledgement of Receipt of Materials									
Transporter 1 Printed/Typed Name Jim Laney					Signature 		Month Day Year 10 17 16		
Transporter 2 Printed/Typed Name					Signature		Month Day Year		
17 Discrepancy									
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection									
17b. Alternate Facility (or Generator) Manifest Reference Number: _____ U.S. EPA ID Number									
Facility's Phone: _____									
17c. Signature of Alternate Facility (or Generator) _____ Month Day Year									
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a									
Printed/Typed Name P. Jancin					Signature 		Month Day Year 10 17 16		

EVERGREEN LANDFILL
3163 WETHERINGTON LANE
VALDOSTA, GA 31601
2292939157

010263
CENTRAL FLORIDA ENVIRONMENTAL SERVICES
11227 McMULLEN ROAD
RIVERVIEW, FL 33569

INVOICE
INBOUND

SITE		CELL		OPERATOR		TICKET #	
Q4				46801		203938	
TRUCK		CONTAINER		LICENSE			
FDLS							
REFERENCE		IN		OUT			
REPLACES#203937		10/17/16 8:39 am		10/17/16 8:39 am			

CONTRACT: 16-01-10263 OTO				GROSS 95,200.00LBS Manual In			
BOL: 162146				TARE 29,580.00LBS Manual Out			
				NET 65,620.00LBS			
QTY	UNIT	DESCRIPTION	ORIGIN	%			
32.81	TN	Contaminated Soil/Debr	YD	0.00	L6	100.00	
32.81	TN	Transportation	YD	0.00	L6	100.00	

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:

Jim Yancey

Underground Injection Control Program
Pilot Test Injection Well Notification Form

Attachment A
EPD-UIC-003
Revision 1
Page 2 of 2

1.0 Address Facility Operator
1.1 Name Former Rice Iron & Metals TMR
1.2 Street Address 2000 W. Savannah Ave 2000 W. Savannah Ave
1.3 City, State Valdosta, GA Valdosta, GA
1.4 ZIP Code 31603 31603
1.5 Telephone N/A - closed down 813-677-4471 ext 7795
2.0 Location: Latitude: 30.818889 Longitude: 83.305

3.0 What is the contaminant in the Ground Water? Benzene, Toluene, Xylenes
4.0 Georgia Licensed Water Well Contractor or Bonded Driller: N/A
5.0 Professional Engineer or Geologist: Arvin Getchell PG. 813-285-0121
6.0 Well Data Table

	Injection Wells	Monitoring Wells <u>AG</u>
6.1 Number Wells	<u>Soil excavation - ORC advanced</u>	
6.2 Well Depth(s)	<u>applied to the excavation (12 ft</u>	
6.3 Well Diameter	<u>below land surface)</u>	
6.4 Volume in/out	<u>~100 pounds of ORC Advanced</u>	
6.5 Sampling freq.	<u>MW-8, MW-11, MW-16 - Semiannually</u>	

7.0 Responsible EPD Associate for site: Ms. Carolyn L. Daniels, PG
8.0 Date injection started: 10/18/16
8.1 Date* injection stopped: 10/18/16
8.2 Reason Injection Stopped? ORC Advanced applied to excavation - one-time
8.3 Date these injection wells were logged in to the UIC Class V Well inventory and file: _____
9.0 UIC Class V Well Inventory Number: _____
10.0 UST/HWMB CAP tracking number: VRP: 1348601340/HSE No. 10923
11.0 Pending UIC Class V Permit Number: _____

*Note: This pilot test well form is valid only for 90 days from the start of injection.

**Submit this form to:

Georgia Environmental Protection Division,
Regulatory Support Program
UIC Unit
Suite 1062 East Tower
2 M.L. King, Jr. Dr.
Atlanta, Georgia, 30334

APPENDIX H

FATE AND TRANSPORT (F&T) ANALYSIS

Background

The VRP Property has historically been used as a scrap metal processing facility. The former owner Rice Iron & Metal, Inc. (Rice) operated a metal scrap yard business since the mid-1960s. Trademark Metals and Recycling, LLC (TMR) purchased the Property from Rice in October 2011. The intended future use of the VRP Property is expected to remain commercial/industrial.

The release of regulated substances at the VRP Property was discovered during due diligence investigations conducted by STI in 2011 prior to TMR acquiring the VRP Property. The subsurface investigation revealed the presence of soil and groundwater impacts in several areas on the VRP Property including: the outdoor metal bailing area and associated oil/water separator discharge point; the metal shearing machine and shearing hydraulic building; the torch cutting area; the motor block storage area; and the train car load-out area. An additional subsurface investigation revealed the presence of chlorinated solvents, petroleum hydrocarbons, and metals at concentrations above Type 1 Risk Reduction Standards (RRS'). The release of these Constituents of Concern (COCs) is assumed to have occurred gradually since the 1960's as a result of the historical industrial operations associated with the scrap metal processing facility. The chlorinated solvent and one inorganic constituent (arsenic) impacts were identified in the immediate vicinity proximity of Area #6 (the outdoor metal bailing area). The concentrations and quantities of the releases of these regulated substances is unknown.

Source area impacts of COCs at the VRP Property was unknown prior to 2011. Remedial activities were conducted in 2011 at within the Outdoor Metal Bailing Area in proximity to the Metal Baler Shed, which was the area of identified tetrachloroethene (PCE) impacts. The impacted soil was removed in an excavation with dimensions of 22 feet x 18 feet x 12 feet (W x L x D). Groundwater quality data from monitoring wells was first collected in 2011. GF has collected groundwater data from the monitoring wells during seven sampling events since 2014. Groundwater laboratory data collected from the monitoring wells was used to identify COCs. The source area containing elevated levels of the COCs was identified in MW-1R. Four organic compounds PCE, trichloroethene (TCE), cis-1,2-dichloroethene (cDCE), and vinyl chloride (VC)/ and one inorganic constituent (arsenic) were identified at concentrations in groundwater underlying the VRP Property that exceeded Type 1 RRS'.

Conceptual Site Model

The historical use of the VRP Property as a scrap metal processing facility resulted in soil and groundwater impacts above and within the unconfined, unconsolidated Upper Surficial Aquifer. Monitoring wells installed at the VRP Property are constructed within the Surficial Aquifer of the Floridian Aquifer System. In general, soils of the Upper Surficial Aquifer observed at the Property are described as sand from ground surface to a depth of 5 feet, sandy clay between depths of 5 feet and 15 feet, and sandy clay or clay with variable layers of medium-grained sand lenses between depths of approximately 15 feet and 50 feet below land surface (bls). The average depth to the water table in the Upper Surficial Aquifer is approximately six feet bls based on measurements collected prior to and during groundwater sampling. Groundwater flow in the northern portion of the VRP Property is toward the southeast and east.

Chlorinated solvents are dense non-aqueous phase liquids (DNAPLs) that have densities greater than water and tend to sink through the water table until a low permeability layer is encountered or the source of DNAPL is depleted (GDNR, 2016). DNAPLs are soluble in water and dissolved DNAPL in groundwater moves downgradient in the direction of the hydraulic gradient. Excavation and removal of contaminated soil in late 2011 removed the source of underlying soil and groundwater impacts in proximity of the Outdoor Metal Bailing Area. This remedial effort removed the source of the chlorinated solvent contamination and reduced the travel distance and COC concentrations in the aquifer underlying the VRP Property. COC levels in groundwater samples collected from the source area monitoring well (MW-1R) have been declining from 2014 to 2017. Based on groundwater analytical results for samples collected in 2017, concentrations of five COCs detected in MW-1R remain above residential Type 1 RRS'. These COCs include four organic compounds: PCE, TCE, CDCE, and VC; and arsenic. Concentrations reported for groundwater samples collected from point of demonstration (POD) monitoring wells (MW-2R, MW-3, MW-4, MW-10, MW-14, and MW-15) indicate that these COCs exist at levels below Type 1 RRS. The approach of F&T modeling conducted for the VRP Property was to provide a conservative estimate of the movement, concentration, and distance of COCs in the Upper Surficial Aquifer from the source area monitoring well (MW-1R).

MW-1R, MW-1D, and MW-1DD, which are monitoring wells constructed with screened intervals between 10 to 20 feet, 35 to 40 feet bls, and 70 to 75 feet bls respectively, were used to analyze downward vertical gradients between the upper, intermediate, and lower portions of the Surficial Aquifer. Based on this analysis, the upper, intermediate, and lower portions of the Surficial Aquifer are hydraulically connected. However, groundwater quality data collected shows little evidence there is vertical movement of the COC plume. COCs have been detected at levels above the Type 1 RRS levels twice at MW-1DD for PCE in 2015 and 2016 and once at MW-1D for TCE in 2014.

Groundwater F&T Analysis for Organic Compounds

To assess the F&T of chlorinated dissolved solvents in the local aquifer, GF used the USEPA's BIOCHLOR, Natural Attenuation Decision Support System code, Version 2.2. BIOCHLOR is an screening model that simulates remediation through natural attenuation of dissolved solvents at chlorinated release sites. The software, programmed in the Microsoft Excel spreadsheet environment and based on the Domenico analytical solute transport model, has the ability to simulate advection, dispersion, and biotransformation by reductive dechlorination. Reductive dechlorination is assumed to occur under anaerobic conditions and dissolved solvent degradation is assumed to follow a sequential first-order decay process. The program is designed to simulate the biotransformation of chlorinated ethenes (PCE, TCE, cDCE, and VC) and chlorinated ethanes. BIOCHLOR approximates the complicated processes of natural attenuation and assumes simple hydrological and hydrogeologic site conditions and groundwater flow conditions underlying the VRP Property.

The BIOCHLOR program includes a screening tool to assess the likelihood of natural attenuation occurring in a contaminant plume based on groundwater chemistry. The natural attenuation screening tool provides a score that is used to indicate the level of evidence that anaerobic biodegradation of chlorinated organics is occurring in the aquifer underlying the Property. Solute transport with biotransformation modeled as first-order decay was the model type used within BIOCHLOR to simulate contaminant concentrations underlying the VRP Property. Detection of elevated concentrations of chlorinated solvents and arsenic in groundwater underlying the VRP Property was limited to the source area monitoring well (MW-1R). Due to the limited data to characterize the contaminant plume outside of the source area, conservative input values were used in BIOCHLOR. The F&T analysis using BIOCHLOR was implemented as a conservative screening tool to assess the maximum horizontal migration of the contaminant plume in the Upper Surficial Aquifer towards the POD monitoring wells.

The input parameters for the BIOCHLOR program were determined from site-specific measurements, BIOCHLOR recommendations described in the user's manual by Aziz et al. (2000 and 2002), and published data for the simulated contaminants. The input parameters used in BIOCHLOR are described in the following paragraphs and listed in Table 1.

Seepage Velocity: The BIOCHLOR model calculated a seepage velocity of 0.3 ft/year. The seepage velocity value was determined from estimated inputs for aquifer effective porosity, hydraulic gradient, and hydraulic conductivity. A conservative effective porosity value of 0.05 (5%) was estimated for the sandy clay strata based on the range of effective porosity values described in Aziz et al. (2000) and GDNR (2016). A hydraulic gradient of 0.0011 was identified as the average gradient observed near the source area. A hydraulic conductivity value of 1.38×10^{-5} cm/sec (0.0392 ft/day) was used and based on the maximum value calculated from slug testing performed in shallow monitoring wells at the VRP Property in 2014.

Groundwater Flow: The groundwater flow direction in proximity to the source area (MW-1R) has varied. Based on groundwater elevation data collected from 2011 to 2017, the groundwater flow directions from MW-1R have shown some variability, but the hydraulic gradient in the southeast direction from MW-1R towards MW-2R is consistent in all elevation datasets. Furthermore, the general groundwater flow directions for the VRP Property are toward the east and southeast as delineated in previous groundwater elevation mapping of the Upper Surficial Aquifer. Therefore, the BIOCHLOR simulations conservatively assume a southeast groundwater flow direction towards the nearest POD well (MW-2R), which is approximately 70 feet from the source area monitoring well (MW-1R).

Dispersivity Values: The dispersivity values in BIOCHLOR relate to the process that the dissolved contaminant will be distributed in three-dimensions by mechanical mixing and chemical diffusion in the aquifer. The three variables of dispersivity are longitudinal, which moves along the direction of groundwater flow; transverse, which moves perpendicular to the direction of groundwater flow; and vertical, which moves downward. These variables define the shape of the plume as it moves over a period. The longitudinal dispersivity value (α_x) was established based on the distance of 70 feet

from MW-1R to the nearest POD well (MW-2R). The longitudinal dispersivity was estimated based on a common relationship recommended in the BIOCHLOR user's manual as 10 percent of the distance from the source, which resulted in a value of 7 feet. The transverse dispersivity (alpha y) input parameter is a ratio of alpha y over alpha x. A ratio value of 0.10 was used and represents a commonly used ratio, according to the BIOCHLOR manual. The vertical dispersivity (alpha z) input parameter is also a ratio value of alpha z over alpha x. A ratio value of 0.05 was used and represents a commonly used ratio, according to the BIOCHLOR manual.

Retardation Factor: The retardation factor in BIOCHLOR is a ratio of the groundwater seepage velocity and the migration of the organic compounds in groundwater. Chlorinated solvents react with aquifer soils, and therefore, the movement of these compounds is slower than the seepage velocity of groundwater. BIOCHLOR uses a single value, which is named "Common R", for calculating the retardation factor used for each compound in simulations of the plume movement. The Common R value is the median value calculated using the retardation values of all simulated compounds. The retardation values for each of the modeled compounds ranged from 15.48 for PCE to 2.01 for VC. The median Common R value used for the simulations was 5.42.

Variables used to calculate the retardation factor include the soil bulk density, effective porosity, organic carbon partition coefficient, fraction of organic carbon, and distribution coefficient. The aquifer soil bulk density value used in the simulations was 1.7 g/cm³, which is a typical value recommended in the BIOCHLOR user's manual. The organic carbon partition coefficient (K_{oc}) is the ratio of a compound amount absorbed to the aquifer soil particles per unit mass of organic carbon in the soil. A higher K_{oc} value indicates that the compound is less mobile than compounds with lower K_{oc} values. The K_{oc} values used in the model ranged from 30 L/kg for VC to 426 L/kg for PCE. The fraction of organic carbon (f_{oc}) is the amount of soil matrix that is comprised of organic carbon. Greater amounts of organic carbon available in the aquifer soil matrix allows greater adsorption of organic compounds to the soil matrix. The f_{oc} value used in model simulations was the default value of 0.001 as recommended in the BIOCHLOR manual. The distribution coefficient is the product of K_{oc} and f_{oc} and is used in BIOCHLOR to calculate the retardation value for each compound.

1st Order Decay Coefficient: The 1st order decay coefficient is used to determine the decay process for dissolved organic compounds in the contaminant plume. The decay of chlorinated solvents by reductive dechlorination is modeled in BIOCHLOR as a sequential 1st order decay process. This process of biotransformation involves the decay of the parent compound to produce daughter products, which in turn also undergoes 1st order decay. Literature values for the biotransformation rate constants for each of the organic compounds were chosen based on recommendations in the BIOCHLOR user's manual. BIOCHLOR provides guidance towards selecting rate constants based on evidence that biotransformation is occurring at the site. The Natural Attenuation Screening Protocol sheet (attached within Appendix H), was used to assess the evidence for anaerobic biodegradation occurring in the chlorinated organic contaminant plume. The interpretation of the screening tool, based on field and laboratory groundwater

chemistry levels measured at the source area, indicated a score of 17. Interpretation of this score indicates “adequate evidence” that site conditions support anaerobic biodegradation. The rate constants selected for the modeling of each organic compound were selected using guidance from the BIOCHLOR user’s manual. The rate constants estimated for the Property were determined based on evidence of reductive dechlorination and limited evidence of electron donors present in the groundwater contaminant plume. Based on these conditions, a maximum rate constant value for each organic compound was recommended. A rate constant value representing 90 percent of the recommended maximum value was used in the model simulations.

Model Area: The model area was represented by a length along the centerline and a width of the plume movement over a simulated period. These values did not affect the simulation results. The model area is only for display purposes.

Simulation Time: Transient simulation time periods of 30, 50, and 100 years were selected for the modeling to predict the migration and concentrations of the chlorinated solvents of concern.

Source Dimensions in Saturated Zone: The source dimensions were estimated based on information from STI’s 2011 soil excavation. According to STI’s 2012 report, the soil excavation was completed at approximate dimensions of 22 feet x 18 feet x 12 feet (W x L X D) to remove contaminated soils at Area #6 Baler Area (Outdoor Metal Bailing Area). The extent of the soil excavation was determined by contaminant screening using field instrumentation.

Source Decay Constant: BIOCHLOR allows the source contamination to be modeled as either constant or decaying. The decaying source concentration option was selected for the simulations performed based on the assumption that the source area was removed in 2011. The source decay constant (K_s) is a first order process that describes decreasing contaminant concentrations in the source area as the DNAPL is depleted. The source decay constants were assessed by plotting site data for the contaminants of concern at the Property. The source decay values were higher than the maximum value allowed in BIOCHLOR. Therefore, a more conservative value of 0.001/yr. was selected as recommended in the BIOCHLOR user’s manual.

Source Concentrations: The concentrations of the organic COCs in the source area were based on the highest concentrations reported for MW-1R. The highest COC concentrations were collected on August 2014, except for PCE. The source concentration used for PCE was conservatively estimated at 0.5 mg/l, based on the PCE concentration of 0.464 mg/l detected in October 2015.

TABLE 1
BIOCHLOR INPUT PARAMETERS

Physical Parameter Input	Value	Rationale
Seepage Velocity	0.3 ft/yr	Value calculated in model using the following conservative input values: aquifer effective porosity of 0.05, average hydraulic gradient of 0.0011 ft/ft, and a hydraulic conductivity of 0.0000138 cm/sec.
Longitudinal Dispersivity (alpha x)	7.0 ft.	Value calculated by model using a length of 70 feet to the nearest POD well.
Transverse Dispersivity Ratio (alpha y:alpha x)	0.10	Common ratio recommended by BIOCHLOR, which assumes the ratio of transverse dispersivity and longitudinal dispersivity is 10 percent.
Vertical Dispersivity Ratio (alpha z:alpha x)	0.05	Common ratio recommended by BIOCHLOR, which assumes the ratio of vertical dispersivity and longitudinal dispersivity is 5 percent.
Retardation Factor	5.42	Median retardation factor was calculated in BIOCHLOR using estimated values for aquifer soil bulk density and the default value of fraction of organic carbon for the aquifer. Organic carbon coefficient values for each contaminant were entered for a temperature of 20 degrees C.
1st Order Decay Coefficient (Lambda)	Varies (per yr.)	The Lambda value for each contaminant was estimated using literature values and recommendations in BIOCHLOR based on evidence of reductive dechlorination.
Source Decay Constant	0.001/yr	Source decay constant was selected based on BIOCHLOR recommendations. A value more conservative than determined using site data was used in the model.
Model Area Length	100 ft.	Set at 100 feet to show extent of plume migration.
Model Area Width	40 ft.	Set at 40 feet, which shows the 22-foot contaminant source width and modeled dispersion of the plume.
Simulation Time	Varies (year)	Transient time periods simulated for plume migration included 30 years, 50 years, and 100 years.
Source Thickness in Saturated Zone	14 ft.	Estimated minimum source thickness calculated from an average groundwater depth of 6 feet and monitoring well depth of 20 feet.
Source Width in Saturated Zone	22 ft.	Estimated minimum source width estimated from the 2011 excavation of 22 ft. x 18 ft. x 12 ft. (W x L X D) to remove contaminated soils at Area #6 Baler Area.
Source Concentrations	Varies (mg/L)	Generally, the highest reported contaminant concentrations were reported from the source area (MW-1R) for August 2014 sampling.

BIOCHLOR Model Results

BIOCHLOR modeling was performed using reported levels of chlorinated solvents in groundwater underlying the VRP Property. A model was built to conservatively simulate maximum migration of the chemical plume in the aquifer. Highest reported concentrations of the COCs and conservative input parameters were used to predict future migration of four chlorinated solvent compounds: PCE, TCE, cDCE, and VC. Simulation periods of 30 years, 50 years, and 100 years were run to estimate the maximum migration distances of the compounds when they are at or below the Residential Type 1 RRS'. Results of the simulations for each compound are summarized in Table 2. The BIOCHLOR input and output results for each contaminant simulation are included within Appendix H.

TABLE 2
BIOCHLOR 1st ORDER DECAY MODEL SIMULATION RESULTS

Contaminant	Residential Type 1 RRS (mg/L)	30 Year Simulation Max. Distance from Source Area Contaminant Conc. < Type 1 RRS (ft)	50 Year Simulation Max. Distance from Source Area Contaminant Conc. < Type 1 RRS (ft)	100 Year Simulation Max. Distance from Source Area Contaminant Conc. < Type 1 RRS (ft)
PCE	0.005	10 (0.003 mg/l)	10 (0.003 mg/l)	10 (0.003 mg/l)
TCE	0.005	16 (0.003 mg/l)	20 (0.003 mg/l)	24 (0.003 mg/l)
cDCE	0.070	14 (0.029 mg/l)	18 (0.037 mg/l)	24 (0.046 mg/l)
VC	0.002	16 (0.001 mg/l)	22 (0.001 mg/l)	30 (0.001 mg/l)

Groundwater F&T Analysis for One Inorganic Constituent

To assess the F&T of the inorganic COC (arsenic) detected in the local aquifer, GF used the Quick Domenico (QD) code. QD is an easy-to-use screening model that simulates remediation through natural attenuation of dissolved contaminant plumes. QD is a Microsoft Excel spreadsheet application of an analytical model for multidimensional transport of a decaying contaminant species by P. A. Domenico (1987). It calculates the concentration of chemical species at any point and time downgradient of a source area of known size and concentration. The kind of contaminants for which Quick Domenico is intended are dissolved organic compounds whose fate and transport can be described or influenced by first order decay, retardation, and three-dimensional dispersion. In addition, QD calculates the concentrations in a two-dimensional 5 x 10 grid that can be established by the modeler to meet project needs.

Although QD is intended to model transport of dissolved organic compounds, simulations for inorganic chemicals using QD can be developed to provide a conservative, screening level assessment of plume migration. Proper selection of model inputs are necessary to effectively simulate F&T modeling of inorganic chemicals. First-order decay variables in QD need to be set to zero as inorganic chemicals do not breakdown by natural degradation. The adsorption variables (K_{oc} and f_{oc}) also need to be set to zero. QD assumes simple hydrological and hydrogeologic site conditions and groundwater flow conditions for the site. QD input parameters were determined from VRP Property specific measurements, QD

recommendations, and published data for arsenic. The input parameters are summarized below and shown in Table 3.

Dispersivity Values: The dispersion values in QD relates to the process that the dissolved contaminant will be distributed in three-dimensions by mechanical mixing and chemical diffusion in the aquifer. The dispersivity values used in QD simulations were entered as a distance (in feet), but the same ratios were used as the BIOCHLOR simulations discussed previously. The dispersivity values used in the QD simulations were as follows: longitudinal dispersivity value (α_x) was 7.0; the transverse dispersivity (α_y) value was 0.7 feet (ratio α_y/α_x equals 10 percent); and the vertical dispersivity (α_z) was 0.35 feet (ratio α_z/α_x equals 5 percent).

Retardation Factor: The retardation factor was set at 1.0 to simulate chemicals that will not be absorbed to the aquifer soil matrix. Therefore, there is no retardation of arsenic. Dissolved arsenic was assumed to travel at the same rate as groundwater seepage velocity. The organic carbon partition coefficient (K_{oc}) and fraction of organic carbon (f_{oc}) were both set to zero.

Contaminant Seepage Velocity: The QD model calculated a contaminant velocity of 0.00086 ft/d (0.313 ft/yr). The contaminant velocity value was determined from estimated inputs for aquifer effective porosity, hydraulic gradient, hydraulic conductivity and retardation factor. A conservative effective porosity value of 0.05 (5 percent) was estimated for the sandy clay strata based on the range of effective porosity values described in Aziz et al. (2000) and GDNR (2016). A hydraulic gradient of 0.0011 was identified as the average gradient observed near the source area. The average gradient was calculated using groundwater elevations collected in October 2016 at MW-1R and MW-2R. A hydraulic conductivity value of 1.38×10^{-5} cm/sec (0.0392 ft/day) was estimated from maximum value calculated from slug testing performed in shallow monitoring wells at the Property in 2014.

1st Order Decay Coefficient: The 1st order decay coefficient for the QD simulations for arsenic was set to zero. Arsenic is an inorganic chemical that does not undergo transport decay.

Model Area: The model area was represented by a length along the centerline and a width of the plume movement over a simulated time period. These values did not affect the simulation results. The model area is only for display purposes.

Simulation Time: Transient simulation time periods of 10,920 days (30 years), 18,200 days (50 years), and 36,400 days (100 years) were selected for the modeling to predict the migration and concentrations of dissolved arsenic.

Source Dimensions in Saturated Zone: The source dimensions were the same values as described in the previous BIOCHLOR model descriptions.

TABLE 3
QUICK DOMENICO INPUT PARAMETERS

Physical Parameter Input	Value	Rationale
Source Concentrations	0.366 mg/L	The highest reported concentration was reported 0.366 mg/l from the source area (MW-1R) for February 2017 sampling.
Longitudinal Dispersivity	7 ft.	Value estimated using a length of 70 feet and the recommended relationship of $\alpha_x = 0.1x$.
Transverse Dispersivity	0.7 ft.	Value estimated based on the common assumption that transverse dispersivity is 10 percent of longitudinal dispersivity.
Vertical Dispersivity	0.35 ft.	Value estimated based on commonly used ratio that transverse dispersivity is 5 percent of longitudinal dispersivity.
1st Order Decay Coefficient (Lambda)	Varies (per yr.)	The Lambda value for arsenic is set at zero, it is an inorganic compound and transport decay does not occur.
Source Thickness in Saturated Zone	14 ft.	Estimated minimum source thickness calculated from an average groundwater depth of 6 feet and monitoring well casing depth of 20 feet.
Hydraulic Conductivity	0.0392 ft/d	Based on maximum value calculated from results of a VRP Property slug tests performed in 2014.
Hydraulic Gradient	0.0011 ft/ft	Based on average value calculated from results of groundwater measurements from onsite monitoring wells.
Effective Porosity	0.05	Aquifer effective porosity of 5 percent based on typical values for sandy clay
Bulk Density	1.7 g/cm ³	QD recommended typical values for soils.
Organic Carbon Partition Coefficient (K _{oc})	0	QD recommends that for inorganic compounds K _{oc} is zero.
Fraction of Organic Carbon (f _{oc})	0	QD recommends that for inorganic compounds f _{oc} is zero.
Point Concentration Location	Varies	Calculated contaminant concentration at a plume location in the aquifer. The point values indicate calculated values of the model and are not model variables. Point concentration locations were chosen as the distance along the plume centerline when the arsenic concentration drops below the Type 1 RSS per the simulation period.
Field Data	Varies	User input values from VRP Property monitoring wells
Retardation Factor	1.0	QD recommends a retardation value for inorganic substances = 1.0, which indicates that no retardation of the arsenic plume will occur.
Contaminant Velocity	8.6x10 ⁻⁴ ft/d	Value calculated in model using an estimated aquifer effective porosity of 5%, an average gradient of 0.0011 ft/ft, and a maximum hydraulic conductivity of 0.0000138 cm/sec

		calculated from results of a site slug tests performed in 2014.
Source Width in Saturated Zone	22 ft.	Estimated minimum source width based on the 2011 excavation of 22 ft. x 18 ft. x 12 ft. (W x L X D) to remove contaminated soils at Area #6 Baler Area.
Model Area Width	40 ft.	Set at 40 feet, which shows the 22-foot contaminant source width and modeled dispersion of the plume.
Model Area Length	100 ft.	Set at 100 feet to show extent of plume migration.
Simulation Time	Varies (day)	Transient time periods simulated for plume migration included 10,920 days (30 years), 18,200 days (50 years), and 36,400 days (100 years).

TABLE 4
QUICK DOMENICO MODEL SIMULATION RESULTS

Contaminant	Residential Type 1 RRS (mg/L)	<u>30 Year Simulation</u> Max. Distance from Source Area Contaminant Conc. < Type 1 RRS (ft)	<u>50 Year Simulation</u> Max. Distance from Source Area Contaminant Conc. < Type 1 RRS (ft)	<u>100 Year Simulation</u> Max. Distance from Source Area Contaminant Conc. < Type 1 RRS (ft)
Arsenic	0.010	32 (0.008 mg/l)	44 (0.009 mg/l)	69 (0.009 mg/l)

F&T Modeling Conclusions

The following conclusions are based on the results of the conservatively developed BIOCHLOR and QD model simulations.

- According to the BIOCHLOR model results for simulation periods of 30, 50 and 100 years, the highest concentrations of chlorinated solvents detected in groundwater samples collected from the source area monitoring well (MW-1R) in 2014 will not migrate to the nearest POD well (MW-2R), which is located 70 feet downgradient, at levels above the regulated Type 1 RRS'. The model results are considered conservative predictions because the highest detected compound concentrations and hydraulic conductivity, and other conservative input parameters were used to construct the model.
- According to the QD model results for simulation periods of 30, 50 and 100 years, the highest concentrations arsenic detected in groundwater samples collected from the sources area monitoring well (MW-1R) in 2017 will not migrate to the nearest POD well (MW-2R), which is located 70 feet downgradient, at levels above the Type 1 RRS'. The model results are considered conservative predictions because the highest detected

compound concentrations and hydraulic conductivity, and other conservative input parameters were used to construct the model. In addition, the results are considered worst-case predictions because contaminated soils have been removed from the sources area and QD assumes a constant supply of the chemical concentration in the source area over the entire simulation periods.

References

- Aziz, C.A., Newell, C.J., Gonzales, J.A., Hass, P., Clement, T.P., and Yunwei, S., 2000, BIOCHLOR Natural Attenuation Decision Support System, Users Manual Version 1.0; U.S. EPA Office of Research and Development, Washington DC, EPA/600/R-00/008, January 2000, 46p.
- Aziz, C.A., Newell, C.J., and Gonzales, J.A., 2002, BIOCHLOR Natural Attenuation Decision Support System, Users Manual Addendum, Version 2.2; U.S. EPA Office of Research and Development, Washington DC, EPA/600/R-00/008, January 2000, 46p.
- Brown, C. D., P. Trowbridge, S. Sayko, and M. Droese (2014), User's Manual for the Quick Domenico Groundwater Fate-and-Transport Model, Pennsylvania Department of Environmental Protection; Version No. 3b, February 28, 2014, 29p.
- Domenico, P. A., An analytical model for multidimensional transport of a decaying contaminant species, *Journal of Hydrology*, 91, 49–58, 1987.
- Brown, C. D., P. Trowbridge, S. Sayko, and M. Droese (2014), User's Manual for the Quick Domenico Groundwater Fate-and-Transport Model, Pennsylvania Department of Environmental Protection; Version No. 3b, February 28, 2014, 29p.
- GDNR, 2016, Guidance: Groundwater Contaminant Fate and Transport Modeling; Georgia Department of Natural Resources, Environmental Protection Division, October 2016, 47p.
- Stillwater Technologies, Inc., 2012, Soil Excavation and Groundwater Investigation Report; Rice Iron & Metal, Inc., prepared for The David J. Joseph Company, February 21, 2012, 15p.

Natural Attenuation Screening Protocol		Interpretation	Score	Score: 17	
		Inadequate evidence for anaerobic biodegradation* of chlorinated organics	0 to 5		
The following is taken from the USEPA protocol (USEPA, 1998). The results of this scoring process have no regulatory significance.		Limited evidence for anaerobic biodegradation* of chlorinated organics	6 to 14	Scroll to End of Table	
		Adequate evidence for anaerobic biodegradation* of chlorinated organics	15 to 20		
		Strong evidence for anaerobic biodegradation* of chlorinated organics	>20		
Analysis	Concentration in Most Contam. Zone	Interpretation	Yes	No	Points Awarded
Oxygen*	<0.5 mg/L	Tolerated, suppresses the reductive pathway at higher concentrations	☒	☐	3
	> 5mg/L	Not tolerated; however, VC may be oxidized aerobically	☐	☒	0
Nitrate*	<1 mg/L	At higher concentrations may compete with reductive pathway	☒	☐	2
Iron II*	>1 mg/L	Reductive pathway possible; VC may be oxidized under Fe(III)-reducing conditions	☐	☐	
Sulfate*	<20 mg/L	At higher concentrations may compete with reductive pathway	☐	☐	
Sulfide*	>1 mg/L	Reductive pathway possible	☐	☐	
Methane*	>0.5 mg/L	Ultimate reductive daughter product, VC Accumulates	☒	☐	3
Oxidation Reduction Potential* (ORP)	<50 millivolts (mV)	Reductive pathway possible	☐	☒	0
	<-100mV	Reductive pathway likely	☐	☒	0
pH*	5 < pH < 9	Optimal range for reductive pathway	☐	☒	-2
TOC	>20 mg/L	Carbon and energy source; drives dechlorination; can be natural or anthropogenic	☒	☐	2
Temperature*	>20°C	At T >20°C biochemical process is accelerated	☒	☐	1
Carbon Dioxide	>2x background	Ultimate oxidative daughter product	☐	☐	
Alkalinity	>2x background	Results from interaction of carbon dioxide with aquifer minerals	☐	☐	
Chloride*	>2x background	Daughter product of organic chlorine	☒	☐	2
Hydrogen	>1 nM	Reductive pathway possible, VC may accumulate	☐	☐	
Volatile Fatty Acids	>0.1 mg/L	Intermediates resulting from biodegradation of aromatic compounds; carbon and energy source	☐	☐	
BTEX*	>0.1 mg/L	Carbon and energy source; drives dechlorination	☐	☐	
PCE*		Material released	☒	☐	0
TCE*		Daughter product of PCE ^{a/}	☒	☐	2
DCE*		Daughter product of TCE. If cis is greater than 80% of total DCE it is likely a daughter product of TCE ^{a/} ; 1,1-DCE can be a chem. reaction product of TCA	☒	☐	2
VC*		Daughter product of DCE ^{a/}	☒	☐	2
1,1,1-Trichloroethane*		Material released	☐	☐	
DCA		Daughter product of TCA under reducing conditions	☐	☐	
Carbon Tetrachloride		Material released	☐	☐	
Chloroethane*		Daughter product of DCA or VC under reducing conditions	☐	☐	
Ethene/Ethane	>0.01 mg/L	Daughter product of VC/ethene	☐	☐	
	>0.1 mg/L	Daughter product of VC/ethene	☐	☐	
Chloroform		Daughter product of Carbon Tetrachloride	☐	☐	
Dichloromethane		Daughter product of Chloroform	☐	☐	

* required analysis.

a/ Points awarded only if it can be shown that the compound is a daughter product (i.e., not a constituent of the source NAPL).

End of Form

BIOCHLOR Natural Attenuation Decision Support System

Version 2.2
Excel 2000

TMR Valdosa, GA

Former Rice Iron & Metals

Run Name

TYPE OF CHLORINATED SOLVENT:

Ethenes ☒

Ethanes ☐

1. ADVECTION

Seepage Velocity* Vs 0.3 (ft/yr)

or

Hydraulic Conductivity K 1.4E-05 (cm/sec)

Hydraulic Gradient i 0.0011 (ft/ft)

Effective Porosity n 0.05 (-)

2. DISPERSION

Alpha x* 7 (ft)

(Alpha y) / (Alpha x)* 0.1 (-)

(Alpha z) / (Alpha x)* 5.E-02 (-)

Calc.
Alpha x

3. ADSORPTION

Retardation Factor* R

or

Soil Bulk Density, rho 1.7 (kg/L)

Fraction Organic Carbon, foc 1.0E-3 (-)

Partition Coefficient Koc

PCE 426 (L/kg) 15.48 (-)

TCE 130 (L/kg) 5.42 (-)

DCE 125 (L/kg) 5.25 (-)

VC 30 (L/kg) 2.01 (-)

ETH 302 (L/kg) 11.27 (-)

Common R (used in model)* = 5.42

4. BIOTRANSFORMATION

Zone 1  -1st Order Decay Coefficient*

PCE → TCE λ (1/yr) 0.720 half-life (yrs) 0.79 Yield 0.79

TCE → DCE λ (1/yr) 0.270 half-life (yrs) 0.74 Yield 0.74

DCE → VC λ (1/yr) 0.090 half-life (yrs) 0.64 Yield 0.64

VC → ETH λ (1/yr) 0.360 half-life (yrs) 0.45 Yield 0.45

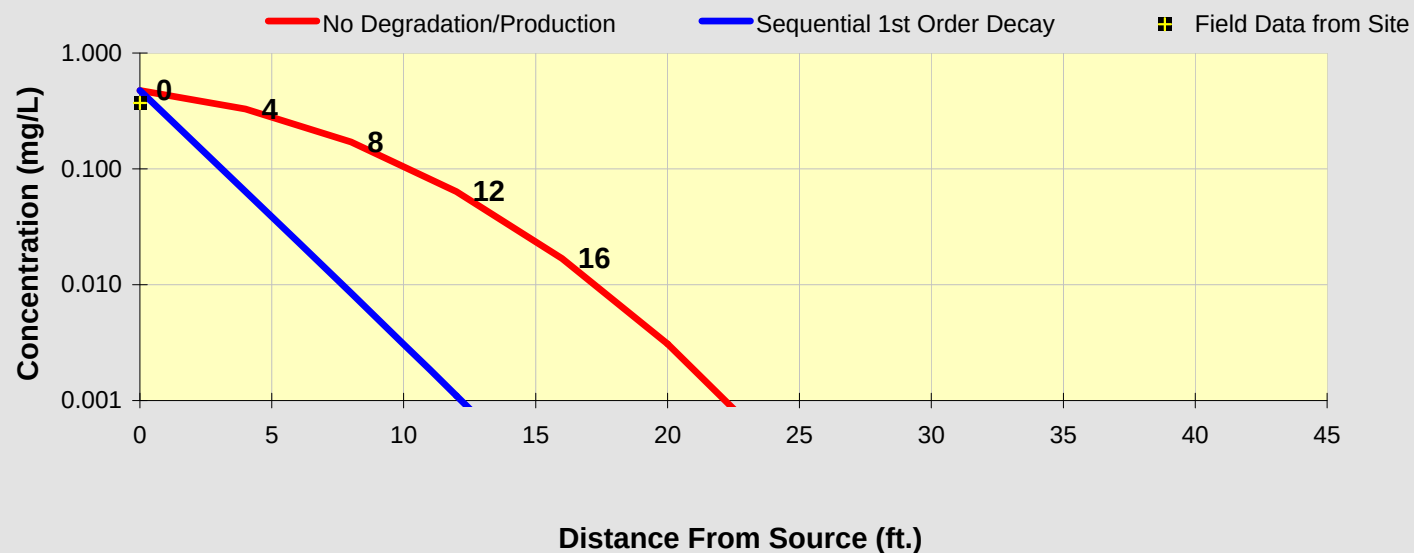
Zone 2  -1st Order Decay Coefficient*

PCE → TCE λ (1/yr) 0.000 half-life (yrs)                 

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

PCE	Distance from Source (ft)										
	0	4	8	12	16	20	24	28	32	36	40
No Degradation	0.476	0.329	0.170	0.064	0.017	0.003	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.4756	0.064	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)										
	0									
Field Data from Site	0.370									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

50.0 Years

Log ↔ Linear

Return to
Input

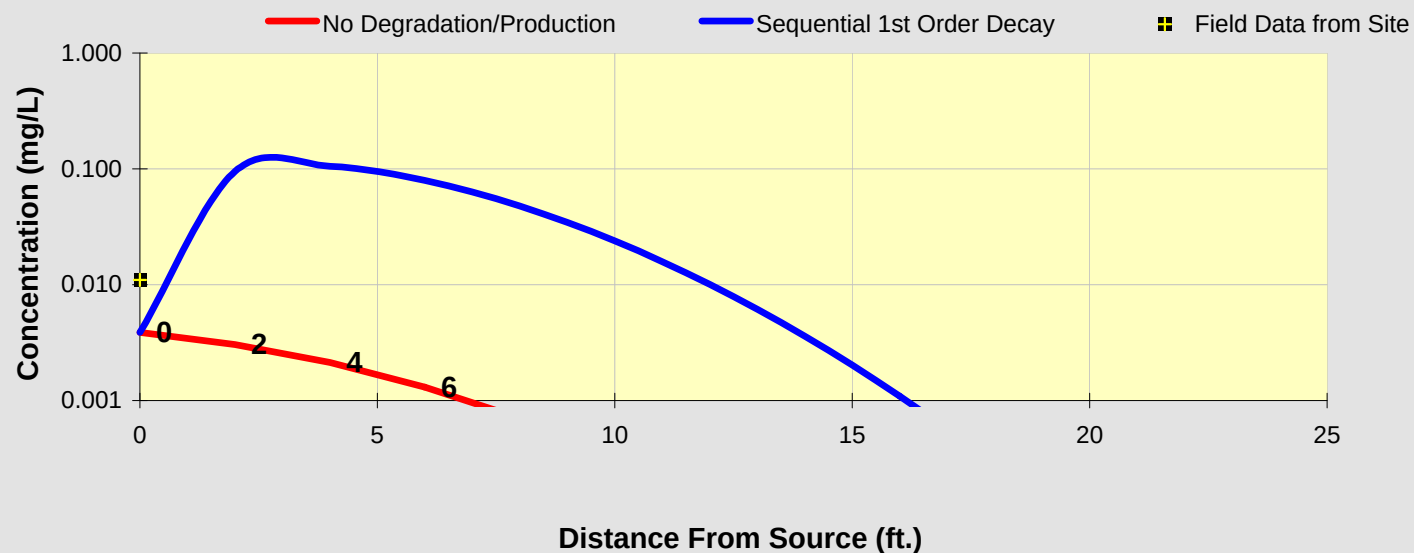
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DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

VC	Distance from Source (ft)										
	0	2	4	6	8	10	12	14	16	18	20
No Degradation	0.004	0.003	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0039	0.095	0.105	0.080	0.048	0.024	0.010	0.004	0.001	0.000	0.000

Monitoring Well Locations (ft)										
0										
Field Data from Site	0.011									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

30.0 Years

Log $\longleftrightarrow$ Linear

Return to
Input

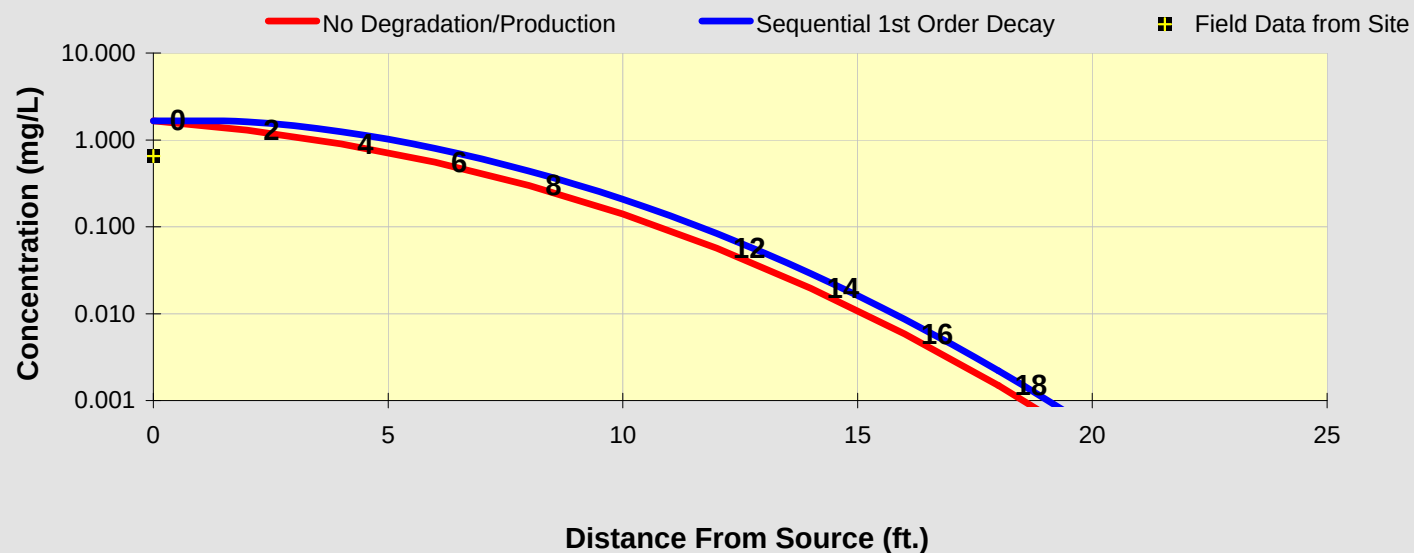
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DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

DCE	Distance from Source (ft)										
	0	2	4	6	8	10	12	14	16	18	20
No Degradation	1.650	1.293	0.903	0.556	0.300	0.140	0.056	0.020	0.006	0.001	0.000
Biotransformation	1.6498	1.621	1.243	0.799	0.438	0.207	0.084	0.029	0.009	0.002	0.000

Field Data from Site	Monitoring Well Locations (ft)										
	0										
Field Data from Site	0.650										



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

30.0 Years

Log $\longleftrightarrow$ Linear

Return to
Input

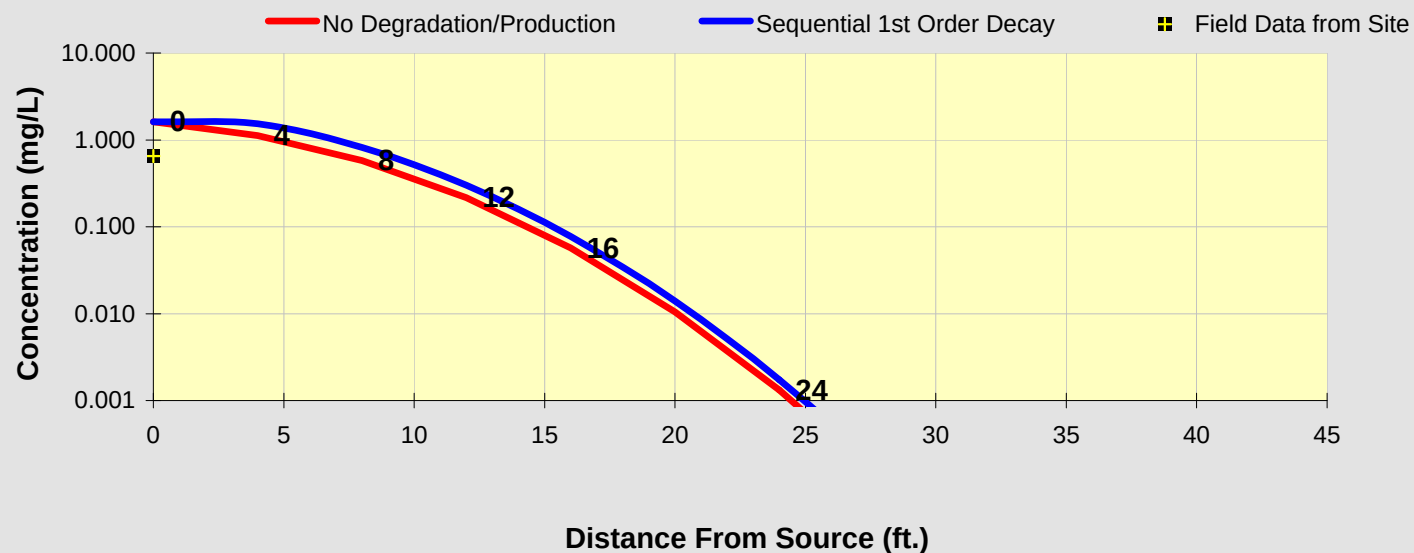
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DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

DCE	Distance from Source (ft)										
	0	4	8	12	16	20	24	28	32	36	40
No Degradation	1.617	1.118	0.579	0.217	0.057	0.010	0.001	0.000	0.000	0.000	0.000
Biotransformation	1.6171	1.539	0.822	0.302	0.078	0.014	0.002	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)										
0										
Field Data from Site	0.650									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

50.0 Years

Log ↔ Linear

Return to
Input

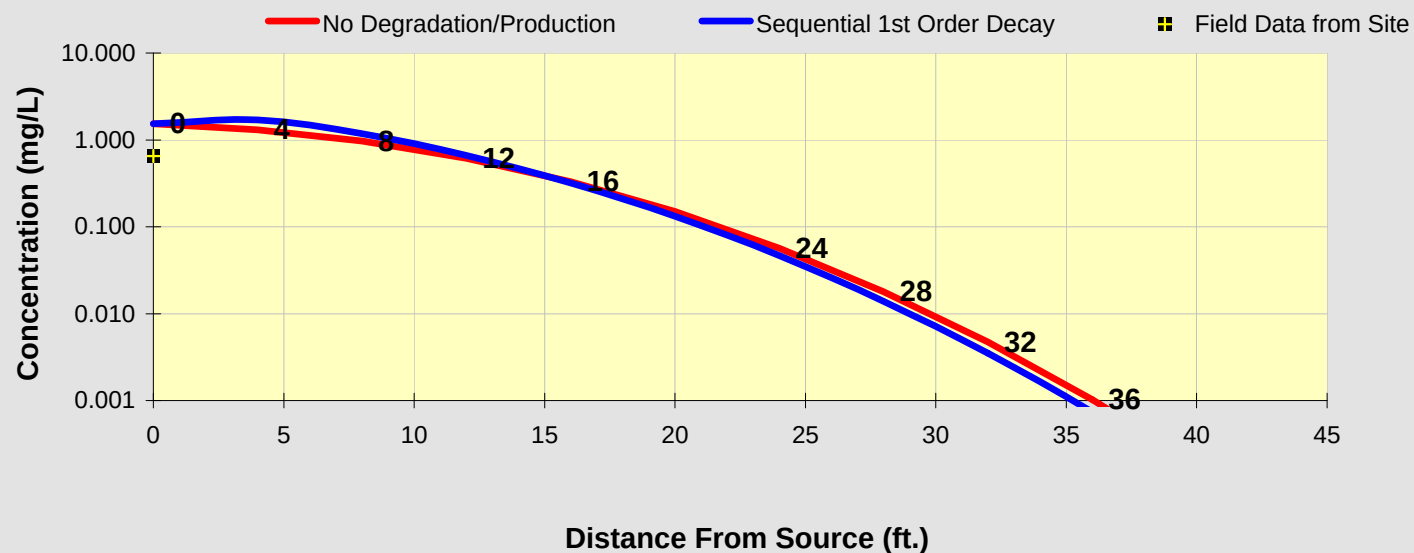
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DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

DCE	Distance from Source (ft)										
	0	4	8	12	16	20	24	28	32	36	40
No Degradation	1.538	1.304	0.968	0.616	0.332	0.150	0.057	0.018	0.005	0.001	0.000
Biotransformation	1.5382	1.696	1.175	0.663	0.319	0.132	0.046	0.014	0.003	0.001	0.000

Monitoring Well Locations (ft)										
0										
Field Data from Site	0.650									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

100.0 Years

Log $\longleftrightarrow$ Linear

Return to
Input

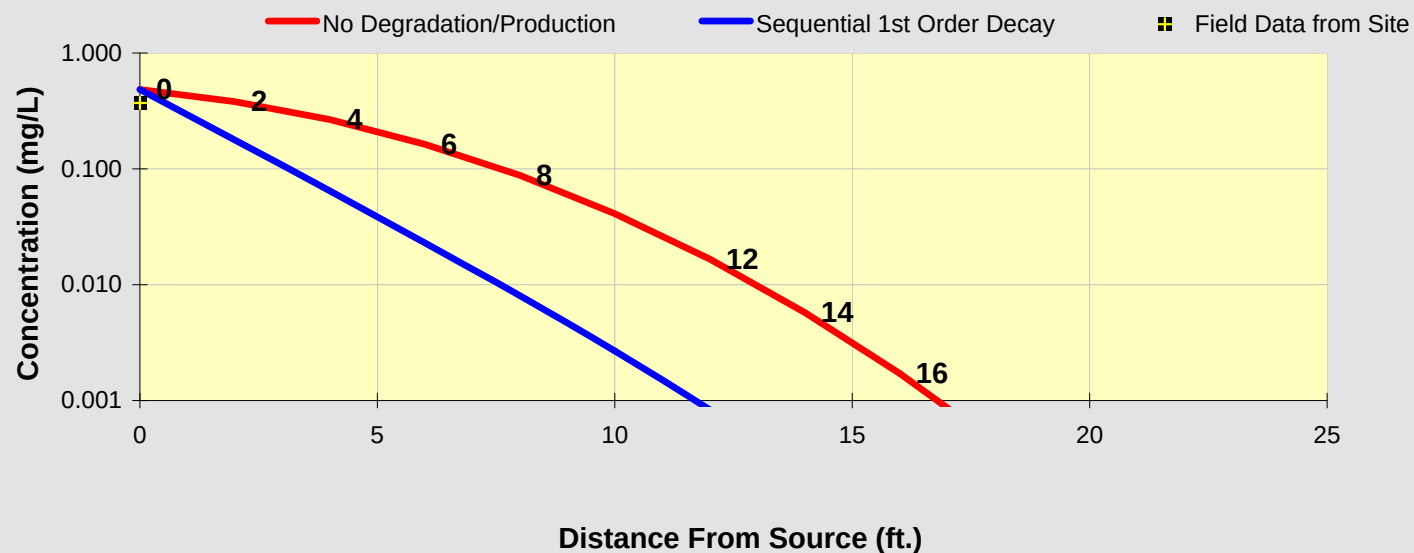
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DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

PCE	Distance from Source (ft)										
	0	2	4	6	8	10	12	14	16	18	20
No Degradation	0.485	0.380	0.266	0.164	0.088	0.041	0.017	0.006	0.002	0.000	0.000
Biotransformation	0.4852	0.177	0.064	0.023	0.008	0.003	0.001	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)										
	0									
Field Data from Site	0.370									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

30.0 Years

Log $\longleftrightarrow$ Linear

Return to
Input

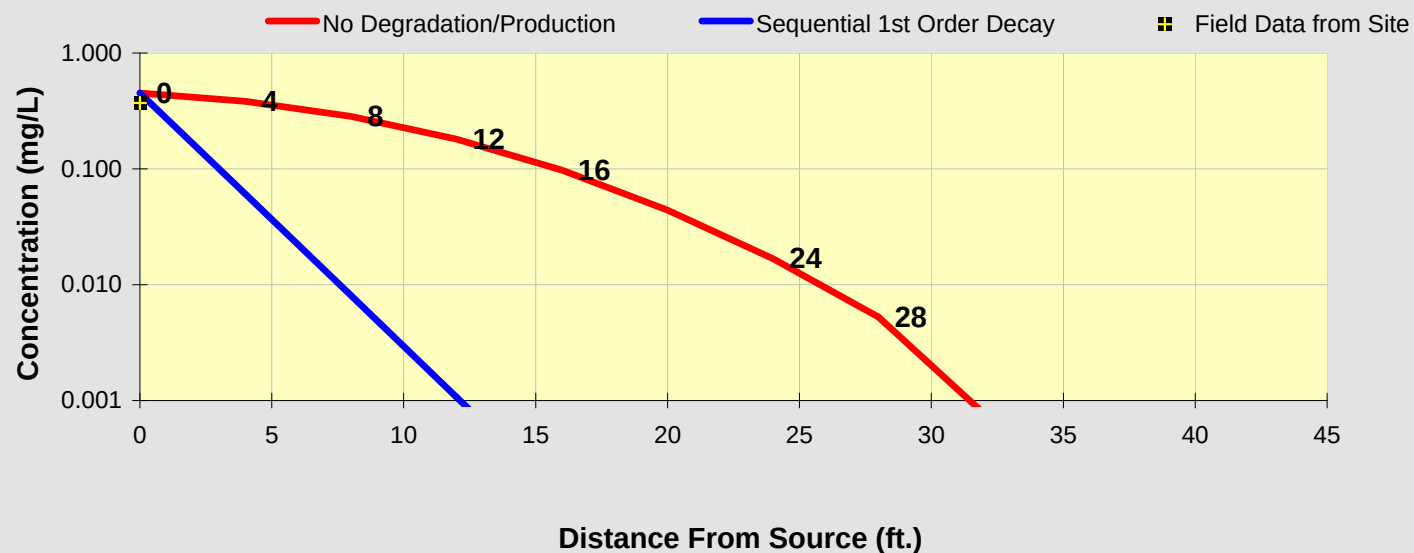
To All

To Array

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

PCE	Distance from Source (ft)										
	0	4	8	12	16	20	24	28	32	36	40
No Degradation	0.452	0.384	0.285	0.181	0.098	0.044	0.017	0.005	0.001	0.000	0.000
Biotransformation	0.4524	0.060	0.008	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)										
	0									
Field Data from Site	0.370									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

100.0 Years

Log $\longleftrightarrow$ Linear

Return to
Input

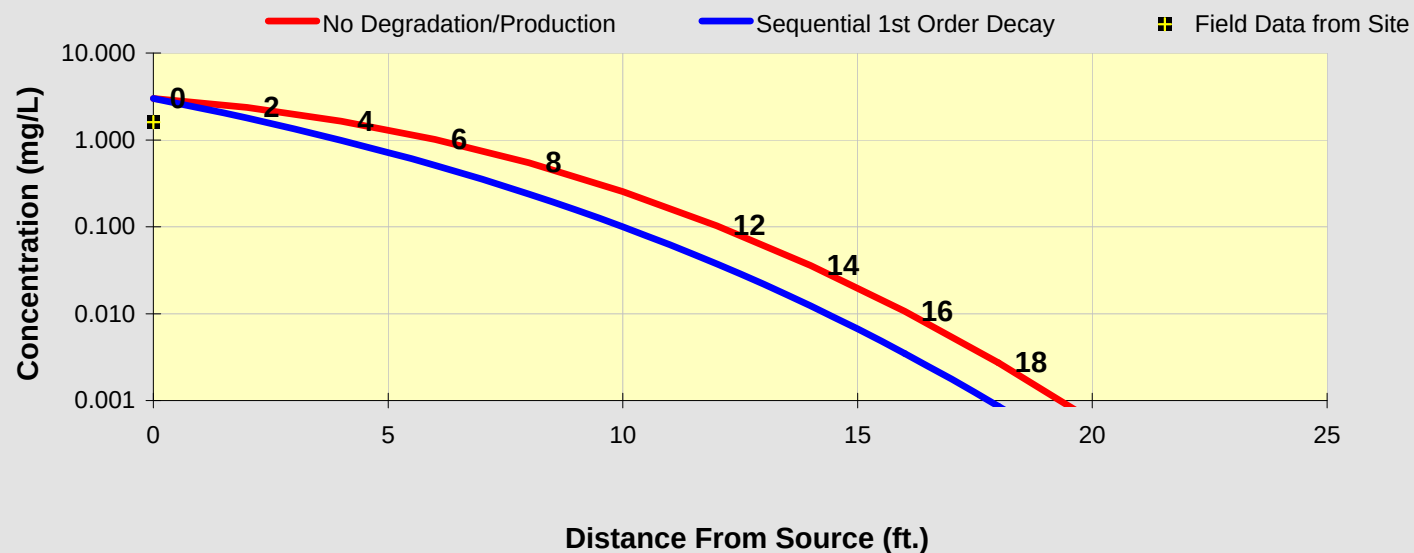
To All

To Array

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

TCE	Distance from Source (ft)										
	0	2	4	6	8	10	12	14	16	18	20
No Degradation	3.008	2.357	1.647	1.015	0.546	0.255	0.103	0.036	0.011	0.003	0.001
Biotransformation	3.0084	1.782	0.989	0.508	0.238	0.100	0.037	0.012	0.003	0.001	0.000

Monitoring Well Locations (ft)										
0										
Field Data from Site	1.600									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

30.0 Years

Log $\longleftrightarrow$ Linear

Return to
Input

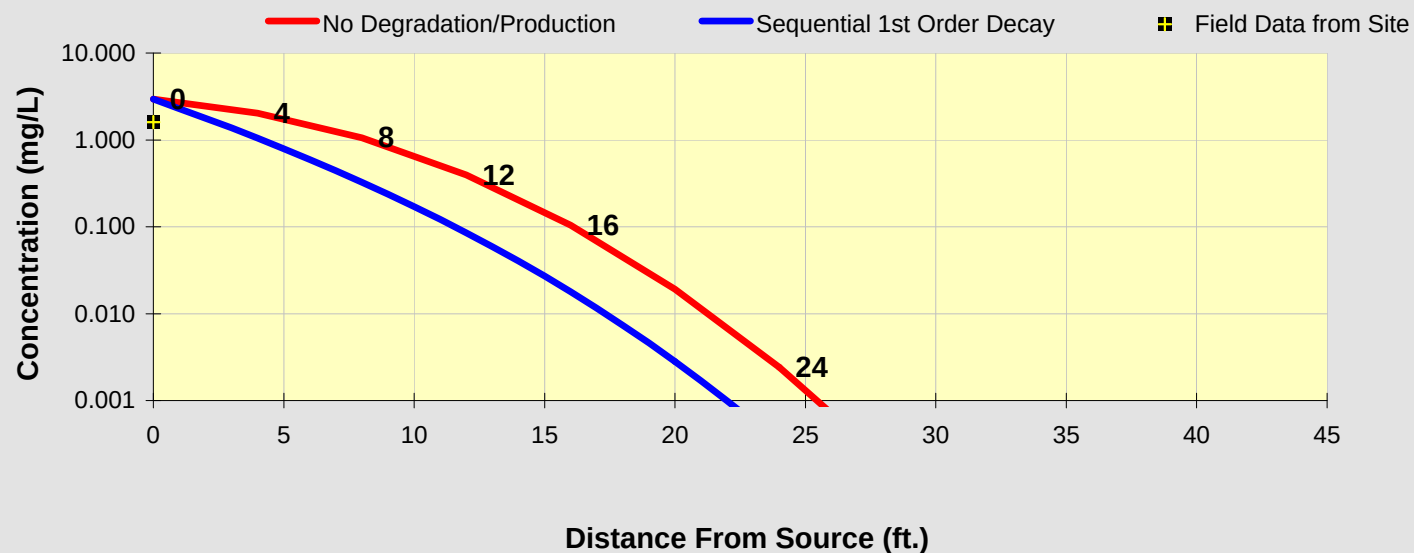
To All

To Array

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

TCE	Distance from Source (ft)										
	0	4	8	12	16	20	24	28	32	36	40
No Degradation	2.949	2.038	1.056	0.395	0.104	0.019	0.002	0.000	0.000	0.000	0.000
Biotransformation	2.9488	1.045	0.324	0.085	0.018	0.003	0.000	0.000	0.000	0.000	0.000

Monitoring Well Locations (ft)										
	0									
Field Data from Site	1.600									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

50.0 Years

Log $\longleftrightarrow$ Linear

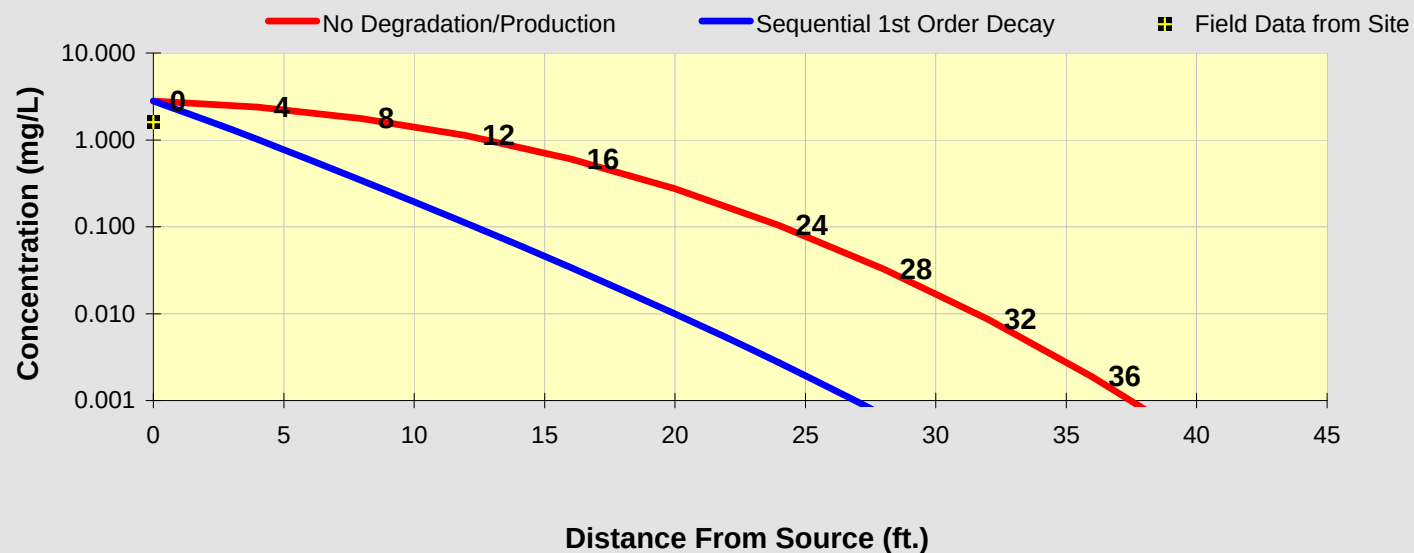
Return to
Input

To All

To Array

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

TCE	Distance from Source (ft)										
	0	4	8	12	16	20	24	28	32	36	40
No Degradation	2.805	2.378	1.764	1.123	0.605	0.274	0.104	0.033	0.009	0.002	0.000
Biotransformation	2.8050	1.013	0.340	0.110	0.034	0.010	0.003	0.001	0.000	0.000	0.000
Field Data from Site	Monitoring Well Locations (ft)										
	0										
	1.600										



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

100.0 Years

Log $\longleftrightarrow$ Linear

Return to
Input

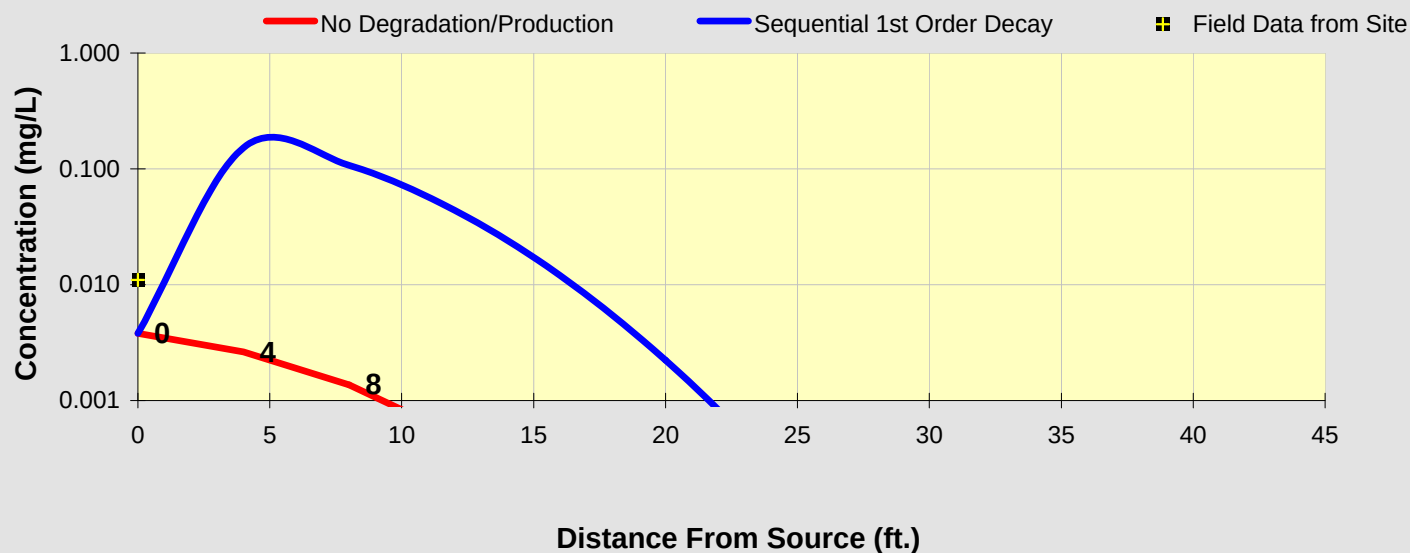
To All

To Array

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

VC	Distance from Source (ft)										
	0	4	8	12	16	20	24	28	32	36	40
No Degradation	0.004	0.003	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0038	0.152	0.107	0.044	0.012	0.002	0.000	0.000	0.000	0.000	0.000

	Monitoring Well Locations (ft)										
	0										
Field Data from Site	0.011										



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

50.0 Years

Log $\longleftrightarrow$ Linear

Return to
Input

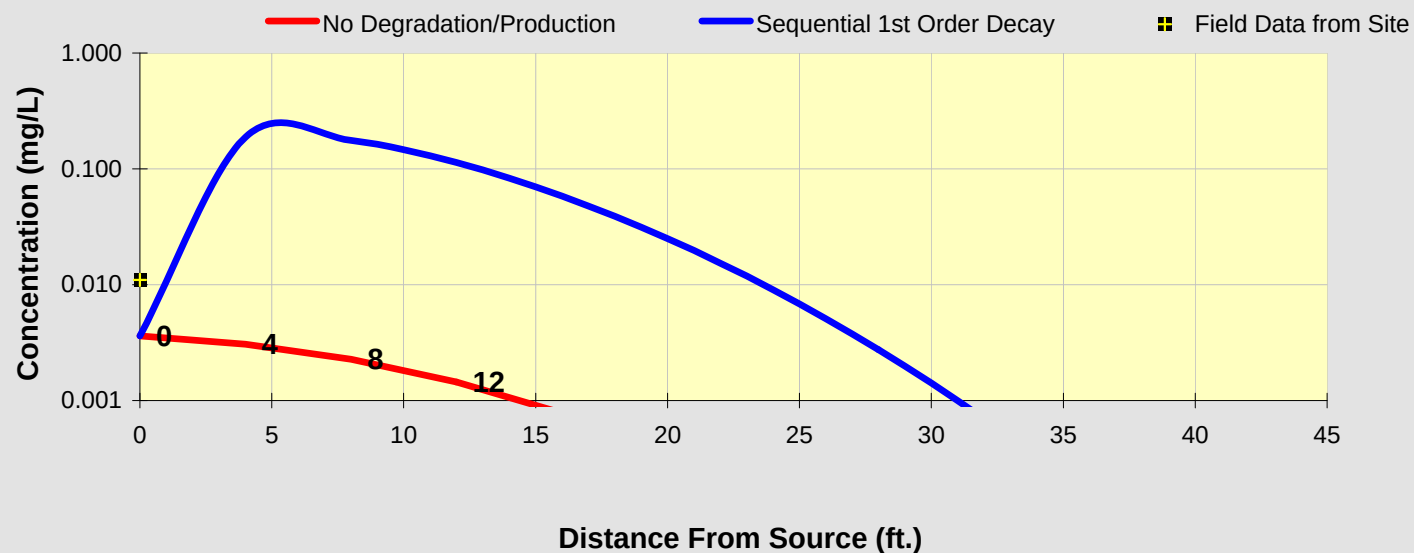
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DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

VC	Distance from Source (ft)										
	0	4	8	12	16	20	24	28	32	36	40
No Degradation	0.004	0.003	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
Biotransformation	0.0036	0.188	0.176	0.113	0.058	0.025	0.009	0.003	0.001	0.000	0.000

Monitoring Well Locations (ft)										
	0									
Field Data from Site	0.011									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

100.0 Years

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Return to
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NEW QUICK DOMENICO

ADVECTIVE TRANSPORT WITH THREE DIMENSIONAL DISPERSION, 1ST ORDER DECAY and RETARDATION - WITH CALIBRATION TOOL																																			
Project:	TMR Valdosta (Former Rice Iron and Metals, Inc.)																																		
Date:	10/20/2017	Prepared by:	JSR																																
		Contaminant:	Arsenic																																
SOURCE	Ax	Ay	Az	LAMBDA	SOURCE	SOURCE	Time (days)																												
CONC	(ft)	(ft)	(ft)		WIDTH	THICKNESS	(days)																												
(MG/L)			>=.001	day-1	(ft)	(ft)																													
	0.366	7.00E+00	7.00E-01	3.50E-01	0	22	14	10920																											
Hydraulic	Hydraulic		Soil Bulk		Frac.	Retard-	V																												
Cond	Gradient	Porosity	Density	KOC	Org. Carb.	ation	($=K*i/n*R$)																												
(ft/day)	(ft/ft)	(dec. frac.)	(g/cm ³)			(R)	(ft/day)																												
	3.92E-02	0.0011	0.05	1.7	0	0.00E+00	1	0.0008624																											
Point Concentration <table border="1"> <thead> <tr> <th>x(ft)</th> <th>y(ft)</th> <th>z(ft)</th> </tr> </thead> <tbody> <tr> <td>32</td> <td>0</td> <td>0</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th></th> <th>x(ft)</th> <th>y(ft)</th> <th>z(ft)</th> </tr> </thead> <tbody> <tr> <td>Conc. At</td> <td>32</td> <td>0</td> <td>0</td> </tr> <tr> <td>at</td> <td>10920</td> <td>days =</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>0.008</td> </tr> <tr> <td></td> <td></td> <td></td> <td>mg/l</td> </tr> </tbody> </table>										x(ft)	y(ft)	z(ft)	32	0	0		x(ft)	y(ft)	z(ft)	Conc. At	32	0	0	at	10920	days =					0.008				mg/l
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40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000																									
20	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000																									
0	0.175	0.063	0.012	0.001	0.000	0.000	0.000	0.000	0.000	0.000																									
-20	0.001	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000																									
-40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000																									
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	Distance from Source			0																															

Centerline Plot (linear)

Centerline Plot (log)

NEW QUICK_DOMENICO.XLS

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APPENDIX I



STATE OF GEORGIA
Brian P. Kemp, Secretary of State
Georgia Board of Water & Wastewater Treatment
Wastewater Laboratory Analyst

License No. WWL013516

Status: Active

Ellen W Pampel
6204 Sandcrest Circle
Orlando FL 32819

Expires: 6/30/2017
Issued: 10/15/1993



Real-time license verification is available at sos.georgia.gov/PLB



STATE OF GEORGIA
Brian P. Kemp, Secretary of State
Georgia Board of Water & Wastewater Treatment
Water Laboratory Analyst

License No. WL012348

Status: Active

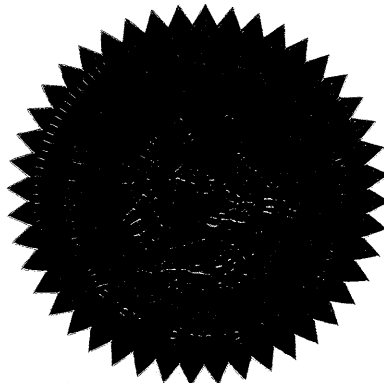
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***North Carolina
Department of Health and Human Services
Laboratory Certification***



*in accordance with the provisions of regulations 10A NCAC 42D 0.200
certification for the analysis of drinking water has been granted to*

Cape Fear Analytical
Laboratory Number 37901

For the following analyte group(s)

Synthetic Organic Chemicals

(Refer to recent status sheet)

July 1, 2015

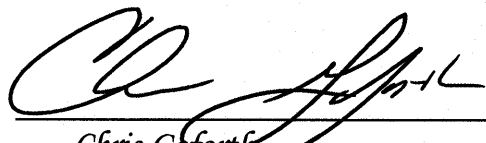
Issue date

July 31, 2016

Expiration date

*Megan Davies, MD
Interim State Health Director*

*Scott J. Zimmerman, DrPh, MPH, HCLD
Director, State Laboratory*


*Chris Goforth
Drinking Water Certification*

*This laboratory has met the minimum requirements for the certification to analyze drinking water.
This certificate does not guarantee accurate results.*

**North Carolina Department of Health and Human Services
State Laboratory of Public Health**

CAPE FEAR ANALYTICAL, LLC

Lab Number 37901

Effective Date:

July 15, 2015

North Carolina Drinking Water Certification Status Sheet :

Analyte Code (UR = Unregulated)		Method Code	Method
2063	Dioxin Dioxin(2,3,7,8-TCDD)	1613	GC/MS High Res - L/L Cap col

State of Utah
Department of Health
Environmental Laboratory Certification Program
Certification is hereby granted to
Cape Fear Analytical, LLC

3306 Kitty Hawk Road Suite 120
Wilmington, NC 28405

*Has conformed with the
2009 TNI Standard
Scope of accreditation is limited to the
State of Utah accredited fields that accompany
this Certificate*

EPA Number: NC01894
Expiration Date: 8/31/2016
Certificate Number: NC018942015-7



Robyn M. Atkinson, Ph.D, HCLD
Director, Utah Public Health Laboratory

Continued accredited status depends on successful ongoing participation in the program.





State of Utah

Gary R. Herbert

Governor

Spencer J. Cox

Lieutenant Governor

Utah Department of Health

Dr. Joseph K. Miner

Executive Director

Division of Disease Control and Prevention

Robyn M. Atkinson, Ph.D, HCLD

Director, Utah Public Health Laboratory



EPA Number: NC01894

Attachment to Certificate Number: NC018942015-7

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Cape Fear Analytical, LLC

Start Date Expires AB

Program/Matrix: CWA (Non Potable Water)

Method EPA 1613B

1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-hpcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-hpcdd)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-hpcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8-Hexachlorodibenzofuran (1,2,3,4,7,8-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (1,2,3,4,7,8-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,6,7,8-Hexachlorodibenzofuran (1,2,3,6,7,8-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (1,2,3,6,7,8-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,7,8,9-Hexachlorodibenzofuran (1,2,3,7,8,9-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (1,2,3,7,8,9-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,7,8-Pentachlorodibenzofuran (1,2,3,7,8-Pecdf)	9/1/2014	8/31/2016	UT
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (1,2,3,7,8-Pecdd)	9/1/2014	8/31/2016	UT
2,3,4,6,7,8-Hexachlorodibenzofuran	9/1/2014	8/31/2016	UT
2,3,4,7,8-Pentachlorodibenzofuran	9/1/2014	8/31/2016	UT
2,3,7,8-TCDD	9/1/2014	8/31/2016	UT
2,3,7,8-Tetrachlorodibenzofuran	9/1/2014	8/31/2016	UT
Hpcdd, total	9/1/2014	8/31/2016	UT
Hpcdf, total	9/1/2014	8/31/2016	UT
Hxcdd, total	9/1/2014	8/31/2016	UT
Hxcdf, total	9/1/2014	8/31/2016	UT
Pecdd, total	9/1/2014	8/31/2016	UT
Pecdf, total	9/1/2014	8/31/2016	UT
TCDD, total	9/1/2014	8/31/2016	UT
TCDF, total	9/1/2014	8/31/2016	UT

	Start Date	Expires	AB
Program/Matrix: RCRA (Air & Emissions)			
Method EPA TO-9A			
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-hpcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-hpcdd)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-hpcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8-Hexachlorodibenzofuran (1,2,3,4,7,8-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (1,2,3,4,7,8-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,6,7,8-Hexachlorodibenzofuran (1,2,3,6,7,8-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (1,2,3,6,7,8-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,7,8,9-Hexachlorodibenzofuran (1,2,3,7,8,9-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (1,2,3,7,8,9-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,7,8-Pentachlorodibenzofuran (1,2,3,7,8-Pecdf)	9/1/2014	8/31/2016	UT
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (1,2,3,7,8-Pecdd)	9/1/2014	8/31/2016	UT
2,3,4,6,7,8-Hexachlorodibenzofuran	9/1/2014	8/31/2016	UT
2,3,4,7,8-Pentachlorodibenzofuran	9/1/2014	8/31/2016	UT
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD)	9/1/2014	8/31/2016	UT
2,3,7,8-Tetrachlorodibenzofuran	9/1/2014	8/31/2016	UT
Hpcdd, total	9/1/2014	8/31/2016	UT
Hpcdf, total	9/1/2014	8/31/2016	UT
Hxcdd, total	9/1/2014	8/31/2016	UT
Hxcdf, total	9/1/2014	8/31/2016	UT
Pecdd, total	9/1/2014	8/31/2016	UT
Pecdf, total	9/1/2014	8/31/2016	UT
TCDD, total	9/1/2014	8/31/2016	UT
TCDF, total	9/1/2014	8/31/2016	UT

	Start Date	Expires	AB
Program/Matrix: RCRA (Non Potable Water)			
Method EPA 1613B			
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-hpcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-hpcdd)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-hpcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8-Hexachlorodibenzofuran (1,2,3,4,7,8-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (1,2,3,4,7,8-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,6,7,8-Hexachlorodibenzofuran (1,2,3,6,7,8-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (1,2,3,6,7,8-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,7,8,9-Hexachlorodibenzofuran (1,2,3,7,8,9-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (1,2,3,7,8,9-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,7,8-Pentachlorodibenzofuran (1,2,3,7,8-Pecdf)	9/1/2014	8/31/2016	UT
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (1,2,3,7,8-Pecdd)	9/1/2014	8/31/2016	UT
2,3,4,6,7,8-Hexachlorodibenzofuran	9/1/2014	8/31/2016	UT
2,3,4,7,8-Pentachlorodibenzofuran	9/1/2014	8/31/2016	UT
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD)	9/1/2014	8/31/2016	UT
2,3,7,8-Tetrachlorodibenzofuran	9/1/2014	8/31/2016	UT
Hpcdd, total	9/1/2014	8/31/2016	UT
Hpcdf, total	9/1/2014	8/31/2016	UT
Hxcdd, total	9/1/2014	8/31/2016	UT
Hxcdf, total	9/1/2014	8/31/2016	UT
Pecdd, total	9/1/2014	8/31/2016	UT
Pecdf, total	9/1/2014	8/31/2016	UT
TCDD, total	9/1/2014	8/31/2016	UT
TCDF, total	9/1/2014	8/31/2016	UT
Method EPA 1668A			
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (BZ-206)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (BZ-194)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (BZ-207)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',5,6-Octachlorobiphenyl (BZ-195)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (BZ-196)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',5-Heptachlorobiphenyl (BZ-170)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',6-Octachlorobiphenyl (BZ-197)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',6-Heptachlorobiphenyl (BZ-171)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4'-Hexachlorobiphenyl (BZ-128)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,5',6'-Nonachlorobiphenyl (BZ-208)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,5',6-Octachlorobiphenyl (BZ-198)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,5',6'-Octachlorobiphenyl (BZ-199)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,5'-Heptachlorobiphenyl (BZ-172)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,6,6'-Octachlorobiphenyl (BZ-200)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5',6'-Octachlorobiphenyl (BZ-201)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,6-Heptachlorobiphenyl (BZ-173)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,6'-Heptachlorobiphenyl (BZ-174)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5',6-Heptachlorobiphenyl (BZ-175)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5',6'-Heptachlorobiphenyl (BZ-177)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5-Hexachlorobiphenyl (BZ-129)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5'-Hexachlorobiphenyl (BZ-130)	9/1/2014	8/31/2016	UT

Cape Fear Analytical, LLC

	Start Date	Expires	AB
Program/Matrix: RCRA (Non Potable Water)			
2,2',3,3',4,6,6'-Heptachlorobiphenyl (BZ-176)	9/1/2014	8/31/2016	UT
2,2',3,3',4,6-Hexachlorobiphenyl (BZ-131)	9/1/2014	8/31/2016	UT
2,2',3,3',4,6'-Hexachlorobiphenyl (BZ-132)	9/1/2014	8/31/2016	UT
2,2',3,3',4-Pentachlorobiphenyl (BZ-82)	9/1/2014	8/31/2016	UT
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (BZ-202)	9/1/2014	8/31/2016	UT
2,2',3,3',5,5',6-Heptachlorobiphenyl (BZ-178)	9/1/2014	8/31/2016	UT
2,2',3,3',5,5'-Hexachlorobiphenyl (BZ-133)	9/1/2014	8/31/2016	UT
2,2',3,3',5,6,6'-Heptachlorobiphenyl (BZ-179)	9/1/2014	8/31/2016	UT
2,2',3,3',5,6-Hexachlorobiphenyl (BZ-134)	9/1/2014	8/31/2016	UT
2,2',3,3',5,6'-Hexachlorobiphenyl (BZ-135)	9/1/2014	8/31/2016	UT
2,2',3,3',5-Pentachlorobiphenyl (BZ-83)	9/1/2014	8/31/2016	UT
2,2',3,3',6,6'-Hexachlorobiphenyl (BZ-136)	9/1/2014	8/31/2016	UT
2,2',3,3',6-Pentachlorobiphenyl (BZ-84)	9/1/2014	8/31/2016	UT
2,2',3,3'-Tetrachlorobiphenyl (BZ-40)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,5',6-Octachlorobiphenyl (BZ-203)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,5'-Heptachlorobiphenyl (BZ-180)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (BZ-204)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,6-Heptachlorobiphenyl (BZ-181)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,6'-Heptachlorobiphenyl (BZ-182)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5',6-Heptachlorobiphenyl (BZ-183)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5-Hexachlorobiphenyl (BZ-137)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5'-Hexachlorobiphenyl (BZ-138)	9/1/2014	8/31/2016	UT
2,2',3,4,4',6-Heptachlorobiphenyl (BZ-184)	9/1/2014	8/31/2016	UT
2,2',3,4,4',6-Hexachlorobiphenyl (BZ-139)	9/1/2014	8/31/2016	UT
2,2',3,4,4',6'-Hexachlorobiphenyl (BZ-140)	9/1/2014	8/31/2016	UT
2,2',3,4,4'-Pentachlorobiphenyl (BZ-85)	9/1/2014	8/31/2016	UT
2,2',3,4,5,5',6-Heptachlorobiphenyl (BZ-185)	9/1/2014	8/31/2016	UT
2,2',3,4',5,5',6-Heptachlorobiphenyl (BZ-187)	9/1/2014	8/31/2016	UT
2,2',3,4,5,5'-Hexachlorobiphenyl (BZ-141)	9/1/2014	8/31/2016	UT
2,2',3,4',5,5'-Hexachlorobiphenyl (BZ-146)	9/1/2014	8/31/2016	UT
2,2',3,4,5,6,6'-Heptachlorobiphenyl (BZ-186)	9/1/2014	8/31/2016	UT
2,2',3,4',5,6,6'-Heptachlorobiphenyl (BZ-188)	9/1/2014	8/31/2016	UT
2,2',3,4,5,6-Hexachlorobiphenyl (BZ-142)	9/1/2014	8/31/2016	UT
2,2',3,4,5,6'-Hexachlorobiphenyl (BZ-143)	9/1/2014	8/31/2016	UT
2,2',3,4,5',6-Hexachlorobiphenyl (BZ-144)	9/1/2014	8/31/2016	UT
2,2',3,4',5,6-Hexachlorobiphenyl (BZ-147)	9/1/2014	8/31/2016	UT
2,2',3,4',5,6'-Hexachlorobiphenyl (BZ-148)	9/1/2014	8/31/2016	UT
2,2',3,4',5',6-Hexachlorobiphenyl (BZ-149)	9/1/2014	8/31/2016	UT
2,2',3,4,5-Pentachlorobiphenyl (BZ-86)	9/1/2014	8/31/2016	UT
2,2',3,4,5'-Pentachlorobiphenyl (BZ-87)	9/1/2014	8/31/2016	UT
2,2',3,4',5-Pentachlorobiphenyl (BZ-90)	9/1/2014	8/31/2016	UT
2,2',3,4',5'-Pentachlorobiphenyl (BZ-97)	9/1/2014	8/31/2016	UT
2,2',3,4,6,6'-Hexachlorobiphenyl (BZ-145)	9/1/2014	8/31/2016	UT
2,2',3,4',6,6'-Hexachlorobiphenyl (BZ-150)	9/1/2014	8/31/2016	UT
2,2',3,4,6-Pentachlorobiphenyl (BZ-88)	9/1/2014	8/31/2016	UT
2,2',3,4,6'-Pentachlorobiphenyl (BZ-89)	9/1/2014	8/31/2016	UT
2,2',3,4',6-Pentachlorobiphenyl (BZ-91)	9/1/2014	8/31/2016	UT
2,2',3,4',6'-Pentachlorobiphenyl (BZ-98)	9/1/2014	8/31/2016	UT
2,2',3,4-Tetrachlorobiphenyl (BZ-41)	9/1/2014	8/31/2016	UT

Cape Fear Analytical, LLC

	Start Date	Expires	AB
Program/Matrix: RCRA (Non Potable Water)			
2,2',3,4'-Tetrachlorobiphenyl (BZ-42)	9/1/2014	8/31/2016	UT
2,2',3,5,5',6'-Hexachlorobiphenyl (BZ-151)	9/1/2014	8/31/2016	UT
2,2',3,5,5'-Pentachlorobiphenyl (BZ-92)	9/1/2014	8/31/2016	UT
2,2',3,5,6,6'-Hexachlorobiphenyl (BZ-152)	9/1/2014	8/31/2016	UT
2,2',3,5,6-Pentachlorobiphenyl (BZ-93)	9/1/2014	8/31/2016	UT
2,2',3,5,6'-Pentachlorobiphenyl (BZ-94)	9/1/2014	8/31/2016	UT
2,2',3,5',6-Pentachlorobiphenyl (BZ-95)	9/1/2014	8/31/2016	UT
2,2',3,5-Tetrachlorobiphenyl (BZ-43)	9/1/2014	8/31/2016	UT
2,2',3,5'-Tetrachlorobiphenyl (BZ-44)	9/1/2014	8/31/2016	UT
2,2',3,6,6'-Pentachlorobiphenyl (BZ-96)	9/1/2014	8/31/2016	UT
2,2',3,6-Tetrachlorobiphenyl (BZ-45)	9/1/2014	8/31/2016	UT
2,2',3,6'-Tetrachlorobiphenyl (BZ-46)	9/1/2014	8/31/2016	UT
2,2',3-Trichlorobiphenyl (BZ-16)	9/1/2014	8/31/2016	UT
2,2',4,4',5,5'-Hexachlorobiphenyl (BZ-153)	9/1/2014	8/31/2016	UT
2,2',4,4',5,6'-Hexachlorobiphenyl (BZ-154)	9/1/2014	8/31/2016	UT
2,2',4,4',5-Pentachlorobiphenyl (BZ-99)	9/1/2014	8/31/2016	UT
2,2',4,4',6,6'-Hexachlorobiphenyl (BZ-155)	9/1/2014	8/31/2016	UT
2,2',4,4',6-Pentachlorobiphenyl (BZ-100)	9/1/2014	8/31/2016	UT
2,2',4,4'-Tetrachlorobiphenyl (BZ-47)	9/1/2014	8/31/2016	UT
2,2',4,5,5'-Pentachlorobiphenyl (BZ-101)	9/1/2014	8/31/2016	UT
2,2',4,5,6'-Pentachlorobiphenyl (BZ-102)	9/1/2014	8/31/2016	UT
2,2',4,5',6-Pentachlorobiphenyl (BZ-103)	9/1/2014	8/31/2016	UT
2,2',4,5-Tetrachlorobiphenyl (BZ-48)	9/1/2014	8/31/2016	UT
2,2',4,5'-Tetrachlorobiphenyl (BZ-49)	9/1/2014	8/31/2016	UT
2,2',4,6,6'-Pentachlorobiphenyl (BZ-104)	9/1/2014	8/31/2016	UT
2,2',4,6-Tetrachlorobiphenyl (BZ-50)	9/1/2014	8/31/2016	UT
2,2',4,6'-Tetrachlorobiphenyl (BZ-51)	9/1/2014	8/31/2016	UT
2,2',4-Trichlorobiphenyl (BZ-17)	9/1/2014	8/31/2016	UT
2,2',5,5'-Tetrachlorobiphenyl (BZ-52)	9/1/2014	8/31/2016	UT
2,2',5,6'-Tetrachlorobiphenyl (BZ-53)	9/1/2014	8/31/2016	UT
2,2',5-Trichlorobiphenyl (BZ-18)	9/1/2014	8/31/2016	UT
2,2',6,6'-Tetrachlorobiphenyl (BZ-54)	9/1/2014	8/31/2016	UT
2,2',6-Trichlorobiphenyl (BZ-19)	9/1/2014	8/31/2016	UT
2,2'-Dichlorobiphenyl (BZ-4)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5,5',6-Octachlorobiphenyl (BZ-205)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5,5'-Heptachlorobiphenyl (BZ-189)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5,6-Heptachlorobiphenyl (BZ-190)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5',6-Heptachlorobiphenyl (BZ-191)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5-Hexachlorobiphenyl (BZ-156)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5'-Hexachlorobiphenyl (BZ-157)	9/1/2014	8/31/2016	UT
2,3,3',4,4',6-Hexachlorobiphenyl (BZ-158)	9/1/2014	8/31/2016	UT
2,3,3',4,4'-Pentachlorobiphenyl (BZ-105)	9/1/2014	8/31/2016	UT
2,3,3',4,5,5',6-Heptachlorobiphenyl (BZ-192)	9/1/2014	8/31/2016	UT
2,3,3',4',5,5',6-Heptachlorobiphenyl (BZ-193)	9/1/2014	8/31/2016	UT
2,3,3',4,5,5'-Hexachlorobiphenyl (BZ-159)	9/1/2014	8/31/2016	UT
2,3,3',4',5,5'-Hexachlorobiphenyl (BZ-162)	9/1/2014	8/31/2016	UT
2,3,3',4,5,6-Hexachlorobiphenyl (BZ-160)	9/1/2014	8/31/2016	UT
2,3,3',4',5,6-Hexachlorobiphenyl (BZ-163)	9/1/2014	8/31/2016	UT
2,3,3',4',5',6-Hexachlorobiphenyl (BZ-164)	9/1/2014	8/31/2016	UT

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	Start Date	Expires	AB
Program/Matrix: RCRA (Non Potable Water)			
2,3,3',4,5',6-Hexachlorobiphenyl (BZ-161)	9/1/2014	8/31/2016	UT
2,3,3',4,5-Pentachlorobiphenyl (BZ-106)	9/1/2014	8/31/2016	UT
2,3,3',4',5-Pentachlorobiphenyl (BZ-107)	9/1/2014	8/31/2016	UT
2,3,3',4,5'-Pentachlorobiphenyl (BZ-108)	9/1/2014	8/31/2016	UT
2,3,3',4',5'-Pentachlorobiphenyl (BZ-122)	9/1/2014	8/31/2016	UT
2,3,3',4,6-Pentachlorobiphenyl (BZ-109)	9/1/2014	8/31/2016	UT
2,3,3',4',6-Pentachlorobiphenyl (BZ-110)	9/1/2014	8/31/2016	UT
2,3,3',4-Tetrachlorobiphenyl (BZ-55)	9/1/2014	8/31/2016	UT
2,3,3',4'-Tetrachlorobiphenyl (BZ-56)	9/1/2014	8/31/2016	UT
2,3,3',5,5',6-Hexachlorobiphenyl (BZ-165)	9/1/2014	8/31/2016	UT
2,3,3',5,5'-Pentachlorobiphenyl (BZ-111)	9/1/2014	8/31/2016	UT
2,3,3',5,6-Pentachlorobiphenyl (BZ-112)	9/1/2014	8/31/2016	UT
2,3,3',5',6-Pentachlorobiphenyl (BZ-113)	9/1/2014	8/31/2016	UT
2,3,3',5-Tetrachlorobiphenyl (BZ-57)	9/1/2014	8/31/2016	UT
2,3,3',5'-Tetrachlorobiphenyl (BZ-58)	9/1/2014	8/31/2016	UT
2,3,3',6-Tetrachlorobiphenyl (BZ-59)	9/1/2014	8/31/2016	UT
2,3,3'-Trichlorobiphenyl (BZ-20)	9/1/2014	8/31/2016	UT
2,3',4,4',5,5'-Hexachlorobiphenyl (BZ-167)	9/1/2014	8/31/2016	UT
2,3,4,4',5,6-Hexachlorobiphenyl (BZ-166)	9/1/2014	8/31/2016	UT
2,3',4,4',5,6-Hexachlorobiphenyl (BZ-168)	9/1/2014	8/31/2016	UT
2,3,4,4',5-Pentachlorobiphenyl (BZ-114)	9/1/2014	8/31/2016	UT
2,3',4,4',5-Pentachlorobiphenyl (BZ-118)	9/1/2014	8/31/2016	UT
2,3',4,4',5'-Pentachlorobiphenyl (BZ-123)	9/1/2014	8/31/2016	UT
2,3,4,4',6-Pentachlorobiphenyl (BZ-115)	9/1/2014	8/31/2016	UT
2,3',4,4',6-Pentachlorobiphenyl (BZ-119)	9/1/2014	8/31/2016	UT
2,3,4,4'-Tetrachlorobiphenyl (BZ-60)	9/1/2014	8/31/2016	UT
2,3',4,4'-Tetrachlorobiphenyl (BZ-66)	9/1/2014	8/31/2016	UT
2,3',4,5,5'-Pentachlorobiphenyl (BZ-120)	9/1/2014	8/31/2016	UT
2,3',4',5,5'-Pentachlorobiphenyl (BZ-124)	9/1/2014	8/31/2016	UT
2,3,4,5,6-Pentachlorobiphenyl (BZ-116)	9/1/2014	8/31/2016	UT
2,3,4',5,6-Pentachlorobiphenyl (BZ-117)	9/1/2014	8/31/2016	UT
2,3',4,5',6-Pentachlorobiphenyl (BZ-121)	9/1/2014	8/31/2016	UT
2,3',4',5',6-Pentachlorobiphenyl (BZ-125)	9/1/2014	8/31/2016	UT
2,3,4,5-Tetrachlorobiphenyl (BZ-61)	9/1/2014	8/31/2016	UT
2,3,4',5-Tetrachlorobiphenyl (BZ-63)	9/1/2014	8/31/2016	UT
2,3',4,5'-Tetrachlorobiphenyl (BZ-68)	9/1/2014	8/31/2016	UT
2,3',4',5-Tetrachlorobiphenyl (BZ-70)	9/1/2014	8/31/2016	UT
2,3',4',5'-Tetrachlorobiphenyl (BZ-76)	9/1/2014	8/31/2016	UT
2,3',4,5-Tetrachlorobiphenyl (BZ-67)	9/1/2014	8/31/2016	UT
2,3,4,6-Tetrachlorobiphenyl (BZ-62)	9/1/2014	8/31/2016	UT
2,3,4',6-Tetrachlorobiphenyl (BZ-64)	9/1/2014	8/31/2016	UT
2,3',4,6-Tetrachlorobiphenyl (BZ-69)	9/1/2014	8/31/2016	UT
2,3',4',6-Tetrachlorobiphenyl (BZ-71)	9/1/2014	8/31/2016	UT
2,3,4-Trichlorobiphenyl (BZ-21)	9/1/2014	8/31/2016	UT
2,3,4'-Trichlorobiphenyl (BZ-22)	9/1/2014	8/31/2016	UT
2,3',4-Trichlorobiphenyl (BZ-25)	9/1/2014	8/31/2016	UT
2,3',4'-Trichlorobiphenyl (BZ-33)	9/1/2014	8/31/2016	UT
2,3',5,5'-Tetrachlorobiphenyl (BZ-72)	9/1/2014	8/31/2016	UT
2,3,5,6-Tetrachlorobiphenyl (BZ-65)	9/1/2014	8/31/2016	UT

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	Start Date	Expires	AB
Program/Matrix: RCRA (Non Potable Water)			
2,3',5',6-Tetrachlorobiphenyl (BZ-73)	9/1/2014	8/31/2016	UT
2,3,5-Trichlorobiphenyl (BZ-23)	9/1/2014	8/31/2016	UT
2,3',5-Trichlorobiphenyl (BZ-26)	9/1/2014	8/31/2016	UT
2,3',5'-Trichlorobiphenyl (BZ-34)	9/1/2014	8/31/2016	UT
2,3,6-Trichlorobiphenyl (BZ-24)	9/1/2014	8/31/2016	UT
2,3',6-Trichlorobiphenyl (BZ-27)	9/1/2014	8/31/2016	UT
2,3-Dichlorobiphenyl (BZ-5)	9/1/2014	8/31/2016	UT
2,3'-Dichlorobiphenyl (BZ-6)	9/1/2014	8/31/2016	UT
2,4,4',5-Tetrachlorobiphenyl (BZ-74)	9/1/2014	8/31/2016	UT
2,4,4',6-Tetrachlorobiphenyl (BZ-75)	9/1/2014	8/31/2016	UT
2,4,4'-Trichlorobiphenyl (BZ-28)	9/1/2014	8/31/2016	UT
2,4,5-Trichlorobiphenyl (BZ-29)	9/1/2014	8/31/2016	UT
2,4',5-Trichlorobiphenyl (BZ-31)	9/1/2014	8/31/2016	UT
2,4,6-Trichlorobiphenyl (BZ-30)	9/1/2014	8/31/2016	UT
2,4',6-Trichlorobiphenyl (BZ-32)	9/1/2014	8/31/2016	UT
2,4-Dichlorobiphenyl (BZ-7)	9/1/2014	8/31/2016	UT
2,4'-Dichlorobiphenyl (BZ-8)	9/1/2014	8/31/2016	UT
2,5-Dichlorobiphenyl (BZ-9)	9/1/2014	8/31/2016	UT
2,6-Dichlorobiphenyl (BZ-10)	9/1/2014	8/31/2016	UT
2-Chlorobiphenyl (BZ-1)	9/1/2014	8/31/2016	UT
3,3',4,4',5,5'-Hexachlorobiphenyl (BZ-169)	9/1/2014	8/31/2016	UT
3,3',4,4',5-Pentachlorobiphenyl (BZ-126)	9/1/2014	8/31/2016	UT
3,3',4,4'-Tetrachlorobiphenyl (BZ-77)	9/1/2014	8/31/2016	UT
3,3',4,5,5'-Pentachlorobiphenyl (BZ-127)	9/1/2014	8/31/2016	UT
3,3',4,5-Tetrachlorobiphenyl (BZ-78)	9/1/2014	8/31/2016	UT
3,3',4,5'-Tetrachlorobiphenyl (BZ-79)	9/1/2014	8/31/2016	UT
3,3',4-Trichlorobiphenyl (BZ-35)	9/1/2014	8/31/2016	UT
3,3',5,5'-Tetrachlorobiphenyl (BZ-80)	9/1/2014	8/31/2016	UT
3,3',5-Trichlorobiphenyl (BZ-36)	9/1/2014	8/31/2016	UT
3,3'-Dichlorobiphenyl (BZ-11)	9/1/2014	8/31/2016	UT
3,4,4',5-Tetrachlorobiphenyl (BZ-81)	9/1/2014	8/31/2016	UT
3,4,4'-Trichlorobiphenyl (BZ-37)	9/1/2014	8/31/2016	UT
3,4,5-Trichlorobiphenyl (BZ-38)	9/1/2014	8/31/2016	UT
3,4',5-Trichlorobiphenyl (BZ-39)	9/1/2014	8/31/2016	UT
3,4-Dichlorobiphenyl (BZ-12)	9/1/2014	8/31/2016	UT
3,4'-Dichlorobiphenyl (BZ-13)	9/1/2014	8/31/2016	UT
3,5-Dichlorobiphenyl (BZ-14)	9/1/2014	8/31/2016	UT
3-Chlorobiphenyl (BZ-2)	9/1/2014	8/31/2016	UT
4,4'-Dichlorobiphenyl (BZ-15)	9/1/2014	8/31/2016	UT
4-Chlorobiphenyl (BZ-3)	9/1/2014	8/31/2016	UT
Decachlorobiphenyl (BZ-209)	9/1/2014	8/31/2016	UT
PCBs	9/1/2014	8/31/2016	UT
Method EPA 1668C			
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (BZ-206)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (BZ-194)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (BZ-207)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',5,6-Octachlorobiphenyl (BZ-195)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (BZ-196)	9/1/2014	8/31/2016	UT

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Start Date	Expires	AB
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Program/Matrix: RCRA (Non Potable Water)

2,2',3,3',4,4',5-Heptachlorobiphenyl (BZ-170)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (BZ-197)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',6-Heptachlorobiphenyl (BZ-171)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4'-Hexachlorobiphenyl (BZ-128)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,5',6'-Nonachlorobiphenyl (BZ-208)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,5',6-Octachlorobiphenyl (BZ-198)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,5',6'-Octachlorobiphenyl (BZ-199)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,5'-Heptachlorobiphenyl (BZ-172)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,6,6'-Octachlorobiphenyl (BZ-200)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (BZ-201)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,6-Heptachlorobiphenyl (BZ-173)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,6'-Heptachlorobiphenyl (BZ-174)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5',6-Heptachlorobiphenyl (BZ-175)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5',6'-Heptachlorobiphenyl (BZ-177)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5-Hexachlorobiphenyl (BZ-129)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5'-Hexachlorobiphenyl (BZ-130)	9/1/2014	8/31/2016	UT
2,2',3,3',4,6,6'-Heptachlorobiphenyl (BZ-176)	9/1/2014	8/31/2016	UT
2,2',3,3',4,6-Hexachlorobiphenyl (BZ-131)	9/1/2014	8/31/2016	UT
2,2',3,3',4,6'-Hexachlorobiphenyl (BZ-132)	9/1/2014	8/31/2016	UT
2,2',3,3',4-Pentachlorobiphenyl (BZ-82)	9/1/2014	8/31/2016	UT
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (BZ-202)	9/1/2014	8/31/2016	UT
2,2',3,3',5,5',6-Heptachlorobiphenyl (BZ-178)	9/1/2014	8/31/2016	UT
2,2',3,3',5,5'-Hexachlorobiphenyl (BZ-133)	9/1/2014	8/31/2016	UT
2,2',3,3',5,6,6'-Heptachlorobiphenyl (BZ-179)	9/1/2014	8/31/2016	UT
2,2',3,3',5,6-Hexachlorobiphenyl (BZ-134)	9/1/2014	8/31/2016	UT
2,2',3,3',5,6'-Hexachlorobiphenyl (BZ-135)	9/1/2014	8/31/2016	UT
2,2',3,3',5-Pentachlorobiphenyl (BZ-83)	9/1/2014	8/31/2016	UT
2,2',3,3',6,6'-Hexachlorobiphenyl (BZ-136)	9/1/2014	8/31/2016	UT
2,2',3,3',6-Pentachlorobiphenyl (BZ-84)	9/1/2014	8/31/2016	UT
2,2',3,3'-Tetrachlorobiphenyl (BZ-40)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,5',6-Octachlorobiphenyl (BZ-203)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,5'-Heptachlorobiphenyl (BZ-180)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (BZ-204)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,6-Heptachlorobiphenyl (BZ-181)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,6'-Heptachlorobiphenyl (BZ-182)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5',6-Heptachlorobiphenyl (BZ-183)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5-Hexachlorobiphenyl (BZ-137)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5'-Hexachlorobiphenyl (BZ-138)	9/1/2014	8/31/2016	UT
2,2',3,4,4',6,6'-Heptachlorobiphenyl (BZ-184)	9/1/2014	8/31/2016	UT
2,2',3,4,4',6-Hexachlorobiphenyl (BZ-139)	9/1/2014	8/31/2016	UT
2,2',3,4,4',6'-Hexachlorobiphenyl (BZ-140)	9/1/2014	8/31/2016	UT
2,2',3,4,4'-Pentachlorobiphenyl (BZ-85)	9/1/2014	8/31/2016	UT
2,2',3,4,5,5',6-Heptachlorobiphenyl (BZ-185)	9/1/2014	8/31/2016	UT
2,2',3,4',5,5',6-Heptachlorobiphenyl (BZ-187)	9/1/2014	8/31/2016	UT
2,2',3,4,5,5'-Hexachlorobiphenyl (BZ-141)	9/1/2014	8/31/2016	UT
2,2',3,4',5,5'-Hexachlorobiphenyl (BZ-146)	9/1/2014	8/31/2016	UT
2,2',3,4,5,6,6'-Heptachlorobiphenyl (BZ-186)	9/1/2014	8/31/2016	UT
2,2',3,4',5,6,6'-Heptachlorobiphenyl (BZ-188)	9/1/2014	8/31/2016	UT
2,2',3,4,5,6-Hexachlorobiphenyl (BZ-142)	9/1/2014	8/31/2016	UT

	Start Date	Expires	AB
Program/Matrix: RCRA (Non Potable Water)			
2,2',3,4,5,6'-Hexachlorobiphenyl (BZ-143)	9/1/2014	8/31/2016	UT
2,2',3,4,5,6'-Hexachlorobiphenyl (BZ-144)	9/1/2014	8/31/2016	UT
2,2',3,4',5,6'-Hexachlorobiphenyl (BZ-147)	9/1/2014	8/31/2016	UT
2,2',3,4',5,6'-Hexachlorobiphenyl (BZ-148)	9/1/2014	8/31/2016	UT
2,2',3,4',5',6'-Hexachlorobiphenyl (BZ-149)	9/1/2014	8/31/2016	UT
2,2',3,4,5-Pentachlorobiphenyl (BZ-86)	9/1/2014	8/31/2016	UT
2,2',3,4,5'-Pentachlorobiphenyl (BZ-87)	9/1/2014	8/31/2016	UT
2,2',3,4',5-Pentachlorobiphenyl (BZ-90)	9/1/2014	8/31/2016	UT
2,2',3,4',5'-Pentachlorobiphenyl (BZ-97)	9/1/2014	8/31/2016	UT
2,2',3,4,6,6'-Hexachlorobiphenyl (BZ-145)	9/1/2014	8/31/2016	UT
2,2',3,4',6,6'-Hexachlorobiphenyl (BZ-150)	9/1/2014	8/31/2016	UT
2,2',3,4,6-Pentachlorobiphenyl (BZ-88)	9/1/2014	8/31/2016	UT
2,2',3,4,6'-Pentachlorobiphenyl (BZ-89)	9/1/2014	8/31/2016	UT
2,2',3,4',6-Pentachlorobiphenyl (BZ-91)	9/1/2014	8/31/2016	UT
2,2',3,4',6'-Pentachlorobiphenyl (BZ-98)	9/1/2014	8/31/2016	UT
2,2',3,4-Tetrachlorobiphenyl (BZ-41)	9/1/2014	8/31/2016	UT
2,2',3,4'-Tetrachlorobiphenyl (BZ-42)	9/1/2014	8/31/2016	UT
2,2',3,5,5',6'-Hexachlorobiphenyl (BZ-151)	9/1/2014	8/31/2016	UT
2,2',3,5,5'-Pentachlorobiphenyl (BZ-92)	9/1/2014	8/31/2016	UT
2,2',3,5,6,6'-Hexachlorobiphenyl (BZ-152)	9/1/2014	8/31/2016	UT
2,2',3,5,6-Pentachlorobiphenyl (BZ-93)	9/1/2014	8/31/2016	UT
2,2',3,5,6'-Pentachlorobiphenyl (BZ-94)	9/1/2014	8/31/2016	UT
2,2',3,5',6-Pentachlorobiphenyl (BZ-95)	9/1/2014	8/31/2016	UT
2,2',3,5-Tetrachlorobiphenyl (BZ-43)	9/1/2014	8/31/2016	UT
2,2',3,5'-Tetrachlorobiphenyl (BZ-44)	9/1/2014	8/31/2016	UT
2,2',3,6,6'-Pentachlorobiphenyl (BZ-96)	9/1/2014	8/31/2016	UT
2,2',3,6-Tetrachlorobiphenyl (BZ-45)	9/1/2014	8/31/2016	UT
2,2',3,6'-Tetrachlorobiphenyl (BZ-46)	9/1/2014	8/31/2016	UT
2,2',3-Trichlorobiphenyl (BZ-16)	9/1/2014	8/31/2016	UT
2,2',4,4',5,5'-Hexachlorobiphenyl (BZ-153)	9/1/2014	8/31/2016	UT
2,2',4,4',5,6'-Hexachlorobiphenyl (BZ-154)	9/1/2014	8/31/2016	UT
2,2',4,4',5-Pentachlorobiphenyl (BZ-99)	9/1/2014	8/31/2016	UT
2,2',4,4',6,6'-Hexachlorobiphenyl (BZ-155)	9/1/2014	8/31/2016	UT
2,2',4,4',6-Pentachlorobiphenyl (BZ-100)	9/1/2014	8/31/2016	UT
2,2',4,4'-Tetrachlorobiphenyl (BZ-47)	9/1/2014	8/31/2016	UT
2,2',4,5,5'-Pentachlorobiphenyl (BZ-101)	9/1/2014	8/31/2016	UT
2,2',4,5,6'-Pentachlorobiphenyl (BZ-102)	9/1/2014	8/31/2016	UT
2,2',4,5',6-Pentachlorobiphenyl (BZ-103)	9/1/2014	8/31/2016	UT
2,2',4,5-Tetrachlorobiphenyl (BZ-48)	9/1/2014	8/31/2016	UT
2,2',4,5'-Tetrachlorobiphenyl (BZ-49)	9/1/2014	8/31/2016	UT
2,2',4,6,6'-Pentachlorobiphenyl (BZ-104)	9/1/2014	8/31/2016	UT
2,2',4,6-Tetrachlorobiphenyl (BZ-50)	9/1/2014	8/31/2016	UT
2,2',4,6'-Tetrachlorobiphenyl (BZ-51)	9/1/2014	8/31/2016	UT
2,2',4-Trichlorobiphenyl (BZ-17)	9/1/2014	8/31/2016	UT
2,2',5,5'-Tetrachlorobiphenyl (BZ-52)	9/1/2014	8/31/2016	UT
2,2',5,6'-Tetrachlorobiphenyl (BZ-53)	9/1/2014	8/31/2016	UT
2,2',5-Trichlorobiphenyl (BZ-18)	9/1/2014	8/31/2016	UT
2,2',6,6'-Tetrachlorobiphenyl (BZ-54)	9/1/2014	8/31/2016	UT
2,2',6-Trichlorobiphenyl (BZ-19)	9/1/2014	8/31/2016	UT

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Program/Matrix: RCRA (Non Potable Water)			
2,2'-Dichlorobiphenyl (BZ-4)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5,5',6-Octachlorobiphenyl (BZ-205)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5,5'-Heptachlorobiphenyl (BZ-189)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5,6-Heptachlorobiphenyl (BZ-190)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5',6-Heptachlorobiphenyl (BZ-191)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5-Hexachlorobiphenyl (BZ-156)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5'-Hexachlorobiphenyl (BZ-157)	9/1/2014	8/31/2016	UT
2,3,3',4,4',6-Hexachlorobiphenyl (BZ-158)	9/1/2014	8/31/2016	UT
2,3,3',4,4'-Pentachlorobiphenyl (BZ-105)	9/1/2014	8/31/2016	UT
2,3,3',4,5,5',6-Heptachlorobiphenyl (BZ-192)	9/1/2014	8/31/2016	UT
2,3,3',4,5,5',6-Heptachlorobiphenyl (BZ-193)	9/1/2014	8/31/2016	UT
2,3,3',4,5,5'-Hexachlorobiphenyl (BZ-159)	9/1/2014	8/31/2016	UT
2,3,3',4',5,5'-Hexachlorobiphenyl (BZ-162)	9/1/2014	8/31/2016	UT
2,3,3',4,5,6-Hexachlorobiphenyl (BZ-160)	9/1/2014	8/31/2016	UT
2,3,3',4',5,6-Hexachlorobiphenyl (BZ-163)	9/1/2014	8/31/2016	UT
2,3,3',4',5',6-Hexachlorobiphenyl (BZ-164)	9/1/2014	8/31/2016	UT
2,3,3',4,5',6-Hexachlorobiphenyl (BZ-161)	9/1/2014	8/31/2016	UT
2,3,3',4,5-Pentachlorobiphenyl (BZ-106)	9/1/2014	8/31/2016	UT
2,3,3',4',5-Pentachlorobiphenyl (BZ-107)	9/1/2014	8/31/2016	UT
2,3,3',4,5'-Pentachlorobiphenyl (BZ-108)	9/1/2014	8/31/2016	UT
2,3,3',4',5'-Pentachlorobiphenyl (BZ-122)	9/1/2014	8/31/2016	UT
2,3,3',4,6-Pentachlorobiphenyl (BZ-109)	9/1/2014	8/31/2016	UT
2,3,3',4',6-Pentachlorobiphenyl (BZ-110)	9/1/2014	8/31/2016	UT
2,3,3',4-Tetrachlorobiphenyl (BZ-55)	9/1/2014	8/31/2016	UT
2,3,3',4'-Tetrachlorobiphenyl (BZ-56)	9/1/2014	8/31/2016	UT
2,3,3',5,5',6-Hexachlorobiphenyl (BZ-165)	9/1/2014	8/31/2016	UT
2,3,3',5,5'-Pentachlorobiphenyl (BZ-111)	9/1/2014	8/31/2016	UT
2,3,3',5,6-Pentachlorobiphenyl (BZ-112)	9/1/2014	8/31/2016	UT
2,3,3',5',6-Pentachlorobiphenyl (BZ-113)	9/1/2014	8/31/2016	UT
2,3,3',5-Tetrachlorobiphenyl (BZ-57)	9/1/2014	8/31/2016	UT
2,3,3',5'-Tetrachlorobiphenyl (BZ-58)	9/1/2014	8/31/2016	UT
2,3,3',6-Tetrachlorobiphenyl (BZ-59)	9/1/2014	8/31/2016	UT
2,3,3'-Trichlorobiphenyl (BZ-20)	9/1/2014	8/31/2016	UT
2,3',4,4',5,5'-Hexachlorobiphenyl (BZ-167)	9/1/2014	8/31/2016	UT
2,3,4,4',5,6-Hexachlorobiphenyl (BZ-166)	9/1/2014	8/31/2016	UT
2,3',4,4',5,6-Hexachlorobiphenyl (BZ-168)	9/1/2014	8/31/2016	UT
2,3,4,4',5-Pentachlorobiphenyl (BZ-114)	9/1/2014	8/31/2016	UT
2,3',4,4',5-Pentachlorobiphenyl (BZ-118)	9/1/2014	8/31/2016	UT
2,3',4,4',5'-Pentachlorobiphenyl (BZ-123)	9/1/2014	8/31/2016	UT
2,3,4,4',6-Pentachlorobiphenyl (BZ-115)	9/1/2014	8/31/2016	UT
2,3',4,4',6-Pentachlorobiphenyl (BZ-119)	9/1/2014	8/31/2016	UT
2,3,4,4'-Tetrachlorobiphenyl (BZ-60)	9/1/2014	8/31/2016	UT
2,3',4,4'-Tetrachlorobiphenyl (BZ-66)	9/1/2014	8/31/2016	UT
2,3',4,5,5'-Pentachlorobiphenyl (BZ-120)	9/1/2014	8/31/2016	UT
2,3',4',5,5'-Pentachlorobiphenyl (BZ-124)	9/1/2014	8/31/2016	UT
2,3,4,5,6-Pentachlorobiphenyl (BZ-116)	9/1/2014	8/31/2016	UT
2,3,4',5,6-Pentachlorobiphenyl (BZ-117)	9/1/2014	8/31/2016	UT
2,3',4,5',6-Pentachlorobiphenyl (BZ-121)	9/1/2014	8/31/2016	UT
2,3',4',5',6-Pentachlorobiphenyl (BZ-125)	9/1/2014	8/31/2016	UT

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Start Date	Expires	AB
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Program/Matrix: RCRA (Non Potable Water)

2,3,4,5-Tetrachlorobiphenyl (BZ-61)	9/1/2014	8/31/2016	UT
2,3,4',5-Tetrachlorobiphenyl (BZ-63)	9/1/2014	8/31/2016	UT
2,3',4,5'-Tetrachlorobiphenyl (BZ-68)	9/1/2014	8/31/2016	UT
2,3',4',5-Tetrachlorobiphenyl (BZ-70)	9/1/2014	8/31/2016	UT
2,3',4',5'-Tetrachlorobiphenyl (BZ-76)	9/1/2014	8/31/2016	UT
2,3',4,5-Tetrachlorobiphenyl (BZ-67)	9/1/2014	8/31/2016	UT
2,3,4,6-Tetrachlorobiphenyl (BZ-62)	9/1/2014	8/31/2016	UT
2,3,4',6-Tetrachlorobiphenyl (BZ-64)	9/1/2014	8/31/2016	UT
2,3',4,6-Tetrachlorobiphenyl (BZ-69)	9/1/2014	8/31/2016	UT
2,3',4',6-Tetrachlorobiphenyl (BZ-71)	9/1/2014	8/31/2016	UT
2,3,4-Trichlorobiphenyl (BZ-21)	9/1/2014	8/31/2016	UT
2,3,4'-Trichlorobiphenyl (BZ-22)	9/1/2014	8/31/2016	UT
2,3',4-Trichlorobiphenyl (BZ-25)	9/1/2014	8/31/2016	UT
2,3',4'-Trichlorobiphenyl (BZ-33)	9/1/2014	8/31/2016	UT
2,3',5,5'-Tetrachlorobiphenyl (BZ-72)	9/1/2014	8/31/2016	UT
2,3,5,6-Tetrachlorobiphenyl (BZ-65)	9/1/2014	8/31/2016	UT
2,3',5',6-Tetrachlorobiphenyl (BZ-73)	9/1/2014	8/31/2016	UT
2,3,5-Trichlorobiphenyl (BZ-23)	9/1/2014	8/31/2016	UT
2,3',5-Trichlorobiphenyl (BZ-26)	9/1/2014	8/31/2016	UT
2,3',5'-Trichlorobiphenyl (BZ-34)	9/1/2014	8/31/2016	UT
2,3,6-Trichlorobiphenyl (BZ-24)	9/1/2014	8/31/2016	UT
2,3',6-Trichlorobiphenyl (BZ-27)	9/1/2014	8/31/2016	UT
2,3-Dichlorobiphenyl (BZ-5)	9/1/2014	8/31/2016	UT
2,3'-Dichlorobiphenyl (BZ-6)	9/1/2014	8/31/2016	UT
2,4,4',5-Tetrachlorobiphenyl (BZ-74)	9/1/2014	8/31/2016	UT
2,4,4',6-Tetrachlorobiphenyl (BZ-75)	9/1/2014	8/31/2016	UT
2,4,4'-Trichlorobiphenyl (BZ-28)	9/1/2014	8/31/2016	UT
2,4,5-Trichlorobiphenyl (BZ-29)	9/1/2014	8/31/2016	UT
2,4',5-Trichlorobiphenyl (BZ-31)	9/1/2014	8/31/2016	UT
2,4,6-Trichlorobiphenyl (BZ-30)	9/1/2014	8/31/2016	UT
2,4',6-Trichlorobiphenyl (BZ-32)	9/1/2014	8/31/2016	UT
2,4-Dichlorobiphenyl (BZ-7)	9/1/2014	8/31/2016	UT
2,4'-Dichlorobiphenyl (BZ-8)	9/1/2014	8/31/2016	UT
2,5-Dichlorobiphenyl (BZ-9)	9/1/2014	8/31/2016	UT
2,6-Dichlorobiphenyl (BZ-10)	9/1/2014	8/31/2016	UT
2-Chlorobiphenyl (BZ-1)	9/1/2014	8/31/2016	UT
3,3',4,4',5,5'-Hexachlorobiphenyl (BZ-169)	9/1/2014	8/31/2016	UT
3,3',4,4',5-Pentachlorobiphenyl (BZ-126)	9/1/2014	8/31/2016	UT
3,3',4,4'-Tetrachlorobiphenyl (BZ-77)	9/1/2014	8/31/2016	UT
3,3',4,5,5'-Pentachlorobiphenyl (BZ-127)	9/1/2014	8/31/2016	UT
3,3',4,5-Tetrachlorobiphenyl (BZ-78)	9/1/2014	8/31/2016	UT
3,3',4,5'-Tetrachlorobiphenyl (BZ-79)	9/1/2014	8/31/2016	UT
3,3',4-Trichlorobiphenyl (BZ-35)	9/1/2014	8/31/2016	UT
3,3',5,5'-Tetrachlorobiphenyl (BZ-80)	9/1/2014	8/31/2016	UT
3,3',5-Trichlorobiphenyl (BZ-36)	9/1/2014	8/31/2016	UT
3,3'-Dichlorobiphenyl (BZ-11)	9/1/2014	8/31/2016	UT
3,4,4',5-Tetrachlorobiphenyl (BZ-81)	9/1/2014	8/31/2016	UT
3,4,4'-Trichlorobiphenyl (BZ-37)	9/1/2014	8/31/2016	UT
3,4,5-Trichlorobiphenyl (BZ-38)	9/1/2014	8/31/2016	UT

	Start Date	Expires	AB
Program/Matrix: RCRA (Non Potable Water)			
3,4',5-Trichlorobiphenyl (BZ-39)	9/1/2014	8/31/2016	UT
3,4-Dichlorobiphenyl (BZ-12)	9/1/2014	8/31/2016	UT
3,4'-Dichlorobiphenyl (BZ-13)	9/1/2014	8/31/2016	UT
3,5-Dichlorobiphenyl (BZ-14)	9/1/2014	8/31/2016	UT
3-Chlorobiphenyl (BZ-2)	9/1/2014	8/31/2016	UT
4,4'-Dichlorobiphenyl (BZ-15)	9/1/2014	8/31/2016	UT
4-Chlorobiphenyl (BZ-3)	9/1/2014	8/31/2016	UT
Decachlorobiphenyl (BZ-209)	9/1/2014	8/31/2016	UT
PCBs	9/1/2014	8/31/2016	UT
Method EPA 3520C			
Preparation/Extraction	9/1/2014	8/31/2016	UT
Method EPA 3620B			
Preparation/Extraction	9/1/2014	8/31/2016	UT
Method EPA 3630C			
Preparation/Extraction	9/1/2014	8/31/2016	UT
Method EPA 8290A			
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-hpcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-hpcdd)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-hpcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8-Hexachlorodibenzofuran (1,2,3,4,7,8-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (1,2,3,4,7,8-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,6,7,8-Hexachlorodibenzofuran (1,2,3,6,7,8-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (1,2,3,6,7,8-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,7,8,9-Hexachlorodibenzofuran (1,2,3,7,8,9-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (1,2,3,7,8,9-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,7,8-Pentachlorodibenzofuran (1,2,3,7,8-Pecdf)	9/1/2014	8/31/2016	UT
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (1,2,3,7,8-Pecdd)	9/1/2014	8/31/2016	UT
2,3,4,6,7,8-Hexachlorodibenzofuran	9/1/2014	8/31/2016	UT
2,3,4,7,8-Pentachlorodibenzofuran	9/1/2014	8/31/2016	UT
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD)	9/1/2014	8/31/2016	UT
2,3,7,8-Tetrachlorodibenzofuran	9/1/2014	8/31/2016	UT
Hpcdd, total	9/1/2014	8/31/2016	UT
Hpcdf, total	9/1/2014	8/31/2016	UT
Hxcdd, total	9/1/2014	8/31/2016	UT
Hxcdf, total	9/1/2014	8/31/2016	UT
Pecdd, total	9/1/2014	8/31/2016	UT
Pecdf, total	9/1/2014	8/31/2016	UT
TCDD, total	9/1/2014	8/31/2016	UT
TCDF, total	9/1/2014	8/31/2016	UT

	Start Date	Expires	AB
Program/Matrix: RCRA (Solid & Hazardous Material)			
Method EPA 1613B			
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-hpcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-hpcdd)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-hpcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8-Hexachlorodibenzofuran (1,2,3,4,7,8-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (1,2,3,4,7,8-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,6,7,8-Hexachlorodibenzofuran (1,2,3,6,7,8-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (1,2,3,6,7,8-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,7,8,9-Hexachlorodibenzofuran (1,2,3,7,8,9-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (1,2,3,7,8,9-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,7,8-Pentachlorodibenzofuran (1,2,3,7,8-Pecdf)	9/1/2014	8/31/2016	UT
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (1,2,3,7,8-Pecdd)	9/1/2014	8/31/2016	UT
2,3,4,6,7,8-Hexachlorodibenzofuran	9/1/2014	8/31/2016	UT
2,3,4,7,8-Pentachlorodibenzofuran	9/1/2014	8/31/2016	UT
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD)	9/1/2014	8/31/2016	UT
2,3,7,8-Tetrachlorodibenzofuran	9/1/2014	8/31/2016	UT
Hpcdd, total	9/1/2014	8/31/2016	UT
Hpcdf, total	9/1/2014	8/31/2016	UT
Hxcdd, total	9/1/2014	8/31/2016	UT
Hxcdf, total	9/1/2014	8/31/2016	UT
Pecdd, total	9/1/2014	8/31/2016	UT
Pecdf, total	9/1/2014	8/31/2016	UT
TCDD, total	9/1/2014	8/31/2016	UT
TCDF, total	9/1/2014	8/31/2016	UT
Method EPA 1668A			
2,2',3,3',4,4',5,5',6'-Nonachlorobiphenyl (BZ-206)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (BZ-194)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (BZ-207)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',5,6-Octachlorobiphenyl (BZ-195)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (BZ-196)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',5-Heptachlorobiphenyl (BZ-170)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',6'-Octachlorobiphenyl (BZ-197)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',6-Heptachlorobiphenyl (BZ-171)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4'-Hexachlorobiphenyl (BZ-128)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,5',6'-Nonachlorobiphenyl (BZ-208)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,5',6-Octachlorobiphenyl (BZ-198)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,5',6'-Octachlorobiphenyl (BZ-199)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,5'-Heptachlorobiphenyl (BZ-172)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,6,6'-Octachlorobiphenyl (BZ-200)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,6,6'-Octachlorobiphenyl (BZ-201)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,6-Heptachlorobiphenyl (BZ-173)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,6'-Heptachlorobiphenyl (BZ-174)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,6-Heptachlorobiphenyl (BZ-175)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,6'-Heptachlorobiphenyl (BZ-177)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5-Hexachlorobiphenyl (BZ-129)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5'-Hexachlorobiphenyl (BZ-130)	9/1/2014	8/31/2016	UT

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Start Date	Expires	AB
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Program/Matrix: RCRA (Solid & Hazardous Material)

2,2',3,3',4,6,6'-Heptachlorobiphenyl (BZ-176)	9/1/2014	8/31/2016	UT
2,2',3,3',4,6-Hexachlorobiphenyl (BZ-131)	9/1/2014	8/31/2016	UT
2,2',3,3',4,6'-Hexachlorobiphenyl (BZ-132)	9/1/2014	8/31/2016	UT
2,2',3,3',4-Pentachlorobiphenyl (BZ-82)	9/1/2014	8/31/2016	UT
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (BZ-202)	9/1/2014	8/31/2016	UT
2,2',3,3',5,5',6-Heptachlorobiphenyl (BZ-178)	9/1/2014	8/31/2016	UT
2,2',3,3',5,5'-Hexachlorobiphenyl (BZ-133)	9/1/2014	8/31/2016	UT
2,2',3,3',5,6,6'-Heptachlorobiphenyl (BZ-179)	9/1/2014	8/31/2016	UT
2,2',3,3',5,6-Hexachlorobiphenyl (BZ-134)	9/1/2014	8/31/2016	UT
2,2',3,3',5,6'-Hexachlorobiphenyl (BZ-135)	9/1/2014	8/31/2016	UT
2,2',3,3',5-Pentachlorobiphenyl (BZ-83)	9/1/2014	8/31/2016	UT
2,2',3,3',6,6'-Hexachlorobiphenyl (BZ-136)	9/1/2014	8/31/2016	UT
2,2',3,3',6-Pentachlorobiphenyl (BZ-84)	9/1/2014	8/31/2016	UT
2,2',3,3'-Tetrachlorobiphenyl (BZ-40)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,5',6-Octachlorobiphenyl (BZ-203)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,5'-Heptachlorobiphenyl (BZ-180)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (BZ-204)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,6-Heptachlorobiphenyl (BZ-181)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,6'-Heptachlorobiphenyl (BZ-182)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,6-Heptachlorobiphenyl (BZ-183)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5-Hexachlorobiphenyl (BZ-137)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5'-Hexachlorobiphenyl (BZ-138)	9/1/2014	8/31/2016	UT
2,2',3,4,4',6,6'-Heptachlorobiphenyl (BZ-184)	9/1/2014	8/31/2016	UT
2,2',3,4,4',6-Hexachlorobiphenyl (BZ-139)	9/1/2014	8/31/2016	UT
2,2',3,4,4',6'-Hexachlorobiphenyl (BZ-140)	9/1/2014	8/31/2016	UT
2,2',3,4,4'-Pentachlorobiphenyl (BZ-85)	9/1/2014	8/31/2016	UT
2,2',3,4,5,5',6-Heptachlorobiphenyl (BZ-185)	9/1/2014	8/31/2016	UT
2,2',3,4,5,5',6-Heptachlorobiphenyl (BZ-187)	9/1/2014	8/31/2016	UT
2,2',3,4,5,5'-Hexachlorobiphenyl (BZ-141)	9/1/2014	8/31/2016	UT
2,2',3,4,5,5'-Hexachlorobiphenyl (BZ-146)	9/1/2014	8/31/2016	UT
2,2',3,4,5,6,6'-Heptachlorobiphenyl (BZ-186)	9/1/2014	8/31/2016	UT
2,2',3,4,5,6,6'-Heptachlorobiphenyl (BZ-188)	9/1/2014	8/31/2016	UT
2,2',3,4,5,6-Hexachlorobiphenyl (BZ-142)	9/1/2014	8/31/2016	UT
2,2',3,4,5,6'-Hexachlorobiphenyl (BZ-143)	9/1/2014	8/31/2016	UT
2,2',3,4,5,6-Hexachlorobiphenyl (BZ-144)	9/1/2014	8/31/2016	UT
2,2',3,4,5,6-Hexachlorobiphenyl (BZ-147)	9/1/2014	8/31/2016	UT
2,2',3,4,5,6'-Hexachlorobiphenyl (BZ-148)	9/1/2014	8/31/2016	UT
2,2',3,4,5,6-Hexachlorobiphenyl (BZ-149)	9/1/2014	8/31/2016	UT
2,2',3,4,5-Pentachlorobiphenyl (BZ-86)	9/1/2014	8/31/2016	UT
2,2',3,4,5'-Pentachlorobiphenyl (BZ-87)	9/1/2014	8/31/2016	UT
2,2',3,4,5-Pentachlorobiphenyl (BZ-90)	9/1/2014	8/31/2016	UT
2,2',3,4,5'-Pentachlorobiphenyl (BZ-97)	9/1/2014	8/31/2016	UT
2,2',3,4,6,6'-Hexachlorobiphenyl (BZ-145)	9/1/2014	8/31/2016	UT
2,2',3,4,6,6'-Hexachlorobiphenyl (BZ-150)	9/1/2014	8/31/2016	UT
2,2',3,4,6-Pentachlorobiphenyl (BZ-88)	9/1/2014	8/31/2016	UT
2,2',3,4,6'-Pentachlorobiphenyl (BZ-89)	9/1/2014	8/31/2016	UT
2,2',3,4,6-Pentachlorobiphenyl (BZ-91)	9/1/2014	8/31/2016	UT
2,2',3,4,6'-Pentachlorobiphenyl (BZ-98)	9/1/2014	8/31/2016	UT
2,2',3,4-Tetrachlorobiphenyl (BZ-41)	9/1/2014	8/31/2016	UT

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Program/Matrix: RCRA (Solid & Hazardous Material)

2,2',3,4'-Tetrachlorobiphenyl (BZ-42)	9/1/2014	8/31/2016	UT
2,2',3,5,5',6'-Hexachlorobiphenyl (BZ-151)	9/1/2014	8/31/2016	UT
2,2',3,5,5'-Pentachlorobiphenyl (BZ-92)	9/1/2014	8/31/2016	UT
2,2',3,5,6'-Hexachlorobiphenyl (BZ-152)	9/1/2014	8/31/2016	UT
2,2',3,5,6-Pentachlorobiphenyl (BZ-93)	9/1/2014	8/31/2016	UT
2,2',3,5,6'-Pentachlorobiphenyl (BZ-94)	9/1/2014	8/31/2016	UT
2,2',3,5',6-Pentachlorobiphenyl (BZ-95)	9/1/2014	8/31/2016	UT
2,2',3,5-Tetrachlorobiphenyl (BZ-43)	9/1/2014	8/31/2016	UT
2,2',3,5'-Tetrachlorobiphenyl (BZ-44)	9/1/2014	8/31/2016	UT
2,2',3,6,6'-Pentachlorobiphenyl (BZ-96)	9/1/2014	8/31/2016	UT
2,2',3,6-Tetrachlorobiphenyl (BZ-45)	9/1/2014	8/31/2016	UT
2,2',3,6'-Tetrachlorobiphenyl (BZ-46)	9/1/2014	8/31/2016	UT
2,2',3-Trichlorobiphenyl (BZ-16)	9/1/2014	8/31/2016	UT
2,2',4,4',5,5'-Hexachlorobiphenyl (BZ-153)	9/1/2014	8/31/2016	UT
2,2',4,4',5,6'-Hexachlorobiphenyl (BZ-154)	9/1/2014	8/31/2016	UT
2,2',4,4',5-Pentachlorobiphenyl (BZ-99)	9/1/2014	8/31/2016	UT
2,2',4,4',6,6'-Hexachlorobiphenyl (BZ-155)	9/1/2014	8/31/2016	UT
2,2',4,4',6-Pentachlorobiphenyl (BZ-100)	9/1/2014	8/31/2016	UT
2,2',4,4'-Tetrachlorobiphenyl (BZ-47)	9/1/2014	8/31/2016	UT
2,2',4,5,5'-Pentachlorobiphenyl (BZ-101)	9/1/2014	8/31/2016	UT
2,2',4,5,6'-Pentachlorobiphenyl (BZ-102)	9/1/2014	8/31/2016	UT
2,2',4,5',6-Pentachlorobiphenyl (BZ-103)	9/1/2014	8/31/2016	UT
2,2',4,5-Tetrachlorobiphenyl (BZ-48)	9/1/2014	8/31/2016	UT
2,2',4,5'-Tetrachlorobiphenyl (BZ-49)	9/1/2014	8/31/2016	UT
2,2',4,6,6'-Pentachlorobiphenyl (BZ-104)	9/1/2014	8/31/2016	UT
2,2',4,6-Tetrachlorobiphenyl (BZ-50)	9/1/2014	8/31/2016	UT
2,2',4,6'-Tetrachlorobiphenyl (BZ-51)	9/1/2014	8/31/2016	UT
2,2',4-Trichlorobiphenyl (BZ-17)	9/1/2014	8/31/2016	UT
2,2',5,5'-Tetrachlorobiphenyl (BZ-52)	9/1/2014	8/31/2016	UT
2,2',5,6'-Tetrachlorobiphenyl (BZ-53)	9/1/2014	8/31/2016	UT
2,2',5-Trichlorobiphenyl (BZ-18)	9/1/2014	8/31/2016	UT
2,2',6,6'-Tetrachlorobiphenyl (BZ-54)	9/1/2014	8/31/2016	UT
2,2',6-Trichlorobiphenyl (BZ-19)	9/1/2014	8/31/2016	UT
2,2'-Dichlorobiphenyl (BZ-4)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5,5',6-Octachlorobiphenyl (BZ-205)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5,5'-Heptachlorobiphenyl (BZ-189)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5,6-Heptachlorobiphenyl (BZ-190)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5',6-Heptachlorobiphenyl (BZ-191)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5-Hexachlorobiphenyl (BZ-156)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5'-Hexachlorobiphenyl (BZ-157)	9/1/2014	8/31/2016	UT
2,3,3',4,4',6-Hexachlorobiphenyl (BZ-158)	9/1/2014	8/31/2016	UT
2,3,3',4,4'-Pentachlorobiphenyl (BZ-105)	9/1/2014	8/31/2016	UT
2,3,3',4,5,5',6-Heptachlorobiphenyl (BZ-192)	9/1/2014	8/31/2016	UT
2,3,3',4',5,5',6-Heptachlorobiphenyl (BZ-193)	9/1/2014	8/31/2016	UT
2,3,3',4,5,5'-Hexachlorobiphenyl (BZ-159)	9/1/2014	8/31/2016	UT
2,3,3',4',5,5'-Hexachlorobiphenyl (BZ-162)	9/1/2014	8/31/2016	UT
2,3,3',4,5,6-Hexachlorobiphenyl (BZ-160)	9/1/2014	8/31/2016	UT
2,3,3',4',5,6-Hexachlorobiphenyl (BZ-163)	9/1/2014	8/31/2016	UT
2,3,3',4',5',6-Hexachlorobiphenyl (BZ-164)	9/1/2014	8/31/2016	UT

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Program/Matrix: RCRA (Solid & Hazardous Material)

2,3,3',4,5',6-Hexachlorobiphenyl (BZ-161)	9/1/2014	8/31/2016	UT
2,3,3',4,5-Pentachlorobiphenyl (BZ-106)	9/1/2014	8/31/2016	UT
2,3,3',4',5-Pentachlorobiphenyl (BZ-107)	9/1/2014	8/31/2016	UT
2,3,3',4,5'-Pentachlorobiphenyl (BZ-108)	9/1/2014	8/31/2016	UT
2,3,3',4',5'-Pentachlorobiphenyl (BZ-122)	9/1/2014	8/31/2016	UT
2,3,3',4,6-Pentachlorobiphenyl (BZ-109)	9/1/2014	8/31/2016	UT
2,3,3',4',6-Pentachlorobiphenyl (BZ-110)	9/1/2014	8/31/2016	UT
2,3,3',4-Tetrachlorobiphenyl (BZ-55)	9/1/2014	8/31/2016	UT
2,3,3',4'-Tetrachlorobiphenyl (BZ-56)	9/1/2014	8/31/2016	UT
2,3,3',5,5',6-Hexachlorobiphenyl (BZ-165)	9/1/2014	8/31/2016	UT
2,3,3',5,5'-Pentachlorobiphenyl (BZ-111)	9/1/2014	8/31/2016	UT
2,3,3',5,6-Pentachlorobiphenyl (BZ-112)	9/1/2014	8/31/2016	UT
2,3,3',5',6-Pentachlorobiphenyl (BZ-113)	9/1/2014	8/31/2016	UT
2,3,3',5-Tetrachlorobiphenyl (BZ-57)	9/1/2014	8/31/2016	UT
2,3,3',5'-Tetrachlorobiphenyl (BZ-58)	9/1/2014	8/31/2016	UT
2,3,3',6-Tetrachlorobiphenyl (BZ-59)	9/1/2014	8/31/2016	UT
2,3,3'-Trichlorobiphenyl (BZ-20)	9/1/2014	8/31/2016	UT
2,3',4,4',5,5'-Hexachlorobiphenyl (BZ-167)	9/1/2014	8/31/2016	UT
2,3,4,4',5,6-Hexachlorobiphenyl (BZ-166)	9/1/2014	8/31/2016	UT
2,3',4,4',5,6-Hexachlorobiphenyl (BZ-168)	9/1/2014	8/31/2016	UT
2,3,4,4',5-Pentachlorobiphenyl (BZ-114)	9/1/2014	8/31/2016	UT
2,3',4,4',5-Pentachlorobiphenyl (BZ-118)	9/1/2014	8/31/2016	UT
2,3',4,4',5'-Pentachlorobiphenyl (BZ-123)	9/1/2014	8/31/2016	UT
2,3,4,4',6-Pentachlorobiphenyl (BZ-115)	9/1/2014	8/31/2016	UT
2,3',4,4',6-Pentachlorobiphenyl (BZ-119)	9/1/2014	8/31/2016	UT
2,3,4,4'-Tetrachlorobiphenyl (BZ-60)	9/1/2014	8/31/2016	UT
2,3',4,4'-Tetrachlorobiphenyl (BZ-66)	9/1/2014	8/31/2016	UT
2,3',4,5,5'-Pentachlorobiphenyl (BZ-120)	9/1/2014	8/31/2016	UT
2,3',4',5,5'-Pentachlorobiphenyl (BZ-124)	9/1/2014	8/31/2016	UT
2,3,4,5,6-Pentachlorobiphenyl (BZ-116)	9/1/2014	8/31/2016	UT
2,3,4',5,6-Pentachlorobiphenyl (BZ-117)	9/1/2014	8/31/2016	UT
2,3',4,5',6-Pentachlorobiphenyl (BZ-121)	9/1/2014	8/31/2016	UT
2,3',4',5',6-Pentachlorobiphenyl (BZ-125)	9/1/2014	8/31/2016	UT
2,3,4,5-Tetrachlorobiphenyl (BZ-61)	9/1/2014	8/31/2016	UT
2,3,4',5-Tetrachlorobiphenyl (BZ-63)	9/1/2014	8/31/2016	UT
2,3',4,5'-Tetrachlorobiphenyl (BZ-68)	9/1/2014	8/31/2016	UT
2,3',4',5-Tetrachlorobiphenyl (BZ-70)	9/1/2014	8/31/2016	UT
2,3',4',5'-Tetrachlorobiphenyl (BZ-76)	9/1/2014	8/31/2016	UT
2,3',4,5-Tetrachlorobiphenyl (BZ-67)	9/1/2014	8/31/2016	UT
2,3,4,6-Tetrachlorobiphenyl (BZ-62)	9/1/2014	8/31/2016	UT
2,3,4',6-Tetrachlorobiphenyl (BZ-64)	9/1/2014	8/31/2016	UT
2,3',4,6-Tetrachlorobiphenyl (BZ-69)	9/1/2014	8/31/2016	UT
2,3',4',6-Tetrachlorobiphenyl (BZ-71)	9/1/2014	8/31/2016	UT
2,3,4-Trichlorobiphenyl (BZ-21)	9/1/2014	8/31/2016	UT
2,3,4'-Trichlorobiphenyl (BZ-22)	9/1/2014	8/31/2016	UT
2,3',4-Trichlorobiphenyl (BZ-25)	9/1/2014	8/31/2016	UT
2,3',4'-Trichlorobiphenyl (BZ-33)	9/1/2014	8/31/2016	UT
2,3',5,5'-Tetrachlorobiphenyl (BZ-72)	9/1/2014	8/31/2016	UT
2,3,5,6-Tetrachlorobiphenyl (BZ-65)	9/1/2014	8/31/2016	UT

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Program/Matrix: RCRA (Solid & Hazardous Material)

2,3',5',6-Tetrachlorobiphenyl (BZ-73)	9/1/2014	8/31/2016	UT
2,3,5-Trichlorobiphenyl (BZ-23)	9/1/2014	8/31/2016	UT
2,3',5-Trichlorobiphenyl (BZ-26)	9/1/2014	8/31/2016	UT
2,3',5'-Trichlorobiphenyl (BZ-34)	9/1/2014	8/31/2016	UT
2,3,6-Trichlorobiphenyl (BZ-24)	9/1/2014	8/31/2016	UT
2,3',6-Trichlorobiphenyl (BZ-27)	9/1/2014	8/31/2016	UT
2,3-Dichlorobiphenyl (BZ-5)	9/1/2014	8/31/2016	UT
2,3'-Dichlorobiphenyl (BZ-6)	9/1/2014	8/31/2016	UT
2,4,4',5-Tetrachlorobiphenyl (BZ-74)	9/1/2014	8/31/2016	UT
2,4,4',6-Tetrachlorobiphenyl (BZ-75)	9/1/2014	8/31/2016	UT
2,4,4'-Trichlorobiphenyl (BZ-28)	9/1/2014	8/31/2016	UT
2,4,5-Trichlorobiphenyl (BZ-29)	9/1/2014	8/31/2016	UT
2,4',5-Trichlorobiphenyl (BZ-31)	9/1/2014	8/31/2016	UT
2,4,6-Trichlorobiphenyl (BZ-30)	9/1/2014	8/31/2016	UT
2,4',6-Trichlorobiphenyl (BZ-32)	9/1/2014	8/31/2016	UT
2,4-Dichlorobiphenyl (BZ-7)	9/1/2014	8/31/2016	UT
2,4'-Dichlorobiphenyl (BZ-8)	9/1/2014	8/31/2016	UT
2,5-Dichlorobiphenyl (BZ-9)	9/1/2014	8/31/2016	UT
2,6-Dichlorobiphenyl (BZ-10)	9/1/2014	8/31/2016	UT
2-Chlorobiphenyl (BZ-1)	9/1/2014	8/31/2016	UT
3,3',4,4',5,5'-Hexachlorobiphenyl (BZ-169)	9/1/2014	8/31/2016	UT
3,3',4,4',5-Pentachlorobiphenyl (BZ-126)	9/1/2014	8/31/2016	UT
3,3',4,4'-Tetrachlorobiphenyl (BZ-77)	9/1/2014	8/31/2016	UT
3,3',4,5,5'-Pentachlorobiphenyl (BZ-127)	9/1/2014	8/31/2016	UT
3,3',4,5-Tetrachlorobiphenyl (BZ-78)	9/1/2014	8/31/2016	UT
3,3',4,5'-Tetrachlorobiphenyl (BZ-79)	9/1/2014	8/31/2016	UT
3,3',4-Trichlorobiphenyl (BZ-35)	9/1/2014	8/31/2016	UT
3,3',5,5'-Tetrachlorobiphenyl (BZ-80)	9/1/2014	8/31/2016	UT
3,3',5-Trichlorobiphenyl (BZ-36)	9/1/2014	8/31/2016	UT
3,3'-Dichlorobiphenyl (BZ-11)	9/1/2014	8/31/2016	UT
3,4,4',5-Tetrachlorobiphenyl (BZ-81)	9/1/2014	8/31/2016	UT
3,4,4'-Trichlorobiphenyl (BZ-37)	9/1/2014	8/31/2016	UT
3,4,5-Trichlorobiphenyl (BZ-38)	9/1/2014	8/31/2016	UT
3,4',5-Trichlorobiphenyl (BZ-39)	9/1/2014	8/31/2016	UT
3,4-Dichlorobiphenyl (BZ-12)	9/1/2014	8/31/2016	UT
3,4'-Dichlorobiphenyl (BZ-13)	9/1/2014	8/31/2016	UT
3,5-Dichlorobiphenyl (BZ-14)	9/1/2014	8/31/2016	UT
3-Chlorobiphenyl (BZ-2)	9/1/2014	8/31/2016	UT
4,4'-Dichlorobiphenyl (BZ-15)	9/1/2014	8/31/2016	UT
4-Chlorobiphenyl (BZ-3)	9/1/2014	8/31/2016	UT
Decachlorobiphenyl (BZ-209)	9/1/2014	8/31/2016	UT
PCBs	9/1/2014	8/31/2016	UT

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2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (BZ-206)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (BZ-194)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (BZ-207)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',5,6-Octachlorobiphenyl (BZ-195)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (BZ-196)	9/1/2014	8/31/2016	UT

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Program/Matrix: RCRA (Solid & Hazardous Material)

2,2',3,3',4,4',5-Heptachlorobiphenyl (BZ-170)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (BZ-197)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4',6-Heptachlorobiphenyl (BZ-171)	9/1/2014	8/31/2016	UT
2,2',3,3',4,4'-Hexachlorobiphenyl (BZ-128)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,5',6'-Nonachlorobiphenyl (BZ-208)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,5',6-Octachlorobiphenyl (BZ-198)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,5',6'-Octachlorobiphenyl (BZ-199)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,5'-Heptachlorobiphenyl (BZ-172)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,6,6'-Octachlorobiphenyl (BZ-200)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,6,6'-Octachlorobiphenyl (BZ-201)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,6-Heptachlorobiphenyl (BZ-173)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5,6'-Heptachlorobiphenyl (BZ-174)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5',6-Heptachlorobiphenyl (BZ-175)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5',6'-Heptachlorobiphenyl (BZ-177)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5-Hexachlorobiphenyl (BZ-129)	9/1/2014	8/31/2016	UT
2,2',3,3',4,5'-Hexachlorobiphenyl (BZ-130)	9/1/2014	8/31/2016	UT
2,2',3,3',4,6,6'-Heptachlorobiphenyl (BZ-176)	9/1/2014	8/31/2016	UT
2,2',3,3',4,6-Hexachlorobiphenyl (BZ-131)	9/1/2014	8/31/2016	UT
2,2',3,3',4,6'-Hexachlorobiphenyl (BZ-132)	9/1/2014	8/31/2016	UT
2,2',3,3',4-Pentachlorobiphenyl (BZ-82)	9/1/2014	8/31/2016	UT
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (BZ-202)	9/1/2014	8/31/2016	UT
2,2',3,3',5,5',6-Heptachlorobiphenyl (BZ-178)	9/1/2014	8/31/2016	UT
2,2',3,3',5,5'-Hexachlorobiphenyl (BZ-133)	9/1/2014	8/31/2016	UT
2,2',3,3',5,6,6'-Heptachlorobiphenyl (BZ-179)	9/1/2014	8/31/2016	UT
2,2',3,3',5,6-Hexachlorobiphenyl (BZ-134)	9/1/2014	8/31/2016	UT
2,2',3,3',5,6'-Hexachlorobiphenyl (BZ-135)	9/1/2014	8/31/2016	UT
2,2',3,3',5-Pentachlorobiphenyl (BZ-83)	9/1/2014	8/31/2016	UT
2,2',3,3',6,6'-Hexachlorobiphenyl (BZ-136)	9/1/2014	8/31/2016	UT
2,2',3,3',6-Pentachlorobiphenyl (BZ-84)	9/1/2014	8/31/2016	UT
2,2',3,3'-Tetrachlorobiphenyl (BZ-40)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,5',6-Octachlorobiphenyl (BZ-203)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,5'-Heptachlorobiphenyl (BZ-180)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (BZ-204)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,6-Heptachlorobiphenyl (BZ-181)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5,6'-Heptachlorobiphenyl (BZ-182)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5',6-Heptachlorobiphenyl (BZ-183)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5-Hexachlorobiphenyl (BZ-137)	9/1/2014	8/31/2016	UT
2,2',3,4,4',5'-Hexachlorobiphenyl (BZ-138)	9/1/2014	8/31/2016	UT
2,2',3,4,4',6,6'-Heptachlorobiphenyl (BZ-184)	9/1/2014	8/31/2016	UT
2,2',3,4,4',6-Hexachlorobiphenyl (BZ-139)	9/1/2014	8/31/2016	UT
2,2',3,4,4',6'-Hexachlorobiphenyl (BZ-140)	9/1/2014	8/31/2016	UT
2,2',3,4,4'-Pentachlorobiphenyl (BZ-85)	9/1/2014	8/31/2016	UT
2,2',3,4,5,5',6-Heptachlorobiphenyl (BZ-185)	9/1/2014	8/31/2016	UT
2,2',3,4',5,5',6-Heptachlorobiphenyl (BZ-187)	9/1/2014	8/31/2016	UT
2,2',3,4,5,5'-Hexachlorobiphenyl (BZ-141)	9/1/2014	8/31/2016	UT
2,2',3,4',5,5'-Hexachlorobiphenyl (BZ-146)	9/1/2014	8/31/2016	UT
2,2',3,4,5,6,6'-Heptachlorobiphenyl (BZ-186)	9/1/2014	8/31/2016	UT
2,2',3,4',5,6,6'-Heptachlorobiphenyl (BZ-188)	9/1/2014	8/31/2016	UT
2,2',3,4,5,6-Hexachlorobiphenyl (BZ-142)	9/1/2014	8/31/2016	UT

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Start Date	Expires	AB
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Program/Matrix: RCRA (Solid & Hazardous Material)

2,2',3,4,5,6'-Hexachlorobiphenyl (BZ-143)	9/1/2014	8/31/2016	UT
2,2',3,4,5',6'-Hexachlorobiphenyl (BZ-144)	9/1/2014	8/31/2016	UT
2,2',3,4',5,6'-Hexachlorobiphenyl (BZ-147)	9/1/2014	8/31/2016	UT
2,2',3,4',5,6'-Hexachlorobiphenyl (BZ-148)	9/1/2014	8/31/2016	UT
2,2',3,4',5',6'-Hexachlorobiphenyl (BZ-149)	9/1/2014	8/31/2016	UT
2,2',3,4,5-Pentachlorobiphenyl (BZ-86)	9/1/2014	8/31/2016	UT
2,2',3,4,5'-Pentachlorobiphenyl (BZ-87)	9/1/2014	8/31/2016	UT
2,2',3,4',5-Pentachlorobiphenyl (BZ-90)	9/1/2014	8/31/2016	UT
2,2',3,4',5'-Pentachlorobiphenyl (BZ-97)	9/1/2014	8/31/2016	UT
2,2',3,4,6,6'-Hexachlorobiphenyl (BZ-145)	9/1/2014	8/31/2016	UT
2,2',3,4',6,6'-Hexachlorobiphenyl (BZ-150)	9/1/2014	8/31/2016	UT
2,2',3,4,6-Pentachlorobiphenyl (BZ-88)	9/1/2014	8/31/2016	UT
2,2',3,4,6'-Pentachlorobiphenyl (BZ-89)	9/1/2014	8/31/2016	UT
2,2',3,4',6-Pentachlorobiphenyl (BZ-91)	9/1/2014	8/31/2016	UT
2,2',3,4',6'-Pentachlorobiphenyl (BZ-98)	9/1/2014	8/31/2016	UT
2,2',3,4-Tetrachlorobiphenyl (BZ-41)	9/1/2014	8/31/2016	UT
2,2',3,4'-Tetrachlorobiphenyl (BZ-42)	9/1/2014	8/31/2016	UT
2,2',3,5,5',6'-Hexachlorobiphenyl (BZ-151)	9/1/2014	8/31/2016	UT
2,2',3,5,5'-Pentachlorobiphenyl (BZ-92)	9/1/2014	8/31/2016	UT
2,2',3,5,6,6'-Hexachlorobiphenyl (BZ-152)	9/1/2014	8/31/2016	UT
2,2',3,5,6-Pentachlorobiphenyl (BZ-93)	9/1/2014	8/31/2016	UT
2,2',3,5,6'-Pentachlorobiphenyl (BZ-94)	9/1/2014	8/31/2016	UT
2,2',3,5',6-Pentachlorobiphenyl (BZ-95)	9/1/2014	8/31/2016	UT
2,2',3,5-Tetrachlorobiphenyl (BZ-43)	9/1/2014	8/31/2016	UT
2,2',3,5'-Tetrachlorobiphenyl (BZ-44)	9/1/2014	8/31/2016	UT
2,2',3,6,6'-Pentachlorobiphenyl (BZ-96)	9/1/2014	8/31/2016	UT
2,2',3,6-Tetrachlorobiphenyl (BZ-45)	9/1/2014	8/31/2016	UT
2,2',3,6'-Tetrachlorobiphenyl (BZ-46)	9/1/2014	8/31/2016	UT
2,2',3-Trichlorobiphenyl (BZ-16)	9/1/2014	8/31/2016	UT
2,2',4,4',5,5'-Hexachlorobiphenyl (BZ-153)	9/1/2014	8/31/2016	UT
2,2',4,4',5,6'-Hexachlorobiphenyl (BZ-154)	9/1/2014	8/31/2016	UT
2,2',4,4',5-Pentachlorobiphenyl (BZ-99)	9/1/2014	8/31/2016	UT
2,2',4,4',6,6'-Hexachlorobiphenyl (BZ-155)	9/1/2014	8/31/2016	UT
2,2',4,4',6-Pentachlorobiphenyl (BZ-100)	9/1/2014	8/31/2016	UT
2,2',4,4'-Tetrachlorobiphenyl (BZ-47)	9/1/2014	8/31/2016	UT
2,2',4,5,5'-Pentachlorobiphenyl (BZ-101)	9/1/2014	8/31/2016	UT
2,2',4,5,6'-Pentachlorobiphenyl (BZ-102)	9/1/2014	8/31/2016	UT
2,2',4,5',6-Pentachlorobiphenyl (BZ-103)	9/1/2014	8/31/2016	UT
2,2',4,5-Tetrachlorobiphenyl (BZ-48)	9/1/2014	8/31/2016	UT
2,2',4,5'-Tetrachlorobiphenyl (BZ-49)	9/1/2014	8/31/2016	UT
2,2',4,6,6'-Pentachlorobiphenyl (BZ-104)	9/1/2014	8/31/2016	UT
2,2',4,6-Tetrachlorobiphenyl (BZ-50)	9/1/2014	8/31/2016	UT
2,2',4,6'-Tetrachlorobiphenyl (BZ-51)	9/1/2014	8/31/2016	UT
2,2',4-Trichlorobiphenyl (BZ-17)	9/1/2014	8/31/2016	UT
2,2',5,5'-Tetrachlorobiphenyl (BZ-52)	9/1/2014	8/31/2016	UT
2,2',5,6'-Tetrachlorobiphenyl (BZ-53)	9/1/2014	8/31/2016	UT
2,2',5-Trichlorobiphenyl (BZ-18)	9/1/2014	8/31/2016	UT
2,2',6,6'-Tetrachlorobiphenyl (BZ-54)	9/1/2014	8/31/2016	UT
2,2',6-Trichlorobiphenyl (BZ-19)	9/1/2014	8/31/2016	UT

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Start Date	Expires	AB
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Program/Matrix: RCRA (Solid & Hazardous Material)

2,2'-Dichlorobiphenyl (BZ-4)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5,5',6-Octachlorobiphenyl (BZ-205)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5,5'-Heptachlorobiphenyl (BZ-189)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5,6-Heptachlorobiphenyl (BZ-190)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5,6-Heptachlorobiphenyl (BZ-191)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5-Hexachlorobiphenyl (BZ-156)	9/1/2014	8/31/2016	UT
2,3,3',4,4',5'-Hexachlorobiphenyl (BZ-157)	9/1/2014	8/31/2016	UT
2,3,3',4,4',6-Hexachlorobiphenyl (BZ-158)	9/1/2014	8/31/2016	UT
2,3,3',4,4'-Pentachlorobiphenyl (BZ-105)	9/1/2014	8/31/2016	UT
2,3,3',4,5,5',6-Heptachlorobiphenyl (BZ-192)	9/1/2014	8/31/2016	UT
2,3,3',4',5,5',6-Heptachlorobiphenyl (BZ-193)	9/1/2014	8/31/2016	UT
2,3,3',4,5,5'-Hexachlorobiphenyl (BZ-159)	9/1/2014	8/31/2016	UT
2,3,3',4',5,5'-Hexachlorobiphenyl (BZ-162)	9/1/2014	8/31/2016	UT
2,3,3',4,5,6-Hexachlorobiphenyl (BZ-160)	9/1/2014	8/31/2016	UT
2,3,3',4',5,6-Hexachlorobiphenyl (BZ-163)	9/1/2014	8/31/2016	UT
2,3,3',4',5,6-Hexachlorobiphenyl (BZ-164)	9/1/2014	8/31/2016	UT
2,3,3',4,5',6-Hexachlorobiphenyl (BZ-161)	9/1/2014	8/31/2016	UT
2,3,3',4,5-Pentachlorobiphenyl (BZ-106)	9/1/2014	8/31/2016	UT
2,3,3',4',5-Pentachlorobiphenyl (BZ-107)	9/1/2014	8/31/2016	UT
2,3,3',4,5'-Pentachlorobiphenyl (BZ-108)	9/1/2014	8/31/2016	UT
2,3,3',4',5'-Pentachlorobiphenyl (BZ-122)	9/1/2014	8/31/2016	UT
2,3,3',4,6-Pentachlorobiphenyl (BZ-109)	9/1/2014	8/31/2016	UT
2,3,3',4',6-Pentachlorobiphenyl (BZ-110)	9/1/2014	8/31/2016	UT
2,3,3',4-Tetrachlorobiphenyl (BZ-55)	9/1/2014	8/31/2016	UT
2,3,3',4'-Tetrachlorobiphenyl (BZ-56)	9/1/2014	8/31/2016	UT
2,3,3',5,5',6-Hexachlorobiphenyl (BZ-165)	9/1/2014	8/31/2016	UT
2,3,3',5,5'-Pentachlorobiphenyl (BZ-111)	9/1/2014	8/31/2016	UT
2,3,3',5,6-Pentachlorobiphenyl (BZ-112)	9/1/2014	8/31/2016	UT
2,3,3',5',6-Pentachlorobiphenyl (BZ-113)	9/1/2014	8/31/2016	UT
2,3,3',5-Tetrachlorobiphenyl (BZ-57)	9/1/2014	8/31/2016	UT
2,3,3',5'-Tetrachlorobiphenyl (BZ-58)	9/1/2014	8/31/2016	UT
2,3,3',6-Tetrachlorobiphenyl (BZ-59)	9/1/2014	8/31/2016	UT
2,3,3'-Trichlorobiphenyl (BZ-20)	9/1/2014	8/31/2016	UT
2,3',4,4',5,5'-Hexachlorobiphenyl (BZ-167)	9/1/2014	8/31/2016	UT
2,3,4,4',5,6-Hexachlorobiphenyl (BZ-166)	9/1/2014	8/31/2016	UT
2,3',4,4',5,6-Hexachlorobiphenyl (BZ-168)	9/1/2014	8/31/2016	UT
2,3,4,4',5-Pentachlorobiphenyl (BZ-114)	9/1/2014	8/31/2016	UT
2,3',4,4',5-Pentachlorobiphenyl (BZ-118)	9/1/2014	8/31/2016	UT
2,3',4,4',5'-Pentachlorobiphenyl (BZ-123)	9/1/2014	8/31/2016	UT
2,3,4,4',6-Pentachlorobiphenyl (BZ-115)	9/1/2014	8/31/2016	UT
2,3',4,4',6-Pentachlorobiphenyl (BZ-119)	9/1/2014	8/31/2016	UT
2,3,4,4'-Tetrachlorobiphenyl (BZ-60)	9/1/2014	8/31/2016	UT
2,3',4,4'-Tetrachlorobiphenyl (BZ-66)	9/1/2014	8/31/2016	UT
2,3',4,5,5'-Pentachlorobiphenyl (BZ-120)	9/1/2014	8/31/2016	UT
2,3',4',5,5'-Pentachlorobiphenyl (BZ-124)	9/1/2014	8/31/2016	UT
2,3,4,5,6-Pentachlorobiphenyl (BZ-116)	9/1/2014	8/31/2016	UT
2,3,4',5,6-Pentachlorobiphenyl (BZ-117)	9/1/2014	8/31/2016	UT
2,3',4,5',6-Pentachlorobiphenyl (BZ-121)	9/1/2014	8/31/2016	UT
2,3',4',5',6-Pentachlorobiphenyl (BZ-125)	9/1/2014	8/31/2016	UT

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Start Date	Expires	AB
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Program/Matrix: RCRA (Solid & Hazardous Material)

2,3,4,5-Tetrachlorobiphenyl (BZ-61)	9/1/2014	8/31/2016	UT
2,3,4',5-Tetrachlorobiphenyl (BZ-63)	9/1/2014	8/31/2016	UT
2,3',4,5'-Tetrachlorobiphenyl (BZ-68)	9/1/2014	8/31/2016	UT
2,3',4',5-Tetrachlorobiphenyl (BZ-70)	9/1/2014	8/31/2016	UT
2,3',4',5'-Tetrachlorobiphenyl (BZ-76)	9/1/2014	8/31/2016	UT
2,3',4,5-Tetrachlorobiphenyl (BZ-67)	9/1/2014	8/31/2016	UT
2,3,4,6-Tetrachlorobiphenyl (BZ-62)	9/1/2014	8/31/2016	UT
2,3,4',6-Tetrachlorobiphenyl (BZ-64)	9/1/2014	8/31/2016	UT
2,3',4,6-Tetrachlorobiphenyl (BZ-69)	9/1/2014	8/31/2016	UT
2,3',4',6-Tetrachlorobiphenyl (BZ-71)	9/1/2014	8/31/2016	UT
2,3,4-Trichlorobiphenyl (BZ-21)	9/1/2014	8/31/2016	UT
2,3,4'-Trichlorobiphenyl (BZ-22)	9/1/2014	8/31/2016	UT
2,3',4-Trichlorobiphenyl (BZ-25)	9/1/2014	8/31/2016	UT
2,3',4'-Trichlorobiphenyl (BZ-33)	9/1/2014	8/31/2016	UT
2,3',5,5'-Tetrachlorobiphenyl (BZ-72)	9/1/2014	8/31/2016	UT
2,3,5,6-Tetrachlorobiphenyl (BZ-65)	9/1/2014	8/31/2016	UT
2,3',5',6-Tetrachlorobiphenyl (BZ-73)	9/1/2014	8/31/2016	UT
2,3,5-Trichlorobiphenyl (BZ-23)	9/1/2014	8/31/2016	UT
2,3',5-Trichlorobiphenyl (BZ-26)	9/1/2014	8/31/2016	UT
2,3',5'-Trichlorobiphenyl (BZ-34)	9/1/2014	8/31/2016	UT
2,3,6-Trichlorobiphenyl (BZ-24)	9/1/2014	8/31/2016	UT
2,3',6-Trichlorobiphenyl (BZ-27)	9/1/2014	8/31/2016	UT
2,3-Dichlorobiphenyl (BZ-5)	9/1/2014	8/31/2016	UT
2,3'-Dichlorobiphenyl (BZ-6)	9/1/2014	8/31/2016	UT
2,4,4',5-Tetrachlorobiphenyl (BZ-74)	9/1/2014	8/31/2016	UT
2,4,4',6-Tetrachlorobiphenyl (BZ-75)	9/1/2014	8/31/2016	UT
2,4,4'-Trichlorobiphenyl (BZ-28)	9/1/2014	8/31/2016	UT
2,4,5-Trichlorobiphenyl (BZ-29)	9/1/2014	8/31/2016	UT
2,4',5-Trichlorobiphenyl (BZ-31)	9/1/2014	8/31/2016	UT
2,4,6-Trichlorobiphenyl (BZ-30)	9/1/2014	8/31/2016	UT
2,4',6-Trichlorobiphenyl (BZ-32)	9/1/2014	8/31/2016	UT
2,4-Dichlorobiphenyl (BZ-7)	9/1/2014	8/31/2016	UT
2,4'-Dichlorobiphenyl (BZ-8)	9/1/2014	8/31/2016	UT
2,5-Dichlorobiphenyl (BZ-9)	9/1/2014	8/31/2016	UT
2,6-Dichlorobiphenyl (BZ-10)	9/1/2014	8/31/2016	UT
2-Chlorobiphenyl (BZ-1)	9/1/2014	8/31/2016	UT
3,3',4,4',5,5'-Hexachlorobiphenyl (BZ-169)	9/1/2014	8/31/2016	UT
3,3',4,4',5-Pentachlorobiphenyl (BZ-126)	9/1/2014	8/31/2016	UT
3,3',4,4'-Tetrachlorobiphenyl (BZ-77)	9/1/2014	8/31/2016	UT
3,3',4,5,5'-Pentachlorobiphenyl (BZ-127)	9/1/2014	8/31/2016	UT
3,3',4,5-Tetrachlorobiphenyl (BZ-78)	9/1/2014	8/31/2016	UT
3,3',4,5'-Tetrachlorobiphenyl (BZ-79)	9/1/2014	8/31/2016	UT
3,3',4-Trichlorobiphenyl (BZ-35)	9/1/2014	8/31/2016	UT
3,3',5,5'-Tetrachlorobiphenyl (BZ-80)	9/1/2014	8/31/2016	UT
3,3',5-Trichlorobiphenyl (BZ-36)	9/1/2014	8/31/2016	UT
3,3'-Dichlorobiphenyl (BZ-11)	9/1/2014	8/31/2016	UT
3,4,4',5-Tetrachlorobiphenyl (BZ-81)	9/1/2014	8/31/2016	UT
3,4,4'-Trichlorobiphenyl (BZ-37)	9/1/2014	8/31/2016	UT
3,4,5-Trichlorobiphenyl (BZ-38)	9/1/2014	8/31/2016	UT

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Start Date	Expires	AB
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Program/Matrix: RCRA (Solid & Hazardous Material)

3,4',5-Trichlorobiphenyl (BZ-39)	9/1/2014	8/31/2016	UT
3,4-Dichlorobiphenyl (BZ-12)	9/1/2014	8/31/2016	UT
3,4'-Dichlorobiphenyl (BZ-13)	9/1/2014	8/31/2016	UT
3,5-Dichlorobiphenyl (BZ-14)	9/1/2014	8/31/2016	UT
3-Chlorobiphenyl (BZ-2)	9/1/2014	8/31/2016	UT
4,4'-Dichlorobiphenyl (BZ-15)	9/1/2014	8/31/2016	UT
4-Chlorobiphenyl (BZ-3)	9/1/2014	8/31/2016	UT
Decachlorobiphenyl (BZ-209)	9/1/2014	8/31/2016	UT
PCBs	9/1/2014	8/31/2016	UT

Method EPA 3540C

Preparation/Extraction	9/1/2014	8/31/2016	UT
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Method EPA 3620B

Preparation/Extraction	9/1/2014	8/31/2016	UT
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Method EPA 3630C

Preparation/Extraction	9/1/2014	8/31/2016	UT
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Method EPA 8290A

1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-hpcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-hpcdd)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-hpcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8-Hexachlorodibenzofuran (1,2,3,4,7,8-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (1,2,3,4,7,8-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,6,7,8-Hexachlorodibenzofuran (1,2,3,6,7,8-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (1,2,3,6,7,8-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,7,8,9-Hexachlorodibenzofuran (1,2,3,7,8,9-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (1,2,3,7,8,9-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,7,8-Pentachlorodibenzofuran (1,2,3,7,8-Pecdf)	9/1/2014	8/31/2016	UT
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (1,2,3,7,8-Pecdd)	9/1/2014	8/31/2016	UT
2,3,4,6,7,8-Hexachlorodibenzofuran	9/1/2014	8/31/2016	UT
2,3,4,7,8-Pentachlorodibenzofuran	9/1/2014	8/31/2016	UT
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD)	9/1/2014	8/31/2016	UT
2,3,7,8-Tetrachlorodibenzofuran	9/1/2014	8/31/2016	UT
Hpcdd, total	9/1/2014	8/31/2016	UT
Hpcdf, total	9/1/2014	8/31/2016	UT
Hxcdd, total	9/1/2014	8/31/2016	UT
Hxcdf, total	9/1/2014	8/31/2016	UT
Pecdd, total	9/1/2014	8/31/2016	UT
Pecdf, total	9/1/2014	8/31/2016	UT
TCDD, total	9/1/2014	8/31/2016	UT
TCDF, total	9/1/2014	8/31/2016	UT

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Start Date	Expires	AB
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Program/Matrix: SDWA (Potable Water)**Method EPA 1613B**

1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-hpcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-hpcdd)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-hpcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8-Hexachlorodibenzofuran (1,2,3,4,7,8-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (1,2,3,4,7,8-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,6,7,8-Hexachlorodibenzofuran (1,2,3,6,7,8-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (1,2,3,6,7,8-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,7,8,9-Hexachlorodibenzofuran (1,2,3,7,8,9-Hxcdf)	9/1/2014	8/31/2016	UT
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (1,2,3,7,8,9-Hxcdd)	9/1/2014	8/31/2016	UT
1,2,3,7,8-Pentachlorodibenzofuran (1,2,3,7,8-Pecdf)	9/1/2014	8/31/2016	UT
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (1,2,3,7,8-Pecdd)	9/1/2014	8/31/2016	UT
2,3,4,6,7,8-Hexachlorodibenzofuran	9/1/2014	8/31/2016	UT
2,3,4,7,8-Pentachlorodibenzofuran	9/1/2014	8/31/2016	UT
2,3,7,8-TCDD	9/1/2014	8/31/2016	UT
2,3,7,8-Tetrachlorodibenzofuran	9/1/2014	8/31/2016	UT
Hpcdd, total	9/1/2014	8/31/2016	UT
Hpcdf, total	9/1/2014	8/31/2016	UT
Hxcdd, total	9/1/2014	8/31/2016	UT
Hxcdf, total	9/1/2014	8/31/2016	UT
Pecdd, total	9/1/2014	8/31/2016	UT
Pecdf, total	9/1/2014	8/31/2016	UT
TCDD, total	9/1/2014	8/31/2016	UT
TCDF, total	9/1/2014	8/31/2016	UT

The Utah Environmental Laboratory Certification Program (ELCP) encourages clients and data users to verify the most current certification letter for the authorized method.

The analytes by method which a laboratory is authorized to perform at any given time will be those indicated in the most recent certificate letter. The most recent certification letter supersedes all previous certification or authorization letters. It is the certified laboratory's responsibility to review this letter for discrepancies. The certified laboratory must document any discrepancies in this letter and send notice to this bureau within 15 days of receipt. This certificate letter will be recalled in the event your laboratory's certification is revoked.



State of Florida
Department of Health, Bureau of Public Health Laboratories
This is to certify that



E83510

SGS ACCUTEST - ORLANDO
4405 VINELAND ROAD, SUITE C-15
ORLANDO, FL 32811

has complied with Florida Administrative Code 64E-1,
for the examination of environmental samples in the following categories

DRINKING WATER - GROUP III UNREGULATED CONTAMINANTS, DRINKING WATER - SYNTHETIC ORGANIC CONTAMINANTS, NON-POTABLE WATER - EXTRACTABLE ORGANICS, NON-POTABLE WATER - GENERAL CHEMISTRY, NON-POTABLE WATER - METALS, NON-POTABLE WATER - PESTICIDES-HERBICIDES-PCB'S, NON-POTABLE WATER - VOLATILE ORGANICS, SOLID AND CHEMICAL MATERIALS - EXTRACTABLE ORGANICS, SOLID AND CHEMICAL MATERIALS - GENERAL CHEMISTRY, SOLID AND CHEMICAL MATERIALS - METALS, SOLID AND CHEMICAL MATERIALS - PESTICIDES-HERBICIDES-PCB'S, SOLID AND CHEMICAL MATERIALS - VOLATILE ORGANICS, AIR AND EMISSIONS - VOLATILE ORGANICS

Continued certification is contingent upon successful on-going compliance with the NELAC Standards and FAC Rule 64E-1 regulations. Specific methods and analytes certified are cited on the Laboratory Scope of Accreditation for this laboratory and are on file at the Bureau of Public Health Laboratories, P. O. Box 210, Jacksonville, Florida 32231. Clients and customers are urged to verify with this agency the laboratory's certification status in Florida for particular methods and analytes.

Date Issued: July 01, 2017 Expiration Date: June 30, 2018



Susanne Crowe, MHA
Acting Chief, Bureau of Public Health Laboratories
DH Form 1697, 7/04
NON-TRANSFERABLE E83510-45-07/01/2017
Supersedes all previously issued certificates

**Laboratory Scope of Accreditation**

Page 1 of 37

Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Drinking Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,2-Dibromo-3-chloropropane (DBCP)	EPA 504.1	Synthetic Organic Contaminants	NELAP	9/6/2002
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 504.1	Synthetic Organic Contaminants	NELAP	9/6/2002
2-(N-Ethyl-perfluorooctane sulfonamido) acetic acid	EPA 537	Group III Unregulated Contaminants	NELAP	10/19/2016
2-(N-Methyl-perfluorooctane sulfonamido) acetic acid	EPA 537	Group III Unregulated Contaminants	NELAP	10/19/2016
Perfluorobutane sulfonate (PFBS, perfluorobutane sulfonic acid)	EPA 537	Group III Unregulated Contaminants	NELAP	11/24/2014
Perfluorodecanoate (PFDA, perfluorodecanoic acid)	EPA 537	Group III Unregulated Contaminants	NELAP	11/24/2014
Perfluorododecanoate (PFDoA, perfluorododecanoic acid)	EPA 537	Group III Unregulated Contaminants	NELAP	11/24/2014
Perfluoroheptanoate (PFHpA, perfluoroheptanoic acid)	EPA 537	Group III Unregulated Contaminants	NELAP	11/24/2014
Perfluorohexane sulfonate (PFHxS, perfluorohexane sulfonic acid)	EPA 537	Group III Unregulated Contaminants	NELAP	11/24/2014
Perfluorohexanoate (PFHxA, perfluorohexanoic acid)	EPA 537	Group III Unregulated Contaminants	NELAP	11/24/2014
Perfluorononanoate (PFNA, perfluorononanoic acid)	EPA 537	Group III Unregulated Contaminants	NELAP	11/24/2014
Perfluorooctane sulfonate (PFOS, perfluorooctane sulfonic acid)	EPA 537	Group III Unregulated Contaminants	NELAP	11/24/2014
Perfluorooctanoate (PFOA, perfluorooctanoic acid)	EPA 537	Group III Unregulated Contaminants	NELAP	11/24/2014
Perfluorotetradecanoate (PFTeDA, perfluorotetradecanoic acid)	EPA 537	Group III Unregulated Contaminants	NELAP	11/24/2014
Perfluorotridecanoate (PFTriA, perfluorotridecanoic acid)	EPA 537	Group III Unregulated Contaminants	NELAP	11/24/2014
Perfluoroundecanoate (PFUnA, perfluoroundecanoic acid)	EPA 537	Group III Unregulated Contaminants	NELAP	11/24/2014

**Laboratory Scope of Accreditation**

Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,1,1,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,1,1-Trichloroethane	EPA 624	Volatile Organics	NELAP	4/10/2002
1,1,1-Trichloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,1,2,2-Tetrachloroethane	EPA 624	Volatile Organics	NELAP	4/10/2002
1,1,2,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260	Volatile Organics	NELAP	11/24/2014
1,1,2-Trichloroethane	EPA 624	Volatile Organics	NELAP	4/10/2002
1,1,2-Trichloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,1-Dichloroethane	EPA 624	Volatile Organics	NELAP	4/10/2002
1,1-Dichloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,1-Dichloroethylene	EPA 624	Volatile Organics	NELAP	4/10/2002
1,1-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,1-Dichloropropene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2,3-Trichlorobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2,3-Trichloropropane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2,4,5-Tetrachlorobenzene	EPA 8270	Extractable Organics	NELAP	8/1/2008
1,2,4-Trichlorobenzene	EPA 625	Extractable Organics	NELAP	4/10/2002
1,2,4-Trichlorobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2,4-Trichlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,2,4-Trimethylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2-Dibromo-3-chloropropane (DBCP)	EPA 504.1	Volatile Organics	NELAP	6/20/2007
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8011	Volatile Organics	NELAP	7/1/2003
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 504.1	Volatile Organics	NELAP	6/20/2007
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8011	Volatile Organics	NELAP	7/1/2003
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2-Dichlorobenzene	EPA 602	Volatile Organics	NELAP	4/10/2002
1,2-Dichlorobenzene	EPA 624	Volatile Organics	NELAP	4/10/2002
1,2-Dichlorobenzene	EPA 625	Extractable Organics	NELAP	4/10/2002
1,2-Dichlorobenzene	EPA 8021	Volatile Organics	NELAP	7/1/2003
1,2-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,2-Dichloroethane	EPA 624	Volatile Organics	NELAP	4/10/2002
1,2-Dichloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2-Dichloropropane	EPA 624	Volatile Organics	NELAP	4/10/2002
1,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	7/1/2003

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 7/1/2017**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,2-Diphenylhydrazine	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,3,5-Trimethylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,3,5-Trinitrobenzene (1,3,5-TNB)	EPA 8270	Extractable Organics	NELAP	3/25/2010
1,3,5-Trinitrobenzene (1,3,5-TNB)	EPA 8330	Extractable Organics	NELAP	7/1/2003
1,3-Dichlorobenzene	EPA 602	Volatile Organics	NELAP	4/10/2002
1,3-Dichlorobenzene	EPA 624	Volatile Organics	NELAP	4/10/2002
1,3-Dichlorobenzene	EPA 625	Extractable Organics	NELAP	4/10/2002
1,3-Dichlorobenzene	EPA 8021	Volatile Organics	NELAP	7/1/2003
1,3-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,3-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,3-Dichloropropane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,3-Dinitrobenzene (1,3-DNB)	EPA 8270	Extractable Organics	NELAP	3/25/2010
1,3-Dinitrobenzene (1,3-DNB)	EPA 8330	Extractable Organics	NELAP	7/1/2003
1,4-Dichlorobenzene	EPA 602	Volatile Organics	NELAP	4/10/2002
1,4-Dichlorobenzene	EPA 624	Volatile Organics	NELAP	4/10/2002
1,4-Dichlorobenzene	EPA 625	Extractable Organics	NELAP	4/10/2002
1,4-Dichlorobenzene	EPA 8021	Volatile Organics	NELAP	7/1/2003
1,4-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,4-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270	Extractable Organics	NELAP	7/30/2012
1,4-Naphthoquinone	EPA 8270	Extractable Organics	NELAP	8/1/2008
1,4-Phenylenediamine	EPA 8270	Extractable Organics	NELAP	8/1/2008
1-Chlorohexane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1-Chloronaphthalene	EPA 8270	Extractable Organics	NELAP	8/1/2008
1H, 1H, 2H, 2H-Perfluorodecane Sulfonate (8:2 Fluorotelomersulfonate, 8:2FTS)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
1H, 1H, 2H, 2H-Perfluorooctane Sulfonate (6:2 Fluorotelomersulfonate, 6:2FTS)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
1-Methylnaphthalene	EPA 610	Extractable Organics	NELAP	6/20/2007
1-Methylnaphthalene	EPA 625	Extractable Organics	NELAP	6/20/2007
1-Methylnaphthalene	EPA 8270	Extractable Organics	NELAP	6/20/2007
1-Methylnaphthalene	EPA 8310	Extractable Organics	NELAP	6/20/2007
1-Naphthylamine	EPA 8270	Extractable Organics	NELAP	8/1/2008
2-(N-Ethyl-perfluorooctane sulfonamido) acetic acid	ALS MS 014	Volatile Organics	NELAP	3/22/2016
2-(N-Methyl-perfluorooctane sulfonamido) acetic acid	ALS MS 014	Volatile Organics	NELAP	3/22/2016
2,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	7/1/2003

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Issue Date: 7/1/2017**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

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Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
2,2'-Oxybis(1-chloropropane),bis(2-Chloro-1-methylethyl)ether (fka bis(2-Chloroisopropyl) ether	EPA 625	Extractable Organics	NELAP	4/10/2002
2,2'-Oxybis(1-chloropropane),bis(2-Chloro-1-methylethyl)ether (fka bis(2-Chloroisopropyl) ether	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,3,4,6-Tetrachlorophenol	EPA 8270	Extractable Organics	NELAP	2/5/2009
2,4,5-T	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
2,4,5-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4,6-Trichlorophenol	EPA 625	Extractable Organics	NELAP	4/10/2002
2,4,6-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4,6-Trinitrotoluene (2,4,6-TNT)	EPA 8330	Extractable Organics	NELAP	7/1/2003
2,4-D	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
2,4-DB	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
2,4-Dichlorophenol	EPA 625	Extractable Organics	NELAP	4/10/2002
2,4-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4-Dimethylphenol	EPA 625	Extractable Organics	NELAP	4/10/2002
2,4-Dimethylphenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4-Dinitrophenol	EPA 625	Extractable Organics	NELAP	4/10/2002
2,4-Dinitrophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4-Dinitrotoluene (2,4-DNT)	EPA 625	Extractable Organics	NELAP	4/10/2002
2,4-Dinitrotoluene (2,4-DNT)	EPA 8091	Extractable Organics	NELAP	3/1/2005
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4-Dinitrotoluene (2,4-DNT)	EPA 8330	Extractable Organics	NELAP	3/1/2005
2,6-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	8/1/2008
2,6-Dinitrotoluene (2,6-DNT)	EPA 625	Extractable Organics	NELAP	4/10/2002
2,6-Dinitrotoluene (2,6-DNT)	EPA 8091	Extractable Organics	NELAP	3/1/2005
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,6-Dinitrotoluene (2,6-DNT)	EPA 8330	Extractable Organics	NELAP	3/1/2005
2-Acetylaminofluorene	EPA 8270	Extractable Organics	NELAP	8/1/2008
2-Amino-4,6-dinitrotoluene (2-am-dnt)	EPA 8330	Extractable Organics	NELAP	7/1/2003
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260	Volatile Organics	NELAP	7/1/2003
2-Chloroethyl vinyl ether	EPA 624	Volatile Organics	NELAP	4/10/2002
2-Chloroethyl vinyl ether	EPA 8260	Volatile Organics	NELAP	7/1/2003
2-Chloronaphthalene	EPA 625	Extractable Organics	NELAP	4/10/2002
2-Chloronaphthalene	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Chlorophenol	EPA 625	Extractable Organics	NELAP	4/10/2002
2-Chlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	7/1/2003

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 7/1/2017**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
2-Hexanone	EPA 8260	Volatile Organics	NELAP	7/1/2003
2-Methyl-4,6-dinitrophenol	EPA 625	Extractable Organics	NELAP	4/10/2002
2-Methyl-4,6-dinitrophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Methylnaphthalene	EPA 610	Extractable Organics	NELAP	6/7/2011
2-Methylnaphthalene	EPA 625	Extractable Organics	NELAP	6/20/2007
2-Methylnaphthalene	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Methylnaphthalene	EPA 8310	Extractable Organics	NELAP	6/20/2007
2-Methylphenol (o-Cresol)	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Naphthylamine	EPA 8270	Extractable Organics	NELAP	8/1/2008
2-Nitroaniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Nitrophenol	EPA 625	Extractable Organics	NELAP	4/10/2002
2-Nitrophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Nitropropane	EPA 8260	Volatile Organics	NELAP	7/1/2003
2-Nitrotoluene	EPA 8330	Extractable Organics	NELAP	7/1/2003
2-Picoline (2-Methylpyridine)	EPA 8270	Extractable Organics	NELAP	8/1/2008
3,3'-Dichlorobenzidine	EPA 625	Extractable Organics	NELAP	4/10/2002
3,3'-Dichlorobenzidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
3,3-Dimethyl-1-butanol	ALS MS 005	Volatile Organics	NELAP	4/3/2009
3,3'-Dimethylbenzidine	EPA 8270	Extractable Organics	NELAP	8/1/2008
3,5-Dinitroaniline	EPA 8330	Extractable Organics	NELAP	8/1/2008
3-Methylcholanthrene	EPA 8270	Extractable Organics	NELAP	8/1/2008
3-Methylphenol (m-Cresol)	EPA 8270	Extractable Organics	NELAP	2/5/2009
3-Nitroaniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
3-Nitrotoluene	EPA 8330	Extractable Organics	NELAP	7/1/2003
4,4'-DDD	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
4,4'-DDD	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
4,4'-DDE	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
4,4'-DDE	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
4,4'-DDT	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
4,4'-DDT	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
4-Amino-2,6-dinitrotoluene (4-am-dnt)	EPA 8330	Extractable Organics	NELAP	7/1/2003
4-Aminobiphenyl	EPA 8270	Extractable Organics	NELAP	8/1/2008
4-Bromophenyl phenyl ether	EPA 625	Extractable Organics	NELAP	4/10/2002
4-Bromophenyl phenyl ether	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Chloro-3-methylphenol	EPA 625	Extractable Organics	NELAP	4/10/2002
4-Chloro-3-methylphenol	EPA 8270	Extractable Organics	NELAP	7/1/2003

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 7/1/2017**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

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Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
4-Chloroaniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Chlorophenyl phenylether	EPA 625	Extractable Organics	NELAP	4/10/2002
4-Chlorophenyl phenylether	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	7/1/2003
4-Dimethyl aminoazobenzene	EPA 8270	Extractable Organics	NELAP	8/1/2008
4-Methyl-2-pentanone (MIBK)	EPA 8260	Volatile Organics	NELAP	7/1/2003
4-Methylphenol (p-Cresol)	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Nitroaniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Nitrophenol	EPA 625	Extractable Organics	NELAP	4/10/2002
4-Nitrophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Nitrotoluene	EPA 8330	Extractable Organics	NELAP	7/1/2003
5-Nitro-o-toluidine	EPA 8270	Extractable Organics	NELAP	8/1/2008
6-Methylchrysene	EPA 8270	Extractable Organics	NELAP	7/30/2012
7,12-Dimethylbenz(a) anthracene	EPA 8270	Extractable Organics	NELAP	8/1/2008
a,a-Dimethylphenethylamine	EPA 8270	Extractable Organics	NELAP	8/1/2008
Acenaphthene	EPA 610	Extractable Organics	NELAP	4/10/2002
Acenaphthene	EPA 625	Extractable Organics	NELAP	4/10/2002
Acenaphthene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Acenaphthene	EPA 8310	Extractable Organics	NELAP	7/1/2003
Acenaphthylene	EPA 610	Extractable Organics	NELAP	4/10/2002
Acenaphthylene	EPA 625	Extractable Organics	NELAP	4/10/2002
Acenaphthylene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Acenaphthylene	EPA 8310	Extractable Organics	NELAP	7/1/2003
Acetone	EPA 8260	Volatile Organics	NELAP	7/1/2003
Acetonitrile	EPA 8260	Volatile Organics	NELAP	4/1/2005
Acetophenone	EPA 8270	Extractable Organics	NELAP	7/1/2003
Acetylene	RSK-175	Volatile Organics	NELAP	4/7/2010
Acrolein (Propenal)	EPA 624	Volatile Organics	NELAP	2/3/2003
Acrolein (Propenal)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Acrylamide	EPA 8316	Volatile Organics	NELAP	10/7/2011
Acrylonitrile	EPA 624	Volatile Organics	NELAP	2/3/2003
Acrylonitrile	EPA 8260	Volatile Organics	NELAP	7/1/2003
Aldrin	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aldrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Alkalinity as CaCO3	SM 2320 B	General Chemistry	NELAP	11/19/2009
Allyl chloride (3-Chloropropene)	EPA 8260	Volatile Organics	NELAP	4/1/2005

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Issue Date: 7/1/2017**Expiration Date: 6/30/2018**

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Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
alpha-Chlordane	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/1/2005
Aluminum	EPA 200.7	Metals	NELAP	4/10/2002
Aluminum	EPA 200.8	Metals	NELAP	11/24/2014
Aluminum	EPA 6010	Metals	NELAP	7/1/2003
Aluminum	EPA 6020	Metals	NELAP	11/24/2014
Ammonia as N	EPA 350.1	General Chemistry	NELAP	6/20/2007
Aniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
Anthracene	EPA 610	Extractable Organics	NELAP	4/10/2002
Anthracene	EPA 625	Extractable Organics	NELAP	4/10/2002
Anthracene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Anthracene	EPA 8310	Extractable Organics	NELAP	7/1/2003
Antimony	EPA 200.7	Metals	NELAP	4/10/2002
Antimony	EPA 200.8	Metals	NELAP	11/24/2014
Antimony	EPA 6010	Metals	NELAP	7/1/2003
Antimony	EPA 6020	Metals	NELAP	11/24/2014
Aramite	EPA 8270	Extractable Organics	NELAP	8/1/2008
Aroclor-1016 (PCB-1016)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1016 (PCB-1016)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1221 (PCB-1221)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1221 (PCB-1221)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1232 (PCB-1232)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1232 (PCB-1232)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1242 (PCB-1242)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1242 (PCB-1242)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1248 (PCB-1248)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1248 (PCB-1248)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1254 (PCB-1254)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1254 (PCB-1254)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1260 (PCB-1260)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1260 (PCB-1260)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aroclor-1262 (PCB-1262)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	5/20/2013
Aroclor-1268 (PCB-1268)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	5/20/2013
Arsenic	EPA 200.7	Metals	NELAP	4/10/2002
Arsenic	EPA 200.8	Metals	NELAP	11/24/2014

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Issue Date: 7/1/2017**Expiration Date: 6/30/2018**

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Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Arsenic	EPA 6010	Metals	NELAP	4/10/2002
Arsenic	EPA 6020	Metals	NELAP	11/24/2014
Atrazine	EPA 8270	Extractable Organics	NELAP	7/30/2012
Azinphos-methyl (Guthion)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Barium	EPA 200.7	Metals	NELAP	4/10/2002
Barium	EPA 200.8	Metals	NELAP	11/24/2014
Barium	EPA 6010	Metals	NELAP	7/1/2003
Barium	EPA 6020	Metals	NELAP	11/24/2014
Benzaldehyde	EPA 8270	Extractable Organics	NELAP	7/30/2012
Benzene	EPA 602	Volatile Organics	NELAP	4/10/2002
Benzene	EPA 624	Volatile Organics	NELAP	4/10/2002
Benzene	EPA 8021	Volatile Organics	NELAP	7/1/2003
Benzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Benzidine	EPA 625	Extractable Organics	NELAP	4/10/2002
Benzidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzo(a)anthracene	EPA 610	Extractable Organics	NELAP	4/10/2002
Benzo(a)anthracene	EPA 625	Extractable Organics	NELAP	4/10/2002
Benzo(a)anthracene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzo(a)anthracene	EPA 8310	Extractable Organics	NELAP	7/1/2003
Benzo(a)pyrene	EPA 610	Extractable Organics	NELAP	4/10/2002
Benzo(a)pyrene	EPA 625	Extractable Organics	NELAP	4/10/2002
Benzo(a)pyrene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzo(a)pyrene	EPA 8310	Extractable Organics	NELAP	7/1/2003
Benzo(b)fluoranthene	EPA 610	Extractable Organics	NELAP	4/10/2002
Benzo(b)fluoranthene	EPA 625	Extractable Organics	NELAP	4/10/2002
Benzo(b)fluoranthene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzo(b)fluoranthene	EPA 8310	Extractable Organics	NELAP	7/1/2003
Benzo(g,h,i)perylene	EPA 610	Extractable Organics	NELAP	4/10/2002
Benzo(g,h,i)perylene	EPA 625	Extractable Organics	NELAP	4/10/2002
Benzo(g,h,i)perylene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzo(g,h,i)perylene	EPA 8310	Extractable Organics	NELAP	7/1/2003
Benzo(k)fluoranthene	EPA 610	Extractable Organics	NELAP	4/10/2002
Benzo(k)fluoranthene	EPA 625	Extractable Organics	NELAP	4/10/2002
Benzo(k)fluoranthene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzo(k)fluoranthene	EPA 8310	Extractable Organics	NELAP	7/1/2003
Benzoic acid	EPA 8270	Extractable Organics	NELAP	7/1/2003

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State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Benzyl alcohol	EPA 8270	Extractable Organics	NELAP	7/1/2003
Beryllium	EPA 200.7	Metals	NELAP	4/10/2002
Beryllium	EPA 200.8	Metals	NELAP	11/24/2014
Beryllium	EPA 6010	Metals	NELAP	7/1/2003
Beryllium	EPA 6020	Metals	NELAP	11/24/2014
beta-BHC (beta-Hexachlorocyclohexane)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
beta-BHC (beta-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Biochemical oxygen demand	SM 5210 B	General Chemistry	NELAP	6/20/2007
Biphenyl	EPA 8270	Extractable Organics	NELAP	7/30/2012
bis(2-Chloroethoxy)methane	EPA 625	Extractable Organics	NELAP	4/10/2002
bis(2-Chloroethoxy)methane	EPA 8270	Extractable Organics	NELAP	7/1/2003
bis(2-Chloroethyl) ether	EPA 625	Extractable Organics	NELAP	4/10/2002
bis(2-Chloroethyl) ether	EPA 8270	Extractable Organics	NELAP	7/1/2003
bis(2-Ethylhexyl) phthalate (DEHP)	EPA 625	Extractable Organics	NELAP	4/10/2002
bis(2-Ethylhexyl) phthalate (DEHP)	EPA 8270	Extractable Organics	NELAP	7/1/2003
Bolstar (Sulprofos)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Bromide	EPA 300.0	General Chemistry	NELAP	4/10/2002
Bromide	EPA 9056	General Chemistry	NELAP	7/1/2003
Bromobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Bromochloromethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Bromodichloromethane	EPA 624	Volatile Organics	NELAP	4/10/2002
Bromodichloromethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Bromoform	EPA 624	Volatile Organics	NELAP	4/10/2002
Bromoform	EPA 8260	Volatile Organics	NELAP	7/1/2003
Butyl benzyl phthalate	EPA 625	Extractable Organics	NELAP	4/10/2002
Butyl benzyl phthalate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Cadmium	EPA 200.7	Metals	NELAP	4/10/2002
Cadmium	EPA 200.8	Metals	NELAP	11/24/2014
Cadmium	EPA 6010	Metals	NELAP	4/10/2002
Cadmium	EPA 6020	Metals	NELAP	11/24/2014
Calcium	EPA 200.7	Metals	NELAP	4/10/2002
Calcium	EPA 200.8	Metals	NELAP	11/24/2014
Calcium	EPA 6010	Metals	NELAP	7/1/2003
Calcium	EPA 6020	Metals	NELAP	11/24/2014
Caprolactam	EPA 8270	Extractable Organics	NELAP	7/30/2012
Carbazole	EPA 8270	Extractable Organics	NELAP	7/1/2003

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Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Carbon disulfide	EPA 8260	Volatile Organics	NELAP	7/1/2003
Carbon tetrachloride	EPA 624	Volatile Organics	NELAP	4/10/2002
Carbon tetrachloride	EPA 8260	Volatile Organics	NELAP	7/1/2003
Carbonaceous BOD (CBOD)	SM 5210 B	General Chemistry	NELAP	4/10/2002
Carbophenothion	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Chemical oxygen demand	SM 5220 C	General Chemistry	NELAP	6/20/2007
Chlordane (tech.)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Chlordane (tech.)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Chloride	EPA 300.0	General Chemistry	NELAP	4/10/2002
Chloride	EPA 9056	General Chemistry	NELAP	7/1/2003
Chlorobenzene	EPA 602	Volatile Organics	NELAP	4/10/2002
Chlorobenzene	EPA 624	Volatile Organics	NELAP	4/10/2002
Chlorobenzene	EPA 8021	Volatile Organics	NELAP	7/1/2003
Chlorobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Chlorobenzilate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Chloroethane	EPA 624	Volatile Organics	NELAP	4/10/2002
Chloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Chloroform	EPA 624	Volatile Organics	NELAP	4/10/2002
Chloroform	EPA 8260	Volatile Organics	NELAP	7/1/2003
Chloroprene	EPA 8260	Volatile Organics	NELAP	4/1/2005
Chlorpyrifos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Chromium	EPA 200.7	Metals	NELAP	4/10/2002
Chromium	EPA 200.8	Metals	NELAP	11/24/2014
Chromium	EPA 6010	Metals	NELAP	4/10/2002
Chromium	EPA 6020	Metals	NELAP	11/24/2014
Chromium VI	EPA 7196	Metals	NELAP	7/1/2003
Chrysene	EPA 610	Extractable Organics	NELAP	4/10/2002
Chrysene	EPA 625	Extractable Organics	NELAP	4/10/2002
Chrysene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Chrysene	EPA 8310	Extractable Organics	NELAP	7/1/2003
cis-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	7/1/2003
cis-1,3-Dichloropropene	EPA 624	Volatile Organics	NELAP	4/10/2002
cis-1,3-Dichloropropene	EPA 8260	Volatile Organics	NELAP	7/1/2003
cis-1,4-Dichloro-2-butene	EPA 8260	Volatile Organics	NELAP	4/3/2009
Cobalt	EPA 200.7	Metals	NELAP	4/10/2002
Cobalt	EPA 200.8	Metals	NELAP	11/24/2014

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State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Cobalt	EPA 6010	Metals	NELAP	7/1/2003
Cobalt	EPA 6020	Metals	NELAP	11/24/2014
Color	SM 2120 B	General Chemistry	NELAP	6/20/2007
Conductivity	EPA 120.1	General Chemistry	NELAP	5/2/2005
Copper	EPA 200.7	Metals	NELAP	4/10/2002
Copper	EPA 200.8	Metals	NELAP	11/24/2014
Copper	EPA 6010	Metals	NELAP	4/10/2002
Copper	EPA 6020	Metals	NELAP	11/24/2014
Coumaphos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Dalapon	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
delta-BHC	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
delta-BHC	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Demeton-o	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Demeton-s	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Diallate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Diazinon	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Dibenz(a,h)acridine	EPA 8270	Extractable Organics	NELAP	7/30/2012
Dibenz(a,h)anthracene	EPA 610	Extractable Organics	NELAP	4/10/2002
Dibenz(a,h)anthracene	EPA 625	Extractable Organics	NELAP	4/10/2002
Dibenz(a,h)anthracene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Dibenz(a,h)anthracene	EPA 8310	Extractable Organics	NELAP	7/1/2003
Dibenz(a,j)acridine	EPA 8270	Extractable Organics	NELAP	8/1/2008
Dibenzofuran	EPA 8270	Extractable Organics	NELAP	7/1/2003
Dibromochloromethane	EPA 624	Volatile Organics	NELAP	4/10/2002
Dibromochloromethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Dibromomethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Dicamba	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Dichlorodifluoromethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Dichloroprop (Dichlorprop)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Dichlorovos (DDVP, Dichlorvos)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Dieldrin	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Dieldrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Diesel range organics (DRO)	EPA 8015	Extractable Organics	NELAP	7/1/2003
Diesel range organics (DRO)	MADEP-EPH (MA-EPH)	Extractable Organics	NELAP	7/1/2003
Diesel range organics (DRO)	OA-2	Extractable Organics	NELAP	4/1/2005
Diesel range organics (DRO)	TN-EPH	Extractable Organics	NELAP	6/20/2007

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Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Diesel range organics (DRO)	WI-DRO	Extractable Organics	NELAP	4/1/2005
Diethyl ether	EPA 8260	Volatile Organics	NELAP	6/20/2007
Diethyl phthalate	EPA 625	Extractable Organics	NELAP	4/10/2002
Diethyl phthalate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Di-isopropylether (DIPE)	EPA 8260	Volatile Organics	NELAP	6/20/2007
Dimethoate	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Dimethoate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Dimethyl phthalate	EPA 625	Extractable Organics	NELAP	4/10/2002
Dimethyl phthalate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Di-n-butyl phthalate	EPA 625	Extractable Organics	NELAP	4/10/2002
Di-n-butyl phthalate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Di-n-octyl phthalate	EPA 625	Extractable Organics	NELAP	4/10/2002
Di-n-octyl phthalate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Diphenyl ether	EPA 8270	Extractable Organics	NELAP	7/30/2012
Dissolved organic carbon (DOC)	EPA 9060	General Chemistry	NELAP	7/30/2012
Dissolved organic carbon (DOC)	SM 5310 B	General Chemistry	NELAP	7/30/2012
Disulfoton	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Disulfoton	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	3/25/2010
Endosulfan I	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Endosulfan I	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Endosulfan II	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Endosulfan II	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Endosulfan sulfate	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Endosulfan sulfate	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Endrin	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Endrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Endrin aldehyde	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Endrin aldehyde	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Endrin ketone	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
EPN	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Ethane	RSK-175	Volatile Organics	NELAP	4/1/2005
Ethanol	EPA 8015	Volatile Organics	NELAP	4/1/2005
Ethanol	EPA 8260	Volatile Organics	NELAP	6/20/2007
Ethion	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Ethoprop	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007

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Issue Date: 7/1/2017**Expiration Date: 6/30/2018**

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State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811****Matrix: Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Ethyl acetate	EPA 8260	Volatile Organics	NELAP	6/20/2007
Ethyl methacrylate	EPA 8260	Volatile Organics	NELAP	4/1/2005
Ethyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	8/1/2008
Ethylbenzene	EPA 602	Volatile Organics	NELAP	4/10/2002
Ethylbenzene	EPA 624	Volatile Organics	NELAP	4/10/2002
Ethylbenzene	EPA 8021	Volatile Organics	NELAP	7/1/2003
Ethylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Ethylene	RSK-175	Volatile Organics	NELAP	4/1/2005
Ethyl-t-butylether (ETBE)	EPA 8260	Volatile Organics	NELAP	6/20/2007
Famphur	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Famphur	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Fensulfothion	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Fenthion	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Fluoranthene	EPA 610	Extractable Organics	NELAP	4/10/2002
Fluoranthene	EPA 625	Extractable Organics	NELAP	4/10/2002
Fluoranthene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Fluoranthene	EPA 8310	Extractable Organics	NELAP	7/1/2003
Fluorene	EPA 610	Extractable Organics	NELAP	4/10/2002
Fluorene	EPA 625	Extractable Organics	NELAP	4/10/2002
Fluorene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Fluorene	EPA 8310	Extractable Organics	NELAP	7/1/2003
Fluoride	EPA 300.0	General Chemistry	NELAP	4/10/2002
Fluoride	EPA 9056	General Chemistry	NELAP	7/1/2003
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
gamma-Chlordane	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/1/2005
Gasoline range organics (GRO)	EPA 8015	Extractable Organics	NELAP	7/1/2003
Gasoline range organics (GRO)	MADEP-VPH (MA-VPH)	Extractable Organics	NELAP	7/1/2003
Gasoline range organics (GRO)	OA-1	Extractable Organics	NELAP	4/1/2005
Gasoline range organics (GRO)	TN-GRO	Extractable Organics	NELAP	4/1/2005
Hardness	SM 2340 B	Metals	NELAP	1/24/2003
Heptachlor	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Heptachlor	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Heptachlor epoxide	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Heptachlor epoxide	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003

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Issue Date: 7/1/2017**Expiration Date: 6/30/2018**

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Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Hexachlorobenzene	EPA 625	Extractable Organics	NELAP	4/10/2002
Hexachlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Hexachlorobutadiene	EPA 625	Extractable Organics	NELAP	4/10/2002
Hexachlorobutadiene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Hexachlorobutadiene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Hexachlorocyclopentadiene	EPA 625	Extractable Organics	NELAP	4/10/2002
Hexachlorocyclopentadiene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Hexachloroethane	EPA 625	Extractable Organics	NELAP	4/10/2002
Hexachloroethane	EPA 8270	Extractable Organics	NELAP	7/1/2003
Hexachlorophene	EPA 8270	Extractable Organics	NELAP	8/1/2008
Hexachloropropene	EPA 8270	Extractable Organics	NELAP	8/1/2008
Ignitability	EPA 1010	General Chemistry	NELAP	7/1/2003
Indene	EPA 8270	Extractable Organics	NELAP	7/30/2012
Indeno(1,2,3-cd)pyrene	EPA 610	Extractable Organics	NELAP	4/10/2002
Indeno(1,2,3-cd)pyrene	EPA 625	Extractable Organics	NELAP	4/10/2002
Indeno(1,2,3-cd)pyrene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Indeno(1,2,3-cd)pyrene	EPA 8310	Extractable Organics	NELAP	7/1/2003
Iodomethane (Methyl iodide)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Iron	EPA 200.7	Metals	NELAP	4/10/2002
Iron	EPA 200.8	Metals	NELAP	11/24/2014
Iron	EPA 6010	Metals	NELAP	7/1/2003
Iron	EPA 6020	Metals	NELAP	11/24/2014
Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8015	Volatile Organics	NELAP	4/1/2005
Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8260	Volatile Organics	NELAP	4/1/2005
Isodrin	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Isophorone	EPA 625	Extractable Organics	NELAP	4/10/2002
Isophorone	EPA 8270	Extractable Organics	NELAP	7/1/2003
Isopropyl alcohol (2-Propanol)	EPA 8015	Volatile Organics	NELAP	4/1/2005
Isopropyl alcohol (2-Propanol)	EPA 8260	Volatile Organics	NELAP	10/19/2016
Isopropylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Isosafrole	EPA 8270	Extractable Organics	NELAP	8/1/2008
Kepone	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Kjeldahl nitrogen - total	EPA 351.2	General Chemistry	NELAP	6/20/2007
Lead	EPA 200.7	Metals	NELAP	4/10/2002
Lead	EPA 200.8	Metals	NELAP	11/24/2014
Lead	EPA 6010	Metals	NELAP	4/10/2002

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State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Lead	EPA 6020	Metals	NELAP	11/24/2014
Magnesium	EPA 200.7	Metals	NELAP	4/10/2002
Magnesium	EPA 200.8	Metals	NELAP	11/24/2014
Magnesium	EPA 6010	Metals	NELAP	7/1/2003
Magnesium	EPA 6020	Metals	NELAP	11/24/2014
Malathion	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Manganese	EPA 200.7	Metals	NELAP	4/10/2002
Manganese	EPA 200.8	Metals	NELAP	11/24/2014
Manganese	EPA 6010	Metals	NELAP	5/21/2007
Manganese	EPA 6020	Metals	NELAP	11/24/2014
MCPA	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
MCPP	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Mercury	EPA 245.1	Metals	NELAP	4/10/2002
Mercury	EPA 7470	Metals	NELAP	4/10/2002
Merphos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Methacrylonitrile	EPA 8260	Volatile Organics	NELAP	4/1/2005
Methane	RSK-175	Volatile Organics	NELAP	4/1/2005
Methanol	EPA 8015	Volatile Organics	NELAP	4/1/2005
Methapyrilene	EPA 8270	Extractable Organics	NELAP	8/1/2008
Methoxychlor	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Methyl bromide (Bromomethane)	EPA 624	Volatile Organics	NELAP	4/10/2002
Methyl bromide (Bromomethane)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Methyl chloride (Chloromethane)	EPA 624	Volatile Organics	NELAP	4/10/2002
Methyl chloride (Chloromethane)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Methyl methacrylate	EPA 8260	Volatile Organics	NELAP	4/1/2005
Methyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	8/1/2008
Methyl parathion (Parathion, methyl)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Methyl parathion (Parathion, methyl)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Methyl tert-butyl ether (MTBE)	EPA 602	Volatile Organics	NELAP	6/20/2007
Methyl tert-butyl ether (MTBE)	EPA 624	Volatile Organics	NELAP	6/20/2007
Methyl tert-butyl ether (MTBE)	EPA 8021	Volatile Organics	NELAP	7/1/2003
Methyl tert-butyl ether (MTBE)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Methylene chloride	EPA 624	Volatile Organics	NELAP	4/10/2002
Methylene chloride	EPA 8260	Volatile Organics	NELAP	7/1/2003
Mevinphos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Molybdenum	EPA 200.7	Metals	NELAP	4/10/2002

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State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Molybdenum	EPA 200.8	Metals	NELAP	11/24/2014
Molybdenum	EPA 6010	Metals	NELAP	4/10/2002
Molybdenum	EPA 6020	Metals	NELAP	11/24/2014
Monocrotophos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Naled	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Naphthalene	EPA 610	Extractable Organics	NELAP	4/10/2002
Naphthalene	EPA 625	Extractable Organics	NELAP	4/10/2002
Naphthalene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Naphthalene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Naphthalene	EPA 8310	Extractable Organics	NELAP	7/1/2003
n-Butyl alcohol	EPA 8015	Volatile Organics	NELAP	4/1/2005
n-Butyl alcohol	EPA 8260	Volatile Organics	NELAP	10/19/2016
n-Butylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
N-Ethylperfluorooctanesulfonamide (EtFOSA)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
N-ethylperfluorooctanesulfonamidoethanol (EtFOSE)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Nickel	EPA 200.7	Metals	NELAP	4/10/2002
Nickel	EPA 200.8	Metals	NELAP	11/24/2014
Nickel	EPA 6010	Metals	NELAP	4/10/2002
Nickel	EPA 6020	Metals	NELAP	11/24/2014
Nitrate	EPA 9056	General Chemistry	NELAP	7/1/2003
Nitrate as N	EPA 300.0	General Chemistry	NELAP	4/10/2002
Nitrate as N	EPA 353.2	General Chemistry	NELAP	7/30/2012
Nitrate-nitrite	EPA 300.0	General Chemistry	NELAP	4/10/2002
Nitrate-nitrite	EPA 353.2	General Chemistry	NELAP	7/30/2012
Nitrite	EPA 9056	General Chemistry	NELAP	7/1/2003
Nitrite as N	EPA 300.0	General Chemistry	NELAP	4/10/2002
Nitrite as N	EPA 353.2	General Chemistry	NELAP	7/30/2012
Nitrobenzene	EPA 625	Extractable Organics	NELAP	4/10/2002
Nitrobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Nitrobenzene	EPA 8330	Extractable Organics	NELAP	7/1/2003
Nitroglycerin	EPA 8330	Extractable Organics	NELAP	8/1/2008
Nitroglycerin	EPA 8332	Extractable Organics	NELAP	7/1/2003
Nitroquinoline-1-oxide	EPA 8270	Extractable Organics	NELAP	8/1/2008
N-Methylperfluorooctanesulfonamide (MeFOSA)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
N-Methylperfluorooctanesulfonamidoethanol (MeFOSA)	ALS MS 014	Volatile Organics	NELAP	3/22/2016

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Analyte	Method/Tech	Category	Certification Type	Effective Date
n-Nitrosodiethylamine	EPA 8270	Extractable Organics	NELAP	8/1/2008
n-Nitrosodimethylamine	EPA 625	Extractable Organics	NELAP	4/10/2002
n-Nitrosodimethylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitroso-di-n-butylamine	EPA 8270	Extractable Organics	NELAP	8/1/2008
n-Nitrosodi-n-propylamine	EPA 625	Extractable Organics	NELAP	4/10/2002
n-Nitrosodi-n-propylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosodiphenylamine	EPA 625	Extractable Organics	NELAP	4/10/2002
n-Nitrosodiphenylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosodiphenylamine/Diphenylamine (analyte pair)	EPA 8270	Extractable Organics	NELAP	8/1/2008
n-Nitrosomethylethylamine	EPA 8270	Extractable Organics	NELAP	8/1/2008
n-Nitrosomorpholine	EPA 8270	Extractable Organics	NELAP	8/1/2008
n-Nitrosopiperidine	EPA 8270	Extractable Organics	NELAP	8/1/2008
n-Nitrosopyrrolidine	EPA 8270	Extractable Organics	NELAP	8/1/2008
n-Propanol	EPA 8015	Volatile Organics	NELAP	4/1/2005
n-Propylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
o,o,o-Triethyl phosphorothioate	ALS GC 032.2 (Rev. 07/08)	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
o,o,o-Triethyl phosphorothioate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	EPA 8330	Extractable Organics	NELAP	7/1/2003
Oil & Grease	EPA 1664A	General Chemistry	NELAP	9/8/2003
Oil & Grease	EPA 9070	General Chemistry	NELAP	7/1/2003
Organic nitrogen	EPA 351.2 - EPA 350.1	General Chemistry	NELAP	6/20/2007
Orthophosphate as P	EPA 365.3	General Chemistry	NELAP	4/10/2002
o-Toluidine	EPA 8270	Extractable Organics	NELAP	8/1/2008
Parathion, ethyl	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Parathion, ethyl	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	3/25/2010
p-Dioxane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Pentachlorobenzene	EPA 8270	Extractable Organics	NELAP	8/1/2008
Pentachloroethane	EPA 8260	Volatile Organics	NELAP	4/1/2005
Pentachloroethane	EPA 8270	Extractable Organics	NELAP	7/30/2012
Pentachloronitrobenzene (Quintozene)	EPA 8270	Extractable Organics	NELAP	8/1/2008
Pentachlorophenol	EPA 625	Extractable Organics	NELAP	4/10/2002
Pentachlorophenol	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Pentachlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
Pentaerythritoltetranitrate (PETN)	ALS GC-020	Extractable Organics	NELAP	8/25/2005
Pentaerythritoltetranitrate (PETN)	EPA 8330	Extractable Organics	NELAP	8/1/2008

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State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Perchlorate	EPA 6850	General Chemistry	NELAP	7/30/2012
Perfluorobutane sulfonate (PFBS, perfluorobutane sulfonic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorobutanoate (PFBA, perfluorobutyric acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorodecane sulfonate (PFDS, perfluorodecane sulfonic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorodecanoate (PFDA, perfluorodecanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorododecanoate (PFDoA, perfluorododecanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluoroheptanesulfonic Acid (PFHpS)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluoroheptanoate (PFHpA, perfluoroheptanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorohexane sulfonate (PFHxS, perfluorohexane sulfonic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorohexanoate (PFHxA, perfluorohexanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorononanoate (PFNA, perfluorononanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorooctane sulfonamide (PFOSA)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorooctane sulfonamide (PFOSA)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorooctane sulfonate (PFOS, perfluorooctane sulfonic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorooctanoate (PFOA, perfluorooctanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluoropentanoate (PFPeA, perfluoropentanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorotetradecanoate (PFTeDA, perfluorotetradecanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorotridecanoate (PFTriA, perfluorotridecanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluoroundecanoate (PFUnA, perfluoroundecanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
pH	EPA 9040	General Chemistry	NELAP	7/1/2003
pH	SM 4500-H+-B	General Chemistry	NELAP	6/20/2007
Phenacetin	EPA 8270	Extractable Organics	NELAP	8/1/2008
Phenanthrene	EPA 610	Extractable Organics	NELAP	4/10/2002
Phenanthrene	EPA 625	Extractable Organics	NELAP	4/10/2002
Phenanthrene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Phenanthrene	EPA 8310	Extractable Organics	NELAP	7/1/2003
Phenol	EPA 625	Extractable Organics	NELAP	4/10/2002
Phenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
Phorate	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Phorate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008

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Analyte	Method/Tech	Category	Certification Type	Effective Date
Phosphorus, total	EPA 365.3	General Chemistry	NELAP	5/21/2007
p-Isopropyltoluene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Potassium	EPA 200.7	Metals	NELAP	4/10/2002
Potassium	EPA 200.8	Metals	NELAP	11/24/2014
Potassium	EPA 6010	Metals	NELAP	7/1/2003
Potassium	EPA 6020	Metals	NELAP	11/24/2014
Pronamide (Kerb)	EPA 8270	Extractable Organics	NELAP	8/1/2008
Propane	RSK-175	Volatile Organics	NELAP	4/7/2010
Propionitrile (Ethyl cyanide)	EPA 8260	Volatile Organics	NELAP	4/1/2005
Pyrene	EPA 610	Extractable Organics	NELAP	4/10/2002
Pyrene	EPA 625	Extractable Organics	NELAP	4/10/2002
Pyrene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Pyrene	EPA 8310	Extractable Organics	NELAP	7/1/2003
Pyridine	EPA 8270	Extractable Organics	NELAP	7/1/2003
Quinoline	EPA 8270	Extractable Organics	NELAP	7/30/2012
RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine)	EPA 8330	Extractable Organics	NELAP	7/1/2003
Reactive cyanide	Sec. 7.3 SW-846	General Chemistry	NELAP	7/1/2003
Reactive sulfide	Sec. 7.3 SW-846	General Chemistry	NELAP	7/1/2003
Residue-filterable (TDS)	SM 2540 C	General Chemistry	NELAP	6/20/2007
Residue-nonfilterable (TSS)	SM 2540 D	General Chemistry	NELAP	6/20/2007
Residue-total	SM 2540 B	General Chemistry	NELAP	6/20/2007
Ronnel	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Safrole	EPA 8270	Extractable Organics	NELAP	8/1/2008
sec-Butylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Selenium	EPA 200.7	Metals	NELAP	4/10/2002
Selenium	EPA 200.8	Metals	NELAP	11/24/2014
Selenium	EPA 6010	Metals	NELAP	4/10/2002
Selenium	EPA 6020	Metals	NELAP	11/24/2014
Silver	EPA 200.7	Metals	NELAP	4/10/2002
Silver	EPA 200.8	Metals	NELAP	11/24/2014
Silver	EPA 6010	Metals	NELAP	7/1/2003
Silver	EPA 6020	Metals	NELAP	11/24/2014
Silvex (2,4,5-TP)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Simazine	EPA 8270	Extractable Organics	NELAP	7/30/2012
Sodium	EPA 200.7	Metals	NELAP	4/10/2002
Sodium	EPA 200.8	Metals	NELAP	11/24/2014

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**Laboratory Scope of Accreditation**

Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Sodium	EPA 6010	Metals	NELAP	7/1/2003
Sodium	EPA 6020	Metals	NELAP	11/24/2014
Stirofos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Strontium	EPA 200.7	Metals	NELAP	7/30/2012
Strontium	EPA 200.8	Metals	NELAP	11/24/2014
Strontium	EPA 6010	Metals	NELAP	7/30/2012
Strontium	EPA 6020	Metals	NELAP	10/19/2016
Styrene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Sulfate	EPA 300.0	General Chemistry	NELAP	4/10/2002
Sulfate	EPA 9056	General Chemistry	NELAP	7/1/2003
Sulfide	SM 4500-S F (19th/20th/21st Ed.)/TITR	General Chemistry	NELAP	6/20/2007
Sulfotep	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Sulfotep	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Surfactants - MBAS	SM 5540 C	General Chemistry	NELAP	6/20/2007
T-amylmethylether (TAME)	EPA 8260	Volatile Organics	NELAP	6/20/2007
tert-Amyl alcohol (2-methyl-2-butanol)	ALS MS 005	Volatile Organics	NELAP	4/3/2009
tert-Butyl alcohol (2-Methyl-2-propanol)	EPA 8260	Volatile Organics	NELAP	6/20/2007
tert-Butyl formate	ALS MS 005	Volatile Organics	NELAP	4/3/2009
tert-Butylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Tetrachloroethylene (Perchloroethylene)	EPA 624	Volatile Organics	NELAP	4/10/2002
Tetrachloroethylene (Perchloroethylene)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Tetraethyl pyrophosphate (TEPP)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Tetryl (methyl-2,4,6-trinitrophenylnitramine)	EPA 8330	Extractable Organics	NELAP	7/1/2003
Thallium	EPA 200.7	Metals	NELAP	4/10/2002
Thallium	EPA 200.8	Metals	NELAP	11/24/2014
Thallium	EPA 6010	Metals	NELAP	7/1/2003
Thallium	EPA 6020	Metals	NELAP	11/24/2014
Thionazin (Zinophos)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Thionazin (Zinophos)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Thiophenol (Benzenethiol)	EPA 8270	Extractable Organics	NELAP	4/7/2010
Tin	EPA 200.7	Metals	NELAP	4/1/2005
Tin	EPA 200.8	Metals	NELAP	11/24/2014
Tin	EPA 6010	Metals	NELAP	7/1/2003
Tin	EPA 6020	Metals	NELAP	11/24/2014
Titanium	EPA 200.7	Metals	NELAP	7/30/2012
Titanium	EPA 200.8	Metals	NELAP	11/24/2014

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Issue Date: 7/1/2017**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Titanium	EPA 6010	Metals	NELAP	7/30/2012
Titanium	EPA 6020	Metals	NELAP	11/24/2014
Tokuthion (Prothiophos)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Toluene	EPA 602	Volatile Organics	NELAP	4/10/2002
Toluene	EPA 624	Volatile Organics	NELAP	4/10/2002
Toluene	EPA 8021	Volatile Organics	NELAP	7/1/2003
Toluene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Total cyanide	EPA 335.4	General Chemistry	NELAP	6/20/2007
Total cyanide	EPA 9012	General Chemistry	NELAP	6/20/2007
Total nitrate-nitrite	EPA 9056	General Chemistry	NELAP	7/1/2003
Total organic carbon	EPA 9060	General Chemistry	NELAP	6/20/2007
Total organic carbon	SM 5310 B	General Chemistry	NELAP	6/20/2007
Total organic carbon	SM 5310 C	General Chemistry	NELAP	9/11/2002
Total Petroleum Hydrocarbons (TPH)	FL-PRO	Extractable Organics	NELAP	7/1/2003
Total Petroleum Hydrocarbons (TPH)	TX1005	Extractable Organics	NELAP	10/7/2011
Total phenolics	EPA 420.4	General Chemistry	NELAP	6/20/2007
Toxaphene (Chlorinated camphene)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Toxaphene (Chlorinated camphene)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
trans-1,2-Dichloroethylene	EPA 624	Volatile Organics	NELAP	4/10/2002
trans-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	7/1/2003
trans-1,3-Dichloropropene	EPA 624	Volatile Organics	NELAP	4/10/2002
trans-1,3-Dichloropropene	EPA 8260	Volatile Organics	NELAP	7/1/2003
trans-1,4-Dichloro-2-butene	EPA 8260	Volatile Organics	NELAP	4/1/2005
Trichloroethene (Trichloroethylene)	EPA 624	Volatile Organics	NELAP	4/10/2002
Trichloroethene (Trichloroethylene)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Trichlorofluoromethane	EPA 624	Volatile Organics	NELAP	4/10/2002
Trichlorofluoromethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Trichloronate	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Turbidity	EPA 180.1	General Chemistry	NELAP	4/10/2002
Un-ionized Ammonia	DEP SOP 10/03/83	General Chemistry	NELAP	2/3/2003
Vanadium	EPA 200.7	Metals	NELAP	4/10/2002
Vanadium	EPA 200.8	Metals	NELAP	11/24/2014
Vanadium	EPA 6010	Metals	NELAP	7/1/2003
Vanadium	EPA 6020	Metals	NELAP	11/24/2014
Vinyl acetate	EPA 8260	Volatile Organics	NELAP	7/1/2003
Vinyl chloride	EPA 624	Volatile Organics	NELAP	4/10/2002

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Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**

EPA Lab Code: **FL00946**

(407) 425-6700

E83510

SGS Accutest - Orlando

4405 Vineland Road, Suite C-15

Orlando, FL 32811

Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Vinyl chloride	EPA 8260	Volatile Organics	NELAP	7/1/2003
Xylene (total)	EPA 602	Volatile Organics	NELAP	2/3/2003
Xylene (total)	EPA 624	Volatile Organics	NELAP	9/8/2003
Xylene (total)	EPA 8021	Volatile Organics	NELAP	7/1/2003
Xylene (total)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Zinc	EPA 200.7	Metals	NELAP	4/10/2002
Zinc	EPA 200.8	Metals	NELAP	11/24/2014
Zinc	EPA 6010	Metals	NELAP	4/10/2002
Zinc	EPA 6020	Metals	NELAP	11/24/2014

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Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,1,1,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,1,1-Trichloroethane	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,1,2,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,1,2-Trichloroethane	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,1-Dichloroethane	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,1-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,1-Dichloropropene	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,2,3-Trichlorobenzene	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,2,3-Trichloropropane	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,2,4,5-Tetrachlorobenzene	EPA 8270	Extractable Organics	NELAP	8/1/2008
1,2,4-Trichlorobenzene	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,2,4-Trichlorobenzene	EPA 8270	Extractable Organics	NELAP	4/10/2002
1,2,4-Trimethylbenzene	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8011	Volatile Organics	NELAP	4/15/2010
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8011	Volatile Organics	NELAP	4/15/2010
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,2-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,2-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	4/10/2002
1,2-Dichloroethane	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,2-Diphenylhydrazine	EPA 8270	Extractable Organics	NELAP	4/10/2002
1,3,5-Trimethylbenzene	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,3,5-Trinitrobenzene (1,3,5-TNB)	EPA 8270	Extractable Organics	NELAP	4/15/2010
1,3,5-Trinitrobenzene (1,3,5-TNB)	EPA 8330	Extractable Organics	NELAP	4/10/2002
1,3-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,3-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	4/10/2002
1,3-Dichloropropane	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,3-Dinitrobenzene (1,3-DNB)	EPA 8270	Extractable Organics	NELAP	4/15/2010
1,3-Dinitrobenzene (1,3-DNB)	EPA 8330	Extractable Organics	NELAP	4/10/2002
1,4-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	4/10/2002
1,4-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	4/10/2002
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8270	Extractable Organics	NELAP	7/30/2012
1,4-Naphthoquinone	EPA 8270	Extractable Organics	NELAP	8/1/2008
1,4-Phenylenediamine	EPA 8270	Extractable Organics	NELAP	8/1/2008

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Issue Date: 7/1/2017**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
1-Chlorohexane	EPA 8260	Volatile Organics	NELAP	4/10/2002
1-Chloronaphthalene	EPA 8270	Extractable Organics	NELAP	8/1/2008
1H, 1H, 2H, 2H-Perfluorodecane Sulfonate (8:2 Fluorotelomersulfonate, 8:2FTS)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
1H, 1H, 2H, 2H-Perfluorooctane Sulfonate (6:2 Fluorotelomersulfonate, 6:2FTS)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
1-Methylnaphthalene	EPA 8270	Extractable Organics	NELAP	6/20/2007
1-Methylnaphthalene	EPA 8310	Extractable Organics	NELAP	6/20/2007
1-Naphthylamine	EPA 8270	Extractable Organics	NELAP	8/1/2008
2-(N-Ethyl-perfluorooctane sulfonamido) acetic acid	ALS MS 014	Volatile Organics	NELAP	3/22/2016
2-(N-Methyl-perfluorooctane sulfonamido) acetic acid	ALS MS 014	Volatile Organics	NELAP	3/22/2016
2,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	4/10/2002
2,2'-Oxybis(1-chloropropane),bis(2-Chloro-1-methylethyl)ether (fka bis(2-Chloroisopropyl) ether	EPA 8270	Extractable Organics	NELAP	4/10/2002
2,3,4,6-Tetrachlorophenol	EPA 8270	Extractable Organics	NELAP	2/5/2009
2,4,5-T	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
2,4,5-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	4/10/2002
2,4,6-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	4/10/2002
2,4,6-Trinitrotoluene (2,4,6-TNT)	EPA 8330	Extractable Organics	NELAP	4/10/2002
2,4-D	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
2,4-DB	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
2,4-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	4/10/2002
2,4-Dimethylphenol	EPA 8270	Extractable Organics	NELAP	4/10/2002
2,4-Dinitrophenol	EPA 8270	Extractable Organics	NELAP	4/10/2002
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270	Extractable Organics	NELAP	4/10/2002
2,4-Dinitrotoluene (2,4-DNT)	EPA 8330	Extractable Organics	NELAP	3/7/2005
2,6-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	8/1/2008
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270	Extractable Organics	NELAP	4/10/2002
2,6-Dinitrotoluene (2,6-DNT)	EPA 8330	Extractable Organics	NELAP	3/7/2005
2-Acetylaminofluorene	EPA 8270	Extractable Organics	NELAP	8/1/2008
2-Amino-4,6-dinitrotoluene (2-am-dnt)	EPA 8330	Extractable Organics	NELAP	4/10/2002
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260	Volatile Organics	NELAP	4/10/2002
2-Chloroethyl vinyl ether	EPA 8260	Volatile Organics	NELAP	4/10/2002
2-Chloronaphthalene	EPA 8270	Extractable Organics	NELAP	4/10/2002
2-Chlorophenol	EPA 8270	Extractable Organics	NELAP	4/10/2002
2-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	4/10/2002
2-Hexanone	EPA 8260	Volatile Organics	NELAP	4/10/2002

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Issue Date: 7/1/2017**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

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Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
2-Methyl-4,6-dinitrophenol	EPA 8270	Extractable Organics	NELAP	4/10/2002
2-Methylnaphthalene	EPA 8270	Extractable Organics	NELAP	4/15/2010
2-Methylnaphthalene	EPA 8310	Extractable Organics	NELAP	4/15/2010
2-Methylphenol (o-Cresol)	EPA 8270	Extractable Organics	NELAP	4/10/2002
2-Naphthylamine	EPA 8270	Extractable Organics	NELAP	8/1/2008
2-Nitroaniline	EPA 8270	Extractable Organics	NELAP	4/10/2002
2-Nitrophenol	EPA 8270	Extractable Organics	NELAP	4/10/2002
2-Nitropropane	EPA 8260	Volatile Organics	NELAP	4/10/2002
2-Nitrotoluene	EPA 8330	Extractable Organics	NELAP	4/10/2002
2-Picoline (2-Methylpyridine)	EPA 8270	Extractable Organics	NELAP	8/1/2008
3,3'-Dichlorobenzidine	EPA 8270	Extractable Organics	NELAP	4/10/2002
3,3'-Dimethylbenzidine	EPA 8270	Extractable Organics	NELAP	8/1/2008
3,5-Dinitroaniline	EPA 8330	Extractable Organics	NELAP	8/1/2008
3-Methylcholanthrene	EPA 8270	Extractable Organics	NELAP	8/1/2008
3-Methylphenol (m-Cresol)	EPA 8270	Extractable Organics	NELAP	2/5/2009
3-Nitroaniline	EPA 8270	Extractable Organics	NELAP	4/10/2002
3-Nitrotoluene	EPA 8330	Extractable Organics	NELAP	4/10/2002
4,4'-DDD	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
4,4'-DDE	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
4,4'-DDT	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
4-Amino-2,6-dinitrotoluene (4-am-dnt)	EPA 8330	Extractable Organics	NELAP	4/10/2002
4-Aminobiphenyl	EPA 8270	Extractable Organics	NELAP	8/1/2008
4-Bromophenyl phenyl ether	EPA 8270	Extractable Organics	NELAP	4/10/2002
4-Chloro-3-methylphenol	EPA 8270	Extractable Organics	NELAP	4/10/2002
4-Chloroaniline	EPA 8270	Extractable Organics	NELAP	4/10/2002
4-Chlorophenyl phenylether	EPA 8270	Extractable Organics	NELAP	4/10/2002
4-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	4/10/2002
4-Dimethyl aminoazobenzene	EPA 8270	Extractable Organics	NELAP	8/1/2008
4-Methyl-2-pentanone (MIBK)	EPA 8260	Volatile Organics	NELAP	4/10/2002
4-Methylphenol (p-Cresol)	EPA 8270	Extractable Organics	NELAP	4/10/2002
4-Nitroaniline	EPA 8270	Extractable Organics	NELAP	4/10/2002
4-Nitrophenol	EPA 8270	Extractable Organics	NELAP	4/10/2002
4-Nitrotoluene	EPA 8330	Extractable Organics	NELAP	4/10/2002
5-Nitro-o-toluidine	EPA 8270	Extractable Organics	NELAP	8/1/2008
6-Methylchrysene	EPA 8270	Extractable Organics	NELAP	7/30/2012
7,12-Dimethylbenz(a) anthracene	EPA 8270	Extractable Organics	NELAP	8/1/2008

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Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811****Matrix: Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
a,a-Dimethylphenethylamine	EPA 8270	Extractable Organics	NELAP	8/1/2008
Acenaphthene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Acenaphthene	EPA 8310	Extractable Organics	NELAP	4/10/2002
Acenaphthylene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Acenaphthylene	EPA 8310	Extractable Organics	NELAP	4/10/2002
Acetone	EPA 8260	Volatile Organics	NELAP	4/10/2002
Acetonitrile	EPA 8260	Volatile Organics	NELAP	4/1/2005
Acetophenone	EPA 8270	Extractable Organics	NELAP	2/3/2003
Acrolein (Propenal)	EPA 8260	Volatile Organics	NELAP	4/10/2002
Acrylamide	EPA 8316	Volatile Organics	NELAP	10/7/2011
Acrylonitrile	EPA 8260	Volatile Organics	NELAP	4/10/2002
Aldrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Allyl chloride (3-Chloropropene)	EPA 8260	Volatile Organics	NELAP	4/1/2005
alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
alpha-Chlordane	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aluminum	EPA 6010	Metals	NELAP	4/10/2002
Aluminum	EPA 6020	Metals	NELAP	11/24/2014
Ammonia as N	EPA 350.1	General Chemistry	NELAP	6/20/2007
Aniline	EPA 8270	Extractable Organics	NELAP	4/10/2002
Anthracene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Anthracene	EPA 8310	Extractable Organics	NELAP	4/10/2002
Antimony	EPA 6010	Metals	NELAP	4/10/2002
Antimony	EPA 6020	Metals	NELAP	11/24/2014
Aramite	EPA 8270	Extractable Organics	NELAP	8/1/2008
Aroclor-1016 (PCB-1016)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1221 (PCB-1221)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1232 (PCB-1232)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1242 (PCB-1242)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1248 (PCB-1248)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1254 (PCB-1254)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1260 (PCB-1260)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1262 (PCB-1262)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	5/20/2013
Aroclor-1268 (PCB-1268)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	5/20/2013
Arsenic	EPA 6010	Metals	NELAP	4/10/2002
Arsenic	EPA 6020	Metals	NELAP	11/24/2014
Atrazine	EPA 8270	Extractable Organics	NELAP	7/30/2012

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Issue Date: 7/1/2017**Expiration Date: 6/30/2018**

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Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Azinphos-methyl (Guthion)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Barium	EPA 6010	Metals	NELAP	4/10/2002
Barium	EPA 6020	Metals	NELAP	11/24/2014
Benzaldehyde	EPA 8270	Extractable Organics	NELAP	7/30/2012
Benzene	EPA 8260	Volatile Organics	NELAP	4/10/2002
Benzidine	EPA 8270	Extractable Organics	NELAP	4/10/2002
Benzo(a)anthracene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Benzo(a)anthracene	EPA 8310	Extractable Organics	NELAP	4/10/2002
Benzo(a)pyrene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Benzo(a)pyrene	EPA 8310	Extractable Organics	NELAP	4/10/2002
Benzo(b)fluoranthene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Benzo(b)fluoranthene	EPA 8310	Extractable Organics	NELAP	4/10/2002
Benzo(g,h,i)perylene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Benzo(g,h,i)perylene	EPA 8310	Extractable Organics	NELAP	4/10/2002
Benzo(k)fluoranthene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Benzo(k)fluoranthene	EPA 8310	Extractable Organics	NELAP	4/10/2002
Benzoic acid	EPA 8270	Extractable Organics	NELAP	4/10/2002
Benzyl alcohol	EPA 8270	Extractable Organics	NELAP	4/10/2002
Beryllium	EPA 6010	Metals	NELAP	4/10/2002
Beryllium	EPA 6020	Metals	NELAP	11/24/2014
beta-BHC (beta-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Biphenyl	EPA 8270	Extractable Organics	NELAP	7/30/2012
bis(2-Chloroethoxy)methane	EPA 8270	Extractable Organics	NELAP	4/10/2002
bis(2-Chloroethyl) ether	EPA 8270	Extractable Organics	NELAP	4/10/2002
bis(2-Ethylhexyl) phthalate (DEHP)	EPA 8270	Extractable Organics	NELAP	4/10/2002
Bolstar (Sulprofos)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Bromide	EPA 9056	General Chemistry	NELAP	4/10/2002
Bromobenzene	EPA 8260	Volatile Organics	NELAP	4/10/2002
Bromochloromethane	EPA 8260	Volatile Organics	NELAP	4/10/2002
Bromodichloromethane	EPA 8260	Volatile Organics	NELAP	4/10/2002
Bromoform	EPA 8260	Volatile Organics	NELAP	4/10/2002
Butyl benzyl phthalate	EPA 8270	Extractable Organics	NELAP	4/10/2002
Cadmium	EPA 6010	Metals	NELAP	4/10/2002
Cadmium	EPA 6020	Metals	NELAP	11/24/2014
Calcium	EPA 6010	Metals	NELAP	4/10/2002
Calcium	EPA 6020	Metals	NELAP	11/24/2014

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Analyte	Method/Tech	Category	Certification Type	Effective Date
Caprolactam	EPA 8270	Extractable Organics	NELAP	7/30/2012
Carbazole	EPA 8270	Extractable Organics	NELAP	4/10/2002
Carbon disulfide	EPA 8260	Volatile Organics	NELAP	4/10/2002
Carbon tetrachloride	EPA 8260	Volatile Organics	NELAP	4/10/2002
Carbophenothion	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Chlordane (tech.)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Chloride	EPA 9056	General Chemistry	NELAP	4/10/2002
Chlorobenzene	EPA 8260	Volatile Organics	NELAP	4/10/2002
Chlorobenzilate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Chloroethane	EPA 8260	Volatile Organics	NELAP	4/10/2002
Chloroform	EPA 8260	Volatile Organics	NELAP	4/10/2002
Chloroprene	EPA 8260	Volatile Organics	NELAP	4/1/2005
Chlorpyrifos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Chromium	EPA 6010	Metals	NELAP	4/10/2002
Chromium	EPA 6020	Metals	NELAP	11/24/2014
Chromium VI	EPA 7196	General Chemistry	NELAP	1/24/2003
Chrysene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Chrysene	EPA 8310	Extractable Organics	NELAP	4/10/2002
cis-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	4/10/2002
cis-1,3-Dichloropropene	EPA 8260	Volatile Organics	NELAP	4/10/2002
cis-1,4-Dichloro-2-butene	EPA 8260	Volatile Organics	NELAP	4/3/2009
Cobalt	EPA 6010	Metals	NELAP	4/10/2002
Cobalt	EPA 6020	Metals	NELAP	11/24/2014
Copper	EPA 6010	Metals	NELAP	4/10/2002
Copper	EPA 6020	Metals	NELAP	11/24/2014
Coumaphos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Dalapon	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
delta-BHC	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Demeton-o	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Demeton-s	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Diallate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Diazinon	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Dibenz(a,h)acridine	EPA 8270	Extractable Organics	NELAP	7/30/2012
Dibenz(a,h)anthracene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Dibenz(a,h)anthracene	EPA 8310	Extractable Organics	NELAP	4/10/2002
Dibenz(a,j)acridine	EPA 8270	Extractable Organics	NELAP	8/1/2008

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State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Dibenzofuran	EPA 8270	Extractable Organics	NELAP	4/10/2002
Dibromochloromethane	EPA 8260	Volatile Organics	NELAP	4/10/2002
Dibromomethane	EPA 8260	Volatile Organics	NELAP	4/10/2002
Dicamba	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Dichlorodifluoromethane	EPA 8260	Volatile Organics	NELAP	4/10/2002
Dichloroprop (Dichlorprop)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Dichlorovos (DDVP, Dichlorvos)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Dieldrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Diesel range organics (DRO)	EPA 8015	Extractable Organics	NELAP	4/10/2002
Diesel range organics (DRO)	MADEP-EPH (MA-EPH)	Extractable Organics	NELAP	2/3/2003
Diesel range organics (DRO)	OA-2	Extractable Organics	NELAP	4/1/2005
Diesel range organics (DRO)	TN-EPH	Extractable Organics	NELAP	6/20/2007
Diethyl ether	EPA 8260	Volatile Organics	NELAP	6/20/2007
Diethyl phthalate	EPA 8270	Extractable Organics	NELAP	4/10/2002
Di-isopropylether (DIPE)	EPA 8260	Volatile Organics	NELAP	11/24/2014
Dimethoate	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Dimethoate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Dimethyl phthalate	EPA 8270	Extractable Organics	NELAP	4/10/2002
Di-n-butyl phthalate	EPA 8270	Extractable Organics	NELAP	4/10/2002
Di-n-octyl phthalate	EPA 8270	Extractable Organics	NELAP	4/10/2002
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Diphenyl ether	EPA 8270	Extractable Organics	NELAP	7/30/2012
Disulfoton	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Disulfoton	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	4/15/2010
Endosulfan I	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Endosulfan II	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Endosulfan sulfate	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Endrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Endrin aldehyde	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Endrin ketone	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
EPN	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Ethanol	EPA 8015	Volatile Organics	NELAP	4/1/2005
Ethion	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Ethoprop	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Ethyl acetate	EPA 8260	Volatile Organics	NELAP	6/20/2007
Ethyl methacrylate	EPA 8260	Volatile Organics	NELAP	4/1/2005

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State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Ethyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	8/1/2008
Ethylbenzene	EPA 8260	Volatile Organics	NELAP	4/10/2002
Ethyl-t-butylether (ETBE)	EPA 8260	Volatile Organics	NELAP	6/20/2007
Famphur	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Famphur	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Fensulfothion	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Fenthion	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Fluoranthene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Fluoranthene	EPA 8310	Extractable Organics	NELAP	4/10/2002
Fluorene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Fluorene	EPA 8310	Extractable Organics	NELAP	4/10/2002
Fluoride	EPA 9056	General Chemistry	NELAP	4/10/2002
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
gamma-Chlordane	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Gasoline range organics (GRO)	EPA 8015	Extractable Organics	NELAP	4/10/2002
Gasoline range organics (GRO)	MADEP-VPH (MA-VPH)	Extractable Organics	NELAP	2/3/2003
Gasoline range organics (GRO)	OA-1	Volatile Organics	NELAP	4/1/2005
Gasoline range organics (GRO)	TN-GRO	Extractable Organics	NELAP	4/1/2005
Heptachlor	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Heptachlor epoxide	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Hexachlorobenzene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Hexachlorobutadiene	EPA 8260	Volatile Organics	NELAP	4/10/2002
Hexachlorobutadiene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Hexachlorocyclopentadiene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Hexachloroethane	EPA 8270	Extractable Organics	NELAP	4/10/2002
Hexachlorophene	EPA 8270	Extractable Organics	NELAP	8/1/2008
Hexachloropropene	EPA 8270	Extractable Organics	NELAP	8/1/2008
Ignitability	EPA 1010	General Chemistry	NELAP	3/31/2011
Indene	EPA 8270	Extractable Organics	NELAP	7/30/2012
Indeno(1,2,3-cd)pyrene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Indeno(1,2,3-cd)pyrene	EPA 8310	Extractable Organics	NELAP	4/10/2002
Iodomethane (Methyl iodide)	EPA 8260	Volatile Organics	NELAP	2/3/2003
Iron	EPA 6010	Metals	NELAP	4/10/2002
Iron	EPA 6020	Metals	NELAP	11/24/2014
Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8015	Volatile Organics	NELAP	4/1/2005
Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8260	Volatile Organics	NELAP	4/1/2005

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State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Isodrin	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Isophorone	EPA 8270	Extractable Organics	NELAP	4/10/2002
Isopropyl alcohol (2-Propanol)	EPA 8015	Volatile Organics	NELAP	4/1/2005
Isopropyl alcohol (2-Propanol)	EPA 8260	Volatile Organics	NELAP	10/19/2016
Isopropylbenzene	EPA 8260	Volatile Organics	NELAP	4/10/2002
Isosafrole	EPA 8270	Extractable Organics	NELAP	8/1/2008
Kepone	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Kjeldahl nitrogen - total	EPA 351.2	General Chemistry	NELAP	6/20/2007
Lead	EPA 6010	Metals	NELAP	4/10/2002
Lead	EPA 6020	Metals	NELAP	11/24/2014
Magnesium	EPA 6010	Metals	NELAP	4/10/2002
Magnesium	EPA 6020	Metals	NELAP	11/24/2014
Malathion	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Manganese	EPA 6010	Metals	NELAP	4/10/2002
Manganese	EPA 6020	Metals	NELAP	11/24/2014
MCPA	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
MCPP	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Mercury	EPA 7471	Metals	NELAP	4/10/2002
Merphos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Methacrylonitrile	EPA 8260	Volatile Organics	NELAP	4/1/2005
Methanol	EPA 8015	Volatile Organics	NELAP	4/1/2005
Methapyrilene	EPA 8270	Extractable Organics	NELAP	8/1/2008
Methoxychlor	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Methyl bromide (Bromomethane)	EPA 8260	Volatile Organics	NELAP	4/10/2002
Methyl chloride (Chloromethane)	EPA 8260	Volatile Organics	NELAP	4/10/2002
Methyl methacrylate	EPA 8260	Volatile Organics	NELAP	4/1/2005
Methyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	8/1/2008
Methyl parathion (Parathion, methyl)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Methyl parathion (Parathion, methyl)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	2/17/2011
Methyl tert-butyl ether (MTBE)	EPA 8260	Volatile Organics	NELAP	4/10/2002
Methylene chloride	EPA 8260	Volatile Organics	NELAP	4/10/2002
Mevinphos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Molybdenum	EPA 6010	Metals	NELAP	4/10/2002
Molybdenum	EPA 6020	Metals	NELAP	11/24/2014
Monocrotophos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Naled	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007

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Analyte	Method/Tech	Category	Certification Type	Effective Date
Naphthalene	EPA 8260	Volatile Organics	NELAP	4/10/2002
Naphthalene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Naphthalene	EPA 8310	Extractable Organics	NELAP	4/10/2002
n-Butyl alcohol	EPA 8015	Volatile Organics	NELAP	4/1/2005
n-Butyl alcohol	EPA 8260	Volatile Organics	NELAP	10/19/2016
n-Butylbenzene	EPA 8260	Volatile Organics	NELAP	4/10/2002
N-Ethylperfluorooctanesulfonamide (EtFOSA)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
N-ethylperfluorooctanesulfonamidoethanol (EtFOSE)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Nickel	EPA 6010	Metals	NELAP	4/10/2002
Nickel	EPA 6020	Metals	NELAP	11/24/2014
Nitrate	EPA 9056	General Chemistry	NELAP	4/10/2002
Nitrite	EPA 9056	General Chemistry	NELAP	4/10/2002
Nitrobenzene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Nitrobenzene	EPA 8330	Extractable Organics	NELAP	2/3/2003
Nitroglycerin	EPA 8330	Extractable Organics	NELAP	8/1/2008
Nitroglycerin	EPA 8332	Extractable Organics	NELAP	2/3/2003
Nitroquinoline-1-oxide	EPA 8270	Extractable Organics	NELAP	8/1/2008
N-Methylperfluorooctanesulfonamide (MeFOSA)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
N-Methylperfluorooctanesulfonamidoethanol (MeFOSA)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
n-Nitrosodiethylamine	EPA 8270	Extractable Organics	NELAP	8/1/2008
n-Nitrosodimethylamine	EPA 8270	Extractable Organics	NELAP	4/10/2002
n-Nitroso-di-n-butylamine	EPA 8270	Extractable Organics	NELAP	8/1/2008
n-Nitrosodi-n-propylamine	EPA 8270	Extractable Organics	NELAP	4/10/2002
n-Nitrosodiphenylamine	EPA 8270	Extractable Organics	NELAP	4/10/2002
n-Nitrosodiphenylamine/Diphenylamine (analyte pair)	EPA 8270	Extractable Organics	NELAP	8/1/2008
n-Nitrosomethylethylamine	EPA 8270	Extractable Organics	NELAP	8/1/2008
n-Nitrosomorpholine	EPA 8270	Extractable Organics	NELAP	8/1/2008
n-Nitrosopiperidine	EPA 8270	Extractable Organics	NELAP	8/1/2008
n-Nitrosopyrrolidine	EPA 8270	Extractable Organics	NELAP	8/1/2008
n-Propanol	EPA 8015	Volatile Organics	NELAP	4/1/2005
n-Propylbenzene	EPA 8260	Volatile Organics	NELAP	4/10/2002
o,o,o-Triethyl phosphorothioate	ALS GC 032.2 (Rev. 07/08)	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
o,o,o-Triethyl phosphorothioate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	EPA 8330	Extractable Organics	NELAP	4/10/2002

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Analyte	Method/Tech	Category	Certification Type	Effective Date
Oil & Grease	EPA 9071	General Chemistry	NELAP	4/10/2002
o-Toluidine	EPA 8270	Extractable Organics	NELAP	8/1/2008
Parathion, ethyl	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Parathion, ethyl	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	4/15/2010
p-Dioxane	EPA 8260	Volatile Organics	NELAP	4/10/2002
Pentachlorobenzene	EPA 8270	Extractable Organics	NELAP	8/1/2008
Pentachloroethane	EPA 8260	Volatile Organics	NELAP	4/1/2005
Pentachloroethane	EPA 8270	Extractable Organics	NELAP	7/30/2012
Pentachloronitrobenzene (Quintozene)	EPA 8270	Extractable Organics	NELAP	8/1/2008
Pentachlorophenol	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Pentachlorophenol	EPA 8270	Extractable Organics	NELAP	4/10/2002
Pentaerythritoltetranitrate (PETN)	ALS GC-020	Extractable Organics	NELAP	8/25/2005
Pentaerythritoltetranitrate (PETN)	EPA 8330	Extractable Organics	NELAP	8/1/2008
Perchlorate	EPA 6850	General Chemistry	NELAP	7/30/2012
Perfluorobutane sulfonate (PFBS, perfluorobutane sulfonic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorobutanoate (PFBA, perfluorobutyric acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorodecane sulfonate (PFDS, perfluorodecane sulfonic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorodecanoate (PFDA, perfluorodecanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorododecanoate (PFDoA, perfluorododecanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluoroheptanesulfonic Acid (PFHpS)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluoroheptanoate (PFHpA, perfluoroheptanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorohexane sulfonate (PFHxS, perfluorohexane sulfonic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorohexanoate (PFHxA, perfluorohexanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorononanoate (PFNA, perfluorononanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorooctane sulfonamide (PFOSA)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorooctane sulfonate (PFOS, perfluorooctane sulfonic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorooctanoate (PFOA, perfluorooctanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluoropentanoate (PFPeA, perfluoropentanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorotetradecanoate (PFTeDA, perfluorotetradecanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
Perfluorotridecanoate (PFTriA, perfluorotridecanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 7/1/2017**Expiration Date: 6/30/2018**

Laboratory Scope of Accreditation

Page 34 of 37

Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Perfluoroundecanoate (PFUnA, perfluoroundecanoic acid)	ALS MS 014	Volatile Organics	NELAP	3/22/2016
pH	EPA 9045	General Chemistry	NELAP	4/2/2012
Phenacetin	EPA 8270	Extractable Organics	NELAP	8/1/2008
Phenanthrene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Phenanthrene	EPA 8310	Extractable Organics	NELAP	4/10/2002
Phenol	EPA 8270	Extractable Organics	NELAP	4/10/2002
Phorate	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Phorate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	4/15/2010
Phosphorus, total	EPA 365.3	General Chemistry	NELAP	6/20/2007
p-Isopropyltoluene	EPA 8260	Volatile Organics	NELAP	4/10/2002
Potassium	EPA 6010	Metals	NELAP	4/10/2002
Potassium	EPA 6020	Metals	NELAP	11/24/2014
Pronamide (Kerb)	EPA 8270	Extractable Organics	NELAP	8/1/2008
Propionitrile (Ethyl cyanide)	EPA 8260	Volatile Organics	NELAP	4/1/2005
Pyrene	EPA 8270	Extractable Organics	NELAP	4/10/2002
Pyrene	EPA 8310	Extractable Organics	NELAP	4/10/2002
Pyridine	EPA 8270	Extractable Organics	NELAP	4/10/2002
Quinoline	EPA 8270	Extractable Organics	NELAP	7/30/2012
RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine)	EPA 8330	Extractable Organics	NELAP	4/10/2002
Reactive cyanide	Sec. 7.3 SW-846	General Chemistry	NELAP	4/10/2002
Reactive sulfide	Sec. 7.3 SW-846	General Chemistry	NELAP	4/10/2002
Ronnel	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Safrole	EPA 8270	Extractable Organics	NELAP	8/1/2008
sec-Butylbenzene	EPA 8260	Volatile Organics	NELAP	4/10/2002
Selenium	EPA 6010	Metals	NELAP	4/10/2002
Selenium	EPA 6020	Metals	NELAP	11/24/2014
Silver	EPA 6010	Metals	NELAP	4/10/2002
Silver	EPA 6020	Metals	NELAP	11/24/2014
Silvex (2,4,5-TP)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Simazine	EPA 8270	Extractable Organics	NELAP	7/30/2012
Sodium	EPA 6010	Metals	NELAP	5/21/2007
Sodium	EPA 6020	Metals	NELAP	11/24/2014
Stirofos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Strontium	EPA 6010	Metals	NELAP	7/30/2012
Strontium	EPA 6020	Metals	NELAP	11/24/2014
Styrene	EPA 8260	Volatile Organics	NELAP	4/10/2002

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 7/1/2017**Expiration Date: 6/30/2018**

**Laboratory Scope of Accreditation**

Page 35 of 37

Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**EPA Lab Code: **FL00946****(407) 425-6700****E83510****SGS Accutest - Orlando****4405 Vineland Road, Suite C-15****Orlando, FL 32811**Matrix: **Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Sulfate	EPA 9056	General Chemistry	NELAP	4/10/2002
Sulfotep	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Sulfotep	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Synthetic Precipitation Leaching Procedure	EPA 1312	General Chemistry	NELAP	4/10/2002
T-amylmethylether (TAME)	EPA 8260	Volatile Organics	NELAP	6/20/2007
tert-Butyl alcohol (2-Methyl-2-propanol)	EPA 8260	Volatile Organics	NELAP	6/20/2007
tert-Butylbenzene	EPA 8260	Volatile Organics	NELAP	4/10/2002
Tetrachloroethylene (Perchloroethylene)	EPA 8260	Volatile Organics	NELAP	4/10/2002
Tetraethyl pyrophosphate (TEPP)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Tetryl (methyl-2,4,6-trinitrophenylnitramine)	EPA 8330	Extractable Organics	NELAP	4/10/2002
Thallium	EPA 6010	Metals	NELAP	4/10/2002
Thallium	EPA 6020	Metals	NELAP	11/24/2014
Thionazin (Zinophos)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Thionazin (Zinophos)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/1/2008
Thiophenol (Benzenethiol)	EPA 8270	Extractable Organics	NELAP	4/7/2010
Tin	EPA 6010	Metals	NELAP	1/24/2003
Tin	EPA 6020	Metals	NELAP	11/24/2014
Titanium	EPA 6010	Metals	NELAP	7/30/2012
Titanium	EPA 6020	Metals	NELAP	11/24/2014
Tokuthion (Prothiophos)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Toluene	EPA 8260	Volatile Organics	NELAP	4/10/2002
Total cyanide	EPA 9012	General Chemistry	NELAP	6/20/2007
Total nitrate-nitrite	EPA 9056	General Chemistry	NELAP	4/10/2002
Total organic carbon	EPA 9060	General Chemistry	NELAP	6/20/2007
Total Petroleum Hydrocarbons (TPH)	FL-PRO	Extractable Organics	NELAP	4/10/2002
Total Petroleum Hydrocarbons (TPH)	TX1005	Extractable Organics	NELAP	10/7/2011
Toxaphene (Chlorinated camphene)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Toxicity Characteristic Leaching Procedure	EPA 1311	General Chemistry	NELAP	4/10/2002
trans-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	4/10/2002
trans-1,3-Dichloropropene	EPA 8260	Volatile Organics	NELAP	4/10/2002
trans-1,4-Dichloro-2-butene	EPA 8260	Volatile Organics	NELAP	4/1/2005
Trichloroethene (Trichloroethylene)	EPA 8260	Volatile Organics	NELAP	4/10/2002
Trichlorofluoromethane	EPA 8260	Volatile Organics	NELAP	4/10/2002
Trichloronate	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	6/20/2007
Vanadium	EPA 6010	Metals	NELAP	4/10/2002
Vanadium	EPA 6020	Metals	NELAP	11/24/2014

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Issue Date: 7/1/2017**Expiration Date: 6/30/2018**



Laboratory Scope of Accreditation

Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**

EPA Lab Code: **FL00946**

(407) 425-6700

E83510

SGS Accutest - Orlando

4405 Vineland Road, Suite C-15

Orlando, FL 32811

Matrix: **Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Vinyl acetate	EPA 8260	Volatile Organics	NELAP	4/10/2002
Vinyl chloride	EPA 8260	Volatile Organics	NELAP	4/10/2002
Xylene (total)	EPA 8260	Volatile Organics	NELAP	4/10/2002
Zinc	EPA 6010	Metals	NELAP	4/10/2002
Zinc	EPA 6020	Metals	NELAP	11/24/2014



Laboratory Scope of Accreditation

Attachment to Certificate #: E83510-45, expiration date June 30, 2018. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: **E83510**

EPA Lab Code: **FL00946**

(407) 425-6700

E83510

SGS Accutest - Orlando

4405 Vineland Road, Suite C-15

Orlando, FL 32811

Matrix: **Air and Emissions**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Benzene	EPA TO-3	Volatile Organics	NELAP	7/1/2007
Ethylbenzene	EPA TO-3	Volatile Organics	NELAP	7/1/2007
Gasoline range organics (GRO)	EPA TO-3	Volatile Organics	NELAP	7/1/2007
Isopropylbenzene	EPA TO-3	Volatile Organics	NELAP	7/1/2007
Methyl tert-butyl ether (MTBE)	EPA TO-3	Volatile Organics	NELAP	7/1/2007
Toluene	EPA TO-3	Volatile Organics	NELAP	7/1/2007
Xylene (total)	EPA TO-3	Volatile Organics	NELAP	7/1/2007

Certificate of Training

Georgia Rural Water Association

P.O. Box 383 • Barnesville, Georgia 30204 • 770-358-0221

www.grwa.org

This is to certify that **Ellen Pampel** completed the

Wastewater Collection on-line training course **June 2017**

Total Points approved **6**

Board Certification Number **CE-6-WW-1215-GRWA-013118-0061**

On-line Training

Training Instructor

NOTE: Points are established by the Certification Board and credit per hour may vary depending on the subject content.

This certificate is your only evidence of attending the training sessions noted. Please retain in a secure location for retrieval in the event of the Certification Board demands proof of recertification hours.

Certificate of Training

Georgia Rural Water Association

P.O. Box 383 • Barnesville, Georgia 30204 • 770-358-0221

www.grwa.org

This is to certify that **Ellen Pampel**

completed the **GRWA Water Utility Math** on-line training course **June 2017**

Total Points approved **12**

Board Certification Number **CE-12-W-1215-GRWA-013118-0073**

GRWA On-Line Training Course

Training Instructor

NOTE: Points are established by the Certification Board and credit per hour may vary depending on the subject content.

This certificate is your only evidence of attending the training sessions noted. Please retain in a secure location for retrieval in the event of the Certification Board demands proof of recertification hours.



09/26/14

Technical Report for

Gannett Fleming

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

57524

Accutest Job Number: FA18404

Sampling Date: 09/17/14

Report to:

Gannett Fleming
West Lake Corporate Center 9119 Corporate Lake Dr, Suite 150
Tampa, FL 33634-6323
axhoffman@gfnet.com; brenda.anderson@tmrecycling.com;
tfalkner@gfnet.com
ATTN: Todd Falkner

Total number of pages in report: **37**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read 'Norm Farmer'.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001)
DoD ELAP (L-A-B L2229), CA (04226CA), TX (T104704404), PA (68-03573), VA (460177),
AK, AR, GA, KY, MA, NV, OK, UT, WA

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

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Sample Summary

Gannett Fleming

Job No: FA18404

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA18404-1	09/17/14	10:00 RF	09/19/14	SO	Soil	B-5 6-8
FA18404-2	09/17/14	10:45 RF	09/19/14	SO	Soil	B-6 6-8
FA18404-3	09/17/14	11:20 RF	09/19/14	SO	Soil	B-7 6-8
FA18404-4	09/17/14	11:55 RF	09/19/14	SO	Soil	B-8 6-8
FA18404-5	09/17/14	12:35 RF	09/19/14	SO	Soil	B-9 6-8

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Page 1 of 1

Job Number: FA18404

Account: Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Collected: 09/17/14

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA18404-1	B-5 6-8					
Tetrachloroethylene		17.5	3.5	0.89	ug/kg	SW846 8260B
Arsenic		492	2.2		mg/kg	SW846 6010C
FA18404-2	B-6 6-8					
Arsenic ^a		1.1	0.87		mg/kg	SW846 6010C
FA18404-3	B-7 6-8					
Tetrachloroethylene		2.6 J	3.6	0.92	ug/kg	SW846 8260B
Arsenic		3.8	0.48		mg/kg	SW846 6010C
FA18404-4	B-8 6-8					
Tetrachloroethylene		3.9 J	4.4	1.1	ug/kg	SW846 8260B
Arsenic		96.7	0.51		mg/kg	SW846 6010C
FA18404-5	B-9 6-8					
Arsenic ^a		61.9	0.97		mg/kg	SW846 6010C

(a) Elevated reporting limit(s) due to matrix interference.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	B-5 6-8	Date Sampled:	09/17/14
Lab Sample ID:	FA18404-1	Date Received:	09/19/14
Matrix:	SO - Soil	Percent Solids:	84.8
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H0087831.D	1	09/19/14	EP	n/a	n/a	VH3339
Run #2							

	Initial Weight
Run #1	8.39 g
Run #2	

VOA Halogenated List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-27-4	Bromodichloromethane	ND	3.5	0.70	ug/kg	
75-25-2	Bromoform	ND	3.5	0.76	ug/kg	
108-90-7	Chlorobenzene	ND	3.5	0.70	ug/kg	
75-00-3	Chloroethane	ND	3.5	1.6	ug/kg	
67-66-3	Chloroform	ND	3.5	0.79	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	18	7.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	3.5	0.98	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.5	0.70	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.5	0.70	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.5	0.70	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.5	0.70	ug/kg	
124-48-1	Dibromochloromethane	ND	3.5	0.70	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.5	0.89	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.5	0.70	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.5	0.70	ug/kg	
541-73-1	m-Dichlorobenzene	ND	3.5	0.70	ug/kg	
95-50-1	o-Dichlorobenzene	ND	3.5	0.70	ug/kg	
106-46-7	p-Dichlorobenzene	ND	3.5	0.79	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.5	0.94	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	7.0	1.6	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.5	0.70	ug/kg	
74-83-9	Methyl bromide	ND	3.5	1.3	ug/kg	
74-87-3	Methyl chloride	ND	3.5	1.4	ug/kg	
75-09-2	Methylene chloride	ND	7.0	2.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.5	0.70	ug/kg	
79-34-5	1,1,1,2,2-Tetrachloroethane	ND	3.5	0.99	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.5	1.1	ug/kg	
127-18-4	Tetrachloroethylene	17.5	3.5	0.89	ug/kg	
79-01-6	Trichloroethylene	ND	3.5	0.72	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.5	0.70	ug/kg	
75-01-4	Vinyl chloride	ND	3.5	0.72	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-5 6-8	Date Sampled:	09/17/14
Lab Sample ID:	FA18404-1	Date Received:	09/19/14
Matrix:	SO - Soil	Percent Solids:	84.8
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA Halogenated List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		75-124%
2037-26-5	Toluene-D8	93%		75-126%
460-00-4	4-Bromofluorobenzene	101%		71-133%
17060-07-0	1,2-Dichloroethane-D4	106%		72-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-5 6-8	Date Sampled:	09/17/14
Lab Sample ID:	FA18404-1	Date Received:	09/19/14
Matrix:	SO - Soil	Percent Solids:	84.8
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	492	2.2	mg/kg	4	09/22/14	09/23/14 LM	SW846 6010C ¹	SW846 3050B ²

(1) Instrument QC Batch: MA11906
(2) Prep QC Batch: MP27899

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-6 6-8	Date Sampled:	09/17/14
Lab Sample ID:	FA18404-2	Date Received:	09/19/14
Matrix:	SO - Soil	Percent Solids:	82.3
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H0087832.D	1	09/19/14	EP	n/a	n/a	VH3339
Run #2							

	Initial Weight
Run #1	7.67 g
Run #2	

VOA Halogenated List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-27-4	Bromodichloromethane	ND	4.0	0.79	ug/kg	
75-25-2	Bromoform	ND	4.0	0.86	ug/kg	
108-90-7	Chlorobenzene	ND	4.0	0.79	ug/kg	
75-00-3	Chloroethane	ND	4.0	1.8	ug/kg	
67-66-3	Chloroform	ND	4.0	0.90	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	20	7.9	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.0	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.0	0.79	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.0	0.79	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.0	0.79	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.0	0.79	ug/kg	
124-48-1	Dibromochloromethane	ND	4.0	0.79	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.0	0.79	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.0	0.79	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4.0	0.79	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.0	0.79	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.0	0.89	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.0	1.1	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	7.9	1.8	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.0	0.79	ug/kg	
74-83-9	Methyl bromide	ND	4.0	1.5	ug/kg	
74-87-3	Methyl chloride	ND	4.0	1.6	ug/kg	
75-09-2	Methylene chloride	ND	7.9	3.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.0	0.79	ug/kg	
79-34-5	1,1,1,2-Tetrachloroethane	ND	4.0	1.1	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.0	1.3	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	4.0	0.81	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.0	0.79	ug/kg	
75-01-4	Vinyl chloride	ND	4.0	0.81	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-6 6-8	Date Sampled:	09/17/14
Lab Sample ID:	FA18404-2	Date Received:	09/19/14
Matrix:	SO - Soil	Percent Solids:	82.3
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA Halogenated List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		75-124%
2037-26-5	Toluene-D8	97%		75-126%
460-00-4	4-Bromofluorobenzene	101%		71-133%
17060-07-0	1,2-Dichloroethane-D4	111%		72-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-6 6-8	Date Sampled:	09/17/14
Lab Sample ID:	FA18404-2	Date Received:	09/19/14
Matrix:	SO - Soil	Percent Solids:	82.3
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic ^a	1.1	0.87	mg/kg	2	09/22/14	09/23/14 LM	SW846 6010C ¹	SW846 3050B ²

- (1) Instrument QC Batch: MA11906
- (2) Prep QC Batch: MP27899

(a) Elevated reporting limit(s) due to matrix interference.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-7 6-8	Date Sampled:	09/17/14
Lab Sample ID:	FA18404-3	Date Received:	09/19/14
Matrix:	SO - Soil	Percent Solids:	92.3
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H0087833.D	1	09/19/14	EP	n/a	n/a	VH3339
Run #2							

	Initial Weight
Run #1	7.45 g
Run #2	

VOA Halogenated List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-27-4	Bromodichloromethane	ND	3.6	0.73	ug/kg	
75-25-2	Bromoform	ND	3.6	0.79	ug/kg	
108-90-7	Chlorobenzene	ND	3.6	0.73	ug/kg	
75-00-3	Chloroethane	ND	3.6	1.6	ug/kg	
67-66-3	Chloroform	ND	3.6	0.82	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	18	7.3	ug/kg	
56-23-5	Carbon tetrachloride	ND	3.6	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.6	0.73	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.6	0.73	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.6	0.73	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.6	0.73	ug/kg	
124-48-1	Dibromochloromethane	ND	3.6	0.73	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.6	0.92	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.6	0.73	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.6	0.73	ug/kg	
541-73-1	m-Dichlorobenzene	ND	3.6	0.73	ug/kg	
95-50-1	o-Dichlorobenzene	ND	3.6	0.73	ug/kg	
106-46-7	p-Dichlorobenzene	ND	3.6	0.81	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.6	0.97	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	7.3	1.6	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.6	0.73	ug/kg	
74-83-9	Methyl bromide	ND	3.6	1.4	ug/kg	
74-87-3	Methyl chloride	ND	3.6	1.5	ug/kg	
75-09-2	Methylene chloride	ND	7.3	2.9	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.6	0.73	ug/kg	
79-34-5	1,1,1,2,2-Tetrachloroethane	ND	3.6	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.6	1.2	ug/kg	
127-18-4	Tetrachloroethylene	2.6	3.6	0.92	ug/kg	J
79-01-6	Trichloroethylene	ND	3.6	0.74	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.6	0.73	ug/kg	
75-01-4	Vinyl chloride	ND	3.6	0.74	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-7 6-8	Date Sampled:	09/17/14
Lab Sample ID:	FA18404-3	Date Received:	09/19/14
Matrix:	SO - Soil	Percent Solids:	92.3
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA Halogenated List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		75-124%
2037-26-5	Toluene-D8	94%		75-126%
460-00-4	4-Bromofluorobenzene	102%		71-133%
17060-07-0	1,2-Dichloroethane-D4	112%		72-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-7 6-8		
Lab Sample ID:	FA18404-3	Date Sampled:	09/17/14
Matrix:	SO - Soil	Date Received:	09/19/14
		Percent Solids:	92.3
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	3.8	0.48	mg/kg	1	09/22/14	09/22/14 LM	SW846 6010C ¹	SW846 3050B ²

(1) Instrument QC Batch: MA11903
(2) Prep QC Batch: MP27899

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-8 6-8	Date Sampled:	09/17/14
Lab Sample ID:	FA18404-4	Date Received:	09/19/14
Matrix:	SO - Soil	Percent Solids:	90.6
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H0087834.D	1	09/19/14	EP	n/a	n/a	VH3339
Run #2							

	Initial Weight
Run #1	6.30 g
Run #2	

VOA Halogenated List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-27-4	Bromodichloromethane	ND	4.4	0.88	ug/kg	
75-25-2	Bromoform	ND	4.4	0.95	ug/kg	
108-90-7	Chlorobenzene	ND	4.4	0.88	ug/kg	
75-00-3	Chloroethane	ND	4.4	2.0	ug/kg	
67-66-3	Chloroform	ND	4.4	0.99	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	22	8.8	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.4	1.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.4	0.88	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.4	0.88	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.4	0.88	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.4	0.88	ug/kg	
124-48-1	Dibromochloromethane	ND	4.4	0.88	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.4	1.1	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.4	0.88	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.4	0.88	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4.4	0.88	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.4	0.88	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.4	0.98	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.4	1.2	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	8.8	2.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.4	0.88	ug/kg	
74-83-9	Methyl bromide	ND	4.4	1.6	ug/kg	
74-87-3	Methyl chloride	ND	4.4	1.8	ug/kg	
75-09-2	Methylene chloride	ND	8.8	3.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.4	0.88	ug/kg	
79-34-5	1,1,1,2,2-Tetrachloroethane	ND	4.4	1.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.4	1.4	ug/kg	
127-18-4	Tetrachloroethylene	3.9	4.4	1.1	ug/kg	J
79-01-6	Trichloroethylene	ND	4.4	0.89	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.4	0.88	ug/kg	
75-01-4	Vinyl chloride	ND	4.4	0.89	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-8 6-8	Date Sampled:	09/17/14
Lab Sample ID:	FA18404-4	Date Received:	09/19/14
Matrix:	SO - Soil	Percent Solids:	90.6
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA Halogenated List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%		75-124%
2037-26-5	Toluene-D8	100%		75-126%
460-00-4	4-Bromofluorobenzene	119%		71-133%
17060-07-0	1,2-Dichloroethane-D4	103%		72-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-8 6-8	Date Sampled:	09/17/14
Lab Sample ID:	FA18404-4	Date Received:	09/19/14
Matrix:	SO - Soil	Percent Solids:	90.6
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	96.7	0.51	mg/kg	1	09/22/14	09/22/14 LM	SW846 6010C ¹	SW846 3050B ²

(1) Instrument QC Batch: MA11903
(2) Prep QC Batch: MP27899

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-9 6-8	Date Sampled:	09/17/14
Lab Sample ID:	FA18404-5	Date Received:	09/19/14
Matrix:	SO - Soil	Percent Solids:	87.4
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H0087835.D	1	09/19/14	EP	n/a	n/a	VH3339
Run #2							

	Initial Weight
Run #1	7.94 g
Run #2	

VOA Halogenated List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-27-4	Bromodichloromethane	ND	3.6	0.72	ug/kg	
75-25-2	Bromoform	ND	3.6	0.78	ug/kg	
108-90-7	Chlorobenzene	ND	3.6	0.72	ug/kg	
75-00-3	Chloroethane	ND	3.6	1.6	ug/kg	
67-66-3	Chloroform	ND	3.6	0.81	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	18	7.2	ug/kg	
56-23-5	Carbon tetrachloride	ND	3.6	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.6	0.72	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.6	0.72	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.6	0.72	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.6	0.72	ug/kg	
124-48-1	Dibromochloromethane	ND	3.6	0.72	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.6	0.91	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.6	0.72	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.6	0.72	ug/kg	
541-73-1	m-Dichlorobenzene	ND	3.6	0.72	ug/kg	
95-50-1	o-Dichlorobenzene	ND	3.6	0.72	ug/kg	
106-46-7	p-Dichlorobenzene	ND	3.6	0.81	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.6	0.97	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	7.2	1.6	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.6	0.72	ug/kg	
74-83-9	Methyl bromide	ND	3.6	1.3	ug/kg	
74-87-3	Methyl chloride	ND	3.6	1.4	ug/kg	
75-09-2	Methylene chloride	ND	7.2	2.9	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.6	0.72	ug/kg	
79-34-5	1,1,1,2,2-Tetrachloroethane	ND	3.6	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.6	1.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.6	0.91	ug/kg	
79-01-6	Trichloroethylene	ND	3.6	0.73	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.6	0.72	ug/kg	
75-01-4	Vinyl chloride	ND	3.6	0.73	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-9 6-8	Date Sampled:	09/17/14
Lab Sample ID:	FA18404-5	Date Received:	09/19/14
Matrix:	SO - Soil	Percent Solids:	87.4
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA Halogenated List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		75-124%
2037-26-5	Toluene-D8	96%		75-126%
460-00-4	4-Bromofluorobenzene	106%		71-133%
17060-07-0	1,2-Dichloroethane-D4	103%		72-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-9 6-8	Date Sampled:	09/17/14
Lab Sample ID:	FA18404-5	Date Received:	09/19/14
Matrix:	SO - Soil	Percent Solids:	87.4
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic ^a	61.9	0.97	mg/kg	2	09/22/14	09/23/14 LM	SW846 6010C ¹	SW846 3050B ²

(1) Instrument QC Batch: MA11906
(2) Prep QC Batch: MP27899

(a) Elevated reporting limit(s) due to matrix interference.

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Client / Reporting Information		Project Information		Analytical Information		Matrix Codes	
Company Name Gannett Fleming		Project Name TMR Vapors					
Address 9119 Corporate Lake Drive SE #102		Street 2000 W Savannah					
City Tampa State FL Zip 33634		City Vero Beach State FL					
Project Contact Paul Palmer E-mail palmer@gfnet.com		Project # 57524					
Phone# 813 882 4366 813 240 5300		Fax # 813 884 4609					
Sampler(s) Name(s) (Printed) R Todd Palmer		Client Purchase Order #					

Accutest Sample #	Field ID / Point of Collection	COLLECTION		CONTAMINANT INFORMATION														LAB USE ONLY
		DATE	TIME	SAMPLED BY	MATRIX	TOTAL # OF BOTTLES	OTHER	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	
1	B-5 6-8	9/17/14	1000	RTF	SO	4		1										
2	B-6 6-8	9/17/14	1045			4		1										
3	B-7 6-8	9/17/14	1120			4		1										
4	B-8 6-8	9/17/14	1155			4		1										
5	B-9 6-8	9/17/14	1235			4		1										

TURNAROUND TIME (Business Days)		Data Deliverable Information		Comments / Remarks	
☒ 10 Days Standard ☐ 7 Day RUSH ☐ 5 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY ☐ OTHER		Approved By: / Rush Code ☐ COMMERCIAL "A" (RESULTS ONLY) ☒ COMMERCIAL "B" (RESULTS PLUS QC) ☐ REDT1 (EPA LEVEL 3) ☐ FULT1 (EPA LEVEL 4) ☐ EDD'S			

Sample Custody must be documented below each time samples change possession, including courier delivery.					
Relinquished by Sample 1 R Todd Palmer	Date Time: 9-18-14 1238	Received By: 2 James Palmer	Date Time: 9-18-14 1238	Relinquished by: 3 James Palmer	Date Time: 9-18-14 1845
Relinquished by: 5	Date Time:	Received By: 6	Date Time:	Relinquished by: 7	Date Time:
Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers:			Cooler Temperature (s) Celsius: 3-6		

FA18404: Chain of Custody

Page 1 of 2

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA18404 CLIENT: GANNETT FLEMING PROJECT: S7524
 DATE/TIME RECEIVED: 9-19-14 08:00 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER
 AIRBILL NUMBERS:

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
- ☒ TRIP BLANK NOT PROVIDED
- ☒ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____
 NUMBER OF 5035 FIELD KITS ? _____
 NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR 10.4
- ☐ OBSERVED TEMPS: 3.2
- ☐ CORRECTED TEMPS: 3.6

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
- ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
- ☐ INSUFFICIENT VOLUME FOR ANALYSIS
- ☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ☐ ID'S ON COC DO NOT MATCH LABEL
- ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- ☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- ☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
- ☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- ☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- ☐ % SOLIDS JAR NOT RECEIVED
- ☐ RESIDUAL CHLORINE PRESENT

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE [Signature] 9-19-14 REVIEWER SIGNATURE/DATE [Signature] 09-19-14

RS 04/14

receipt confirmation 041514.xls

FA18404: Chain of Custody

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GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 2

Job Number: FA18404**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3339-MB	H0087820.D	1	09/19/14	EP	n/a	n/a	VH3339

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA18404-1, FA18404-2, FA18404-3, FA18404-4, FA18404-5

CAS No.	Compound	Result	RL	MDL	Units	Q
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.1	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.3	ug/kg	
67-66-3	Chloroform	ND	5.0	1.1	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	25	10	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.4	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.3	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	1.0	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	1.0	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	1.1	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.3	ug/kg	
540-59-0	1,2-Dichloroethene (total)	ND	10	2.3	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.9	ug/kg	
74-87-3	Methyl chloride	ND	5.0	2.0	ug/kg	
75-09-2	Methylene chloride	ND	10	4.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.4	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.6	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	89% 75-124%

Method Blank Summary

Job Number: FA18404
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3339-MB	H0087820.D	1	09/19/14	EP	n/a	n/a	VH3339

The QC reported here applies to the following samples:

Method: SW846 8260B

FA18404-1, FA18404-2, FA18404-3, FA18404-4, FA18404-5

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	98% 75-126%
460-00-4	4-Bromofluorobenzene	101% 71-133%
17060-07-0	1,2-Dichloroethane-D4	102% 72-135%

Blank Spike Summary

Page 1 of 2

Job Number: FA18404**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3339-BS	H0087819.D	1	09/19/14	EP	n/a	n/a	VH3339

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA18404-1, FA18404-2, FA18404-3, FA18404-4, FA18404-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
75-27-4	Bromodichloromethane	50	43.9	88	74-130
75-25-2	Bromoform	50	37.9	76	76-127
108-90-7	Chlorobenzene	50	49.5	99	81-129
75-00-3	Chloroethane	50	52.9	106	68-133
67-66-3	Chloroform	50	49.5	99	72-123
110-75-8	2-Chloroethyl vinyl ether	250	234	94	45-159
56-23-5	Carbon tetrachloride	50	49.1	98	78-133
75-34-3	1,1-Dichloroethane	50	50.0	100	73-125
75-35-4	1,1-Dichloroethylene	50	47.9	96	81-136
107-06-2	1,2-Dichloroethane	50	50.2	100	74-128
78-87-5	1,2-Dichloropropane	50	48.6	97	74-125
124-48-1	Dibromochloromethane	50	43.9	88	76-127
75-71-8	Dichlorodifluoromethane	50	56.9	114	68-168
156-59-2	cis-1,2-Dichloroethylene	50	48.6	97	74-126
10061-01-5	cis-1,3-Dichloropropene	50	47.6	95	80-123
541-73-1	m-Dichlorobenzene	50	57.2	114	81-129
95-50-1	o-Dichlorobenzene	50	52.9	106	80-129
106-46-7	p-Dichlorobenzene	50	57.8	116	76-130
156-60-5	trans-1,2-Dichloroethylene	50	50.4	101	70-127
540-59-0	1,2-Dichloroethene (total)	100	99.0	99	73-125
10061-02-6	trans-1,3-Dichloropropene	50	48.0	96	75-131
74-83-9	Methyl bromide	50	52.7	105	65-139
74-87-3	Methyl chloride	50	51.8	104	71-144
75-09-2	Methylene chloride	50	49.2	98	74-137
71-55-6	1,1,1-Trichloroethane	50	49.4	99	70-129
79-34-5	1,1,2,2-Tetrachloroethane	50	45.3	91	71-126
79-00-5	1,1,2-Trichloroethane	50	45.0	90	74-124
127-18-4	Tetrachloroethylene	50	53.6	107	79-130
79-01-6	Trichloroethylene	50	49.5	99	75-128
75-69-4	Trichlorofluoromethane	50	51.5	103	73-145
75-01-4	Vinyl chloride	50	49.5	99	76-141

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	75-124%

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: FA18404

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH3339-BS	H0087819.D	1	09/19/14	EP	n/a	n/a	VH3339

The QC reported here applies to the following samples:

Method: SW846 8260B

FA18404-1, FA18404-2, FA18404-3, FA18404-4, FA18404-5

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	95%	75-126%
460-00-4	4-Bromofluorobenzene	101%	71-133%
17060-07-0	1,2-Dichloroethane-D4	97%	72-135%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA18404

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA18372-1MS	H0087829.D	1	09/19/14	EP	n/a	n/a	VH3339
FA18372-1MSD	H0087830.D	1	09/19/14	EP	n/a	n/a	VH3339
FA18372-1	H0087822.D	1	09/19/14	EP	n/a	n/a	VH3339

The QC reported here applies to the following samples:

Method: SW846 8260B

FA18404-1, FA18404-2, FA18404-3, FA18404-4, FA18404-5

CAS No.	Compound	FA18372-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
75-27-4	Bromodichloromethane	ND	70.7	56.8	80	71.6	46.8	65*	19	74-130/25
75-25-2	Bromoform	ND	70.7	50.0	71*	71.6	41.4	58*	19	76-127/26
108-90-7	Chlorobenzene	ND	70.7	64.9	92	71.6	50.7	71*	25	81-129/29
75-00-3	Chloroethane	ND	70.7	69.4	98	71.6	62.5	87	10	68-133/29
67-66-3	Chloroform	ND	70.7	63.6	90	71.6	54.7	76	15	72-123/26
110-75-8	2-Chloroethyl vinyl ether	ND	354	336	95	358	300	84	11	45-159/26
56-23-5	Carbon tetrachloride	ND	70.7	60.6	86	71.6	49.8	70*	20	78-133/29
75-34-3	1,1-Dichloroethane	ND	70.7	64.6	91	71.6	57.2	80	12	73-125/27
75-35-4	1,1-Dichloroethylene	ND	70.7	60.4	85	71.6	52.1	73*	15	81-136/28
107-06-2	1,2-Dichloroethane	ND	70.7	67.6	96	71.6	60.7	85	11	74-128/23
78-87-5	1,2-Dichloropropane	ND	70.7	62.8	89	71.6	54.4	76	14	74-125/25
124-48-1	Dibromochloromethane	ND	70.7	57.0	81	71.6	47.2	66*	19	76-127/27
75-71-8	Dichlorodifluoromethane	ND	70.7	66.5	94	71.6	57.7	81	14	68-168/29
156-59-2	cis-1,2-Dichloroethylene	ND	70.7	62.7	89	71.6	54.5	76	14	74-126/26
10061-01-5	cis-1,3-Dichloropropene	ND	70.7	61.6	87	71.6	50.6	71*	20	80-123/26
541-73-1	m-Dichlorobenzene	ND	70.7	67.3	95	71.6	44.1	62*	42*	81-129/33
95-50-1	o-Dichlorobenzene	ND	70.7	64.4	91	71.6	44.2	62*	37*	80-129/32
106-46-7	p-Dichlorobenzene	ND	70.7	68.6	97	71.6	44.6	62*	42*	76-130/32
156-60-5	trans-1,2-Dichloroethylene	ND	70.7	64.5	91	71.6	55.0	77	16	70-127/27
540-59-0	1,2-Dichloroethene (total)	ND	141	127	90	143	110	77	14	73-125/27
10061-02-6	trans-1,3-Dichloropropene	ND	70.7	63.2	89	71.6	51.9	72*	20	75-131/28
74-83-9	Methyl bromide	ND	70.7	68.6	97	71.6	61.9	86	10	65-139/31
74-87-3	Methyl chloride	ND	70.7	65.3	92	71.6	59.9	84	9	71-144/27
75-09-2	Methylene chloride	ND	70.7	70.3	99	71.6	60.7	85	15	74-137/28
71-55-6	1,1,1-Trichloroethane	ND	70.7	64.3	91	71.6	56.1	78	14	70-129/27
79-34-5	1,1,2,2-Tetrachloroethane	ND	70.7	66.1	93	71.6	55.3	77	18	71-126/30
79-00-5	1,1,2-Trichloroethane	ND	70.7	65.9	93	71.6	55.4	77	17	74-124/28
127-18-4	Tetrachloroethylene	ND	70.7	66.0	93	71.6	56.1	78*	16	79-130/31
79-01-6	Trichloroethylene	6.4	70.7	65.2	83	71.6	53.1	65*	20	75-128/27
75-69-4	Trichlorofluoromethane	ND	70.7	65.9	93	71.6	56.0	78	16	73-145/31
75-01-4	Vinyl chloride	ND	70.7	62.0	88	71.6	56.2	78	10	76-141/27

CAS No.	Surrogate Recoveries	MS	MSD	FA18372-1	Limits
1868-53-7	Dibromofluoromethane	95%	93%	90%	75-124%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA18404

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA18372-1MS	H0087829.D	1	09/19/14	EP	n/a	n/a	VH3339
FA18372-1MSD	H0087830.D	1	09/19/14	EP	n/a	n/a	VH3339
FA18372-1	H0087822.D	1	09/19/14	EP	n/a	n/a	VH3339

The QC reported here applies to the following samples:

Method: SW846 8260B

FA18404-1, FA18404-2, FA18404-3, FA18404-4, FA18404-5

CAS No.	Surrogate Recoveries	MS	MSD	FA18372-1	Limits
2037-26-5	Toluene-D8	98%	98%	96%	75-126%
460-00-4	4-Bromofluorobenzene	107%	107%	102%	71-133%
17060-07-0	1,2-Dichloroethane-D4	100%	99%	107%	72-135%

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA18404
Account: GFLEMFLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27899
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 09/22/14

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.75	1.6		
Antimony	1.0	.1	.1		
Arsenic	0.50	.1	.1	-0.11	<0.50
Barium	10	.05	.05		
Beryllium	0.25	.025	.025		
Cadmium	0.20	.025	.025		
Calcium	250	2.5	2.5		
Chromium	0.50	.05	.05		
Cobalt	2.5	.025	.025		
Copper	1.3	.05	.05		
Iron	15	.85	1.3		
Lead	1.0	.055	.08		
Magnesium	250	2.5	2.5		
Manganese	0.75	.025	.025		
Molybdenum	2.5	.025	.03		
Nickel	2.0	.025	.025		
Potassium	500	10	10		
Selenium	1.0	.12	.15		
Silver	0.50	.033	.033		
Sodium	500	25	25		
Strontium	0.50	.02	.025		
Thallium	0.50	.075	.075		
Tin	2.5	.035	.035		
Titanium	0.50	.045	.045		
Vanadium	2.5	.025	.025		
Zinc	1.0	.15	.15		

Associated samples MP27899: FA18404-1, FA18404-2, FA18404-3, FA18404-4, FA18404-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA18404
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27899
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date: 09/22/14 09/22/14

Metal	FA18425-1 Original	DUP	RPD	QC Limits	FA18425-1 Original MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum								
Antimony								
Arsenic	3.1	3.4 (a)	9.2	0-20	3.1	97.5 (a)	102	80-120
Barium								
Beryllium								
Cadmium	anr							
Calcium								
Chromium	anr							
Cobalt								
Copper								
Iron								
Lead	anr							
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP27899: FA18404-1, FA18404-2, FA18404-3, FA18404-4, FA18404-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Sample dilution required due to difficult matrix.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA18404
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27899
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date: 09/22/14

Metal	FA18425-1 Original MSD	Spike lot MPFLICP2 % Rec	MSD RPD	QC Limit
Aluminum				
Antimony				
Arsenic	3.1	108 (a)	107	98.0
Barium				
Beryllium				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron				
Lead	anr			
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP27899: FA18404-1, FA18404-2, FA18404-3, FA18404-4, FA18404-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Sample dilution required due to difficult matrix.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA18404
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27899
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date: 09/22/14

Metal	BSP Result	Spike lot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	94.5	100	94.5	80-120
Barium				
Beryllium				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron				
Lead	anr			
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP27899: FA18404-1, FA18404-2, FA18404-3, FA18404-4, FA18404-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA18404
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27899
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: ug/l

Prep Date: 09/22/14

Metal	FA18425-1 Original	SDL 5:25	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	63.5	50.1	21.1 (a)	0-10
Barium				
Beryllium				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron				
Lead	anr			
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP27899: FA18404-1, FA18404-2, FA18404-3, FA18404-4, FA18404-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: FA18404
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27899
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: ug/l

Prep Date:

09/22/14

Metal	Sample ml	Final ml	FA18425-1 Raw	PS Corr.** ug/l	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic	9.8	10	63.5	62.23	179.2	0.2	5	100	117.0	80-120
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP27899: FA18404-1, FA18404-2, FA18404-3, FA18404-4, FA18404-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested



07/31/14

Technical Report for

Gannett Fleming

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Accutest Job Number: FA16876

Sampling Date: 07/22/14

Report to:

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Total number of pages in report: **49**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.


Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Andrea Colby 407-425-6700

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Sample Summary

Gannett Fleming

Job No: FA16876

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample Number	Collected			Received	Matrix		Client Sample ID
	Date	Time	By		Code	Type	
FA16876-1	07/22/14	08:25	JS	07/24/14	AQ	Ground Water	MW-10
FA16876-2	07/22/14	09:01	JS	07/24/14	AQ	Ground Water	MW-4
FA16876-3	07/22/14	09:41	JS	07/24/14	AQ	Ground Water	MW-3
FA16876-4	07/22/14	10:20	JS	07/24/14	AQ	Ground Water	MW-11
FA16876-5	07/22/14	10:59	JS	07/24/14	AQ	Ground Water	MW-6
FA16876-6	07/22/14	11:34	JS	07/24/14	AQ	Ground Water	MW-5
FA16876-7	07/22/14	12:22	JS	07/24/14	AQ	Ground Water	MW-8

Summary of Hits

Page 1 of 1

Job Number: FA16876
Account: Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Collected: 07/22/14

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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FA16876-1 MW-10

No hits reported in this sample.

FA16876-2 MW-4

No hits reported in this sample.

FA16876-3 MW-3

No hits reported in this sample.

FA16876-4 MW-11

1,1-Dichloroethane	1.1	1.0	0.26	ug/l	SW846 8260B
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FA16876-5 MW-6

Methyl Tert Butyl Ether	1.5	1.0	0.20	ug/l	SW846 8260B
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FA16876-6 MW-5

Benzene	12.9	2.0	0.49	ug/l	SW846 8260B
Methyl Tert Butyl Ether	149	2.0	0.40	ug/l	SW846 8260B

FA16876-7 MW-8

Benzene	0.61 J	1.0	0.24	ug/l	SW846 8260B
Methyl Tert Butyl Ether	0.41 J	1.0	0.20	ug/l	SW846 8260B

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-1	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B100071.D	1	07/30/14	MM	n/a	n/a	VB4065
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	11	ug/l	
107-02-8	Acrolein	ND	20	6.4	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.31	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.30	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.27	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.23	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.29	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.20	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.78	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.24	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.34	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-1	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.29	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.24	ug/l	
100-42-5	Styrene	ND	1.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.57	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.24	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
	m,p-Xylene	ND	2.0	0.48	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-1	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	109%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-1	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	07/29/14	07/29/14 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA11774
(2) Prep QC Batch: MP27624

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-2	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B100072.D	1	07/30/14	MM	n/a	n/a	VB4065
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	11	ug/l	
107-02-8	Acrolein	ND	20	6.4	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.31	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.30	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.27	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.23	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.29	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.20	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.78	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.24	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.34	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-4	Date Sampled: 07/22/14
Lab Sample ID: FA16876-2	Date Received: 07/24/14
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.29	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.24	ug/l	
100-42-5	Styrene	ND	1.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.57	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.24	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
	m,p-Xylene	ND	2.0	0.48	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-2	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	109%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	109%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-2	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	07/29/14	07/29/14 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA11774
(2) Prep QC Batch: MP27624

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-3	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B100073.D	1	07/30/14	MM	n/a	n/a	VB4065
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	11	ug/l	
107-02-8	Acrolein	ND	20	6.4	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.31	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.30	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.27	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.23	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.29	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.20	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.78	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.24	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.34	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-3	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.29	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.24	ug/l	
100-42-5	Styrene	ND	1.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.57	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.24	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
	m,p-Xylene	ND	2.0	0.48	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-3	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	107%		79-125%
2037-26-5	Toluene-D8	104%		85-112%
460-00-4	4-Bromofluorobenzene	108%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-3	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	07/29/14	07/29/14 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA11774
(2) Prep QC Batch: MP27624

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-4	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B100074.D	1	07/30/14	MM	n/a	n/a	VB4065
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	11	ug/l	
107-02-8	Acrolein	ND	20	6.4	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.31	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.30	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.27	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.23	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.29	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.20	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	1.1	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.78	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.24	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.34	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-11	Date Sampled: 07/22/14
Lab Sample ID: FA16876-4	Date Received: 07/24/14
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.29	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.24	ug/l	
100-42-5	Styrene	ND	1.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.57	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.24	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
	m,p-Xylene	ND	2.0	0.48	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-4	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	108%		79-125%
2037-26-5	Toluene-D8	105%		85-112%
460-00-4	4-Bromofluorobenzene	107%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-5	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B100075.D	1	07/30/14	MM	n/a	n/a	VB4065
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	11	ug/l	
107-02-8	Acrolein	ND	20	6.4	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.31	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.30	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.27	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.23	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.29	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.20	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.78	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.24	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.34	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-6	Date Sampled: 07/22/14
Lab Sample ID: FA16876-5	Date Received: 07/24/14
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.29	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.5	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.24	ug/l	
100-42-5	Styrene	ND	1.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.57	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.24	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
	m,p-Xylene	ND	2.0	0.48	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-5	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	107%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	107%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-6	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B100076.D	2	07/30/14	MM	n/a	n/a	VB4065
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	21	ug/l	
107-02-8	Acrolein	ND	40	13	ug/l	
107-13-1	Acrylonitrile	ND	20	4.0	ug/l	
71-43-2	Benzene	12.9	2.0	0.49	ug/l	
108-86-1	Bromobenzene	ND	2.0	0.63	ug/l	
74-97-5	Bromochloromethane	ND	2.0	0.75	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.52	ug/l	
75-25-2	Bromoform	ND	2.0	0.77	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.60	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.54	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.57	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.48	ug/l	
75-00-3	Chloroethane	ND	4.0	1.0	ug/l	
67-66-3	Chloroform	ND	2.0	0.62	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.45	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.58	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	2.0	ug/l	
75-15-0	Carbon disulfide	ND	4.0	0.40	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.79	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.51	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.51	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.56	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	1.6	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.48	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.48	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.71	ug/l	
142-28-9	1,3-Dichloropropane	ND	2.0	0.68	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	0.66	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.72	ug/l	
75-71-8	Dichlorodifluoromethane	ND	4.0	0.66	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.65	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.42	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-5	Date Sampled: 07/22/14
Lab Sample ID: FA16876-6	Date Received: 07/24/14
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	2.0	0.40	ug/l	
95-50-1	o-Dichlorobenzene	ND	2.0	0.59	ug/l	
106-46-7	p-Dichlorobenzene	ND	2.0	0.40	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.69	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.42	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.56	ug/l	
591-78-6	2-Hexanone	ND	20	4.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.0	1.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.40	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.48	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	2.0	ug/l	
74-83-9	Methyl bromide	ND	4.0	1.1	ug/l	
74-87-3	Methyl chloride	ND	4.0	1.1	ug/l	
74-95-3	Methylene bromide	ND	4.0	0.58	ug/l	
75-09-2	Methylene chloride	ND	10	4.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	149	2.0	0.40	ug/l	
91-20-3	Naphthalene	ND	10	2.0	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.48	ug/l	
100-42-5	Styrene	ND	2.0	0.47	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.67	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.55	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.63	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	4.0	1.1	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	4.0	0.49	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	4.0	0.40	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.51	ug/l	
108-88-3	Toluene	ND	2.0	0.40	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.60	ug/l	
75-69-4	Trichlorofluoromethane	ND	4.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.65	ug/l	
108-05-4	Vinyl Acetate	ND	20	4.0	ug/l	
	m,p-Xylene	ND	4.0	0.96	ug/l	
95-47-6	o-Xylene	ND	2.0	0.40	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-6	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	105%		85-112%
460-00-4	4-Bromofluorobenzene	106%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-7	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B100077.D	1	07/30/14	MM	n/a	n/a	VB4065
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	11	ug/l	
107-02-8	Acrolein	ND	20	6.4	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	0.61	1.0	0.24	ug/l	J
108-86-1	Bromobenzene	ND	1.0	0.31	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.30	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.27	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.23	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.29	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.20	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.78	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.24	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.34	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-7	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.29	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.41	1.0	0.20	ug/l	J
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.24	ug/l	
100-42-5	Styrene	ND	1.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.57	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.24	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
	m,p-Xylene	ND	2.0	0.48	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	07/22/14
Lab Sample ID:	FA16876-7	Date Received:	07/24/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	107%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	107%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



Accutest Laboratories Southeast Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB #

FA 16876

PAGE 1 OF 1

Accutest Quote #

SKIFF#

Client / Reporting Information		Project Information		Analytical Information										Matrix Codes					
Company Name: <u>Gannett Fleming</u>		Project Name: <u>Thru R Valdosta</u>												DW - Drinking Water GW - Ground Water WW - Wastewater SW - Surface Water SO - Soil SL - Sludge OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe					
Address: <u>9119 Corporate Lake Dr.</u>		Street: <u>2000 W. Savannah</u>																	
City: <u>Tampa</u> State: <u>FL</u> Zip: <u>33634</u>		City: <u>Valdosta</u> State: <u>GA</u>																	
Project Contact: <u>David Falkner</u> E-mail: <u>dfalkner@gannett.com</u>		Project #																	
Phone: <u>813 882 4366</u>		Fax: <u>813 884 4609</u>																	
Sampler(s) Name(s): <u>J. Scott Stevens</u>		Client Purchase Order #																	
Field ID / Point of Collection		DATE		TIME	SAMPLED BY	MATRIX	TOTAL # OF BOTTLES	COOLERS	NOV	DEC	JAN	FEB	MARCH	APRIL	MAY/JUNE	JULY/AUG	SEPT/OCT	NOV/DEC	LAB USE ONLY
1	<u>mw-10</u>	<u>7/24/14</u>	<u>0825</u>	<u>J.S.S.</u>	<u>GW</u>	<u>4</u>													
2	<u>mw-4</u>	<u>7/24/14</u>	<u>0901</u>	<u>J.S.S.</u>	<u>GW</u>	<u>4</u>													
3	<u>mw-3</u>	<u>7/24/14</u>	<u>0941</u>	<u>J.S.S.</u>	<u>GW</u>	<u>4</u>													
4	<u>mw-11</u>	<u>7/24/14</u>	<u>1020</u>	<u>J.S.S.</u>	<u>GW</u>	<u>3</u>													
5	<u>mw-6</u>	<u>7/24/14</u>	<u>1059</u>	<u>J.S.S.</u>	<u>GW</u>	<u>3</u>													
6	<u>mw-5</u>	<u>7/24/14</u>	<u>1134</u>	<u>J.S.S.</u>	<u>GW</u>	<u>3</u>													
7	<u>mw-8</u>	<u>7/24/14</u>	<u>1222</u>	<u>J.S.S.</u>	<u>GW</u>	<u>3</u>													
TURNAROUND TIME (Business Days)		Data Deliverable Information		Comments / Remarks															
☒ 10 Days Standard ☐ 7 Day RUSH ☐ 5 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY ☐ OTHER		Approved By: / Rush Code		☐ COMMERCIAL "A" (RESULTS ONLY) ☐ COMMERCIAL "B" (RESULTS PLUS QC) ☐ REDT1 (EPA LEVEL 3) ☐ FULT1 (EPA LEVEL 4) ☒ EDD'S															
Emergency or Rush T/A Data Available VIA Email or Lablink																			
Sample Custody must be documented below each time samples change possession, including courier delivery.																			
Relinquished by: <u>1 J. Scott Stevens</u>	Date Time: <u>7/23/14 1506</u>	Received By: <u>2 James H. Hove</u>	Date Time: <u>7-23-14 1505</u>	Relinquished by: <u>3 James H. Hove</u>	Date Time: <u>7-27-14 1735</u>	Received By: <u>4 M. Williams</u>	Date Time: <u>07-29-14 to 6</u>												
Relinquished by: <u>5</u>	Date Time: <u>6</u>	Received By: <u>6</u>	Date Time: <u>7</u>	Relinquished by: <u>7</u>	Date Time: <u>8</u>	Received By: <u>8</u>													
Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: <u>2-4</u>																			

FA16876: Chain of Custody

Page 1 of 2

ACCEPTANCE NUMBER: 171107122 CLIENT: G2-1123 PROJECT: TMR Valdosta
DATE/TIME RECEIVED: 07-24-14 806 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER
AIRBILL NUMBERS:

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
☒ TRIP BLANK NOT PROVIDED
☒ TRIP BLANK NOT ON COC
☐ TRIP BLANK INTACT
☐ TRIP BLANK NOT INTACT
☐ RECEIVED WATER TRIP BLANK
☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____
NUMBER OF 5035 FIELD KITS ? _____
NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR 40.4
☐ OBSERVED TEMPS: 20
☐ CORRECTED TEMPS: 24

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
☐ INSUFFICIENT VOLUME FOR ANALYSIS
☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
☐ ID'S ON COC DO NOT MATCH LABEL
☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
☐ % SOLIDS JAR NOT RECEIVED
☐ RESIDUAL CHLORINE PRESENT

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE

RS 04/14

REVIEWER SIGNATURE/DATE

receipt confirmation 041514.xls

FA16876: Chain of Custody

Page 2 of 2

GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 3

Job Number: FA16876**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4065-MB	B100069.D	1	07/30/14	MM	n/a	n/a	VB4065

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA16876-1, FA16876-2, FA16876-3, FA16876-4, FA16876-5, FA16876-6, FA16876-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	11	ug/l	
107-02-8	Acrolein	ND	20	6.4	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.31	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.30	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.27	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.23	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.29	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.20	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.78	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.24	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.34	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: FA16876**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4065-MB	B100069.D	1	07/30/14	MM	n/a	n/a	VB4065

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA16876-1, FA16876-2, FA16876-3, FA16876-4, FA16876-5, FA16876-6, FA16876-7

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.29	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.24	ug/l	
100-42-5	Styrene	ND	1.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.57	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.24	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
	m,p-Xylene	ND	2.0	0.48	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Page 3 of 3

Job Number: FA16876

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4065-MB	B100069.D	1	07/30/14	MM	n/a	n/a	VB4065

The QC reported here applies to the following samples:

Method: SW846 8260B

FA16876-1, FA16876-2, FA16876-3, FA16876-4, FA16876-5, FA16876-6, FA16876-7

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	102% 83-118%
17060-07-0	1,2-Dichloroethane-D4	107% 79-125%
2037-26-5	Toluene-D8	104% 85-112%
460-00-4	4-Bromofluorobenzene	110% 83-118%

Blank Spike Summary

Job Number: FA16876**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4065-BS	B100067.D	1	07/30/14	MM	n/a	n/a	VB4065

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA16876-1, FA16876-2, FA16876-3, FA16876-4, FA16876-5, FA16876-6, FA16876-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	87.8	70	50-147
107-02-8	Acrolein	125	115	92	31-154
107-13-1	Acrylonitrile	125	124	99	58-126
71-43-2	Benzene	25	27.3	109	81-122
108-86-1	Bromobenzene	25	25.3	101	80-121
74-97-5	Bromochloromethane	25	24.4	98	76-123
75-27-4	Bromodichloromethane	25	25.2	101	79-123
75-25-2	Bromoform	25	22.0	88	66-123
104-51-8	n-Butylbenzene	25	27.6	110	79-126
135-98-8	sec-Butylbenzene	25	29.3	117	83-133
98-06-6	tert-Butylbenzene	25	29.4	118	80-133
108-90-7	Chlorobenzene	25	27.1	108	82-124
75-00-3	Chloroethane	25	26.0	104	62-144
67-66-3	Chloroform	25	26.4	106	80-124
95-49-8	o-Chlorotoluene	25	27.7	111	81-127
106-43-4	p-Chlorotoluene	25	28.9	116	83-130
110-75-8	2-Chloroethyl vinyl ether	125	127	102	56-122
75-15-0	Carbon disulfide	25	24.9	100	66-148
56-23-5	Carbon tetrachloride	25	25.6	102	76-136
75-34-3	1,1-Dichloroethane	25	26.7	107	81-122
75-35-4	1,1-Dichloroethylene	25	28.0	112	78-137
563-58-6	1,1-Dichloropropene	25	28.4	114	79-131
96-12-8	1,2-Dibromo-3-chloropropane	25	23.0	92	64-123
106-93-4	1,2-Dibromoethane	25	24.2	97	75-120
107-06-2	1,2-Dichloroethane	25	26.8	107	75-125
78-87-5	1,2-Dichloropropane	25	25.7	103	76-124
142-28-9	1,3-Dichloropropane	25	25.1	100	80-118
594-20-7	2,2-Dichloropropane	25	27.5	110	74-139
124-48-1	Dibromochloromethane	25	23.6	94	78-122
75-71-8	Dichlorodifluoromethane	25	26.4	106	42-167
156-59-2	cis-1,2-Dichloroethylene	25	25.6	102	78-120
10061-01-5	cis-1,3-Dichloropropene	25	24.2	97	75-118
541-73-1	m-Dichlorobenzene	25	28.8	115	84-125
95-50-1	o-Dichlorobenzene	25	28.0	112	82-124
106-46-7	p-Dichlorobenzene	25	27.1	108	78-120
156-60-5	trans-1,2-Dichloroethylene	25	28.0	112	76-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA16876**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4065-BS	B100067.D	1	07/30/14	MM	n/a	n/a	VB4065

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA16876-1, FA16876-2, FA16876-3, FA16876-4, FA16876-5, FA16876-6, FA16876-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	25	26.3	105	80-120
100-41-4	Ethylbenzene	25	25.7	103	81-121
591-78-6	2-Hexanone	125	97.2	78	61-129
87-68-3	Hexachlorobutadiene	25	23.9	96	75-142
98-82-8	Isopropylbenzene	25	29.5	118	83-132
99-87-6	p-Isopropyltoluene	25	28.4	114	79-130
108-10-1	4-Methyl-2-pentanone	125	128	102	66-122
74-83-9	Methyl bromide	25	22.7	91	59-143
74-87-3	Methyl chloride	25	29.2	117	50-159
74-95-3	Methylene bromide	25	23.9	96	78-119
75-09-2	Methylene chloride	25	28.4	114	69-135
78-93-3	Methyl ethyl ketone	125	109	87	56-143
1634-04-4	Methyl Tert Butyl Ether	25	24.2	97	72-117
91-20-3	Naphthalene	25	22.3	89	63-132
103-65-1	n-Propylbenzene	25	30.4	122	82-133
100-42-5	Styrene	25	24.7	99	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	26.4	106	77-122
71-55-6	1,1,1-Trichloroethane	25	26.4	106	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	24.4	98	72-120
79-00-5	1,1,2-Trichloroethane	25	25.1	100	76-119
87-61-6	1,2,3-Trichlorobenzene	25	22.9	92	68-131
96-18-4	1,2,3-Trichloropropane	25	24.3	97	77-120
120-82-1	1,2,4-Trichlorobenzene	25	24.4	98	73-129
95-63-6	1,2,4-Trimethylbenzene	25	26.8	107	79-120
108-67-8	1,3,5-Trimethylbenzene	25	27.4	110	79-120
127-18-4	Tetrachloroethylene	25	26.4	106	76-135
108-88-3	Toluene	25	25.5	102	80-120
79-01-6	Trichloroethylene	25	25.9	104	81-126
75-69-4	Trichlorofluoromethane	25	26.3	105	71-156
75-01-4	Vinyl chloride	25	27.5	110	69-159
108-05-4	Vinyl Acetate	125	182	146	43-154
	m,p-Xylene	50	53.6	107	79-126
95-47-6	o-Xylene	25	28.2	113	80-127

* = Outside of Control Limits.

Blank Spike Summary

Page 3 of 3

Job Number: FA16876

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4065-BS	B100067.D	1	07/30/14	MM	n/a	n/a	VB4065

The QC reported here applies to the following samples:

Method: SW846 8260B

FA16876-1, FA16876-2, FA16876-3, FA16876-4, FA16876-5, FA16876-6, FA16876-7

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	83-118%
17060-07-0	1,2-Dichloroethane-D4	106%	79-125%
2037-26-5	Toluene-D8	104%	85-112%
460-00-4	4-Bromofluorobenzene	101%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA16876

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA16735-1MS	B100090.D	1	07/30/14	MM	n/a	n/a	VB4065
FA16735-1MSD	B100091.D	1	07/30/14	MM	n/a	n/a	VB4065
FA16735-1	B100070.D	1	07/30/14	MM	n/a	n/a	VB4065

The QC reported here applies to the following samples:

Method: SW846 8260B

FA16876-1, FA16876-2, FA16876-3, FA16876-4, FA16876-5, FA16876-6, FA16876-7

CAS No.	Compound	FA16735-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	72.3	58	125	72.8	58	1	50-147/21
107-02-8	Acrolein	ND		125	104	83	125	91.3	73	13	31-154/29
107-13-1	Acrylonitrile	ND		125	125	100	125	130	104	4	58-126/16
71-43-2	Benzene	ND		25	27.3	109	25	26.8	107	2	81-122/14
108-86-1	Bromobenzene	ND		25	26.4	106	25	24.2	97	9	80-121/14
74-97-5	Bromochloromethane	ND		25	25.4	102	25	25.3	101	0	76-123/14
75-27-4	Bromodichloromethane	ND		25	25.6	102	25	22.7	91	12	79-123/19
75-25-2	Bromoform	ND		25	21.0	84	25	20.1	80	4	66-123/21
104-51-8	n-Butylbenzene	ND		25	27.0	108	25	24.6	98	9	79-126/16
135-98-8	sec-Butylbenzene	ND		25	29.1	116	25	28.1	112	3	83-133/16
98-06-6	tert-Butylbenzene	ND		25	29.4	118	25	28.5	114	3	80-133/16
108-90-7	Chlorobenzene	ND		25	27.5	110	25	27.2	109	1	82-124/14
75-00-3	Chloroethane	ND		25	27.1	108	25	26.7	107	1	62-144/20
67-66-3	Chloroform	ND		25	26.3	105	25	26.9	108	2	80-124/15
95-49-8	o-Chlorotoluene	ND		25	29.0	116	25	27.9	112	4	81-127/15
106-43-4	p-Chlorotoluene	ND		25	29.8	119	25	28.3	113	5	83-130/15
110-75-8	2-Chloroethyl vinyl ether	ND		125	ND	0*	125	ND	0*	nc	56-122/23
75-15-0	Carbon disulfide	ND		25	22.1	88	25	20.2	81	9	66-148/23
56-23-5	Carbon tetrachloride	ND		25	25.6	102	25	23.6	94	8	76-136/23
75-34-3	1,1-Dichloroethane	ND		25	27.6	110	25	27.0	108	2	81-122/15
75-35-4	1,1-Dichloroethylene	ND		25	28.2	113	25	28.4	114	1	78-137/18
563-58-6	1,1-Dichloropropene	ND		25	27.6	110	25	26.5	106	4	79-131/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		25	24.4	98	25	23.9	96	2	64-123/18
106-93-4	1,2-Dibromoethane	ND		25	24.9	100	25	24.4	98	2	75-120/13
107-06-2	1,2-Dichloroethane	ND		25	28.2	113	25	27.9	112	1	75-125/14
78-87-5	1,2-Dichloropropane	ND		25	26.5	106	25	25.6	102	3	76-124/14
142-28-9	1,3-Dichloropropane	ND		25	25.7	103	25	25.7	103	0	80-118/13
594-20-7	2,2-Dichloropropane	ND		25	23.4	94	25	22.9	92	2	74-139/17
124-48-1	Dibromochloromethane	ND		25	23.9	96	25	21.6	86	10	78-122/19
75-71-8	Dichlorodifluoromethane	ND		25	26.0	104	25	25.9	104	0	42-167/19
156-59-2	cis-1,2-Dichloroethylene	ND		25	24.6	98	25	25.0	100	2	78-120/15
10061-01-5	cis-1,3-Dichloropropene	ND		25	24.5	98	25	21.3	85	14	75-118/23
541-73-1	m-Dichlorobenzene	ND		25	28.3	113	25	27.1	108	4	84-125/14
95-50-1	o-Dichlorobenzene	ND		25	26.8	107	25	25.8	103	4	82-124/14
106-46-7	p-Dichlorobenzene	ND		25	26.4	106	25	24.9	100	6	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		25	28.0	112	25	26.8	107	4	76-127/17

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA16876

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA16735-1MS	B100090.D	1	07/30/14	MM	n/a	n/a	VB4065
FA16735-1MSD	B100091.D	1	07/30/14	MM	n/a	n/a	VB4065
FA16735-1	B100070.D	1	07/30/14	MM	n/a	n/a	VB4065

The QC reported here applies to the following samples:

Method: SW846 8260B

FA16876-1, FA16876-2, FA16876-3, FA16876-4, FA16876-5, FA16876-6, FA16876-7

CAS No.	Compound	FA16735-1 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND	25	26.0	104	25	24.3	97	7	80-120/22
100-41-4	Ethylbenzene	ND	25	25.6	102	25	25.3	101	1	81-121/14
591-78-6	2-Hexanone	ND	125	102	82	125	108	86	6	61-129/18
87-68-3	Hexachlorobutadiene	ND	25	21.4	86	25	23.0	92	7	75-142/19
98-82-8	Isopropylbenzene	ND	25	29.5	118	25	28.7	115	3	83-132/15
99-87-6	p-Isopropyltoluene	ND	25	27.7	111	25	27.4	110	1	79-130/16
108-10-1	4-Methyl-2-pentanone	ND	125	150	120	125	148	118	1	66-122/16
74-83-9	Methyl bromide	ND	25	23.5	94	25	23.7	95	1	59-143/19
74-87-3	Methyl chloride	ND	25	32.0	128	25	30.4	122	5	50-159/19
74-95-3	Methylene bromide	ND	25	24.9	100	25	24.4	98	2	78-119/14
75-09-2	Methylene chloride	ND	25	30.1	120	25	30.3	121	1	69-135/16
78-93-3	Methyl ethyl ketone	ND	125	116	93	125	116	93	0	56-143/18
1634-04-4	Methyl Tert Butyl Ether	ND	25	24.7	99	25	24.6	98	0	72-117/14
91-20-3	Naphthalene	ND	25	22.4	90	25	23.1	92	3	63-132/25
103-65-1	n-Propylbenzene	ND	25	31.3	125	25	30.0	120	4	82-133/15
100-42-5	Styrene	ND	25	23.7	95	25	23.8	95	0	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND	25	25.2	101	25	24.2	97	4	77-122/19
71-55-6	1,1,1-Trichloroethane	ND	25	26.2	105	25	26.9	108	3	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	26.8	107	25	26.0	104	3	72-120/14
79-00-5	1,1,2-Trichloroethane	ND	25	26.5	106	25	26.3	105	1	76-119/14
87-61-6	1,2,3-Trichlorobenzene	ND	25	22.1	88	25	22.0	88	0	68-131/25
96-18-4	1,2,3-Trichloropropane	ND	25	27.3	109	25	26.1	104	4	77-120/16
120-82-1	1,2,4-Trichlorobenzene	ND	25	22.9	92	25	22.8	91	0	73-129/20
95-63-6	1,2,4-Trimethylbenzene	ND	25	27.1	108	25	26.3	105	3	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND	25	27.5	110	25	26.7	107	3	79-120/19
127-18-4	Tetrachloroethylene	ND	25	25.1	100	25	24.4	98	3	76-135/16
108-88-3	Toluene	ND	25	25.4	102	25	25.5	102	0	80-120/14
79-01-6	Trichloroethylene	ND	25	26.2	105	25	24.9	100	5	81-126/15
75-69-4	Trichlorofluoromethane	ND	25	26.2	105	25	25.8	103	2	71-156/21
75-01-4	Vinyl chloride	ND	25	26.6	106	25	27.3	109	3	69-159/18
108-05-4	Vinyl Acetate	ND	125	194	155*	125	188	150	3	43-154/14
	m,p-Xylene	ND	50	54.0	108	50	52.5	105	3	79-126/15
95-47-6	o-Xylene	ND	25	27.7	111	25	28.1	112	1	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: FA16876

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA16735-1MS	B100090.D	1	07/30/14	MM	n/a	n/a	VB4065
FA16735-1MSD	B100091.D	1	07/30/14	MM	n/a	n/a	VB4065
FA16735-1	B100070.D	1	07/30/14	MM	n/a	n/a	VB4065

The QC reported here applies to the following samples:

Method: SW846 8260B

FA16876-1, FA16876-2, FA16876-3, FA16876-4, FA16876-5, FA16876-6, FA16876-7

CAS No.	Surrogate Recoveries	MS	MSD	FA16735-1	Limits
1868-53-7	Dibromofluoromethane	99%	104%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	110%	112%	106%	79-125%
2037-26-5	Toluene-D8	100%	104%	105%	85-112%
460-00-4	4-Bromofluorobenzene	109%	109%	110%	83-118%

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA16876
Account: GFLEMLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27624
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 07/29/14

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	15	15		
Antimony	6.0	2	2.3		
Arsenic	10	2	2.4	-1.1	<10
Barium	200	1	1		
Beryllium	4.0	.5	.5		
Cadmium	5.0	.5	.5		
Calcium	1000	50	50		
Chromium	10	1	2		
Cobalt	50	.5	.5		
Copper	25	1	1		
Iron	300	17	17		
Lead	5.0	1.1	1.1		
Magnesium	5000	50	56		
Manganese	15	.5	1		
Molybdenum	50	.5	.5		
Nickel	40	.5	.5		
Potassium	10000	200	200		
Selenium	10	2.3	2.3		
Silver	10	.65	.77		
Sodium	10000	500	500		
Strontium	10	.4	.4		
Thallium	10	1.5	2		
Tin	50	.7	1		
Titanium	10	.9	1		
Vanadium	50	.5	.5		
Zinc	20	3	3		

Associated samples MP27624: FA16876-1, FA16876-2, FA16876-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA16876
 Account: GFLEMLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27624
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 07/29/14 07/29/14

Metal	FA16876-1 Original	DUP	RPD	QC Limits	FA16876-1 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic	0.0	0.0	NC	0-20	0.0	2010	2000	100.5	80-120
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium									
Manganese									
Molybdenum	anr								
Nickel									
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	anr								

Associated samples MP27624: FA16876-1, FA16876-2, FA16876-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA16876
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27624
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 07/29/14

Metal	FA16876-1 Original MSD	Spike lot MPFLICP2 % Rec	MSD RPD	QC Limit
Aluminum				
Antimony				
Arsenic	0.0	1980	2000	99.0
Barium	anr			
Beryllium				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese				
Molybdenum	anr			
Nickel				
Potassium				
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP27624: FA16876-1, FA16876-2, FA16876-3

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA16876
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27624
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 07/29/14

Metal	BSP Result	Spike lot MPFLICP2 % Rec	QC Limits
Aluminum			
Antimony			
Arsenic	2010	2000	100.5
Barium	anr		80-120
Beryllium			
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt			
Copper	anr		
Iron	anr		
Lead	anr		
Magnesium			
Manganese			
Molybdenum	anr		
Nickel			
Potassium			
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc	anr		

Associated samples MP27624: FA16876-1, FA16876-2, FA16876-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA16876
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27624
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 07/29/14

Metal	FA16876-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	0.00	0.00	NC	0-10
Barium	anr			
Beryllium				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese				
Molybdenum	anr			
Nickel				
Potassium				
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP27624: FA16876-1, FA16876-2, FA16876-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA16876
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27624
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

07/29/14

Metal	Sample ml	Final ml	FA16876-1 Raw	FA16876-1 Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic	9.8	10			108.8	0.2	5	100	108.8	80-120
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP27624: FA16876-1, FA16876-2, FA16876-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested



08/20/14

Technical Report for

Gannett Fleming

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Accutest Job Number: FA17334

Sampling Dates: 08/11/14 - 08/12/14

Report to:

Gannett Fleming
West Lake Corporate Center 9119 Corporate Lake Dr, Suite 150
Tampa, FL 33634-6323
axhoffman@gfnet.com; brenda.anderson@tmrecycling.com;
tfalkner@gfnet.com
ATTN: Todd Falkner

Total number of pages in report: **45**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read 'Norm Farmer'.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001)
DoD ELAP (L-A-B L2229), CA (04226CA), TX (T104704404), PA (68-03573), VA (460177),
AK, AR, GA, KY, MA, NV, OK, UT, WA

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Test results relate only to samples analyzed.

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Sample Summary

Gannett Fleming

Job No: FA17334

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA17334-1	08/11/14	14:53 JS	08/13/14	AQ	Ground Water	MW-13
FA17334-2	08/11/14	15:43 JS	08/13/14	AQ	Ground Water	MW-5D
FA17334-3	08/11/14	16:13 JS	08/13/14	AQ	Ground Water	MW-12
FA17334-4	08/12/14	08:53 JS	08/13/14	AQ	Ground Water	MW-2R
FA17334-5	08/12/14	09:31 JS	08/13/14	AQ	Ground Water	MW-1R

Summary of Hits

Job Number: FA17334
Account: Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Collected: 08/11/14 thru 08/12/14

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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FA17334-1 MW-13

No hits reported in this sample.

FA17334-2 MW-5D

1,1-Dichloroethane	0.34 J	1.0	0.26	ug/l	SW846 8260B
Methyl Tert Butyl Ether	0.38 J	1.0	0.20	ug/l	SW846 8260B
1,2,4-Trichlorobenzene	0.51 J	1.0	0.50	ug/l	SW846 8260B

FA17334-3 MW-12

Methyl Tert Butyl Ether	6.1	1.0	0.20	ug/l	SW846 8260B
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FA17334-4 MW-2R

Tetrachloroethylene	2.3	1.0	0.26	ug/l	SW846 8260B
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FA17334-5 MW-1R

Benzene	0.91 J	1.0	0.24	ug/l	SW846 8260B
Chloroform	0.41 J	1.0	0.31	ug/l	SW846 8260B
1,1-Dichloroethane	1.6	1.0	0.26	ug/l	SW846 8260B
1,1-Dichloroethylene	24.8	1.0	0.25	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	1770	50	16	ug/l	SW846 8260B
o-Dichlorobenzene	0.60 J	1.0	0.29	ug/l	SW846 8260B
p-Dichlorobenzene	0.33 J	1.0	0.20	ug/l	SW846 8260B
trans-1,2-Dichloroethylene	20.1	1.0	0.34	ug/l	SW846 8260B
Ethylbenzene	22.5	1.0	0.28	ug/l	SW846 8260B
Isopropylbenzene	1.1	1.0	0.20	ug/l	SW846 8260B
p-Isopropyltoluene	0.28 J	1.0	0.24	ug/l	SW846 8260B
Naphthalene	2.9 J	5.0	1.0	ug/l	SW846 8260B
n-Propylbenzene	2.6	1.0	0.24	ug/l	SW846 8260B
1,2,4-Trimethylbenzene	6.6	2.0	0.24	ug/l	SW846 8260B
1,3,5-Trimethylbenzene	2.3	2.0	0.20	ug/l	SW846 8260B
Tetrachloroethylene	130	50	13	ug/l	SW846 8260B
Toluene	2.9	1.0	0.20	ug/l	SW846 8260B
Trichloroethylene	3060	50	15	ug/l	SW846 8260B
Vinyl chloride	4.2	1.0	0.33	ug/l	SW846 8260B
m,p-Xylene	27.5	2.0	0.48	ug/l	SW846 8260B
o-Xylene	29.6	1.0	0.20	ug/l	SW846 8260B
Arsenic	225	10		ug/l	SW846 6010C

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-13	Date Sampled:	08/11/14
Lab Sample ID:	FA17334-1	Date Received:	08/13/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z27877.D	1	08/15/14	SP	n/a	n/a	VZ1080
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	11	ug/l	
107-02-8	Acrolein	ND	20	6.4	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.31	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.30	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.27	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.23	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.29	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.20	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.78	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.24	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.34	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13	Date Sampled:	08/11/14
Lab Sample ID:	FA17334-1	Date Received:	08/13/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.29	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.24	ug/l	
100-42-5	Styrene	ND	1.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.57	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.24	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
108-05-4	Vinyl Acetate ^a	ND	10	2.0	ug/l	
	m,p-Xylene	ND	2.0	0.48	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13	Date Sampled:	08/11/14
Lab Sample ID:	FA17334-1	Date Received:	08/13/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	91%		79-125%
2037-26-5	Toluene-D8	91%		85-112%
460-00-4	4-Bromofluorobenzene	89%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5D	Date Sampled:	08/11/14
Lab Sample ID:	FA17334-2	Date Received:	08/13/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z27878.D	1	08/15/14	SP	n/a	n/a	VZ1080
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	11	ug/l	
107-02-8	Acrolein	ND	20	6.4	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.31	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.30	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.27	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.23	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.29	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.20	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	0.34	1.0	0.26	ug/l	J
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.78	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.24	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.34	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5D	Date Sampled:	08/11/14
Lab Sample ID:	FA17334-2	Date Received:	08/13/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.29	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.38	1.0	0.20	ug/l	J
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.24	ug/l	
100-42-5	Styrene	ND	1.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.57	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.51	1.0	0.50	ug/l	J
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.24	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
108-05-4	Vinyl Acetate ^a	ND	10	2.0	ug/l	
	m,p-Xylene	ND	2.0	0.48	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5D	Date Sampled:	08/11/14
Lab Sample ID:	FA17334-2	Date Received:	08/13/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		83-118%
17060-07-0	1,2-Dichloroethane-D4	90%		79-125%
2037-26-5	Toluene-D8	92%		85-112%
460-00-4	4-Bromofluorobenzene	88%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-12	Date Sampled:	08/11/14
Lab Sample ID:	FA17334-3	Date Received:	08/13/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z27879.D	1	08/15/14	SP	n/a	n/a	VZ1080
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	11	ug/l	
107-02-8	Acrolein	ND	20	6.4	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.31	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.30	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.27	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.23	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.29	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.20	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.78	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.24	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.34	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-12	Date Sampled:	08/11/14
Lab Sample ID:	FA17334-3	Date Received:	08/13/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.29	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	6.1	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.24	ug/l	
100-42-5	Styrene	ND	1.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.57	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.24	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
108-05-4	Vinyl Acetate ^a	ND	10	2.0	ug/l	
	m,p-Xylene	ND	2.0	0.48	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-12	Date Sampled:	08/11/14
Lab Sample ID:	FA17334-3	Date Received:	08/13/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		83-118%
17060-07-0	1,2-Dichloroethane-D4	90%		79-125%
2037-26-5	Toluene-D8	93%		85-112%
460-00-4	4-Bromofluorobenzene	89%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	08/12/14
Lab Sample ID:	FA17334-4	Date Received:	08/13/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z27880.D	1	08/15/14	SP	n/a	n/a	VZ1080
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	11	ug/l	
107-02-8	Acrolein	ND	20	6.4	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.31	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.30	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.27	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.23	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.29	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.20	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.78	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.24	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.34	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	08/12/14
Lab Sample ID:	FA17334-4	Date Received:	08/13/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.29	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.24	ug/l	
100-42-5	Styrene	ND	1.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.57	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.24	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	2.3	1.0	0.26	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
108-05-4	Vinyl Acetate ^a	ND	10	2.0	ug/l	
	m,p-Xylene	ND	2.0	0.48	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	08/12/14
Lab Sample ID:	FA17334-4	Date Received:	08/13/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	90%		79-125%
2037-26-5	Toluene-D8	90%		85-112%
460-00-4	4-Bromofluorobenzene	86%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R		
Lab Sample ID:	FA17334-4	Date Sampled:	08/12/14
Matrix:	AQ - Ground Water	Date Received:	08/13/14
		Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	08/14/14	08/14/14 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA11814
(2) Prep QC Batch: MP27705

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	08/12/14
Lab Sample ID:	FA17334-5	Date Received:	08/13/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z27881.D	1	08/15/14	SP	n/a	n/a	VZ1080
Run #2	B100495.D	50	08/19/14	DP	n/a	n/a	VB4081

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	11	ug/l	
107-02-8	Acrolein	ND	20	6.4	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	0.91	1.0	0.24	ug/l	J
108-86-1	Bromobenzene	ND	1.0	0.31	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.30	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.27	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	0.41	1.0	0.31	ug/l	J
95-49-8	o-Chlorotoluene	ND	1.0	0.23	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.29	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.20	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	1.6	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	24.8	1.0	0.25	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.78	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.24	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.34	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1770 ^a	50	16	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	08/12/14
Lab Sample ID:	FA17334-5	Date Received:	08/13/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	0.60	1.0	0.29	ug/l	J
106-46-7	p-Dichlorobenzene	0.33	1.0	0.20	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	20.1	1.0	0.34	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	22.5	1.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	1.1	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	0.28	1.0	0.24	ug/l	J
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.29	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	2.9	5.0	1.0	ug/l	J
103-65-1	n-Propylbenzene	2.6	1.0	0.24	ug/l	
100-42-5	Styrene	ND	1.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.57	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	6.6	2.0	0.24	ug/l	
108-67-8	1,3,5-Trimethylbenzene	2.3	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	130 ^a	50	13	ug/l	
108-88-3	Toluene	2.9	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	3060 ^a	50	15	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	4.2	1.0	0.33	ug/l	
108-05-4	Vinyl Acetate ^b	ND	10	2.0	ug/l	
	m,p-Xylene	27.5	2.0	0.48	ug/l	
95-47-6	o-Xylene	29.6	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	08/12/14
Lab Sample ID:	FA17334-5	Date Received:	08/13/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	107%	83-118%
17060-07-0	1,2-Dichloroethane-D4	91%	111%	79-125%
2037-26-5	Toluene-D8	88%	100%	85-112%
460-00-4	4-Bromofluorobenzene	84%	101%	83-118%

(a) Result is from Run# 2

(b) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	08/12/14
Lab Sample ID:	FA17334-5	Date Received:	08/13/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	225	10	ug/l	1	08/14/14	08/14/14 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA11814
(2) Prep QC Batch: MP27705

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Quote #	Customer Name	Product	Price	Quantity	Total	Notes

SKIFF#	
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[illegible]

FA17334: Chain of Custody

Page 1 of 2

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA17334 CLIENT: Gannett PROJECT: TMR Valdosta
 DATE/TIME RECEIVED: 08-13-14 8:00 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER
 AIRBILL NUMBERS: _____

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
- ☒ TRIP BLANK NOT PROVIDED
- ☒ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____
 NUMBER OF 5035 FIELD KITS ? _____
 NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

IR THERM ID 1 CORR. FACTOR -0.4
 OBSERVED TEMPS: 2.4
 CORRECTED TEMPS: 2.8

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
- ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
- ☐ INSUFFICIENT VOLUME FOR ANALYSIS
- ☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ☐ ID'S ON COC DO NOT MATCH LABEL
- ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- ☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- ☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
- ☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- ☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- ☐ % SOLIDS JAR NOT RECEIVED
- ☐ RESIDUAL CHLORINE PRESENT

[APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS]

SUMMARY OF COMMENTS: _____

TECHNICIAN SIGNATURE/DATE

RW 08-13-14

REVIEWER SIGNATURE/DATE

08-13-14

RS 04/14

receipt confirmation 041514.xls

FA17334: Chain of Custody

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GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 3

Job Number: FA17334**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ1080-MB	Z27867.D	1	08/15/14	SP	n/a	n/a	VZ1080

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA17334-1, FA17334-2, FA17334-3, FA17334-4, FA17334-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	11	ug/l	
107-02-8	Acrolein	ND	20	6.4	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.24	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.31	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.38	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.30	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.27	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.29	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.23	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.29	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.0	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.20	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.78	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.24	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.34	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.33	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: FA17334**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ1080-MB	Z27867.D	1	08/15/14	SP	n/a	n/a	VZ1080

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA17334-1, FA17334-2, FA17334-3, FA17334-4, FA17334-5

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.28	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.24	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.29	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	1.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.24	ug/l	
100-42-5	Styrene	ND	1.0	0.23	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.57	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.24	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
	m,p-Xylene	ND	2.0	0.48	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA17334
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ1080-MB	Z27867.D	1	08/15/14	SP	n/a	n/a	VZ1080

The QC reported here applies to the following samples: Method: SW846 8260B

FA17334-1, FA17334-2, FA17334-3, FA17334-4, FA17334-5

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	93% 83-118%
17060-07-0	1,2-Dichloroethane-D4	89% 79-125%
2037-26-5	Toluene-D8	91% 85-112%
460-00-4	4-Bromofluorobenzene	91% 83-118%

Method Blank Summary

Page 1 of 1

Job Number: FA17334

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4081-MB	B100475.D	1	08/19/14	DP	n/a	n/a	VB4081

The QC reported here applies to the following samples:

Method: SW846 8260B

FA17334-5

CAS No.	Compound	Result	RL	MDL	Units	Q
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	106% 83-118%
17060-07-0	1,2-Dichloroethane-D4	108% 79-125%
2037-26-5	Toluene-D8	104% 85-112%
460-00-4	4-Bromofluorobenzene	99% 83-118%

Blank Spike Summary

Page 1 of 3

Job Number: FA17334**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ1080-BS	Z27865.D	1	08/15/14	SP	n/a	n/a	VZ1080

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA17334-1, FA17334-2, FA17334-3, FA17334-4, FA17334-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	165	132	50-147
107-02-8	Acrolein	125	185	148	31-154
107-13-1	Acrylonitrile	125	119	95	58-126
71-43-2	Benzene	25	24.3	97	81-122
108-86-1	Bromobenzene	25	26.9	108	80-121
74-97-5	Bromochloromethane	25	24.7	99	76-123
75-27-4	Bromodichloromethane	25	22.8	91	79-123
75-25-2	Bromoform	25	20.8	83	66-123
104-51-8	n-Butylbenzene	25	27.8	111	79-126
135-98-8	sec-Butylbenzene	25	29.0	116	83-133
98-06-6	tert-Butylbenzene	25	28.6	114	80-133
108-90-7	Chlorobenzene	25	28.1	112	82-124
75-00-3	Chloroethane	25	32.5	130	62-144
67-66-3	Chloroform	25	23.6	94	80-124
95-49-8	o-Chlorotoluene	25	24.7	99	81-127
106-43-4	p-Chlorotoluene	25	23.9	96	83-130
110-75-8	2-Chloroethyl vinyl ether	125	125	100	56-122
75-15-0	Carbon disulfide	25	28.8	115	66-148
56-23-5	Carbon tetrachloride	25	26.5	106	76-136
75-34-3	1,1-Dichloroethane	25	26.4	106	81-122
75-35-4	1,1-Dichloroethylene	25	29.3	117	78-137
563-58-6	1,1-Dichloropropene	25	27.6	110	79-131
96-12-8	1,2-Dibromo-3-chloropropane	25	21.6	86	64-123
106-93-4	1,2-Dibromoethane	25	23.2	93	75-120
107-06-2	1,2-Dichloroethane	25	24.6	98	75-125
78-87-5	1,2-Dichloropropane	25	24.7	99	76-124
142-28-9	1,3-Dichloropropane	25	23.0	92	80-118
594-20-7	2,2-Dichloropropane	25	26.9	108	74-139
124-48-1	Dibromochloromethane	25	22.3	89	78-122
75-71-8	Dichlorodifluoromethane	25	26.1	104	42-167
156-59-2	cis-1,2-Dichloroethylene	25	25.6	102	78-120
10061-01-5	cis-1,3-Dichloropropene	25	22.6	90	75-118
541-73-1	m-Dichlorobenzene	25	26.6	106	84-125
95-50-1	o-Dichlorobenzene	25	28.9	116	82-124
106-46-7	p-Dichlorobenzene	25	24.8	99	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.5	106	76-127

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA17334**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ1080-BS	Z27865.D	1	08/15/14	SP	n/a	n/a	VZ1080

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA17334-1, FA17334-2, FA17334-3, FA17334-4, FA17334-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	25	23.0	92	80-120
100-41-4	Ethylbenzene	25	25.3	101	81-121
591-78-6	2-Hexanone	125	146	117	61-129
87-68-3	Hexachlorobutadiene	25	26.2	105	75-142
98-82-8	Isopropylbenzene	25	31.0	124	83-132
99-87-6	p-Isopropyltoluene	25	27.9	112	79-130
108-10-1	4-Methyl-2-pentanone	125	116	93	66-122
74-83-9	Methyl bromide	25	31.2	125	59-143
74-87-3	Methyl chloride	25	33.1	132	50-159
74-95-3	Methylene bromide	25	24.2	97	78-119
75-09-2	Methylene chloride	25	28.9	116	69-135
78-93-3	Methyl ethyl ketone	125	145	116	56-143
1634-04-4	Methyl Tert Butyl Ether	25	20.7	83	72-117
91-20-3	Naphthalene	25	20.6	82	63-132
103-65-1	n-Propylbenzene	25	30.4	122	82-133
100-42-5	Styrene	25	22.6	90	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	25.0	100	77-122
71-55-6	1,1,1-Trichloroethane	25	26.3	105	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	22.4	90	72-120
79-00-5	1,1,2-Trichloroethane	25	24.0	96	76-119
87-61-6	1,2,3-Trichlorobenzene	25	22.5	90	68-131
96-18-4	1,2,3-Trichloropropane	25	22.4	90	77-120
120-82-1	1,2,4-Trichlorobenzene	25	22.5	90	73-129
95-63-6	1,2,4-Trimethylbenzene	25	24.0	96	79-120
108-67-8	1,3,5-Trimethylbenzene	25	23.3	93	79-120
127-18-4	Tetrachloroethylene	25	25.3	101	76-135
108-88-3	Toluene	25	24.2	97	80-120
79-01-6	Trichloroethylene	25	25.5	102	81-126
75-69-4	Trichlorofluoromethane	25	30.0	120	71-156
75-01-4	Vinyl chloride	25	31.2	125	69-159
108-05-4	Vinyl Acetate	125	198	158*	43-154
	m,p-Xylene	50	49.2	98	79-126
95-47-6	o-Xylene	25	25.0	100	80-127

* = Outside of Control Limits.

Blank Spike Summary

Page 3 of 3

Job Number: FA17334

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ1080-BS	Z27865.D	1	08/15/14	SP	n/a	n/a	VZ1080

The QC reported here applies to the following samples:

Method: SW846 8260B

FA17334-1, FA17334-2, FA17334-3, FA17334-4, FA17334-5

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	86%	79-125%
2037-26-5	Toluene-D8	90%	85-112%
460-00-4	4-Bromofluorobenzene	87%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 1

Job Number: FA17334

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4081-BS	B100473.D	1	08/19/14	DP	n/a	n/a	VB4081

The QC reported here applies to the following samples:

Method: SW846 8260B

FA17334-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
156-59-2	cis-1,2-Dichloroethylene	25	26.5	106	78-120
127-18-4	Tetrachloroethylene	25	26.8	107	76-135
79-01-6	Trichloroethylene	25	26.7	107	81-126

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	83-118%
17060-07-0	1,2-Dichloroethane-D4	106%	79-125%
2037-26-5	Toluene-D8	104%	85-112%
460-00-4	4-Bromofluorobenzene	99%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA17334

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA17334-1MS	Z27886.D	1	08/15/14	SP	n/a	n/a	VZ1080
FA17334-1MSD	Z27887.D	1	08/15/14	SP	n/a	n/a	VZ1080
FA17334-1	Z27877.D	1	08/15/14	SP	n/a	n/a	VZ1080

The QC reported here applies to the following samples:

Method: SW846 8260B

FA17334-1, FA17334-2, FA17334-3, FA17334-4, FA17334-5

CAS No.	Compound	FA17334-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	125	98.8	79	125	97.7	78	1	50-147/21
107-02-8	Acrolein	ND	125	195	156*	125	181	145	7	31-154/29
107-13-1	Acrylonitrile	ND	125	124	99	125	118	94	5	58-126/16
71-43-2	Benzene	ND	25	24.9	100	25	23.8	95	5	81-122/14
108-86-1	Bromobenzene	ND	25	26.4	106	25	25.7	103	3	80-121/14
74-97-5	Bromochloromethane	ND	25	25.0	100	25	24.5	98	2	76-123/14
75-27-4	Bromodichloromethane	ND	25	22.8	91	25	20.9	84	9	79-123/19
75-25-2	Bromoform	ND	25	19.3	77	25	17.9	72	8	66-123/21
104-51-8	n-Butylbenzene	ND	25	26.0	104	25	25.7	103	1	79-126/16
135-98-8	sec-Butylbenzene	ND	25	27.6	110	25	27.4	110	1	83-133/16
98-06-6	tert-Butylbenzene	ND	25	27.2	109	25	27.7	111	2	80-133/16
108-90-7	Chlorobenzene	ND	25	28.1	112	25	27.4	110	3	82-124/14
75-00-3	Chloroethane	ND	25	35.1	140	25	32.3	129	8	62-144/20
67-66-3	Chloroform	ND	25	24.7	99	25	23.7	95	4	80-124/15
95-49-8	o-Chlorotoluene	ND	25	24.1	96	25	23.6	94	2	81-127/15
106-43-4	p-Chlorotoluene	ND	25	23.4	94	25	23.1	92	1	83-130/15
110-75-8	2-Chloroethyl vinyl ether	ND	125	ND	0*	125	ND	0*	nc	56-122/23
75-15-0	Carbon disulfide	ND	25	25.2	101	25	23.2	93	8	66-148/23
56-23-5	Carbon tetrachloride	ND	25	26.8	107	25	24.1	96	11	76-136/23
75-34-3	1,1-Dichloroethane	ND	25	27.5	110	25	25.9	104	6	81-122/15
75-35-4	1,1-Dichloroethylene	ND	25	29.7	119	25	28.5	114	4	78-137/18
563-58-6	1,1-Dichloropropene	ND	25	27.8	111	25	26.2	105	6	79-131/16
96-12-8	1,2-Dibromo-3-chloropropane	ND	25	21.3	85	25	19.9	80	7	64-123/18
106-93-4	1,2-Dibromoethane	ND	25	23.4	94	25	22.4	90	4	75-120/13
107-06-2	1,2-Dichloroethane	ND	25	25.2	101	25	24.2	97	4	75-125/14
78-87-5	1,2-Dichloropropane	ND	25	24.8	99	25	24.2	97	2	76-124/14
142-28-9	1,3-Dichloropropane	ND	25	22.8	91	25	22.9	92	0	80-118/13
594-20-7	2,2-Dichloropropane	ND	25	23.7	95	25	22.7	91	4	74-139/17
124-48-1	Dibromochloromethane	ND	25	20.7	83	25	19.4	78	6	78-122/19
75-71-8	Dichlorodifluoromethane	ND	25	25.4	102	25	25.6	102	1	42-167/19
156-59-2	cis-1,2-Dichloroethylene	ND	25	26.2	105	25	25.8	103	2	78-120/15
10061-01-5	cis-1,3-Dichloropropene	ND	25	19.8	79	25	18.4	74*	7	75-118/23
541-73-1	m-Dichlorobenzene	ND	25	26.3	105	25	25.8	103	2	84-125/14
95-50-1	o-Dichlorobenzene	ND	25	28.5	114	25	28.5	114	0	82-124/14
106-46-7	p-Dichlorobenzene	ND	25	25.0	100	25	24.3	97	3	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND	25	26.8	107	25	25.9	104	3	76-127/17

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA17334

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA17334-1MS	Z27886.D	1	08/15/14	SP	n/a	n/a	VZ1080
FA17334-1MSD	Z27887.D	1	08/15/14	SP	n/a	n/a	VZ1080
FA17334-1	Z27877.D	1	08/15/14	SP	n/a	n/a	VZ1080

The QC reported here applies to the following samples:

Method: SW846 8260B

FA17334-1, FA17334-2, FA17334-3, FA17334-4, FA17334-5

CAS No.	Compound	FA17334-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND	25	21.1	84	25	20.1	80	5	80-120/22
100-41-4	Ethylbenzene	ND	25	24.8	99	25	24.5	98	1	81-121/14
591-78-6	2-Hexanone	ND	125	109	87	125	109	87	0	61-129/18
87-68-3	Hexachlorobutadiene	ND	25	23.4	94	25	24.9	100	6	75-142/19
98-82-8	Isopropylbenzene	ND	25	29.1	116	25	29.0	116	0	83-132/15
99-87-6	p-Isopropyltoluene	ND	25	27.0	108	25	26.7	107	1	79-130/16
108-10-1	4-Methyl-2-pentanone	ND	125	121	97	125	118	94	3	66-122/16
74-83-9	Methyl bromide	ND	25	33.0	132	25	31.5	126	5	59-143/19
74-87-3	Methyl chloride	ND	25	35.1	140	25	33.9	136	3	50-159/19
74-95-3	Methylene bromide	ND	25	24.7	99	25	23.8	95	4	78-119/14
75-09-2	Methylene chloride	ND	25	30.2	121	25	28.4	114	6	69-135/16
78-93-3	Methyl ethyl ketone	ND	125	101	81	125	103	82	2	56-143/18
1634-04-4	Methyl Tert Butyl Ether	ND	25	21.3	85	25	20.8	83	2	72-117/14
91-20-3	Naphthalene	ND	25	20.8	83	25	21.6	86	4	63-132/25
103-65-1	n-Propylbenzene	ND	25	29.6	118	25	29.0	116	2	82-133/15
100-42-5	Styrene	ND	25	21.5	86	25	20.0	80	7	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND	25	24.6	98	25	22.9	92	7	77-122/19
71-55-6	1,1,1-Trichloroethane	ND	25	26.3	105	25	24.9	100	5	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	23.5	94	25	22.8	91	3	72-120/14
79-00-5	1,1,2-Trichloroethane	ND	25	24.4	98	25	24.0	96	2	76-119/14
87-61-6	1,2,3-Trichlorobenzene	ND	25	22.1	88	25	22.9	92	4	68-131/25
96-18-4	1,2,3-Trichloropropane	ND	25	22.3	89	25	22.6	90	1	77-120/16
120-82-1	1,2,4-Trichlorobenzene	ND	25	21.8	87	25	21.8	87	0	73-129/20
95-63-6	1,2,4-Trimethylbenzene	ND	25	23.0	92	25	22.0	88	4	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND	25	22.4	90	25	21.7	87	3	79-120/19
127-18-4	Tetrachloroethylene	ND	25	25.3	101	25	24.4	98	4	76-135/16
108-88-3	Toluene	ND	25	23.9	96	25	23.5	94	2	80-120/14
79-01-6	Trichloroethylene	ND	25	26.1	104	25	24.9	100	5	81-126/15
75-69-4	Trichlorofluoromethane	ND	25	30.7	123	25	29.1	116	5	71-156/21
75-01-4	Vinyl chloride	ND	25	31.7	127	25	31.5	126	1	69-159/18
108-05-4	Vinyl Acetate	ND	125	196	157*	125	190	152	3	43-154/14
	m,p-Xylene	ND	50	48.4	97	50	46.6	93	4	79-126/15
95-47-6	o-Xylene	ND	25	24.3	97	25	23.7	95	3	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: FA17334

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA17334-1MS	Z27886.D	1	08/15/14	SP	n/a	n/a	VZ1080
FA17334-1MSD	Z27887.D	1	08/15/14	SP	n/a	n/a	VZ1080
FA17334-1	Z27877.D	1	08/15/14	SP	n/a	n/a	VZ1080

The QC reported here applies to the following samples:

Method: SW846 8260B

FA17334-1, FA17334-2, FA17334-3, FA17334-4, FA17334-5

CAS No.	Surrogate Recoveries	MS	MSD	FA17334-1	Limits
1868-53-7	Dibromofluoromethane	99%	96%	95%	83-118%
17060-07-0	1,2-Dichloroethane-D4	87%	87%	91%	79-125%
2037-26-5	Toluene-D8	89%	90%	91%	85-112%
460-00-4	4-Bromofluorobenzene	84%	85%	89%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: FA17334

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA17315-2MS	B100496.D	1	08/19/14	DP	n/a	n/a	VB4081
FA17315-2MSD	B100497.D	1	08/19/14	DP	n/a	n/a	VB4081
FA17315-2	B100485.D	1	08/19/14	DP	n/a	n/a	VB4081

The QC reported here applies to the following samples:

Method: SW846 8260B

FA17334-5

CAS No.	Compound	FA17315-2 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
156-59-2	cis-1,2-Dichloroethylene	1.0 U	25	26.0	104	25	27.0	108	4	78-120/15
127-18-4	Tetrachloroethylene	1.0 U	25	25.6	102	25	24.6	98	4	76-135/16
79-01-6	Trichloroethylene	1.0 U	25	27.1	108	25	27.3	109	1	81-126/15

CAS No.	Surrogate Recoveries	MS	MSD	FA17315-2	Limits
1868-53-7	Dibromofluoromethane	107%	107%	108%	83-118%
17060-07-0	1,2-Dichloroethane-D4	107%	111%	112%	79-125%
2037-26-5	Toluene-D8	97%	101%	102%	85-112%
460-00-4	4-Bromofluorobenzene	99%	101%	98%	83-118%

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA17334
Account: GFLEMLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27705
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 08/14/14

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	15	15		
Antimony	6.0	2	2.3		
Arsenic	10	2	2.4	-0.50	<10
Barium	200	1	1		
Beryllium	4.0	.5	.5		
Cadmium	5.0	.5	.5		
Calcium	1000	50	50		
Chromium	10	1	2		
Cobalt	50	.5	.5		
Copper	25	1	1		
Iron	300	17	17		
Lead	5.0	1.1	1.1		
Magnesium	5000	50	56		
Manganese	15	.5	1		
Molybdenum	50	.5	.5		
Nickel	40	.5	.5		
Potassium	10000	200	200		
Selenium	10	2.3	2.3		
Silver	10	.65	.77		
Sodium	10000	500	500		
Strontium	10	.4	.4		
Thallium	10	1.5	2		
Tin	50	.7	1		
Titanium	10	.9	1		
Vanadium	50	.5	.5		
Zinc	20	3	3		

Associated samples MP27705: FA17334-4, FA17334-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA17334
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27705
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 08/14/14 08/14/14

Metal	FA17194-1 Original DUP	RPD	QC Limits	FA17194-1 Original MS	Spikelot MPFLICP2 % Rec	QC Limits
Aluminum	anr					
Antimony	anr					
Arsenic	20.6 21.2	2.9	0-20	20.6 1990	2000 98.5	80-120
Barium	anr					
Beryllium	anr					
Cadmium	anr					
Calcium	anr					
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	anr					
Magnesium	anr					
Manganese	anr					
Molybdenum						
Nickel	anr					
Potassium	anr					
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	anr					

Associated samples MP27705: FA17334-4, FA17334-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA17334
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27705
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 08/14/14

Metal	FA17194-1 Original MSD	Spike lot MPFLICP2 % Rec			MSD RPD	QC Limit
Aluminum	anr					
Antimony	anr					
Arsenic	20.6	1970	2000	97.5	1.0	20
Barium	anr					
Beryllium	anr					
Cadmium	anr					
Calcium	anr					
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	anr					
Magnesium	anr					
Manganese	anr					
Molybdenum						
Nickel	anr					
Potassium	anr					
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	anr					

Associated samples MP27705: FA17334-4, FA17334-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA17334

Account: GFLEMFLT - Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27705

Methods: SW846 6010C

Matrix Type: AQUEOUS

Units: ug/l

Prep Date: 08/14/14

Metal	BSP Result	Spike lot MPFLICP2 % Rec	QC Limits
Aluminum	anr		
Antimony	anr		
Arsenic	1950	2000 97.5	80-120
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	anr		
Magnesium	anr		
Manganese	anr		
Molybdenum			
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	anr		

Associated samples MP27705: FA17334-4, FA17334-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA17334
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27705
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 08/14/14

Metal	FA17194-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	20.6	21.0	1.9	0-10
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP27705: FA17334-4, FA17334-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA17334
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27705
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

08/14/14

Metal	Sample ml	Final ml	FA17194-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic	9.8	10	20.6	20.188	123.1	0.2	5	100	102.9	80-120
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP27705: FA17334-4, FA17334-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested



10/01/14

Technical Report for

Gannett Fleming

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

57524.012

Accutest Job Number: FA18589

Sampling Date: 09/22/14

Report to:

Gannett Fleming
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Total number of pages in report: **31**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read 'Norm Farmer'.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001)
DoD ELAP (L-A-B L2229), CA (04226CA), TX (T104704404), PA (68-03573), VA (460177),
AK, AR, GA, KY, MA, NV, OK, UT, WA

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

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Sample Summary

Gannett Fleming

Job No: FA18589

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524.012

Sample Number	Collected		Time By	Received	Matrix		Client Sample ID
	Date				Code	Type	
FA18589-1	09/22/14	15:23	DD	09/25/14	AQ	Ground Water	MW-14
FA18589-2	09/22/14	16:16	DD	09/25/14	AQ	Ground Water	MW-15
FA18589-3	09/22/14	17:28	DD	09/25/14	AQ	Ground Water	MW-1D

Summary of Hits

Job Number: FA18589
Account: Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Collected: 09/22/14

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
---------------	------------------	--------------------	----	-----	-------	--------

FA18589-1 MW-14

No hits reported in this sample.

FA18589-2 MW-15

No hits reported in this sample.

FA18589-3 MW-1D

cis-1,2-Dichloroethylene	2.0	1.0	0.33	ug/l	SW846 8260B
1,2-Dichloroethene (total)	2.0	2.0	0.67	ug/l	SW846 8260B
Tetrachloroethylene	0.67 J	1.0	0.26	ug/l	SW846 8260B
Trichloroethylene	7.9	1.0	0.30	ug/l	SW846 8260B

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	09/22/14
Lab Sample ID:	FA18589-1	Date Received:	09/25/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B101319.D	1	09/30/14	DP	n/a	n/a	VB4110
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Halogenated List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
110-75-8	2-Chloroethyl vinyl ether ^a	ND	5.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	2.0	0.67	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	09/22/14
Lab Sample ID:	FA18589-1	Date Received:	09/25/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA Halogenated List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	103%		85-112%
460-00-4	4-Bromofluorobenzene	107%		83-118%

(a) Associated CCV outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14		
Lab Sample ID:	FA18589-1	Date Sampled:	09/22/14
Matrix:	AQ - Ground Water	Date Received:	09/25/14
		Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	09/29/14	09/29/14 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA11921
(2) Prep QC Batch: MP27955

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	09/22/14
Lab Sample ID:	FA18589-2	Date Received:	09/25/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B101320.D	1	09/30/14	DP	n/a	n/a	VB4110
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Halogenated List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
110-75-8	2-Chloroethyl vinyl ether ^a	ND	5.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	2.0	0.67	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	09/22/14
Lab Sample ID:	FA18589-2	Date Received:	09/25/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA Halogenated List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	106%		79-125%
2037-26-5	Toluene-D8	104%		85-112%
460-00-4	4-Bromofluorobenzene	103%		83-118%

(a) Associated CCV outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	09/22/14
Lab Sample ID:	FA18589-2	Date Received:	09/25/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	09/29/14	09/29/14 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA11921
(2) Prep QC Batch: MP27955

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	09/22/14
Lab Sample ID:	FA18589-3	Date Received:	09/25/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B101321.D	1	09/30/14	DP	n/a	n/a	VB4110
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Halogenated List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
110-75-8	2-Chloroethyl vinyl ether ^a	ND	5.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethylene	2.0	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
540-59-0	1,2-Dichloroethene (total)	2.0	2.0	0.67	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethylene	0.67	1.0	0.26	ug/l	J
79-01-6	Trichloroethylene	7.9	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	09/22/14
Lab Sample ID:	FA18589-3	Date Received:	09/25/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA Halogenated List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	106%		83-118%

(a) Associated CCV outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	09/22/14
Lab Sample ID:	FA18589-3	Date Received:	09/25/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	09/29/14	09/29/14 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA11921
(2) Prep QC Batch: MP27955

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



Accutest Laboratories Southeast

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB #

PAGE 1 OF 1

FA18589

Accutest Quote #

SKIFF#

Client / Reporting Information		Project Information		Analytical Information												Matrix Codes		
Company Name: <u>Gannett Fleming</u>		Project Name: <u>JMR Valdosta</u>														DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge OI - Oil LID - Other Liquid AIR - Air SOL - Other Solid WP - Wipe		
Address: <u>9119 Corporate Lake Dr.</u>		Street: <u>2000 W. Savannah Ave.</u>																
City: <u>Tampa</u> State: <u>FL</u> Zip: <u>33634</u>		City: <u>Valdosta</u> State: <u>GA</u>																
Project Contact: <u>Tony Hoffman</u> E-mail: <u>ahoffman@gfnet</u>		Project # <u>57524.012</u>																
Phone # <u>813-882-4366</u>		Fax # <u>813-884-4609</u>																
Sampler(s) Name(s) (Printed): <u>Dan Dennis</u>		Client Purchase Order #																
Accutest Sample #	Field ID / Point of Collection	COLLECTION				CONTAINER INFORMATION												LAB USE ONLY
		DATE	TIME	SAMPLED BY	MATRIX	TOTAL # OF BOTTLES	OTHER	PCME	HEI	SLUG	HN03	SS03A	MOH+ZINC	D. WATER	MECH			
1	MW-14	9/22/14	1523	DRD	GW	4			X		X					3	1	
2	MW-15	↓	1616	↓	↓	4			X		X					3	1	
3	MW-1D	↓	1738	↓	↓	4			X		X					3	1	
TURNAROUND TIME (Business Days)		Data Deliverable Information												Comments / Remarks				
☒ 10 Days Standard ☐ 7 Day RUSH ☐ 5 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY ☐ OTHER		Approved By: / Rush Code		☐ COMMERCIAL "A" (RESULTS ONLY) ☒ COMMERCIAL "B" (RESULTS PLUS QC) ☐ REDT1 (EPA LEVEL 3) ☐ FULT1 (EPA LEVEL 4) ☐ EDD'S												For 8260 - Just Report chlorinated solvents		
Emergency or Rush T/A Data Available VIA Email or Lablink																		
Sample Custody must be documented below each time samples change possession, including courier delivery.																		
Relinquished by Sampler: <u>Dan Dennis</u>		Date Time: <u>9/24/14</u>		Received By: <u>James Blonca</u>		Date Time: <u>9-24-14 1235</u>		Relinquished by: <u>James Blonca</u>		Date Time: <u>9-24-14 1800</u>		Received By: <u>James Blonca</u>		Date Time: <u>09-25-14 800</u>				
Relinquished by: <u>5</u>		Date Time:		Received By: <u>6</u>		Date Time:		Relinquished by: <u>7</u>		Date Time:		Received By: <u>8</u>		Date Time:				
Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: <u>28</u>																		

FA18589: Chain of Custody

Page 1 of 2

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA18589 CLIENT: Gannett PROJECT: IMR Velocite
 DATE/TIME RECEIVED: 09-25-14 800 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER
 AIRBILL NUMBERS: _____

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
- ☒ TRIP BLANK NOT PROVIDED
- ☒ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____
 NUMBER OF 5035 FIELD KITS ? _____
 NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- ☐ IR THERM ID _____ CORR. FACTOR 46.4
- ☐ OBSERVED TEMPS: 2.4
- ☐ CORRECTED TEMPS: 2.6

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
- ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
- ☐ INSUFFICIENT VOLUME FOR ANALYSIS
- ☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ☐ ID'S ON COC DO NOT MATCH LABEL
- ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- ☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- ☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
- ☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- ☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- ☐ % SOLIDS JAR NOT RECEIVED
- ☐ RESIDUAL CHLORINE PRESENT

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

SUMMARY OF COMMENTS: _____

TECHNICIAN SIGNATURE/DATE RW 09-25-14 REVIEWER SIGNATURE/DATE JC 09-25-14
 RS 04/14 receipt confirmation 041514.xls

FA18589: Chain of Custody

Page 2 of 2

GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 2

Job Number: FA18589**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4110-MB	B101316.D	1	09/30/14	DP	n/a	n/a	VB4110

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA18589-1, FA18589-2, FA18589-3

CAS No.	Compound	Result	RL	MDL	Units	Q
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	2.0	0.67	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	101% 83-118%

Method Blank Summary

Job Number: FA18589
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4110-MB	B101316.D	1	09/30/14	DP	n/a	n/a	VB4110

The QC reported here applies to the following samples: Method: SW846 8260B

FA18589-1, FA18589-2, FA18589-3

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4	109% 79-125%
2037-26-5	Toluene-D8	105% 85-112%
460-00-4	4-Bromofluorobenzene	105% 83-118%

Blank Spike Summary

Page 1 of 2

Job Number: FA18589**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4110-BS	B101314.D	1	09/30/14	DP	n/a	n/a	VB4110

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA18589-1, FA18589-2, FA18589-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
75-27-4	Bromodichloromethane	25	26.2	105	79-123
75-25-2	Bromoform	25	23.8	95	66-123
108-90-7	Chlorobenzene	25	27.0	108	82-124
75-00-3	Chloroethane	25	25.7	103	62-144
67-66-3	Chloroform	25	27.0	108	80-124
110-75-8	2-Chloroethyl vinyl ether	125	79.7	64	56-122
56-23-5	Carbon tetrachloride	25	29.6	118	76-136
75-34-3	1,1-Dichloroethane	25	25.5	102	81-122
75-35-4	1,1-Dichloroethylene	25	27.6	110	78-137
107-06-2	1,2-Dichloroethane	25	26.5	106	75-125
78-87-5	1,2-Dichloropropane	25	24.0	96	76-124
124-48-1	Dibromochloromethane	25	25.3	101	78-122
75-71-8	Dichlorodifluoromethane	25	39.8	159	42-167
156-59-2	cis-1,2-Dichloroethylene	25	24.4	98	78-120
10061-01-5	cis-1,3-Dichloropropene	25	25.0	100	75-118
541-73-1	m-Dichlorobenzene	25	29.0	116	84-125
95-50-1	o-Dichlorobenzene	25	27.2	109	82-124
106-46-7	p-Dichlorobenzene	25	27.2	109	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.5	106	76-127
540-59-0	1,2-Dichloroethene (total)	50	50.9	102	77-122
10061-02-6	trans-1,3-Dichloropropene	25	26.6	106	80-120
74-83-9	Methyl bromide	25	24.7	99	59-143
74-87-3	Methyl chloride	25	29.1	116	50-159
75-09-2	Methylene chloride	25	24.4	98	69-135
71-55-6	1,1,1-Trichloroethane	25	27.5	110	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	25.2	101	72-120
79-00-5	1,1,2-Trichloroethane	25	23.7	95	76-119
127-18-4	Tetrachloroethylene	25	25.7	103	76-135
79-01-6	Trichloroethylene	25	26.5	106	81-126
75-69-4	Trichlorofluoromethane	25	30.4	122	71-156
75-01-4	Vinyl chloride	25	32.3	129	69-159

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: FA18589

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4110-BS	B101314.D	1	09/30/14	DP	n/a	n/a	VB4110

The QC reported here applies to the following samples:

Method: SW846 8260B

FA18589-1, FA18589-2, FA18589-3

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	107%	79-125%
2037-26-5	Toluene-D8	103%	85-112%
460-00-4	4-Bromofluorobenzene	105%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA18589

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA18589-2MS	B101337.D	1	09/30/14	DP	n/a	n/a	VB4110
FA18589-2MSD	B101338.D	1	09/30/14	DP	n/a	n/a	VB4110
FA18589-2	B101320.D	1	09/30/14	DP	n/a	n/a	VB4110

The QC reported here applies to the following samples:

Method: SW846 8260B

FA18589-1, FA18589-2, FA18589-3

CAS No.	Compound	FA18589-2 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
75-27-4	Bromodichloromethane	ND	25	24.9	100	25	22.5	90	10	79-123/19
75-25-2	Bromoform	ND	25	20.8	83	25	18.4	74	12	66-123/21
108-90-7	Chlorobenzene	ND	25	26.9	108	25	25.4	102	6	82-124/14
75-00-3	Chloroethane	ND	25	27.4	110	25	26.5	106	3	62-144/20
67-66-3	Chloroform	ND	25	26.3	105	25	25.1	100	5	80-124/15
110-75-8	2-Chloroethyl vinyl ether	ND	125	ND	0*	125	ND	0*	nc	56-122/23
56-23-5	Carbon tetrachloride	ND	25	26.2	105	25	23.0	92	13	76-136/23
75-34-3	1,1-Dichloroethane	ND	25	24.5	98	25	24.0	96	2	81-122/15
75-35-4	1,1-Dichloroethylene	ND	25	26.7	107	25	26.2	105	2	78-137/18
107-06-2	1,2-Dichloroethane	ND	25	25.4	102	25	25.0	100	2	75-125/14
78-87-5	1,2-Dichloropropane	ND	25	23.6	94	25	23.4	94	1	76-124/14
124-48-1	Dibromochloromethane	ND	25	23.1	92	25	20.6	82	11	78-122/19
75-71-8	Dichlorodifluoromethane	ND	25	36.8	147	25	34.8	139	6	42-167/19
156-59-2	cis-1,2-Dichloroethylene	ND	25	24.4	98	25	23.4	94	4	78-120/15
10061-01-5	cis-1,3-Dichloropropene	ND	25	20.2	81	25	18.9	76	7	75-118/23
541-73-1	m-Dichlorobenzene	ND	25	29.2	117	25	28.4	114	3	84-125/14
95-50-1	o-Dichlorobenzene	ND	25	26.4	106	25	25.6	102	3	82-124/14
106-46-7	p-Dichlorobenzene	ND	25	26.1	104	25	25.5	102	2	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND	25	25.4	102	25	24.4	98	4	76-127/17
540-59-0	1,2-Dichloroethene (total)	ND	50	49.8	100	50	47.8	96	4	77-122/15
10061-02-6	trans-1,3-Dichloropropene	ND	25	19.6	78*	25	18.8	75*	4	80-120/22
74-83-9	Methyl bromide	ND	25	27.5	110	25	26.7	107	3	59-143/19
74-87-3	Methyl chloride	ND	25	28.1	112	25	28.7	115	2	50-159/19
75-09-2	Methylene chloride	ND	25	23.7	95	25	22.8	91	4	69-135/16
71-55-6	1,1,1-Trichloroethane	ND	25	25.9	104	25	25.3	101	2	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	25.7	103	25	24.6	98	4	72-120/14
79-00-5	1,1,2-Trichloroethane	ND	25	23.7	95	25	24.6	98	4	76-119/14
127-18-4	Tetrachloroethylene	ND	25	24.2	97	25	23.5	94	3	76-135/16
79-01-6	Trichloroethylene	ND	25	25.4	102	25	25.2	101	1	81-126/15
75-69-4	Trichlorofluoromethane	ND	25	29.3	117	25	28.5	114	3	71-156/21
75-01-4	Vinyl chloride	ND	25	31.3	125	25	30.9	124	1	69-159/18

CAS No.	Surrogate Recoveries	MS	MSD	FA18589-2	Limits
1868-53-7	Dibromofluoromethane	100%	98%	99%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA18589

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA18589-2MS	B101337.D	1	09/30/14	DP	n/a	n/a	VB4110
FA18589-2MSD	B101338.D	1	09/30/14	DP	n/a	n/a	VB4110
FA18589-2	B101320.D	1	09/30/14	DP	n/a	n/a	VB4110

The QC reported here applies to the following samples:

Method: SW846 8260B

FA18589-1, FA18589-2, FA18589-3

CAS No.	Surrogate Recoveries	MS	MSD	FA18589-2	Limits
17060-07-0	1,2-Dichloroethane-D4	102%	101%	106%	79-125%
2037-26-5	Toluene-D8	103%	102%	104%	85-112%
460-00-4	4-Bromofluorobenzene	107%	106%	103%	83-118%

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA18589
Account: GFLEMLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27955
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 09/29/14

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	15	15		
Antimony	6.0	2	2.3		
Arsenic	10	2	2.4	-0.80	<10
Barium	200	1	1		
Beryllium	4.0	.5	.5		
Cadmium	5.0	.5	.5		
Calcium	1000	50	50		
Chromium	10	1	2		
Cobalt	50	.5	.5		
Copper	25	1	1		
Iron	300	17	17		
Lead	5.0	1.1	1.1		
Magnesium	5000	50	56		
Manganese	15	.5	1		
Molybdenum	50	.5	.5		
Nickel	40	.5	.5		
Potassium	10000	200	200		
Selenium	10	2.3	2.3		
Silver	10	.65	.77		
Sodium	10000	500	500		
Strontium	10	.4	.4		
Thallium	10	1.5	2		
Tin	50	.7	1		
Titanium	10	.9	1		
Vanadium	50	.5	.5		
Zinc	20	3	3		

Associated samples MP27955: FA18589-1, FA18589-2, FA18589-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA18589
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27955
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 09/29/14 09/29/14

Metal	FA18611-1 Original	DUP	RPD	QC Limits	FA18611-1 Original MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum								
Antimony	anr							
Arsenic	0.0	0.0	NC	0-20	0.0	2000	2000	100.0 80-120
Barium	anr							
Beryllium	anr							
Cadmium	anr							
Calcium								
Chromium	anr							
Cobalt								
Copper								
Iron								
Lead	anr							
Magnesium								
Manganese								
Molybdenum								
Nickel	anr							
Potassium								
Selenium	anr							
Silver	anr							
Sodium								
Strontium								
Thallium	anr							
Tin								
Titanium								
Vanadium	anr							
Zinc	anr							

Associated samples MP27955: FA18589-1, FA18589-2, FA18589-3

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA18589
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27955
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 09/29/14

Metal	FA18611-1 Original MSD	Spike lot MPFLICP2 % Rec			MSD RPD	QC Limit
Aluminum						
Antimony	anr					
Arsenic	0.0	1990	2000	99.5	0.5	20
Barium	anr					
Beryllium	anr					
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt						
Copper						
Iron						
Lead	anr					
Magnesium						
Manganese						
Molybdenum						
Nickel	anr					
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	anr					

Associated samples MP27955: FA18589-1, FA18589-2, FA18589-3

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA18589
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27955
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 09/29/14

Metal	BSP Result	Spike lot MPFLICP2 % Rec	QC Limits
Aluminum			
Antimony	anr		
Arsenic	1980	2000 99.0	80-120
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt			
Copper			
Iron			
Lead	anr		
Magnesium			
Manganese			
Molybdenum			
Nickel	anr		
Potassium			
Selenium	anr		
Silver	anr		
Sodium			
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	anr		

Associated samples MP27955: FA18589-1, FA18589-2, FA18589-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA18589
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27955
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 09/29/14

Metal	FA18611-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	0.00	0.00	NC	0-10
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron				
Lead	anr			
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP27955: FA18589-1, FA18589-2, FA18589-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA18589
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP27955
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

09/29/14

Metal	Sample ml	Final ml	FA18611-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic	9.8	10			105.2	0.2	5	100	105.2	80-120
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP27955: FA18589-1, FA18589-2, FA18589-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested



11/18/14

Technical Report for

Gannett Fleming

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

57524.012

Accutest Job Number: FA19889

Sampling Date: 11/11/14

Report to:

Gannett Fleming
West Lake Corporate Center 9119 Corporate Lake Dr, Suite 150
Tampa, FL 33634-6323
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tfalkner@gfnet.com
ATTN: Todd Falkner

Total number of pages in report: **25**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read 'Norm Farmer'.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001)
DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177),
AK, AR, GA, KY, MA, NV, OK, UT, WA

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Test results relate only to samples analyzed.

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Sample Summary

Gannett Fleming

Job No: FA19889

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524.012

Sample Number	Collected		Time By	Received	Matrix		Client Sample ID
	Date				Code	Type	
FA19889-1	11/11/14	15:35	RF	11/13/14	AQ	Ground Water	MW-1DD

Summary of Hits

Job Number: FA19889
Account: Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Collected: 11/11/14

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method	
FA19889-1	MW-1DD						
		Bromodichloromethane	2.3	1.0	0.26	ug/l	SW846 8260B
		Chloroform	26.7	1.0	0.31	ug/l	SW846 8260B
		Tetrachloroethylene	1.8	1.0	0.26	ug/l	SW846 8260B
		Trichloroethylene	0.99 J	1.0	0.30	ug/l	SW846 8260B

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	11/11/14
Lab Sample ID:	FA19889-1	Date Received:	11/13/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I25297.D	1	11/17/14	DP	n/a	n/a	VI554
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Halogenated List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-27-4	Bromodichloromethane	2.3	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	26.7	1.0	0.31	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	2.0	0.67	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethylene	1.8	1.0	0.26	ug/l	
79-01-6	Trichloroethylene	0.99	1.0	0.30	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	11/11/14
Lab Sample ID:	FA19889-1	Date Received:	11/13/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA Halogenated List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	92%		79-125%
2037-26-5	Toluene-D8	106%		85-112%
460-00-4	4-Bromofluorobenzene	105%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	11/11/14
Lab Sample ID:	FA19889-1	Date Received:	11/13/14
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	11/14/14	11/14/14 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12036
(2) Prep QC Batch: MP28211

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

[illegible]

FA19889: Chain of Custody

Page 1 of 2

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA19889 CLIENT: Gannett PROJECT: TMR
 DATE/TIME RECEIVED: 11-13-14 800 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: _____
 AIRBILL NUMBERS: _____

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
- ☒ TRIP BLANK NOT PROVIDED
- ☒ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____
 NUMBER OF 5035 FIELD KITS ? _____
 NUMBER OF LAB FILTERED METALS ? _____

pH PAPER LOT#s WIDE RANGE _____ A036122

NARROW RANGE HC421754

OTHER (specify) _____ 405-230010

SUMMARY OF COMMENTS: _____

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR +0.4
- ☐ OBSERVED TEMPS: 7.4
- ☐ CORRECTED TEMPS: 2.8

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
- ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
- ☐ INSUFFICIENT VOLUME FOR ANALYSIS
- ☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ☐ ID'S ON COC DO NOT MATCH LABEL
- ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- ☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- ☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
- ☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- ☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- ☐ % SOLIDS JAR NOT RECEIVED
- ☐ RESIDUAL CHLORINE PRESENT LOT# 14-860

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TECHNICIAN SIGNATURE/DATE

RW 11-13-14

REVIEWER SIGNATURE/DATE

11-13-14

NF 10/14

receipt confirmation 102914.xls

FA19889: Chain of Custody

Page 2 of 2

GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 2

Job Number: FA19889**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI554-MB	I25295.D	1	11/17/14	DP	n/a	n/a	VI554

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA19889-1

CAS No.	Compound	Result	RL	MDL	Units	Q
75-27-4	Bromodichloromethane	ND	1.0	0.26	ug/l	
75-25-2	Bromoform	ND	1.0	0.38	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.24	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	1.0	0.31	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.25	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.24	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.36	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.33	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.34	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	2.0	0.67	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.54	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.53	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.27	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.26	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.33	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	95% 83-118%

Method Blank Summary

Job Number: FA19889
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI554-MB	I25295.D	1	11/17/14	DP	n/a	n/a	VI554

The QC reported here applies to the following samples: Method: SW846 8260B

FA19889-1

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4	96% 79-125%
2037-26-5	Toluene-D8	104% 85-112%
460-00-4	4-Bromofluorobenzene	104% 83-118%

Blank Spike Summary

Page 1 of 2

Job Number: FA19889**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI554-BS	I25293.D	1	11/17/14	DP	n/a	n/a	VI554

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA19889-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
75-27-4	Bromodichloromethane	25	24.4	98	79-123
75-25-2	Bromoform	25	21.7	87	66-123
108-90-7	Chlorobenzene	25	25.2	101	82-124
75-00-3	Chloroethane	25	18.3	73	62-144
67-66-3	Chloroform	25	24.0	96	80-124
110-75-8	2-Chloroethyl vinyl ether	125	84.5	68	56-122
56-23-5	Carbon tetrachloride	25	25.0	100	76-136
75-34-3	1,1-Dichloroethane	25	23.4	94	81-122
75-35-4	1,1-Dichloroethylene	25	22.9	92	78-137
107-06-2	1,2-Dichloroethane	25	23.6	94	75-125
78-87-5	1,2-Dichloropropane	25	25.2	101	76-124
124-48-1	Dibromochloromethane	25	23.8	95	78-122
75-71-8	Dichlorodifluoromethane	25	22.3	89	42-167
156-59-2	cis-1,2-Dichloroethylene	25	23.7	95	78-120
10061-01-5	cis-1,3-Dichloropropene	25	24.2	97	75-118
541-73-1	m-Dichlorobenzene	25	26.4	106	84-125
95-50-1	o-Dichlorobenzene	25	26.4	106	82-124
106-46-7	p-Dichlorobenzene	25	24.3	97	78-120
156-60-5	trans-1,2-Dichloroethylene	25	23.9	96	76-127
540-59-0	1,2-Dichloroethene (total)	50	47.6	95	77-122
10061-02-6	trans-1,3-Dichloropropene	25	24.2	97	80-120
74-83-9	Methyl bromide	25	19.2	77	59-143
74-87-3	Methyl chloride	25	21.8	87	50-159
75-09-2	Methylene chloride	25	23.5	94	69-135
71-55-6	1,1,1-Trichloroethane	25	23.8	95	75-130
79-34-5	1,1,2,2-Tetrachloroethane	25	23.9	96	72-120
79-00-5	1,1,2-Trichloroethane	25	24.7	99	76-119
127-18-4	Tetrachloroethylene	25	25.2	101	76-135
79-01-6	Trichloroethylene	25	25.1	100	81-126
75-69-4	Trichlorofluoromethane	25	25.8	103	71-156
75-01-4	Vinyl chloride	25	21.8	87	69-159

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Page 2 of 2

Job Number: FA19889

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI554-BS	I25293.D	1	11/17/14	DP	n/a	n/a	VI554

The QC reported here applies to the following samples:

Method: SW846 8260B

FA19889-1

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	100%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	103%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: FA19889

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA19936-1MS	I25302.D	20	11/17/14	DP	n/a	n/a	VI554
FA19936-1MSD	I25303.D	20	11/17/14	DP	n/a	n/a	VI554
FA19936-1	I25316.D	10	11/17/14	DP	n/a	n/a	VI554
FA19936-1 ^a	I25301.D	20	11/17/14	DP	n/a	n/a	VI554

The QC reported here applies to the following samples:

Method: SW846 8260B

FA19889-1

CAS No.	Compound	FA19936-1 ug/l	Spike Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
75-27-4	Bromodichloromethane	10 U		500	487	97	500	425	85	14	79-123/19
75-25-2	Bromoform	10 U		500	371	74	500	341	68	8	66-123/21
108-90-7	Chlorobenzene	6.4	I	500	528	104	500	500	99	5	82-124/14
75-00-3	Chloroethane	20 U		500	431	86	500	391	78	10	62-144/20
67-66-3	Chloroform	10 U		500	505	101	500	486	97	4	80-124/15
110-75-8	2-Chloroethyl vinyl ether	50 U		2500	750	30*	2500	663	27*	12	56-122/23
56-23-5	Carbon tetrachloride	10 U		500	522	104	500	439	88	17	76-136/23
75-34-3	1,1-Dichloroethane	10 U		500	492	98	500	469	94	5	81-122/15
75-35-4	1,1-Dichloroethylene	10 U		500	526	105	500	497	99	6	78-137/18
107-06-2	1,2-Dichloroethane	10 U		500	500	100	500	491	98	2	75-125/14
78-87-5	1,2-Dichloropropane	10 U		500	523	105	500	510	102	3	76-124/14
124-48-1	Dibromochloromethane	10 U		500	451	90	500	384	77*	16	78-122/19
75-71-8	Dichlorodifluoromethane	20 U		500	482	96	500	436	87	10	42-167/19
156-59-2	cis-1,2-Dichloroethylene	10 U		500	476	95	500	474	95	0	78-120/15
10061-01-5	cis-1,3-Dichloropropene	10 U		500	460	92	500	379	76	19	75-118/23
541-73-1	m-Dichlorobenzene	5.1	I	500	553	110	500	524	104	5	84-125/14
95-50-1	o-Dichlorobenzene	4.3	I	500	544	108	500	536	106	1	82-124/14
106-46-7	p-Dichlorobenzene	5.0	I	500	501	99	500	484	96	3	78-120/15
156-60-5	trans-1,2-Dichloroethylene	10 U		500	499	100	500	472	94	6	76-127/17
540-59-0	1,2-Dichloroethene (total)	20 U		1000	976	98	1000	946	95	3	77-122/15
10061-02-6	trans-1,3-Dichloropropene	10 U		500	454	91	500	375	75*	19	80-120/22
74-83-9	Methyl bromide	20 U		500	436	87	500	391	78	11	59-143/19
74-87-3	Methyl chloride	20 U		500	492	98	500	472	94	4	50-159/19
75-09-2	Methylene chloride	50 U		500	517	103	500	503	101	3	69-135/16
71-55-6	1,1,1-Trichloroethane	10 U		500	503	101	500	472	94	6	75-130/16
79-34-5	1,1,2,2-Tetrachloroethane	10 U		500	484	97	500	505	101	4	72-120/14
79-00-5	1,1,2-Trichloroethane	10 U		500	502	100	500	497	99	1	76-119/14
127-18-4	Tetrachloroethylene	10 U		500	523	105	500	485	97	8	76-135/16
79-01-6	Trichloroethylene	10 U		500	530	106	500	499	100	6	81-126/15
75-69-4	Trichlorofluoromethane	20 U		500	590	118	500	544	109	8	71-156/21
75-01-4	Vinyl chloride	10 U		500	509	102	500	464	93	9	69-159/18

CAS No.	Surrogate Recoveries	MS	MSD	FA19936-1	FA19936-1	Limits
1868-53-7	Dibromofluoromethane	97%	97%	95%	92%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: FA19889

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA19936-1MS	I25302.D	20	11/17/14	DP	n/a	n/a	VI554
FA19936-1MSD	I25303.D	20	11/17/14	DP	n/a	n/a	VI554
FA19936-1	I25316.D	10	11/17/14	DP	n/a	n/a	VI554
FA19936-1 ^a	I25301.D	20	11/17/14	DP	n/a	n/a	VI554

The QC reported here applies to the following samples:

Method: SW846 8260B

FA19889-1

CAS No.	Surrogate Recoveries	MS	MSD	FA19936-1	FA19936-1	Limits
17060-07-0	1,2-Dichloroethane-D4	101%	101%	99%	95%	79-125%
2037-26-5	Toluene-D8	102%	101%	105%	103%	85-112%
460-00-4	4-Bromofluorobenzene	102%	103%	105%	102%	83-118%

(a) Confirmation run.

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA19889
Account: GFLEMFLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP28211
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 11/14/14 11/14/14 11/14/14

Metal	RL	IDL	MDL	MB raw	final	MB raw	final	MB raw	final
Aluminum	200	15	15						
Antimony	6.0	2	2.3						
Arsenic	10	2	2.4	-1.0	<10	-1.0	<10	-0.40	<10
Barium	200	1	1						
Beryllium	4.0	.5	.5						
Cadmium	5.0	.5	.5						
Calcium	1000	50	50						
Chromium	10	1	2						
Cobalt	50	.5	.5						
Copper	25	1	1						
Iron	300	17	17						
Lead	5.0	1.1	1.1						
Magnesium	5000	50	56						
Manganese	15	.5	1						
Molybdenum	50	.5	.5						
Nickel	40	.5	.5						
Potassium	10000	200	200						
Selenium	10	2.3	2.3						
Silver	10	.65	.77						
Sodium	10000	500	500						
Strontium	10	.4	.4						
Thallium	10	1.5	2						
Tin	50	.7	1						
Titanium	10	.9	1						
Vanadium	50	.5	.5						
Zinc	20	3	3						

Associated samples MP28211: FA19889-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA19889
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP28211
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

11/14/14

11/14/14

Metal	FA19821-8 Original	DUP	RPD	QC Limits	FA19821-8 Original MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	anr							
Antimony	anr							
Arsenic	0.0	0.0	NC	0-20	0.0	2060	2000	103.0
Barium	anr							
Beryllium	anr							
Cadmium	anr							
Calcium	anr							
Chromium	anr							
Cobalt	anr							
Copper	anr							
Iron	anr							
Lead	anr							
Magnesium	anr							
Manganese	anr							
Molybdenum	anr							
Nickel	anr							
Potassium	anr							
Selenium	anr							
Silver	anr							
Sodium	anr							
Strontium								
Thallium	anr							
Tin								
Titanium								
Vanadium	anr							
Zinc	anr							

Associated samples MP28211: FA19889-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA19889
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP28211
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 11/14/14

Metal	FA19821-8 Original MSD	SpikeLot MPFLICP2 % Rec	MSD RPD	QC Limit
Aluminum	anr			
Antimony	anr			
Arsenic	0.0	2060	2000	103.0
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP28211: FA19889-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA19889

Account: GFLEMFLT - Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP28211

Methods: SW846 6010C

Matrix Type: AQUEOUS

Units: ug/l

Prep Date: 11/14/14

Metal	BSP Result	Spike lot MPFLICP2	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	2050	2000	102.5	80-120
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP28211: FA19889-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA19889
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP28211
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 11/14/14

Metal	FA19821-8 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	0.00	0.00	NC	0-10
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP28211: FA19889-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA19889
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP28211
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

11/14/14

Metal	Sample ml	Final ml	FA19821-8 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic	9.8	10			107.2	0.2	5	100	107.2	80-120
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP28211: FA19889-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested



04/23/15

Technical Report for

Gannett Fleming

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
57524

Accutest Job Number: FA23686

Sampling Date: 04/14/15

Report to:

Gannett Fleming
West Lake Corporate Center 9119 Corporate Lake Dr, Suite 150
Tampa, FL 33634-6323
axhoffman@gfnet.com; brenda.anderson@tmrecycling.com;
tfalkner@gfnet.com
ATTN: Todd Falkner

Total number of pages in report: **22**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read 'Norm Farmer'.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001)
DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177),
AK, AR, GA, KY, MA, NV, OK, UT, WA

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Test results relate only to samples analyzed.

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Sample Summary

Gannett Fleming

Job No: FA23686

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA23686-1	04/14/15	10:20	RFDD 04/18/15	SO	Soil	SB-1 0-2
FA23686-2	04/14/15	10:25	RFDD 04/18/15	SO	Soil	SB-1 2-4
FA23686-3	04/14/15	10:30	RFDD 04/18/15	SO	Soil	SB-2 0-2
FA23686-4	04/14/15	10:35	RFDD 04/18/15	SO	Soil	SB-2 2-4
FA23686-5	04/14/15	10:40	RFDD 04/18/15	SO	Soil	SB-3 0-2
FA23686-6	04/14/15	10:45	RFDD 04/18/15	SO	Soil	SB-3 2-4
FA23686-7	04/14/15	10:50	RFDD 04/18/15	SO	Soil	SB-4 0-2
FA23686-8	04/14/15	10:55	RFDD 04/18/15	SO	Soil	SB-4 2-4
FA23686-9	04/14/15	11:05	RFDD 04/18/15	SO	Soil	SB-5 0-2
FA23686-10	04/14/15	11:10	RFDD 04/18/15	SO	Soil	SB-5 2-4

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Page 1 of 1

Job Number: FA23686
Account: Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Collected: 04/14/15

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
--------------------------	------------------	-----------------	----	-----	-------	--------

FA23686-1 **SB-1 0-2**

No hits reported in this sample.

FA23686-2 **SB-1 2-4**

No hits reported in this sample.

FA23686-3 **SB-2 0-2**

Aroclor 1260 ^a	12.3 J	19	7.6	ug/kg	SW846 8082A
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FA23686-4 **SB-2 2-4**

No hits reported in this sample.

FA23686-5 **SB-3 0-2**

Aroclor 1248 ^b	29.2	18	7.2	ug/kg	SW846 8082A
Aroclor 1260 ^a	26.9	18	7.2	ug/kg	SW846 8082A

FA23686-6 **SB-3 2-4**

No hits reported in this sample.

FA23686-7 **SB-4 0-2**

Aroclor 1248 ^b	62.8	19	7.7	ug/kg	SW846 8082A
Aroclor 1254 ^a	67.7	19	7.7	ug/kg	SW846 8082A

FA23686-8 **SB-4 2-4**

No hits reported in this sample.

FA23686-9 **SB-5 0-2**

Aroclor 1248 ^b	7.7 J	19	7.5	ug/kg	SW846 8082A
Aroclor 1254 ^a	8.0 J	19	7.5	ug/kg	SW846 8082A

FA23686-10 **SB-5 2-4**

No hits reported in this sample.

(a) All hits confirmed by dual column analysis.

(b) All hits confirmed by dual column analysis. Aroclor pattern appears to be weathered.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SB-1 0-2	Date Sampled:	04/14/15
Lab Sample ID:	FA23686-1	Date Received:	04/18/15
Matrix:	SO - Soil	Percent Solids:	88.7
Method:	SW846 8082A SW846 3546		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	MM16425.D	1	04/21/15	RS	04/21/15	OP55799	GMM346
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	18	7.2	ug/kg	
11104-28-2	Aroclor 1221	ND	18	9.0	ug/kg	
11141-16-5	Aroclor 1232	ND	18	9.0	ug/kg	
53469-21-9	Aroclor 1242	ND	18	7.2	ug/kg	
12672-29-6	Aroclor 1248	ND	18	7.2	ug/kg	
11097-69-1	Aroclor 1254	ND	18	7.2	ug/kg	
11096-82-5	Aroclor 1260	ND	18	7.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	101%		44-126%
2051-24-3	Decachlorobiphenyl	101%		41-145%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 2-4	Date Sampled:	04/14/15
Lab Sample ID:	FA23686-2	Date Received:	04/18/15
Matrix:	SO - Soil	Percent Solids:	85.8
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	85.8		%	1	04/20/15 09:31	KC	SM19 2540G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-2 0-2	Date Sampled:	04/14/15
Lab Sample ID:	FA23686-3	Date Received:	04/18/15
Matrix:	SO - Soil	Percent Solids:	83.2
Method:	SW846 8082A SW846 3546		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	MM16433.D	1	04/21/15	RS	04/21/15	OP55799	GMM346
Run #2							

	Initial Weight	Final Volume
Run #1	15.9 g	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	19	7.6	ug/kg	
11104-28-2	Aroclor 1221	ND	19	9.4	ug/kg	
11141-16-5	Aroclor 1232	ND	19	9.4	ug/kg	
53469-21-9	Aroclor 1242	ND	19	7.6	ug/kg	
12672-29-6	Aroclor 1248	ND	19	7.6	ug/kg	
11097-69-1	Aroclor 1254	ND	19	7.6	ug/kg	
11096-82-5	Aroclor 1260	12.3	19	7.6	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		44-126%
2051-24-3	Decachlorobiphenyl	89%		41-145%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 2-4	Date Sampled:	04/14/15
Lab Sample ID:	FA23686-4	Date Received:	04/18/15
Matrix:	SO - Soil	Percent Solids:	85.2
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	85.2		%	1	04/20/15 09:31	KC	SM19 2540G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-3 0-2	Date Sampled:	04/14/15
Lab Sample ID:	FA23686-5	Date Received:	04/18/15
Matrix:	SO - Soil	Percent Solids:	90.5
Method:	SW846 8082A SW846 3546		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	MM16434.D	1	04/21/15	RS	04/21/15	OP55799	GMM346
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	18	7.2	ug/kg	
11104-28-2	Aroclor 1221	ND	18	9.0	ug/kg	
11141-16-5	Aroclor 1232	ND	18	9.0	ug/kg	
53469-21-9	Aroclor 1242	ND	18	7.2	ug/kg	
12672-29-6	Aroclor 1248 ^b	29.2	18	7.2	ug/kg	
11097-69-1	Aroclor 1254	ND	18	7.2	ug/kg	
11096-82-5	Aroclor 1260	26.9	18	7.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	98%		44-126%
2051-24-3	Decachlorobiphenyl	89%		41-145%

(a) All hits confirmed by dual column analysis.

(b) Aroclor pattern appears to be weathered.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 2-4	Date Sampled:	04/14/15
Lab Sample ID:	FA23686-6	Date Received:	04/18/15
Matrix:	SO - Soil	Percent Solids:	87.4
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	87.4		%	1	04/20/15 09:31	KC	SM19 2540G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-4 0-2	Date Sampled:	04/14/15
Lab Sample ID:	FA23686-7	Date Received:	04/18/15
Matrix:	SO - Soil	Percent Solids:	85.7
Method:	SW846 8082A SW846 3546		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	MM16435.D	1	04/21/15	RS	04/21/15	OP55799	GMM346
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	19	7.7	ug/kg	
11104-28-2	Aroclor 1221	ND	19	9.6	ug/kg	
11141-16-5	Aroclor 1232	ND	19	9.6	ug/kg	
53469-21-9	Aroclor 1242	ND	19	7.7	ug/kg	
12672-29-6	Aroclor 1248 ^b	62.8	19	7.7	ug/kg	
11097-69-1	Aroclor 1254	67.7	19	7.7	ug/kg	
11096-82-5	Aroclor 1260	ND	19	7.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%		44-126%
2051-24-3	Decachlorobiphenyl	92%		41-145%

(a) All hits confirmed by dual column analysis.

(b) Aroclor pattern appears to be weathered.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-4 2-4	Date Sampled:	04/14/15
Lab Sample ID:	FA23686-8	Date Received:	04/18/15
Matrix:	SO - Soil	Percent Solids:	88.5
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	88.5		%	1	04/20/15 09:31	KC	SM19 2540G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-5 0-2	Date Sampled:	04/14/15
Lab Sample ID:	FA23686-9	Date Received:	04/18/15
Matrix:	SO - Soil	Percent Solids:	83.4
Method:	SW846 8082A SW846 3546		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	MM16436.D	1	04/21/15	RS	04/21/15	OP55799	GMM346
Run #2							

	Initial Weight	Final Volume
Run #1	16.0 g	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	19	7.5	ug/kg	
11104-28-2	Aroclor 1221	ND	19	9.4	ug/kg	
11141-16-5	Aroclor 1232	ND	19	9.4	ug/kg	
53469-21-9	Aroclor 1242	ND	19	7.5	ug/kg	
12672-29-6	Aroclor 1248 ^b	7.7	19	7.5	ug/kg	J
11097-69-1	Aroclor 1254	8.0	19	7.5	ug/kg	J
11096-82-5	Aroclor 1260	ND	19	7.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%		44-126%
2051-24-3	Decachlorobiphenyl	93%		41-145%

(a) All hits confirmed by dual column analysis.

(b) Aroclor pattern appears to be weathered.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-5 2-4	Date Sampled:	04/14/15
Lab Sample ID:	FA23686-10	Date Received:	04/18/15
Matrix:	SO - Soil	Percent Solids:	85.5
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	85.5		%	1	04/20/15 09:31	KC	SM19 2540G

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Client / Reporting Information		Project Information		Analytical Information										Matrix Codes
Company Name: <u>Gannett Fleming</u>		Street: <u>Turk Kidston Ave</u>												DW - Drinking Water GW - Ground Water WW - Wastewater SW - Surface Water SO - Soil SL - Sludge OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Waste
Address: <u>9119 Corporate Lake Drive</u>		City: <u>Tamla FL</u> State: <u>FL</u> Zip: <u>33463</u>												
Phone: <u>(407) 682-4366</u>		Fax: <u>(407) 530-5300</u>												
Sample(s) Name(s) (Printed): <u>Rickie Walker @ gannett.com</u>		Project #: <u>57524</u>												
		Client Purchase Order #:												
COLLECTION INFORMATION				CONTAINER INFORMATION										
Accutest Sample #	Field ID / Point of Collection	DATE	TIME	SAMPLED BY	MATRIX	TOTAL # OF BOTTLES	OTHER	VOLUME	PICK UP	HOLDING	CLOSURE	LABORATORY	INSTRUCTIONS	REMARKS
1	SB-1 0-2	4/14/15	1020	RJF	SC	2		2						X X
2	SB-1 2-4		1025											
3	SB-2 0-2		1030											
4	SB-2 2-4		1035											
5	SB-3 0-2		1040											
6	SB-3 2-4		1045											
7	SB-4 0-2		1050											
8	SB-4 2-4		1055											
9	SB-5 0-2		1105											
10	SB-5 2-4	✓	1110	✓	✓	✓		✓						✓ ✓
TURNAROUND TIME (Business Days)				Data Deliverable Information										Comments / Remarks
☒ 10 Days Standard ☐ 7 Day RUSH _____ ☐ 5 Day RUSH _____ ☐ 3 Day EMERGENCY _____ ☐ 2 Day EMERGENCY _____ ☐ 1 Day EMERGENCY _____ ☐ OTHER _____ Emergency or Rush T/A Data Available VIA Email or LabLink				Approved By: / Rush Code _____ ☐ COMMERCIAL "A" (RESULTS ONLY) ☒ COMMERCIAL "B" (RESULTS PLUS QC) ☐ REDT1 (EPA LEVEL 3) ☐ FULT1 (EPA LEVEL 4) ☐ EDD'S				hold all 2-4 samples and hold all congeners samples until approved by Gannett Fleming. DB:DB						
Sample Custody must be documented below each time samples change possession, including courier delivery.														
Relinquished by Sampler: [Signature]		Date Time: 4-17-15 13:15	Received By: James Llovera		Date Time: 4-17-15 13:15	Relinquished by: [Signature]		Date Time: 4-17-15 18:15	Received By: J. COLE (ALISE) A-18-1					
Relinquished by:		Date Time:	Received By:		Date Time:	Relinquished by:		Date Time:	Received By:					
5			6			7			8					
Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: 1 Cooler Temperature (s) Celsius: 3-4														

FA23686: Chain of Custody

Page 1 of 2

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA 23686 CLIENT: GANNETT F. PROJECT: S7524
 DATE/TIME RECEIVED: 4-18-15 08:00 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: _____
 AIRBILL NUMBERS: _____

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
- ☒ TRIP BLANK NOT PROVIDED
- ☒ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____
 NUMBER OF 5035 FIELD KITS ? _____
 NUMBER OF LAB FILTERED METALS ? _____

pH PAPER LOT#s WIDE RANGE A036122 NARROW RANGE HC421754 OTHER (specify) 405-230010

SUMMARY OF COMMENTS: _____

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR -0.2
- ☐ OBSERVED TEMPS: 3.6
- ☐ CORRECTED TEMPS: 3.4

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
- ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
- ☐ INSUFFICIENT VOLUME FOR ANALYSIS
- ☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ☐ ID'S ON COC DO NOT MATCH LABEL
- ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- ☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- ☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
- ☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- ☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- ☐ % SOLIDS JAR NOT RECEIVED
- ☐ RESIDUAL CHLORINE PRESENT LOT# _____

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TECHNICIAN SIGNATURE/DATE [Signature] 4-18-15 REVIEWER SIGNATURE/DATE [Signature] 4-18-15

NF 10/14

receipt confirmation 102914.xls

FA23686: Chain of Custody

Page 2 of 2

GC Semi-volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 1

Job Number: FA23686

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55799-MB	MM16424.D	1	04/21/15	RS	04/21/15	OP55799	GMM346

The QC reported here applies to the following samples:

Method: SW846 8082A

FA23686-1, FA23686-3, FA23686-5, FA23686-7, FA23686-9

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	17	6.7	ug/kg	
11104-28-2	Aroclor 1221	ND	17	8.3	ug/kg	
11141-16-5	Aroclor 1232	ND	17	8.3	ug/kg	
53469-21-9	Aroclor 1242	ND	17	6.7	ug/kg	
12672-29-6	Aroclor 1248	ND	17	6.7	ug/kg	
11097-69-1	Aroclor 1254	ND	17	6.7	ug/kg	
11096-82-5	Aroclor 1260	ND	17	6.7	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	91%	44-126%
2051-24-3	Decachlorobiphenyl	89%	41-145%

Blank Spike Summary

Page 1 of 1

Job Number: FA23686

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55799-BS	MM16423.D	1	04/21/15	RS	04/21/15	OP55799	GMM346

The QC reported here applies to the following samples:

Method: SW846 8082A

FA23686-1, FA23686-3, FA23686-5, FA23686-7, FA23686-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	133	140	105	58-126
11096-82-5	Aroclor 1260	133	140	105	59-133

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	103%	44-126%
2051-24-3	Decachlorobiphenyl	91%	41-145%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: FA23686

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55799-MS	MM16426.D	1	04/21/15	RS	04/21/15	OP55799	GMM346
OP55799-MSD	MM16427.D	1	04/21/15	RS	04/21/15	OP55799	GMM346
FA23686-1	MM16425.D	1	04/21/15	RS	04/21/15	OP55799	GMM346

The QC reported here applies to the following samples:

Method: SW846 8082A

FA23686-1, FA23686-3, FA23686-5, FA23686-7, FA23686-9

CAS No.	Compound	FA23686-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	150	148	98	147	162	110	9	58-126/25
11096-82-5	Aroclor 1260	ND	150	147	98	147	159	108	8	59-133/31

CAS No.	Surrogate Recoveries	MS	MSD	FA23686-1	Limits
877-09-8	Tetrachloro-m-xylene	95%	100%	101%	44-126%
2051-24-3	Decachlorobiphenyl	90%	100%	101%	41-145%

* = Outside of Control Limits.



04/30/15

Technical Report for

Gannett Fleming

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
57524

Accutest Job Number: FA23685

Sampling Dates: 04/14/15 - 04/15/15

Report to:

Gannett Fleming
West Lake Corporate Center 9119 Corporate Lake Dr, Suite 150
Tampa, FL 33634-6323
axhoffman@gfnet.com; tfalkner@gfnet.com

ATTN: Todd Falkner

Total number of pages in report: **114**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read 'Norm Farmer'.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001)
DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177),
AK, AR, GA, KY, MA, NV, OK, UT, WA

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Test results relate only to samples analyzed.

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Sample Summary

Gannett Fleming

Job No: FA23685

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA23685-1	04/14/15	14:10	RFDD 04/18/15	AQ	Ground Water	MW-13
FA23685-2	04/14/15	14:18	RFDD 04/18/15	AQ	Ground Water	MW-12
FA23685-3	04/14/15	14:47	RFDD 04/18/15	AQ	Ground Water	MW-5
FA23685-4	04/14/15	15:34	RFDD 04/18/15	AQ	Ground Water	MW-5D
FA23685-5	04/14/15	15:35	RFDD 04/18/15	AQ	Ground Water	MW-6
FA23685-6	04/15/15	08:50	RFDD 04/18/15	AQ	Ground Water	MW-1DD
FA23685-7	04/15/15	08:57	RFDD 04/18/15	AQ	Ground Water	MW-1D
FA23685-8	04/15/15	09:37	RFDD 04/18/15	AQ	Ground Water	MW-1R
FA23685-9	04/15/15	09:43	RFDD 04/18/15	AQ	Ground Water	MW-2R
FA23685-10	04/15/15	10:40	RFDD 04/18/15	AQ	Ground Water	MW-14
FA23685-11	04/15/15	11:04	RFDD 04/18/15	AQ	Ground Water	MW-15
FA23685-12	04/15/15	11:21	RFDD 04/18/15	AQ	Ground Water	MW-4
FA23685-13	04/15/15	11:37	RFDD 04/18/15	AQ	Ground Water	MW-10



Sample Summary
(continued)

Gannett Fleming

Job No: FA23685

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA23685-14	04/15/15	12:00	RFDD 04/18/15	AQ	Ground Water	WATER WELL
FA23685-15	04/15/15	12:03	RFDD 04/18/15	AQ	Ground Water	MW-3
FA23685-16	04/15/15	13:42	RFDD 04/18/15	AQ	Ground Water	MW-8
FA23685-17	04/15/15	15:08	RFDD 04/18/15	AQ	Ground Water	MW-11

Summary of Hits

Job Number: FA23685
Account: Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Collected: 04/14/15 thru 04/15/15

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
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FA23685-1 MW-13

No hits reported in this sample.

FA23685-2 MW-12

Methyl Tert Butyl Ether	3.1	1.0	0.30	ug/l	SW846 8260B
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FA23685-3 MW-5

Benzene	2.7	1.0	0.20	ug/l	SW846 8260B
Methyl Tert Butyl Ether	56.6	1.0	0.30	ug/l	SW846 8260B

FA23685-4 MW-5D

Methyl Tert Butyl Ether	0.52 J	1.0	0.30	ug/l	SW846 8260B
1,2,4-Trichlorobenzene	1.1	1.0	0.50	ug/l	SW846 8260B

FA23685-5 MW-6

Methyl Tert Butyl Ether	1.1	1.0	0.30	ug/l	SW846 8260B
-------------------------	-----	-----	------	------	-------------

FA23685-6 MW-1DD

Chloroform	3.9	1.0	0.30	ug/l	SW846 8260B
Tetrachloroethylene	3.9	1.0	0.33	ug/l	SW846 8260B
Trichloroethylene	0.79 J	1.0	0.22	ug/l	SW846 8260B

FA23685-7 MW-1D

No hits reported in this sample.

FA23685-8 MW-1R

Benzene	0.71 J	1.0	0.20	ug/l	SW846 8260B
Chlorobenzene	0.21 J	1.0	0.20	ug/l	SW846 8260B
Chloroform	0.79 J	1.0	0.30	ug/l	SW846 8260B
1,2-Dichlorobenzene	0.34 J	1.0	0.22	ug/l	SW846 8260B
1,1-Dichloroethane	0.70 J	1.0	0.20	ug/l	SW846 8260B
1,1-Dichloroethylene	13.8	1.0	0.27	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	612	25	5.5	ug/l	SW846 8260B
trans-1,2-Dichloroethylene	11.1	1.0	0.21	ug/l	SW846 8260B
Ethylbenzene	10.2	1.0	0.20	ug/l	SW846 8260B
Isopropylbenzene	0.59 J	1.0	0.20	ug/l	SW846 8260B
Naphthalene	12.6	5.0	1.0	ug/l	SW846 8260B

Summary of Hits

Job Number: FA23685
Account: Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Collected: 04/14/15 thru 04/15/15

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
n-Propylbenzene		1.2	1.0	0.20	ug/l	SW846 8260B
Tetrachloroethylene		389	25	8.1	ug/l	SW846 8260B
Toluene		1.3	1.0	0.40	ug/l	SW846 8260B
Trichloroethylene		1790	25	5.4	ug/l	SW846 8260B
1,2,4-Trimethylbenzene		3.8	2.0	0.20	ug/l	SW846 8260B
1,3,5-Trimethylbenzene		1.2 J	2.0	0.22	ug/l	SW846 8260B
Vinyl Chloride		1.3	1.0	0.25	ug/l	SW846 8260B
m,p-Xylene		13.9	2.0	0.31	ug/l	SW846 8260B
o-Xylene		12.9	1.0	0.20	ug/l	SW846 8260B
Arsenic		283	10		ug/l	SW846 6010C
FA23685-9 MW-2R						
Tetrachloroethylene		2.1	1.0	0.33	ug/l	SW846 8260B
FA23685-10 MW-14						
No hits reported in this sample.						
FA23685-11 MW-15						
No hits reported in this sample.						
FA23685-12 MW-4						
Trichloroethylene		0.24 J	1.0	0.22	ug/l	SW846 8260B
FA23685-13 MW-10						
No hits reported in this sample.						
FA23685-14 WATER WELL						
No hits reported in this sample.						
FA23685-15 MW-3						
No hits reported in this sample.						
FA23685-16 MW-8						
Vinyl Chloride		0.80 J	1.0	0.25	ug/l	SW846 8260B

Summary of Hits

Job Number: FA23685
Account: Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Collected: 04/14/15 thru 04/15/15

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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FA23685-17 MW-11

1,1-Dichloroethane	0.32 J	1.0	0.20	ug/l	SW846 8260B
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Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-13	Date Sampled:	04/14/15
Lab Sample ID:	FA23685-1	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B105058.D	1	04/22/15	DP	n/a	n/a	VB4259
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether ^a	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13	Date Sampled:	04/14/15
Lab Sample ID:	FA23685-1	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13	Date Sampled:	04/14/15
Lab Sample ID:	FA23685-1	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	97%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	94%		83-118%

(a) Associated CCV outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-12	Date Sampled: 04/14/15
Lab Sample ID: FA23685-2	Date Received: 04/18/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B105059.D	1	04/22/15	DP	n/a	n/a	VB4259
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether ^a	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-12	Date Sampled:	04/14/15
Lab Sample ID:	FA23685-2	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	3.1	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-12	Date Sampled:	04/14/15
Lab Sample ID:	FA23685-2	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		83-118%
17060-07-0	1,2-Dichloroethane-D4	95%		79-125%
2037-26-5	Toluene-D8	103%		85-112%
460-00-4	4-Bromofluorobenzene	96%		83-118%

(a) Associated CCV outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	04/14/15
Lab Sample ID:	FA23685-3	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B105060.D	1	04/22/15	DP	n/a	n/a	VB4259
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	2.7	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether ^a	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	04/14/15
Lab Sample ID:	FA23685-3	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	56.6	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	04/14/15
Lab Sample ID:	FA23685-3	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	103%		85-112%
460-00-4	4-Bromofluorobenzene	94%		83-118%

(a) Associated CCV outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5D	Date Sampled:	04/14/15
Lab Sample ID:	FA23685-4	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B105061.D	1	04/22/15	DP	n/a	n/a	VB4259
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether ^a	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5D	Date Sampled:	04/14/15
Lab Sample ID:	FA23685-4	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.52	1.0	0.30	ug/l	J
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.1	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5D	Date Sampled:	04/14/15
Lab Sample ID:	FA23685-4	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		83-118%
17060-07-0	1,2-Dichloroethane-D4	98%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	97%		83-118%

(a) Associated CCV outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6	Date Sampled:	04/14/15
Lab Sample ID:	FA23685-5	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B105062.D	1	04/22/15	DP	n/a	n/a	VB4259
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether ^a	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6	Date Sampled:	04/14/15
Lab Sample ID:	FA23685-5	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.1	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6	Date Sampled:	04/14/15
Lab Sample ID:	FA23685-5	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	92%		83-118%

(a) Associated CCV outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-6	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B105063.D	1	04/22/15	DP	n/a	n/a	VB4259
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether ^a	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	3.9	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-6	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	3.9	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	0.79	1.0	0.22	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-6	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		83-118%
17060-07-0	1,2-Dichloroethane-D4	101%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	94%		83-118%

(a) Associated CCV outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-6	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	04/20/15	04/20/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12349
(2) Prep QC Batch: MP28825

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-1D	
Lab Sample ID:	FA23685-7	Date Sampled: 04/15/15
Matrix:	AQ - Ground Water	Date Received: 04/18/15
Method:	SW846 8260B	Percent Solids: n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B105064.D	1	04/22/15	DP	n/a	n/a	VB4259
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether ^a	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-7	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-7	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	101%		79-125%
2037-26-5	Toluene-D8	95%		85-112%
460-00-4	4-Bromofluorobenzene	91%		83-118%

(a) Associated CCV outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-7	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	04/20/15	04/20/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12349
(2) Prep QC Batch: MP28825

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-8	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B105065.D	1	04/22/15	DP	n/a	n/a	VB4259
Run #2	I29202.D	25	04/23/15	DP	n/a	n/a	VI696

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	0.71	1.0	0.20	ug/l	J
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	0.21	1.0	0.20	ug/l	J
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether ^a	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	0.79	1.0	0.30	ug/l	J
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.34	1.0	0.22	ug/l	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	0.70	1.0	0.20	ug/l	J
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	13.8	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	612 ^b	25	5.5	ug/l	
156-60-5	trans-1,2-Dichloroethylene	11.1	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-8	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	10.2	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	0.59	1.0	0.20	ug/l	J
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	12.6	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	1.2	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	389 ^b	25	8.1	ug/l	
108-88-3	Toluene	1.3	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	1790 ^b	25	5.4	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	3.8	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.2	2.0	0.22	ug/l	J
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	1.3	1.0	0.25	ug/l	
	m,p-Xylene	13.9	2.0	0.31	ug/l	
95-47-6	o-Xylene	12.9	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-8	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	99%	100%	79-125%
2037-26-5	Toluene-D8	99%	101%	85-112%
460-00-4	4-Bromofluorobenzene	87%	101%	83-118%

(a) Associated CCV outside control limits.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-8	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	283	10	ug/l	1	04/20/15	04/20/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12349
(2) Prep QC Batch: MP28825

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-2R	
Lab Sample ID: FA23685-9	Date Sampled: 04/15/15
Matrix: AQ - Ground Water	Date Received: 04/18/15
Method: SW846 8260B	Percent Solids: n/a
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I29185.D	1	04/23/15	DP	n/a	n/a	VI696
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-9	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	2.1	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-9	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	91%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-9	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	04/21/15	04/21/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12351
(2) Prep QC Batch: MP28832

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-10	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B105067.D	1	04/22/15	DP	n/a	n/a	VB4259
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether ^a	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-10	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-10	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		83-118%
17060-07-0	1,2-Dichloroethane-D4	99%		79-125%
2037-26-5	Toluene-D8	104%		85-112%
460-00-4	4-Bromofluorobenzene	86%		83-118%

(a) Associated CCV outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-10	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	04/21/15	04/21/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12351
(2) Prep QC Batch: MP28832

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-11	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I29332.D	1	04/29/15	DP	n/a	n/a	VI701
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-11	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene ^a	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-11	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	97%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	107%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-11	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	04/21/15	04/21/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12351
(2) Prep QC Batch: MP28832

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-12	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I29343.D	1	04/29/15	DP	n/a	n/a	VI701
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-12	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene ^a	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	0.24	1.0	0.22	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-12	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	97%		79-125%
2037-26-5	Toluene-D8	103%		85-112%
460-00-4	4-Bromofluorobenzene	108%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-12	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	04/21/15	04/21/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12351
(2) Prep QC Batch: MP28832

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-13	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I29344.D	1	04/29/15	DP	n/a	n/a	VI701
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-13	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene ^a	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-13	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	97%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	106%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10		
Lab Sample ID:	FA23685-13	Date Sampled:	04/15/15
Matrix:	AQ - Ground Water	Date Received:	04/18/15
		Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	04/21/15	04/21/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12351
(2) Prep QC Batch: MP28832

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WATER WELL	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-14	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I29345.D	1	04/29/15	DP	n/a	n/a	VI701
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WATER WELL	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-14	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene ^a	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WATER WELL	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-14	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	106%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WATER WELL	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-14	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	04/21/15	04/21/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12351
(2) Prep QC Batch: MP28832

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-15	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I29346.D	1	04/29/15	DP	n/a	n/a	VI701
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-15	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene ^a	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-15	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	97%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	106%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-15	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	04/21/15	04/21/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12351
(2) Prep QC Batch: MP28832

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-16	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I29347.D	1	04/29/15	DP	n/a	n/a	VI701
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-16	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene ^a	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	0.80	1.0	0.25	ug/l	J
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-16	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	97%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	108%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11		
Lab Sample ID:	FA23685-17	Date Sampled:	04/15/15
Matrix:	AQ - Ground Water	Date Received:	04/18/15
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I29348.D	1	04/29/15	DP	n/a	n/a	VI701
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	0.32	1.0	0.20	ug/l	J
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-17	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene ^a	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	04/15/15
Lab Sample ID:	FA23685-17	Date Received:	04/18/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	97%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	107%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



Accutest Laboratories Southeast Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB #

FA23685

PAGE

1 OF 2

Accutest Quote #

SKIFF#

Client / Reporting Information				Project Information				Analytical Information												Matrix Codes	
Company Name: <u>Gannett Fleming</u>				Project Name: <u>TMR Midstate</u>																DW - Drinking Water GW - Ground Water WW - Wastewater SW - Surface Water SO - Soil SL - Sludge OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe	
Address: <u>9119 Corporate Lake Dr Suite 100</u>				Street: <u>2600 West Savannah Ave</u>																	
City: <u>Tampa</u> State: <u>FL</u> Zip: <u>33634</u>				City: <u>Valdosta</u> State: <u>GA</u>																	
Project Contact: <u>David Fuller</u> E-mail: <u>dfuller@gannett.com</u>				Project # <u>57524</u>																	
Phone: <u>813 882 4366</u> Fax: <u>813 882 4609</u>				Client Purchase Order #																	
Sampler(s) Name(s): <u>R. D. D. Fuller, Dan Dennis</u>				Client Purchase Order #																	
Accutest Sample #	Field ID / Point of Collection	COLLECTION		CONTAINER INFORMATION												LAB USE ONLY					
		DATE	TIME	SAMPLED BY	MATRIX	TOTAL # OF BOTTLES	OTHER	POME	113	113H	113H3	113H4	113H5	113H6	113H7		113H8	113H9	113H10	113H11	113H12
1	MW-13	4/14/15	1410	RTF	GW	3		3													X
2	MW-12	4/14/15	1418	DRD	GW	3		3													X
3	MW-5	4/14/15	1447	DRD	GW	3		3													X
4	MW-5D	4/14/15	1534	RTF	GW	3		3													X
5	MW-6	4/15/15	1535	DRD	GW	3		3													X
6	MW-1DD	4/15/15	0850	DRD	GW	4		3		1											X X
7	MW-1D	4/15/15	0857	RTF	GW	4		3		1											X X
8	MW-1R	4/15/15	0937	RTF	GW	4		3		1											X X
9	MW-2R	4/15/15	0943	DRD	GW	4		3		1											X X
10	MW-14	4/15/15	1040	RTF	GW	4		3		1											X X
11	MW-15	4/15/15	1104	DRD	GW	4		3		1											X X
12	MW-4	4/15/15	1121	RTF	GW	4		3		1											X X
TURNAROUND TIME (Business Days)				Data Deliverable Information												Comments / Remarks					
☒ 10 Days Standard ☐ 7 Day RUSH ☐ 5 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY ☐ OTHER				☐ COMMERCIAL "A" (RESULTS ONLY) ☒ COMMERCIAL "B" (RESULTS PLUS QC) ☐ REDT1 (EPA LEVEL 3) ☐ FULT1 (EPA LEVEL 4) ☐ EDD'S																	
Emergency or Rush T/A Data Available VIA Email or Lablink																					
Sample Custody must be documented below each time samples change possession, including courier delivery.																					
Relinquished by Sampler:		Date Time:		Received By:		Relinquished by:		Date Time:		Received By:		Relinquished by:		Date Time:		Received By:					
1 R. D. D. Fuller		4-17-15 12:15		2 James L. Brown		4-17-15 13:15		3 James L. Brown		4-17-15 18:15		4 J. CORAL (A13E)		4-18-15							
Relinquished by:		Date Time:		Received By:		Relinquished by:		Date Time:		Received By:		Relinquished by:		Date Time:		Received By:					
5				6				7				8									
Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: 1 Cooler Temperature (s) Celsius: 28																					

FA23685: Chain of Custody

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Accutest Laboratories Southeast Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB #

FA23685

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Accutest Quote #

SKIFF#

Client / Reporting Information		Project Information		Analytical Information												Matrix Codes
Company Name <u>Garnett + Fleming</u>		Project Name: <u>TNR Valosta</u>														DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge OL - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe
Address <u>919 Corporate Ldr. Bldg SW 150</u>		Street <u>200 West Savannah Ave</u>														
City <u>Tampa</u> State <u>FL</u> Zip <u>33634</u>		City <u>Valdosta</u> State <u>GA</u>														
Project Contact <u>1000 Filer</u> Email <u>tfiler@gfnet.com</u>		Project # <u>57524</u>														
Phone# <u>813 892 4316</u> <u>813 246 5300</u>		Fax # <u>813 884 4609</u>														
Sampler(s) Name(s) <u>Don Davis</u>		Client Purchase Order #														
Accutest Sample #	Field ID / Point of Collection	CONTAINER INFORMATION												LAB USE ONLY		
		DATE	TIME	SAMPLED BY	MATRIX	TOTAL # OF BOTTLES	OTHER	DOVE	NOI	BAH	FINCH	ROSCA	NECHZAC		WATER	MECH
13	MW-10	4/15/15	1137	ARD	GW	4		3	1						X	X
14	waterwell	1	1200	DRD	GW	4		3	1						X	X
15	MW-3	1	1203	KTF	GW	4		3	1						X	X
16	MW-8	1	1342	KTF	GW	3		3							X	
17	MW-11	✓	1508	KTF	GW	3		3							X	
TURNAROUND TIME (Business Days)		Data Deliverable Information												Comments / Remarks		
☒ 10 Days Standard ☐ 7 Day RUSH ☐ 5 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY ☐ OTHER		☐ COMMERCIAL "A" (RESULTS ONLY) ☒ COMMERCIAL "B" (RESULTS PLUS QC) ☐ REDT1 (EPA LEVEL 3) ☐ FULT1 (EPA LEVEL 4) ☐ EDD'S														
Approved By: / Rush Code																
Emergency or Rush T/A Data Available VIA Email or Lablink																
Sample Custody must be documented below each time samples change possession, including courier delivery.																
Relinquished by: <u>1 R. Told</u>	Date Time: <u>4-17-15 1315</u>	Received By: <u>2 James Alom</u>	Date Time: <u>4-17-15 1315</u>	Relinquished by: <u>3 James Alom</u>	Date Time: <u>4-17-15 1815</u>	Received By: <u>4 J. Gagne (A/SE)</u>	Date Time: <u>4-18-15</u>									
Relinquished by: <u>5</u>	Date Time:	Received By: <u>6</u>	Date Time:	Relinquished by: <u>7</u>	Date Time:	Received By: <u>8</u>	Date Time:									
Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius:																

FA23685: Chain of Custody

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ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA 23685 CLIENT: GANNETT F PROJECT: S7524
 DATE/TIME RECEIVED: 4-18-15 08:00 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: _____
 AIRBILL NUMBERS: _____

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
- ☒ TRIP BLANK NOT PROVIDED
- ☒ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____
 NUMBER OF 5035 FIELD KITS ? _____
 NUMBER OF LAB FILTERED METALS ? _____

pH PAPER LOT#s WIDE RANGE A036122 NARROW RANGE HC421754 OTHER (specify) 405-230010

SUMMARY OF COMMENTS: _____

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR -0.2
- ☐ OBSERVED TEMPS: 3.0
- ☐ CORRECTED TEMPS: 2.8

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
- ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
- ☐ INSUFFICIENT VOLUME FOR ANALYSIS
- ☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ☐ ID'S ON COC DO NOT MATCH LABEL
- ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- ☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- ☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
- ☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- ☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- ☐ % SOLIDS JAR NOT RECEIVED
- ☐ RESIDUAL CHLORINE PRESENT LOT# _____

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TECHNICIAN SIGNATURE/DATE [Signature] 4-18-15 REVIEWER SIGNATURE/DATE [Signature] 4-18-15

NF 10/14

receipt confirmation 102914.xls

FA23685: Chain of Custody

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GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

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Job Number: FA23685

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4259-MB	B105051.D	1	04/22/15	DP	n/a	n/a	VB4259

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23685-1, FA23685-2, FA23685-3, FA23685-4, FA23685-5, FA23685-6, FA23685-7, FA23685-8, FA23685-10

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: FA23685**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4259-MB	B105051.D	1	04/22/15	DP	n/a	n/a	VB4259

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA23685-1, FA23685-2, FA23685-3, FA23685-4, FA23685-5, FA23685-6, FA23685-7, FA23685-8, FA23685-10

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA23685
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4259-MB	B105051.D	1	04/22/15	DP	n/a	n/a	VB4259

The QC reported here applies to the following samples: Method: SW846 8260B

FA23685-1, FA23685-2, FA23685-3, FA23685-4, FA23685-5, FA23685-6, FA23685-7, FA23685-8, FA23685-10

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	103% 83-118%
17060-07-0	1,2-Dichloroethane-D4	96% 79-125%
2037-26-5	Toluene-D8	102% 85-112%
460-00-4	4-Bromofluorobenzene	100% 83-118%

Method Blank Summary

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Job Number: FA23685

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI696-MB	I29183.D	1	04/23/15	DP	n/a	n/a	VI696

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23685-8, FA23685-9

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: FA23685**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI696-MB	I29183.D	1	04/23/15	DP	n/a	n/a	VI696

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA23685-8, FA23685-9

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA23685
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI696-MB	I29183.D	1	04/23/15	DP	n/a	n/a	VI696

The QC reported here applies to the following samples: Method: SW846 8260B
FA23685-8, FA23685-9

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	99% 83-118%
17060-07-0	1,2-Dichloroethane-D4	98% 79-125%
2037-26-5	Toluene-D8	100% 85-112%
460-00-4	4-Bromofluorobenzene	99% 83-118%

Method Blank Summary

Page 1 of 3

Job Number: FA23685**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI701-MB	I29322.D	1	04/29/15	DP	n/a	n/a	VI701

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA23685-11, FA23685-12, FA23685-13, FA23685-14, FA23685-15, FA23685-16, FA23685-17

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	

Method Blank Summary

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Job Number: FA23685**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI701-MB	I29322.D	1	04/29/15	DP	n/a	n/a	VI701

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA23685-11, FA23685-12, FA23685-13, FA23685-14, FA23685-15, FA23685-16, FA23685-17

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.92	1.0	0.50	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA23685
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI701-MB	I29322.D	1	04/29/15	DP	n/a	n/a	VI701

The QC reported here applies to the following samples: Method: SW846 8260B

FA23685-11, FA23685-12, FA23685-13, FA23685-14, FA23685-15, FA23685-16, FA23685-17

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	97% 83-118%
17060-07-0	1,2-Dichloroethane-D4	94% 79-125%
2037-26-5	Toluene-D8	99% 85-112%
460-00-4	4-Bromofluorobenzene	104% 83-118%

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Job Number: FA23685**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4259-BS	B105049.D	1	04/22/15	DP	n/a	n/a	VB4259

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA23685-1, FA23685-2, FA23685-3, FA23685-4, FA23685-5, FA23685-6, FA23685-7, FA23685-8, FA23685-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	118	94	50-147
107-02-8	Acrolein	125	76.9	62	31-154
107-13-1	Acrylonitrile	125	113	90	58-126
71-43-2	Benzene	25	22.9	92	81-122
108-86-1	Bromobenzene	25	23.0	92	80-121
74-97-5	Bromochloromethane	25	22.5	90	76-123
75-27-4	Bromodichloromethane	25	21.3	85	79-123
75-25-2	Bromoform	25	19.9	80	66-123
78-93-3	2-Butanone (MEK)	125	112	90	56-143
104-51-8	n-Butylbenzene	25	23.3	93	79-126
135-98-8	sec-Butylbenzene	25	26.5	106	83-133
98-06-6	tert-Butylbenzene	25	25.0	100	80-133
75-15-0	Carbon Disulfide	25	22.7	91	66-148
56-23-5	Carbon Tetrachloride	25	24.1	96	76-136
108-90-7	Chlorobenzene	25	25.2	101	82-124
75-00-3	Chloroethane	25	31.1	124	62-144
110-75-8	2-Chloroethyl Vinyl Ether	125	70.9	57	56-122
67-66-3	Chloroform	25	25.0	100	80-124
95-49-8	o-Chlorotoluene	25	24.8	99	81-127
106-43-4	p-Chlorotoluene	25	26.2	105	83-130
124-48-1	Dibromochloromethane	25	22.6	90	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	20.5	82	64-123
106-93-4	1,2-Dibromoethane	25	22.2	89	75-120
75-71-8	Dichlorodifluoromethane	25	27.8	111	42-167
95-50-1	1,2-Dichlorobenzene	25	24.0	96	82-124
541-73-1	1,3-Dichlorobenzene	25	25.2	101	84-125
106-46-7	1,4-Dichlorobenzene	25	23.6	94	78-120
75-34-3	1,1-Dichloroethane	25	24.0	96	81-122
107-06-2	1,2-Dichloroethane	25	24.5	98	75-125
75-35-4	1,1-Dichloroethylene	25	27.8	111	78-137
156-59-2	cis-1,2-Dichloroethylene	25	25.1	100	78-120
156-60-5	trans-1,2-Dichloroethylene	25	25.0	100	76-127
78-87-5	1,2-Dichloropropane	25	24.3	97	76-124
142-28-9	1,3-Dichloropropane	25	21.5	86	80-118
594-20-7	2,2-Dichloropropane	25	23.0	92	74-139
563-58-6	1,1-Dichloropropene	25	27.2	109	79-131

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA23685**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4259-BS	B105049.D	1	04/22/15	DP	n/a	n/a	VB4259

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA23685-1, FA23685-2, FA23685-3, FA23685-4, FA23685-5, FA23685-6, FA23685-7, FA23685-8, FA23685-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	25	22.2	89	75-118
10061-02-6	trans-1,3-Dichloropropene	25	23.3	93	80-120
100-41-4	Ethylbenzene	25	23.8	95	81-121
87-68-3	Hexachlorobutadiene	25	23.9	96	75-142
591-78-6	2-Hexanone	125	105	84	61-129
98-82-8	Isopropylbenzene	25	24.3	97	83-132
99-87-6	p-Isopropyltoluene	25	25.4	102	79-130
74-83-9	Methyl Bromide	25	32.6	130	59-143
74-87-3	Methyl Chloride	25	28.7	115	50-159
74-95-3	Methylene Bromide	25	21.5	86	78-119
75-09-2	Methylene Chloride	25	23.9	96	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	104	83	66-122
1634-04-4	Methyl Tert Butyl Ether	25	23.8	95	72-117
91-20-3	Naphthalene	25	22.3	89	63-132
103-65-1	n-Propylbenzene	25	24.6	98	82-133
100-42-5	Styrene	25	22.0	88	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	23.0	92	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	22.0	88	72-120
127-18-4	Tetrachloroethylene	25	24.1	96	76-135
108-88-3	Toluene	25	22.9	92	80-120
87-61-6	1,2,3-Trichlorobenzene	25	23.0	92	68-131
120-82-1	1,2,4-Trichlorobenzene	25	23.3	93	73-129
71-55-6	1,1,1-Trichloroethane	25	24.0	96	75-130
79-00-5	1,1,2-Trichloroethane	25	21.5	86	76-119
79-01-6	Trichloroethylene	25	23.7	95	81-126
75-69-4	Trichlorofluoromethane	25	28.6	114	71-156
96-18-4	1,2,3-Trichloropropane	25	21.8	87	77-120
95-63-6	1,2,4-Trimethylbenzene	25	23.7	95	79-120
108-67-8	1,3,5-Trimethylbenzene	25	23.0	92	79-120
108-05-4	Vinyl Acetate	125	71.5	57	43-154
75-01-4	Vinyl Chloride	25	29.5	118	69-159
	m,p-Xylene	50	48.1	96	79-126
95-47-6	o-Xylene	25	23.7	95	80-127

* = Outside of Control Limits.

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Job Number: FA23685

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4259-BS	B105049.D	1	04/22/15	DP	n/a	n/a	VB4259

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23685-1, FA23685-2, FA23685-3, FA23685-4, FA23685-5, FA23685-6, FA23685-7, FA23685-8, FA23685-10

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	97%	79-125%
2037-26-5	Toluene-D8	99%	85-112%
460-00-4	4-Bromofluorobenzene	91%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA23685**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI696-BS	I29181.D	1	04/23/15	DP	n/a	n/a	VI696

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA23685-8, FA23685-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	130	104	50-147
107-02-8	Acrolein	125	100	80	31-154
107-13-1	Acrylonitrile	125	92.9	74	58-126
71-43-2	Benzene	25	24.6	98	81-122
108-86-1	Bromobenzene	25	24.1	96	80-121
74-97-5	Bromochloromethane	25	23.6	94	76-123
75-27-4	Bromodichloromethane	25	23.7	95	79-123
75-25-2	Bromoform	25	23.3	93	66-123
78-93-3	2-Butanone (MEK)	125	117	94	56-143
104-51-8	n-Butylbenzene	25	24.4	98	79-126
135-98-8	sec-Butylbenzene	25	26.8	107	83-133
98-06-6	tert-Butylbenzene	25	28.6	114	80-133
75-15-0	Carbon Disulfide	25	27.2	109	66-148
56-23-5	Carbon Tetrachloride	25	26.9	108	76-136
108-90-7	Chlorobenzene	25	27.4	110	82-124
75-00-3	Chloroethane	25	28.3	113	62-144
110-75-8	2-Chloroethyl Vinyl Ether	125	97.9	78	56-122
67-66-3	Chloroform	25	25.2	101	80-124
95-49-8	o-Chlorotoluene	25	25.9	104	81-127
106-43-4	p-Chlorotoluene	25	26.8	107	83-130
124-48-1	Dibromochloromethane	25	24.9	100	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	23.5	94	64-123
106-93-4	1,2-Dibromoethane	25	25.6	102	75-120
75-71-8	Dichlorodifluoromethane	25	25.7	103	42-167
95-50-1	1,2-Dichlorobenzene	25	25.3	101	82-124
541-73-1	1,3-Dichlorobenzene	25	26.2	105	84-125
106-46-7	1,4-Dichlorobenzene	25	24.5	98	78-120
75-34-3	1,1-Dichloroethane	25	26.8	107	81-122
107-06-2	1,2-Dichloroethane	25	25.1	100	75-125
75-35-4	1,1-Dichloroethylene	25	32.0	128	78-137
156-59-2	cis-1,2-Dichloroethylene	25	26.2	105	78-120
156-60-5	trans-1,2-Dichloroethylene	25	25.6	102	76-127
78-87-5	1,2-Dichloropropane	25	24.4	98	76-124
142-28-9	1,3-Dichloropropane	25	24.9	100	80-118
594-20-7	2,2-Dichloropropane	25	25.2	101	74-139
563-58-6	1,1-Dichloropropene	25	26.6	106	79-131

* = Outside of Control Limits.

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Job Number: FA23685**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI696-BS	I29181.D	1	04/23/15	DP	n/a	n/a	VI696

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA23685-8, FA23685-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	25	21.8	87	75-118
10061-02-6	trans-1,3-Dichloropropene	25	23.3	93	80-120
100-41-4	Ethylbenzene	25	26.5	106	81-121
87-68-3	Hexachlorobutadiene	25	26.3	105	75-142
591-78-6	2-Hexanone	125	131	105	61-129
98-82-8	Isopropylbenzene	25	27.4	110	83-132
99-87-6	p-Isopropyltoluene	25	26.3	105	79-130
74-83-9	Methyl Bromide	25	30.5	122	59-143
74-87-3	Methyl Chloride	25	27.3	109	50-159
74-95-3	Methylene Bromide	25	24.2	97	78-119
75-09-2	Methylene Chloride	25	26.1	104	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	124	99	66-122
1634-04-4	Methyl Tert Butyl Ether	25	25.6	102	72-117
91-20-3	Naphthalene	25	24.8	99	63-132
103-65-1	n-Propylbenzene	25	27.5	110	82-133
100-42-5	Styrene	25	25.9	104	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	25.2	101	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	23.5	94	72-120
127-18-4	Tetrachloroethylene	25	27.1	108	76-135
108-88-3	Toluene	25	24.8	99	80-120
87-61-6	1,2,3-Trichlorobenzene	25	23.9	96	68-131
120-82-1	1,2,4-Trichlorobenzene	25	22.8	91	73-129
71-55-6	1,1,1-Trichloroethane	25	24.3	97	75-130
79-00-5	1,1,2-Trichloroethane	25	25.4	102	76-119
79-01-6	Trichloroethylene	25	25.4	102	81-126
75-69-4	Trichlorofluoromethane	25	28.8	115	71-156
96-18-4	1,2,3-Trichloropropane	25	23.7	95	77-120
95-63-6	1,2,4-Trimethylbenzene	25	25.6	102	79-120
108-67-8	1,3,5-Trimethylbenzene	25	23.7	95	79-120
108-05-4	Vinyl Acetate	125	60.0	48	43-154
75-01-4	Vinyl Chloride	25	30.4	122	69-159
	m,p-Xylene	50	52.9	106	79-126
95-47-6	o-Xylene	25	27.8	111	80-127

* = Outside of Control Limits.

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Job Number: FA23685

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI696-BS	I29181.D	1	04/23/15	DP	n/a	n/a	VI696

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23685-8, FA23685-9

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	79-125%
2037-26-5	Toluene-D8	100%	85-112%
460-00-4	4-Bromofluorobenzene	100%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA23685**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI701-BS	I29320.D	1	04/29/15	DP	n/a	n/a	VI701

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA23685-11, FA23685-12, FA23685-13, FA23685-14, FA23685-15, FA23685-16, FA23685-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	128	102	50-147
107-02-8	Acrolein	125	100	80	31-154
107-13-1	Acrylonitrile	125	120	96	58-126
71-43-2	Benzene	25	27.9	112	81-122
108-86-1	Bromobenzene	25	26.6	106	80-121
74-97-5	Bromochloromethane	25	26.2	105	76-123
75-27-4	Bromodichloromethane	25	25.0	100	79-123
75-25-2	Bromoform	25	27.4	110	66-123
78-93-3	2-Butanone (MEK)	125	113	90	56-143
104-51-8	n-Butylbenzene	25	29.6	118	79-126
135-98-8	sec-Butylbenzene	25	29.5	118	83-133
98-06-6	tert-Butylbenzene	25	27.7	111	80-133
75-15-0	Carbon Disulfide	25	28.4	114	66-148
56-23-5	Carbon Tetrachloride	25	31.3	125	76-136
108-90-7	Chlorobenzene	25	26.5	106	82-124
75-00-3	Chloroethane	25	29.7	119	62-144
110-75-8	2-Chloroethyl Vinyl Ether	125	124	99	56-122
67-66-3	Chloroform	25	27.4	110	80-124
95-49-8	o-Chlorotoluene	25	27.3	109	81-127
106-43-4	p-Chlorotoluene	25	26.7	107	83-130
124-48-1	Dibromochloromethane	25	27.0	108	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	28.7	115	64-123
106-93-4	1,2-Dibromoethane	25	25.8	103	75-120
75-71-8	Dichlorodifluoromethane	25	31.2	125	42-167
95-50-1	1,2-Dichlorobenzene	25	26.4	106	82-124
541-73-1	1,3-Dichlorobenzene	25	28.5	114	84-125
106-46-7	1,4-Dichlorobenzene	25	26.3	105	78-120
75-34-3	1,1-Dichloroethane	25	29.4	118	81-122
107-06-2	1,2-Dichloroethane	25	24.8	99	75-125
75-35-4	1,1-Dichloroethylene	25	30.6	122	78-137
156-59-2	cis-1,2-Dichloroethylene	25	26.8	107	78-120
156-60-5	trans-1,2-Dichloroethylene	25	31.6	126	76-127
78-87-5	1,2-Dichloropropane	25	25.1	100	76-124
142-28-9	1,3-Dichloropropane	25	25.1	100	80-118
594-20-7	2,2-Dichloropropane	25	32.2	129	74-139
563-58-6	1,1-Dichloropropene	25	29.4	118	79-131

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA23685**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI701-BS	I29320.D	1	04/29/15	DP	n/a	n/a	VI701

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA23685-11, FA23685-12, FA23685-13, FA23685-14, FA23685-15, FA23685-16, FA23685-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	25	26.3	105	75-118
10061-02-6	trans-1,3-Dichloropropene	25	25.1	100	80-120
100-41-4	Ethylbenzene	25	27.5	110	81-121
87-68-3	Hexachlorobutadiene	25	31.1	124	75-142
591-78-6	2-Hexanone	125	104	83	61-129
98-82-8	Isopropylbenzene	25	28.3	113	83-132
99-87-6	p-Isopropyltoluene	25	28.9	116	79-130
74-83-9	Methyl Bromide	25	30.9	124	59-143
74-87-3	Methyl Chloride	25	29.9	120	50-159
74-95-3	Methylene Bromide	25	25.3	101	78-119
75-09-2	Methylene Chloride	25	29.0	116	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	110	88	66-122
1634-04-4	Methyl Tert Butyl Ether	25	28.1	112	72-117
91-20-3	Naphthalene	25	34.6	138*	63-132
103-65-1	n-Propylbenzene	25	28.4	114	82-133
100-42-5	Styrene	25	25.6	102	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	26.6	106	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	24.5	98	72-120
127-18-4	Tetrachloroethylene	25	27.2	109	76-135
108-88-3	Toluene	25	26.0	104	80-120
87-61-6	1,2,3-Trichlorobenzene	25	32.6	130	68-131
120-82-1	1,2,4-Trichlorobenzene	25	29.5	118	73-129
71-55-6	1,1,1-Trichloroethane	25	30.0	120	75-130
79-00-5	1,1,2-Trichloroethane	25	25.6	102	76-119
79-01-6	Trichloroethylene	25	28.3	113	81-126
75-69-4	Trichlorofluoromethane	25	28.6	114	71-156
96-18-4	1,2,3-Trichloropropane	25	24.3	97	77-120
95-63-6	1,2,4-Trimethylbenzene	25	28.4	114	79-120
108-67-8	1,3,5-Trimethylbenzene	25	25.5	102	79-120
108-05-4	Vinyl Acetate	125	70.2	56	43-154
75-01-4	Vinyl Chloride	25	30.1	120	69-159
	m,p-Xylene	50	55.4	111	79-126
95-47-6	o-Xylene	25	28.0	112	80-127

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA23685

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI701-BS	I29320.D	1	04/29/15	DP	n/a	n/a	VI701

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23685-11, FA23685-12, FA23685-13, FA23685-14, FA23685-15, FA23685-16, FA23685-17

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	95%	79-125%
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	105%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA23685

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23629-6MS	B105068.D	1	04/22/15	DP	n/a	n/a	VB4259
FA23629-6MSD	B105069.D	1	04/22/15	DP	n/a	n/a	VB4259
FA23629-6	B105052.D	1	04/22/15	DP	n/a	n/a	VB4259

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23685-1, FA23685-2, FA23685-3, FA23685-4, FA23685-5, FA23685-6, FA23685-7, FA23685-8, FA23685-10

CAS No.	Compound	FA23629-6 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	25 U	125	71.8	57	125	79.9	64	11	50-147/21
107-02-8	Acrolein	20 U	125	86.6	69	125	91.9	74	6	31-154/29
107-13-1	Acrylonitrile	10 U	125	100	80	125	125	100	22*	58-126/16
71-43-2	Benzene	1.0 U	25	22.5	90	25	28.4	114	23*	81-122/14
108-86-1	Bromobenzene	1.0 U	25	23.3	93	25	28.1	112	19*	80-121/14
74-97-5	Bromochloromethane	1.0 U	25	23.9	96	25	27.9	112	15*	76-123/14
75-27-4	Bromodichloromethane	1.0 U	25	21.0	84	25	23.5	94	11	79-123/19
75-25-2	Bromoform	1.0 U	25	20.7	83	25	24.8	99	18	66-123/21
78-93-3	2-Butanone (MEK)	5.0 U	125	93.2	75	125	117	94	23*	56-143/18
104-51-8	n-Butylbenzene	1.0 U	25	21.7	87	25	25.4	102	16	79-126/16
135-98-8	sec-Butylbenzene	1.0 U	25	25.1	100	25	29.7	119	17*	83-133/16
98-06-6	tert-Butylbenzene	1.0 U	25	24.0	96	25	25.8	103	7	80-133/16
75-15-0	Carbon Disulfide	2.0 U	25	19.4	78	25	20.1	80	4	66-148/23
56-23-5	Carbon Tetrachloride	1.0 U	25	26.4	106	25	27.4	110	4	76-136/23
108-90-7	Chlorobenzene	1.0 U	25	25.2	101	25	30.1	120	18*	82-124/14
75-00-3	Chloroethane	2.0 U	25	22.8	91	25	33.2	133	37*	62-144/20
110-75-8	2-Chloroethyl Vinyl Ether	5.0 U	125	ND	0*	125	ND	0*	nc	56-122/23
67-66-3	Chloroform	1.0 U	25	25.4	102	25	29.1	116	14	80-124/15
95-49-8	o-Chlorotoluene	1.0 U	25	24.3	97	25	29.0	116	18*	81-127/15
106-43-4	p-Chlorotoluene	1.0 U	25	24.4	98	25	28.5	114	16*	83-130/15
124-48-1	Dibromochloromethane	1.0 U	25	22.2	89	25	26.0	104	16	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U	25	22.0	88	25	22.9	92	4	64-123/18
106-93-4	1,2-Dibromoethane	2.0 U	25	21.7	87	25	27.7	111	24*	75-120/13
75-71-8	Dichlorodifluoromethane	2.0 U	25	15.7	63	25	27.6	110	55*	42-167/19
95-50-1	1,2-Dichlorobenzene	1.0 U	25	24.0	96	25	28.8	115	18*	82-124/14
541-73-1	1,3-Dichlorobenzene	1.0 U	25	25.8	103	25	30.3	121	16*	84-125/14
106-46-7	1,4-Dichlorobenzene	1.0 U	25	23.4	94	25	27.4	110	16*	78-120/15
75-34-3	1,1-Dichloroethane	1.0 U	25	24.6	98	25	28.0	112	13	81-122/15
107-06-2	1,2-Dichloroethane	1.0 U	25	23.8	95	25	28.4	114	18*	75-125/14
75-35-4	1,1-Dichloroethylene	1.0 U	25	29.2	117	25	32.9	132	12	78-137/18
156-59-2	cis-1,2-Dichloroethylene	1.0 U	25	25.8	103	25	29.4	118	13	78-120/15
156-60-5	trans-1,2-Dichloroethylene	1.0 U	25	26.0	104	25	28.4	114	9	76-127/17
78-87-5	1,2-Dichloropropane	1.0 U	25	23.6	94	25	27.4	110	15*	76-124/14
142-28-9	1,3-Dichloropropane	1.0 U	25	22.5	90	25	26.2	105	15*	80-118/13
594-20-7	2,2-Dichloropropane	1.0 U	25	21.8	87	25	25.5	102	16	74-139/17
563-58-6	1,1-Dichloropropene	1.0 U	25	26.3	105	25	29.4	118	11	79-131/16

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA23685

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23629-6MS	B105068.D	1	04/22/15	DP	n/a	n/a	VB4259
FA23629-6MSD	B105069.D	1	04/22/15	DP	n/a	n/a	VB4259
FA23629-6	B105052.D	1	04/22/15	DP	n/a	n/a	VB4259

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23685-1, FA23685-2, FA23685-3, FA23685-4, FA23685-5, FA23685-6, FA23685-7, FA23685-8, FA23685-10

CAS No.	Compound	FA23629-6 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	1.0 U	25	19.7	79	25	22.9	92	15	75-118/23
10061-02-6	trans-1,3-Dichloropropene	1.0 U	25	21.7	87	25	24.2	97	11	80-120/22
100-41-4	Ethylbenzene	1.0 U	25	22.8	91	25	28.7	115	23*	81-121/14
87-68-3	Hexachlorobutadiene	2.0 U	25	22.8	91	25	26.2	105	14	75-142/19
591-78-6	2-Hexanone	10 U	125	83.8	67	125	101	81	19*	61-129/18
98-82-8	Isopropylbenzene	1.0 U	25	24.3	97	25	29.8	119	20*	83-132/15
99-87-6	p-Isopropyltoluene	1.0 U	25	24.4	98	25	28.7	115	16	79-130/16
74-83-9	Methyl Bromide	2.0 U	25	24.5	98	25	35.5	142	37*	59-143/19
74-87-3	Methyl Chloride	2.0 U	25	18.8	75	25	30.4	122	47*	50-159/19
74-95-3	Methylene Bromide	2.0 U	25	23.2	93	25	27.5	110	17*	78-119/14
75-09-2	Methylene Chloride	5.0 U	25	25.9	104	25	29.5	118	13	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	125	110	88	125	128	102	15	66-122/16
1634-04-4	Methyl Tert Butyl Ether	1.0 U	25	24.1	96	25	28.5	114	17*	72-117/14
91-20-3	Naphthalene	5.0 U	25	22.2	89	25	26.1	104	16	63-132/25
103-65-1	n-Propylbenzene	1.0 U	25	23.6	94	25	28.0	112	17*	82-133/15
100-42-5	Styrene	1.0 U	25	22.0	88	25	26.3	105	18	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U	25	24.4	98	25	26.6	106	9	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	25	22.0	88	25	27.3	109	22*	72-120/14
127-18-4	Tetrachloroethylene	1.0 U	25	25.3	101	25	29.8	119	16	76-135/16
108-88-3	Toluene	1.0 U	25	23.1	92	25	26.8	107	15*	80-120/14
87-61-6	1,2,3-Trichlorobenzene	1.0 U	25	22.0	88	25	27.0	108	20	68-131/25
120-82-1	1,2,4-Trichlorobenzene	1.0 U	25	21.8	87	25	26.5	106	19	73-129/20
71-55-6	1,1,1-Trichloroethane	1.0 U	25	24.8	99	25	27.6	110	11	75-130/16
79-00-5	1,1,2-Trichloroethane	1.0 U	25	21.3	85	25	25.9	104	19*	76-119/14
79-01-6	Trichloroethylene	1.0 U	25	22.8	91	25	27.0	108	17*	81-126/15
75-69-4	Trichlorofluoromethane	2.0 U	25	22.5	90	25	29.8	119	28*	71-156/21
96-18-4	1,2,3-Trichloropropane	2.0 U	25	21.4	86	25	27.7	111	26*	77-120/16
95-63-6	1,2,4-Trimethylbenzene	2.0 U	25	22.5	90	25	26.8	107	17	79-120/18
108-67-8	1,3,5-Trimethylbenzene	2.0 U	25	22.6	90	25	26.7	107	17	79-120/19
108-05-4	Vinyl Acetate	10 U	125	68.4	55	125	84.6	68	21*	43-154/14
75-01-4	Vinyl Chloride	1.0 U	25	18.7	75	25	29.5	118	45*	69-159/18
	m,p-Xylene	2.0 U	50	50.1	100	50	59.0	118	16*	79-126/15
95-47-6	o-Xylene	1.0 U	25	22.9	92	25	28.3	113	21*	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA23685

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23629-6MS	B105068.D	1	04/22/15	DP	n/a	n/a	VB4259
FA23629-6MSD	B105069.D	1	04/22/15	DP	n/a	n/a	VB4259
FA23629-6	B105052.D	1	04/22/15	DP	n/a	n/a	VB4259

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23685-1, FA23685-2, FA23685-3, FA23685-4, FA23685-5, FA23685-6, FA23685-7, FA23685-8, FA23685-10

CAS No.	Surrogate Recoveries	MS	MSD	FA23629-6	Limits
1868-53-7	Dibromofluoromethane	106%	104%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	98%	96%	93%	79-125%
2037-26-5	Toluene-D8	98%	96%	105%	85-112%
460-00-4	4-Bromofluorobenzene	88%	91%	99%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA23685

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23683-1MS	I29204.D	1	04/23/15	DP	n/a	n/a	VI696
FA23683-1MSD	I29205.D	1	04/23/15	DP	n/a	n/a	VI696
FA23683-1	I29188.D	1	04/23/15	DP	n/a	n/a	VI696

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23685-8, FA23685-9

CAS No.	Compound	FA23683-1 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	25 U	125	98.0	78	125	110	88	12	50-147/21
107-02-8	Acrolein	20 U	125	119	95	125	113	90	5	31-154/29
107-13-1	Acrylonitrile	10 U	125	99.5	80	125	103	82	3	58-126/16
71-43-2	Benzene	1.0 U	25	25.7	103	25	27.0	108	5	81-122/14
108-86-1	Bromobenzene	1.0 U	25	24.9	100	25	26.3	105	5	80-121/14
74-97-5	Bromochloromethane	1.0 U	25	25.6	102	25	26.4	106	3	76-123/14
75-27-4	Bromodichloromethane	1.0 U	25	23.8	95	25	23.6	94	1	79-123/19
75-25-2	Bromoform	1.0 U	25	21.8	87	25	21.3	85	2	66-123/21
78-93-3	2-Butanone (MEK)	5.0 U	125	103	82	125	114	91	10	56-143/18
104-51-8	n-Butylbenzene	1.0 U	25	24.2	97	25	25.7	103	6	79-126/16
135-98-8	sec-Butylbenzene	1.0 U	25	27.5	110	25	29.1	116	6	83-133/16
98-06-6	tert-Butylbenzene	1.0 U	25	29.6	118	25	31.3	125	6	80-133/16
75-15-0	Carbon Disulfide	2.0 U	25	23.9	96	25	20.6	82	15	66-148/23
56-23-5	Carbon Tetrachloride	1.0 U	25	26.9	108	25	26.0	104	3	76-136/23
108-90-7	Chlorobenzene	1.0 U	25	28.6	114	25	29.9	120	4	82-124/14
75-00-3	Chloroethane	2.0 U	25	31.6	126	25	31.5	126	0	62-144/20
110-75-8	2-Chloroethyl Vinyl Ether	5.0 U	125	ND	0*	125	ND	0*	nc	56-122/23
67-66-3	Chloroform	1.0 U	25	26.5	106	25	27.6	110	4	80-124/15
95-49-8	o-Chlorotoluene	1.0 U	25	26.6	106	25	27.8	111	4	81-127/15
106-43-4	p-Chlorotoluene	1.0 U	25	26.7	107	25	28.5	114	7	83-130/15
124-48-1	Dibromochloromethane	1.0 U	25	24.1	96	25	23.5	94	3	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U	25	24.1	96	25	28.0	112	15	64-123/18
106-93-4	1,2-Dibromoethane	2.0 U	25	27.2	109	25	28.9	116	6	75-120/13
75-71-8	Dichlorodifluoromethane	2.0 U	25	25.8	103	25	26.8	107	4	42-167/19
95-50-1	1,2-Dichlorobenzene	1.0 U	25	26.7	107	25	28.3	113	6	82-124/14
541-73-1	1,3-Dichlorobenzene	1.0 U	25	27.1	108	25	28.5	114	5	84-125/14
106-46-7	1,4-Dichlorobenzene	1.0 U	25	25.0	100	25	26.7	107	7	78-120/15
75-34-3	1,1-Dichloroethane	1.0 U	25	28.4	114	25	29.5	118	4	81-122/15
107-06-2	1,2-Dichloroethane	1.0 U	25	26.8	107	25	28.5	114	6	75-125/14
75-35-4	1,1-Dichloroethylene	1.0 U	25	36.0	144*	25	35.6	142*	1	78-137/18
156-59-2	cis-1,2-Dichloroethylene	1.0 U	25	28.0	112	25	29.2	117	4	78-120/15
156-60-5	trans-1,2-Dichloroethylene	1.0 U	25	27.5	110	25	28.0	112	2	76-127/17
78-87-5	1,2-Dichloropropane	1.0 U	25	25.8	103	25	27.6	110	7	76-124/14
142-28-9	1,3-Dichloropropane	1.0 U	25	26.5	106	25	28.3	113	7	80-118/13
594-20-7	2,2-Dichloropropane	1.0 U	25	23.5	94	25	24.3	97	3	74-139/17
563-58-6	1,1-Dichloropropene	1.0 U	25	27.5	110	25	28.8	115	5	79-131/16

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA23685

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23683-1MS	I29204.D	1	04/23/15	DP	n/a	n/a	VI696
FA23683-1MSD	I29205.D	1	04/23/15	DP	n/a	n/a	VI696
FA23683-1	I29188.D	1	04/23/15	DP	n/a	n/a	VI696

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23685-8, FA23685-9

CAS No.	Compound	FA23683-1 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	1.0 U	25	20.3	81	25	20.1	80	1	75-118/23
10061-02-6	trans-1,3-Dichloropropene	1.0 U	25	22.3	89	25	22.3	89	0	80-120/22
100-41-4	Ethylbenzene	1.0 U	25	26.5	106	25	29.0	116	9	81-121/14
87-68-3	Hexachlorobutadiene	2.0 U	25	26.2	105	25	27.6	110	5	75-142/19
591-78-6	2-Hexanone	10 U	125	120	96	125	135	108	12	61-129/18
98-82-8	Isopropylbenzene	1.0 U	25	28.3	113	25	29.8	119	5	83-132/15
99-87-6	p-Isopropyltoluene	1.0 U	25	26.7	107	25	27.9	112	4	79-130/16
74-83-9	Methyl Bromide	2.0 U	25	31.3	125	25	31.8	127	2	59-143/19
74-87-3	Methyl Chloride	2.0 U	25	29.8	119	25	31.4	126	5	50-159/19
74-95-3	Methylene Bromide	2.0 U	25	26.2	105	25	27.7	111	6	78-119/14
75-09-2	Methylene Chloride	5.0 U	25	28.9	116	25	29.4	118	2	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	125	136	109	125	150	120	10	66-122/16
1634-04-4	Methyl Tert Butyl Ether	1.0 U	25	27.8	111	25	29.3	117	5	72-117/14
91-20-3	Naphthalene	5.0 U	25	23.9	96	25	31.2	125	26*	63-132/25
103-65-1	n-Propylbenzene	1.0 U	25	28.0	112	25	29.4	118	5	82-133/15
100-42-5	Styrene	1.0 U	25	26.4	106	25	27.1	108	3	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U	25	26.4	106	25	26.6	106	1	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	25	25.9	104	25	28.4	114	9	72-120/14
127-18-4	Tetrachloroethylene	9.9	25	37.7	111	25	38.7	115	3	76-135/16
108-88-3	Toluene	1.0 U	25	25.6	102	25	27.2	109	6	80-120/14
87-61-6	1,2,3-Trichlorobenzene	1.0 U	25	23.1	92	25	28.6	114	21	68-131/25
120-82-1	1,2,4-Trichlorobenzene	1.0 U	25	23.3	93	25	26.4	106	12	73-129/20
71-55-6	1,1,1-Trichloroethane	1.0 U	25	25.1	100	25	25.8	103	3	75-130/16
79-00-5	1,1,2-Trichloroethane	1.0 U	25	27.3	109	25	29.2	117	7	76-119/14
79-01-6	Trichloroethylene	1.7	25	27.9	105	25	29.1	110	4	81-126/15
75-69-4	Trichlorofluoromethane	2.0 U	25	31.8	127	25	32.2	129	1	71-156/21
96-18-4	1,2,3-Trichloropropane	2.0 U	25	24.8	99	25	27.6	110	11	77-120/16
95-63-6	1,2,4-Trimethylbenzene	2.0 U	25	26.4	106	25	27.7	111	5	79-120/18
108-67-8	1,3,5-Trimethylbenzene	2.0 U	25	24.6	98	25	25.5	102	4	79-120/19
108-05-4	Vinyl Acetate	10 U	125	59.5	48	125	65.7	53	10	43-154/14
75-01-4	Vinyl Chloride	1.0 U	25	34.0	136	25	34.2	137	1	69-159/18
	m,p-Xylene	2.0 U	50	54.6	109	50	57.2	114	5	79-126/15
95-47-6	o-Xylene	1.0 U	25	29.1	116	25	30.5	122	5	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: FA23685

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23683-1MS	I29204.D	1	04/23/15	DP	n/a	n/a	VI696
FA23683-1MSD	I29205.D	1	04/23/15	DP	n/a	n/a	VI696
FA23683-1	I29188.D	1	04/23/15	DP	n/a	n/a	VI696

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23685-8, FA23685-9

CAS No.	Surrogate Recoveries	MS	MSD	FA23683-1	Limits
1868-53-7	Dibromofluoromethane	102%	100%	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	102%	93%	79-125%
2037-26-5	Toluene-D8	99%	99%	103%	85-112%
460-00-4	4-Bromofluorobenzene	96%	97%	101%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA23685

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23685-11MS	I29333.D	1	04/29/15	DP	n/a	n/a	VI701
FA23685-11MSD	I29334.D	1	04/29/15	DP	n/a	n/a	VI701
FA23685-11	I29332.D	1	04/29/15	DP	n/a	n/a	VI701

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23685-11, FA23685-12, FA23685-13, FA23685-14, FA23685-15, FA23685-16, FA23685-17

CAS No.	Compound	FA23685-11 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	125	120	96	125	126	101	5	50-147/21
107-02-8	Acrolein	ND	125	90.2	72	125	77.6	62	15	31-154/29
107-13-1	Acrylonitrile	ND	125	119	95	125	116	93	3	58-126/16
71-43-2	Benzene	ND	25	24.8	99	25	23.2	93	7	81-122/14
108-86-1	Bromobenzene	ND	25	23.4	94	25	22.3	89	5	80-121/14
74-97-5	Bromochloromethane	ND	25	23.4	94	25	23.0	92	2	76-123/14
75-27-4	Bromodichloromethane	ND	25	21.7	87	25	20.6	82	5	79-123/19
75-25-2	Bromoform	ND	25	21.4	86	25	21.6	86	1	66-123/21
78-93-3	2-Butanone (MEK)	ND	125	107	86	125	105	84	2	56-143/18
104-51-8	n-Butylbenzene	ND	25	24.8	99	25	23.4	94	6	79-126/16
135-98-8	sec-Butylbenzene	ND	25	25.2	101	25	23.8	95	6	83-133/16
98-06-6	tert-Butylbenzene	ND	25	24.3	97	25	22.9	92	6	80-133/16
75-15-0	Carbon Disulfide	ND	25	22.5	90	25	21.1	84	6	66-148/23
56-23-5	Carbon Tetrachloride	ND	25	24.9	100	25	24.6	98	1	76-136/23
108-90-7	Chlorobenzene	ND	25	23.6	94	25	22.0	88	7	82-124/14
75-00-3	Chloroethane	ND	25	23.1	92	25	21.8	87	6	62-144/20
110-75-8	2-Chloroethyl Vinyl Ether	ND	125	ND	0*	125	ND	0*	nc	56-122/23
67-66-3	Chloroform	ND	25	24.2	97	25	23.6	94	3	80-124/15
95-49-8	o-Chlorotoluene	ND	25	23.7	95	25	22.4	90	6	81-127/15
106-43-4	p-Chlorotoluene	ND	25	23.5	94	25	22.0	88	7	83-130/15
124-48-1	Dibromochloromethane	ND	25	22.1	88	25	22.1	88	0	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	ND	25	21.2	85	25	23.1	92	9	64-123/18
106-93-4	1,2-Dibromoethane	ND	25	23.0	92	25	22.6	90	2	75-120/13
75-71-8	Dichlorodifluoromethane	ND	25	25.7	103	25	25.6	102	0	42-167/19
95-50-1	1,2-Dichlorobenzene	ND	25	22.7	91	25	21.6	86	5	82-124/14
541-73-1	1,3-Dichlorobenzene	ND	25	25.1	100	25	23.4	94	7	84-125/14
106-46-7	1,4-Dichlorobenzene	ND	25	22.7	91	25	21.6	86	5	78-120/15
75-34-3	1,1-Dichloroethane	ND	25	26.1	104	25	24.9	100	5	81-122/15
107-06-2	1,2-Dichloroethane	ND	25	22.9	92	25	22.1	88	4	75-125/14
75-35-4	1,1-Dichloroethylene	ND	25	24.8	99	25	23.8	95	4	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND	25	23.9	96	25	22.2	89	7	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND	25	28.1	112	25	26.7	107	5	76-127/17
78-87-5	1,2-Dichloropropane	ND	25	22.6	90	25	21.2	85	6	76-124/14
142-28-9	1,3-Dichloropropane	ND	25	23.1	92	25	22.1	88	4	80-118/13
594-20-7	2,2-Dichloropropane	ND	25	25.2	101	25	24.8	99	2	74-139/17
563-58-6	1,1-Dichloropropene	ND	25	26.6	106	25	24.8	99	7	79-131/16

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA23685

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23685-11MS	I29333.D	1	04/29/15	DP	n/a	n/a	VI701
FA23685-11MSD	I29334.D	1	04/29/15	DP	n/a	n/a	VI701
FA23685-11	I29332.D	1	04/29/15	DP	n/a	n/a	VI701

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23685-11, FA23685-12, FA23685-13, FA23685-14, FA23685-15, FA23685-16, FA23685-17

CAS No.	Compound	FA23685-11 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND	25	22.1	88	25	21.8	87	1	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND	25	20.8	83	25	21.0	84	1	80-120/22
100-41-4	Ethylbenzene	ND	25	24.3	97	25	22.8	91	6	81-121/14
87-68-3	Hexachlorobutadiene	ND	25	23.8	95	25	22.6	90	5	75-142/19
591-78-6	2-Hexanone	ND	125	112	90	125	111	89	1	61-129/18
98-82-8	Isopropylbenzene	ND	25	24.5	98	25	23.2	93	5	83-132/15
99-87-6	p-Isopropyltoluene	ND	25	24.7	99	25	23.4	94	5	79-130/16
74-83-9	Methyl Bromide	ND	25	23.9	96	25	22.1	88	8	59-143/19
74-87-3	Methyl Chloride	ND	25	23.7	95	25	22.7	91	4	50-159/19
74-95-3	Methylene Bromide	ND	25	23.0	92	25	22.3	89	3	78-119/14
75-09-2	Methylene Chloride	ND	25	24.9	100	25	24.0	96	4	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	125	105	84	125	102	82	3	66-122/16
1634-04-4	Methyl Tert Butyl Ether	ND	25	25.5	102	25	25.3	101	1	72-117/14
91-20-3	Naphthalene	ND	25	23.5	94	25	27.3	109	15	63-132/25
103-65-1	n-Propylbenzene	ND	25	24.4	98	25	22.9	92	6	82-133/15
100-42-5	Styrene	ND	25	22.5	90	25	21.2	85	6	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND	25	22.0	88	25	21.6	86	2	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	22.4	90	25	22.2	89	1	72-120/14
127-18-4	Tetrachloroethylene	ND	25	23.4	94	25	22.3	89	5	76-135/16
108-88-3	Toluene	ND	25	23.3	93	25	21.7	87	7	80-120/14
87-61-6	1,2,3-Trichlorobenzene	ND	25	19.5	78	25	22.6	90	15	68-131/25
120-82-1	1,2,4-Trichlorobenzene	ND	25	22.2	89	25	22.7	91	2	73-129/20
71-55-6	1,1,1-Trichloroethane	ND	25	25.5	102	25	24.5	98	4	75-130/16
79-00-5	1,1,2-Trichloroethane	ND	25	23.3	93	25	22.2	89	5	76-119/14
79-01-6	Trichloroethylene	ND	25	25.6	102	25	24.3	97	5	81-126/15
75-69-4	Trichlorofluoromethane	ND	25	22.5	90	25	22.0	88	2	71-156/21
96-18-4	1,2,3-Trichloropropane	ND	25	22.6	90	25	21.9	88	3	77-120/16
95-63-6	1,2,4-Trimethylbenzene	ND	25	24.8	99	25	23.2	93	7	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND	25	22.0	88	25	20.5	82	7	79-120/19
108-05-4	Vinyl Acetate	ND	125	67.4	54	125	67.3	54	0	43-154/14
75-01-4	Vinyl Chloride	ND	25	23.5	94	25	22.4	90	5	69-159/18
	m,p-Xylene	ND	50	48.7	97	50	45.5	91	7	79-126/15
95-47-6	o-Xylene	ND	25	24.7	99	25	23.2	93	6	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: FA23685

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA23685-11MS	I29333.D	1	04/29/15	DP	n/a	n/a	VI701
FA23685-11MSD	I29334.D	1	04/29/15	DP	n/a	n/a	VI701
FA23685-11	I29332.D	1	04/29/15	DP	n/a	n/a	VI701

The QC reported here applies to the following samples:

Method: SW846 8260B

FA23685-11, FA23685-12, FA23685-13, FA23685-14, FA23685-15, FA23685-16, FA23685-17

CAS No.	Surrogate Recoveries	MS	MSD	FA23685-11	Limits
1868-53-7	Dibromofluoromethane	98%	100%	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	98%	101%	97%	79-125%
2037-26-5	Toluene-D8	99%	99%	100%	85-112%
460-00-4	4-Bromofluorobenzene	103%	106%	107%	83-118%

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA23685
Account: GFLEMLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP28825
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 04/20/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14		
Antimony	6.0	1	1		
Arsenic	10	1.3	1.3	-1.3	<10
Barium	200	1	1		
Beryllium	4.0	.2	.2		
Cadmium	5.0	.2	.2		
Calcium	1000	50	50		
Chromium	10	1	1		
Cobalt	50	.2	.2		
Copper	25	1	1		
Iron	300	17	17		
Lead	5.0	1	1.1		
Magnesium	5000	35	35		
Manganese	15	.5	1		
Molybdenum	50	.3	.3		
Nickel	40	.4	.4		
Potassium	10000	200	200		
Selenium	10	2.4	2.9		
Silver	10	.7	.7		
Sodium	10000	500	500		
Strontium	10	.5	.5		
Thallium	10	1.1	1.4		
Tin	50	.9	1		
Titanium	10	.5	1		
Vanadium	50	.5	.6		
Zinc	20	3	4.4		

Associated samples MP28825: FA23685-6, FA23685-7, FA23685-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA23685
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP28825
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/20/15 04/20/15

Metal	FA23522-3F Original	DUP	RPD	QC Limits	FA23522-3F Original MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum								
Antimony	anr							
Arsenic	0.0	0.0	NC	0-20	0.0	2020	2000	101.0 80-120
Barium	anr							
Beryllium	anr							
Cadmium	anr							
Calcium								
Chromium	anr							
Cobalt								
Copper	anr							
Iron	anr							
Lead	anr							
Magnesium								
Manganese	anr							
Molybdenum								
Nickel	anr							
Potassium								
Selenium	anr							
Silver	anr							
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Vanadium	anr							
Zinc								

Associated samples MP28825: FA23685-6, FA23685-7, FA23685-8

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA23685
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP28825
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/20/15

Metal	FA23522-3F Original MSD	SpikeLot MPFLICP2 % Rec	MSD RPD	QC Limit
Aluminum				
Antimony	anr			
Arsenic	0.0	2100	2000	105.0
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium	anr			
Zinc				

Associated samples MP28825: FA23685-6, FA23685-7, FA23685-8

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA23685

Account: GFLEMLT - Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP28825

Methods: SW846 6010C

Matrix Type: AQUEOUS

Units: ug/l

Prep Date: 04/20/15

Metal	BSP Result	Spike lot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	2050	2000	102.5	80-120
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium	anr			
Zinc				

Associated samples MP28825: FA23685-6, FA23685-7, FA23685-8

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA23685
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP28825
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/20/15

Metal	FA23522-3F Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	0.00	0.00	NC	0-10
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium	anr			
Zinc				

Associated samples MP28825: FA23685-6, FA23685-7, FA23685-8

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA23685
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP28825
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

04/20/15

Metal	Sample ml	Final ml	FA23522-3F Raw	FA23522-3F Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic	9.8	10			105.4	0.2	5	100	105.4	80-120
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP28825: FA23685-6, FA23685-7, FA23685-8

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA23685
Account: GFLEMLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP28832
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 04/21/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14		
Antimony	6.0	1	1		
Arsenic	10	1.3	1.3	-0.60	<10
Barium	200	1	1		
Beryllium	4.0	.2	.2		
Cadmium	5.0	.2	.2		
Calcium	1000	50	50		
Chromium	10	1	1		
Cobalt	50	.2	.2		
Copper	25	1	1		
Iron	300	17	17		
Lead	5.0	1	1.1		
Magnesium	5000	35	35		
Manganese	15	.5	1		
Molybdenum	50	.3	.3		
Nickel	40	.4	.4		
Potassium	10000	200	200		
Selenium	10	2.4	2.9		
Silver	10	.7	.7		
Sodium	10000	500	500		
Strontium	10	.5	.5		
Thallium	10	1.1	1.4		
Tin	50	.9	1		
Titanium	10	.5	1		
Vanadium	50	.5	.6		
Zinc	20	3	4.4		

Associated samples MP28832: FA23685-9, FA23685-10, FA23685-11, FA23685-12, FA23685-13, FA23685-14, FA23685-15

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA23685
 Account: GFLEMLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP28832
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/21/15 04/21/15

Metal	FA23557-5 Original	DUP	RPD	QC Limits	FA23557-5 Original MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum								
Antimony								
Arsenic	40.7	38.3	6.1	0-20	40.7	2050	2000	100.5
Barium								
Beryllium								
Cadmium	anr							
Calcium								
Chromium	anr							
Cobalt	anr							
Copper	anr							
Iron	anr							
Lead	anr							
Magnesium								
Manganese	anr							
Molybdenum								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Strontium								
Thallium								
Tin	anr							
Titanium								
Vanadium								
Zinc	anr							

Associated samples MP28832: FA23685-9, FA23685-10, FA23685-11, FA23685-12, FA23685-13, FA23685-14, FA23685-15

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA23685
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP28832
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/21/15

Metal	FA23557-5 Original MSD	Spikelet MPFLICP2 % Rec	MSD RPD	QC Limit
Aluminum				
Antimony				
Arsenic	40.7	2040	2000	100.0
Barium				
Beryllium				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese	anr			
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin	anr			
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP28832: FA23685-9, FA23685-10, FA23685-11, FA23685-12, FA23685-13, FA23685-14, FA23685-15

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA23685
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP28832
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/21/15

Metal	BSP Result	Spike lot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	2050	2000	102.5	80-120
Barium				
Beryllium				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese	anr			
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin	anr			
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP28832: FA23685-9, FA23685-10, FA23685-11, FA23685-12, FA23685-13, FA23685-14, FA23685-15

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA23685
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP28832
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/21/15

Metal	FA23557-5 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	40.7	33.7	17.2 (a)	0-10
Barium				
Beryllium				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese	anr			
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin	anr			
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP28832: FA23685-9, FA23685-10, FA23685-11, FA23685-12, FA23685-13, FA23685-14, FA23685-15

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: FA23685
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP28832
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

04/21/15

Metal	Sample ml	Final ml	FA23557-5 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic	9.8	10	40.7	39.886	145	0.2	5	100	105.1	80-120
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP28832: FA23685-9, FA23685-10, FA23685-11, FA23685-12, FA23685-13, FA23685-14, FA23685-15

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested



11/02/15

Technical Report for

Gannett Fleming

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
57524

Accutest Job Number: FA28651

Sampling Date: 10/21/15

Report to:

Gannett Fleming
West Lake Corporate Center 9119 Corporate Lake Dr, Suite 150
Tampa, FL 33634-6323
axhoffman@gfnet.com; tfalkner@gfnet.com

ATTN: Todd Falkner

Total number of pages in report: **60**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink that reads 'Norm Farmer'.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001)
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Test results relate only to samples analyzed.

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Sample Summary

Gannett Fleming

Job No: FA28651

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA28651-1	10/21/15	08:25	DMTF 10/23/15	SO	Soil	SB-1 0-2
FA28651-2	10/21/15	08:25	DMTF 10/23/15	SO	Soil	SB-1 2-4
FA28651-3	10/21/15	08:40	DMTF 10/23/15	SO	Soil	SB-2 0-2
FA28651-4	10/21/15	08:40	DMTF 10/23/15	SO	Soil	SB-2 2-4
FA28651-5	10/21/15	09:00	DMTF 10/23/15	SO	Soil	SB-3 0-2
FA28651-6	10/21/15	09:00	DMTF 10/23/15	SO	Soil	SB-3 2-4
FA28651-7	10/21/15	09:20	DMTF 10/23/15	SO	Soil	SB-4 0-2
FA28651-8	10/21/15	09:20	DMTF 10/23/15	SO	Soil	SB-4 2-4
FA28651-9	10/21/15	09:45	DMTF 10/23/15	SO	Soil	SB-5 ~ 3

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: FA28651
Account: Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Collected: 10/21/15

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

FA28651-1 **SB-1 0-2**

No hits reported in this sample.

FA28651-2 **SB-1 2-4**

No hits reported in this sample.

FA28651-3 **SB-2 0-2**

No hits reported in this sample.

FA28651-4 **SB-2 2-4**

No hits reported in this sample.

FA28651-5 **SB-3 0-2**

No hits reported in this sample.

FA28651-6 **SB-3 2-4**

No hits reported in this sample.

FA28651-7 **SB-4 0-2**

No hits reported in this sample.

FA28651-8 **SB-4 2-4**

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SB-1 0-2	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-1	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	98.9
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0073316.D	1	10/24/15	AD	n/a	n/a	VF2509
Run #2							

	Initial Weight	Final Volume
Run #1	6.59 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	38	12	ug/kg	
107-02-8	Acrolein	ND	19	10	ug/kg	
107-13-1	Acrylonitrile	ND	19	5.4	ug/kg	
71-43-2	Benzene	ND	3.8	0.77	ug/kg	
108-86-1	Bromobenzene	ND	3.8	0.77	ug/kg	
74-97-5	Bromochloromethane	ND	3.8	0.77	ug/kg	
75-27-4	Bromodichloromethane	ND	3.8	0.77	ug/kg	
75-25-2	Bromoform	ND	3.8	0.77	ug/kg	
78-93-3	2-Butanone (MEK)	ND	19	6.5	ug/kg	
104-51-8	n-Butylbenzene	ND	3.8	0.77	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.8	0.77	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.8	0.77	ug/kg	
75-15-0	Carbon Disulfide	ND	3.8	1.1	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.8	0.77	ug/kg	
108-90-7	Chlorobenzene	ND	3.8	0.77	ug/kg	
75-00-3	Chloroethane	ND	3.8	1.5	ug/kg	
110-75-8	2-Chloroethyl Vinyl Ether	ND	19	7.7	ug/kg	
67-66-3	Chloroform	ND	3.8	0.77	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.8	0.77	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.8	0.77	ug/kg	
124-48-1	Dibromochloromethane	ND	3.8	0.77	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.8	1.1	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.8	0.77	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.8	1.1	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.8	0.77	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.8	0.77	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.8	0.77	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.8	0.77	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.8	0.77	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.8	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.8	0.77	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.8	0.77	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 0-2	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-1	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	98.9
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	3.8	0.77	ug/kg	
142-28-9	1,3-Dichloropropane	ND	3.8	0.77	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.8	0.85	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.8	0.77	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.8	0.77	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.8	0.77	ug/kg	
100-41-4	Ethylbenzene	ND	3.8	0.77	ug/kg	
87-68-3	Hexachlorobutadiene	ND	3.8	1.1	ug/kg	
591-78-6	2-Hexanone	ND	19	6.3	ug/kg	
98-82-8	Isopropylbenzene	ND	3.8	0.77	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.8	0.77	ug/kg	
74-83-9	Methyl Bromide	ND	3.8	1.7	ug/kg	
74-87-3	Methyl Chloride	ND	3.8	1.5	ug/kg	
74-95-3	Methylene Bromide	ND	3.8	0.77	ug/kg	
75-09-2	Methylene Chloride	ND	7.7	3.1	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	19	4.1	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.8	0.92	ug/kg	
91-20-3	Naphthalene	ND	3.8	1.5	ug/kg	
103-65-1	n-Propylbenzene	ND	3.8	0.77	ug/kg	
100-42-5	Styrene	ND	3.8	0.77	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	3.8	0.77	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.8	0.85	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.8	1.3	ug/kg	
108-88-3	Toluene	ND	3.8	0.77	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.8	0.77	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.8	0.77	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.8	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.8	0.97	ug/kg	
79-01-6	Trichloroethylene	ND	3.8	0.77	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.8	1.3	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.8	1.1	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.8	0.77	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.8	0.77	ug/kg	
108-05-4	Vinyl Acetate	ND	19	9.1	ug/kg	
75-01-4	Vinyl Chloride	ND	3.8	1.2	ug/kg	
	m,p-Xylene	ND	7.7	0.82	ug/kg	
95-47-6	o-Xylene	ND	3.8	0.77	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 0-2	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-1	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	98.9
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		75-124%
17060-07-0	1,2-Dichloroethane-D4	102%		72-135%
2037-26-5	Toluene-D8	104%		75-126%
460-00-4	4-Bromofluorobenzene	114%		71-133%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 0-2	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-1	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	98.9
Method:	SW846 8082A SW846 3546		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ST136291.D	1	10/30/15	RS	10/27/15	OP58104	GST3246
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	16	6.5	ug/kg	
11104-28-2	Aroclor 1221	ND	16	8.2	ug/kg	
11141-16-5	Aroclor 1232	ND	16	8.2	ug/kg	
53469-21-9	Aroclor 1242	ND	16	6.5	ug/kg	
12672-29-6	Aroclor 1248	ND	16	6.5	ug/kg	
11097-69-1	Aroclor 1254	ND	16	6.5	ug/kg	
11096-82-5	Aroclor 1260	ND	16	6.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	83%		44-126%
2051-24-3	Decachlorobiphenyl	94%		41-145%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 2-4	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-2	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	95.2
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0073317.D	1	10/24/15	AD	n/a	n/a	VF2509
Run #2							

	Initial Weight	Final Volume
Run #1	8.32 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	32	9.5	ug/kg	
107-02-8	Acrolein	ND	16	8.5	ug/kg	
107-13-1	Acrylonitrile	ND	16	4.4	ug/kg	
71-43-2	Benzene	ND	3.2	0.63	ug/kg	
108-86-1	Bromobenzene	ND	3.2	0.63	ug/kg	
74-97-5	Bromochloromethane	ND	3.2	0.63	ug/kg	
75-27-4	Bromodichloromethane	ND	3.2	0.63	ug/kg	
75-25-2	Bromoform	ND	3.2	0.63	ug/kg	
78-93-3	2-Butanone (MEK)	ND	16	5.4	ug/kg	
104-51-8	n-Butylbenzene	ND	3.2	0.63	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.2	0.63	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.2	0.63	ug/kg	
75-15-0	Carbon Disulfide	ND	3.2	0.93	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.2	0.63	ug/kg	
108-90-7	Chlorobenzene	ND	3.2	0.63	ug/kg	
75-00-3	Chloroethane	ND	3.2	1.3	ug/kg	
110-75-8	2-Chloroethyl Vinyl Ether	ND	16	6.3	ug/kg	
67-66-3	Chloroform	ND	3.2	0.63	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.2	0.63	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.2	0.63	ug/kg	
124-48-1	Dibromochloromethane	ND	3.2	0.63	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.2	0.88	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.2	0.63	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.2	0.86	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.2	0.63	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.2	0.63	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.2	0.63	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.2	0.63	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.2	0.63	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.2	0.83	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.2	0.63	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.2	0.63	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 2-4	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-2	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	95.2
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	3.2	0.63	ug/kg	
142-28-9	1,3-Dichloropropane	ND	3.2	0.63	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.2	0.70	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.2	0.63	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.2	0.63	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.2	0.63	ug/kg	
100-41-4	Ethylbenzene	ND	3.2	0.63	ug/kg	
87-68-3	Hexachlorobutadiene	ND	3.2	0.86	ug/kg	
591-78-6	2-Hexanone	ND	16	5.1	ug/kg	
98-82-8	Isopropylbenzene	ND	3.2	0.63	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.2	0.63	ug/kg	
74-83-9	Methyl Bromide	ND	3.2	1.4	ug/kg	
74-87-3	Methyl Chloride	ND	3.2	1.3	ug/kg	
74-95-3	Methylene Bromide	ND	3.2	0.63	ug/kg	
75-09-2	Methylene Chloride	ND	6.3	2.5	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	16	3.4	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.2	0.76	ug/kg	
91-20-3	Naphthalene	ND	3.2	1.3	ug/kg	
103-65-1	n-Propylbenzene	ND	3.2	0.63	ug/kg	
100-42-5	Styrene	ND	3.2	0.63	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	3.2	0.63	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.2	0.70	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.2	1.0	ug/kg	
108-88-3	Toluene	ND	3.2	0.63	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.2	0.63	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.2	0.63	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.2	0.83	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.2	0.80	ug/kg	
79-01-6	Trichloroethylene	ND	3.2	0.63	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.2	1.1	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.2	0.86	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.2	0.63	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.2	0.63	ug/kg	
108-05-4	Vinyl Acetate	ND	16	7.5	ug/kg	
75-01-4	Vinyl Chloride	ND	3.2	1.0	ug/kg	
	m,p-Xylene	ND	6.3	0.68	ug/kg	
95-47-6	o-Xylene	ND	3.2	0.63	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 2-4	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-2	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	95.2
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		75-124%
17060-07-0	1,2-Dichloroethane-D4	100%		72-135%
2037-26-5	Toluene-D8	107%		75-126%
460-00-4	4-Bromofluorobenzene	115%		71-133%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 0-2	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-3	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	93.8
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0073318.D	1	10/24/15	AD	n/a	n/a	VF2509
Run #2							

	Initial Weight	Final Volume
Run #1	7.22 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	37	11	ug/kg	
107-02-8	Acrolein	ND	18	9.9	ug/kg	
107-13-1	Acrylonitrile	ND	18	5.2	ug/kg	
71-43-2	Benzene	ND	3.7	0.74	ug/kg	
108-86-1	Bromobenzene	ND	3.7	0.74	ug/kg	
74-97-5	Bromochloromethane	ND	3.7	0.74	ug/kg	
75-27-4	Bromodichloromethane	ND	3.7	0.74	ug/kg	
75-25-2	Bromoform	ND	3.7	0.74	ug/kg	
78-93-3	2-Butanone (MEK)	ND	18	6.3	ug/kg	
104-51-8	n-Butylbenzene	ND	3.7	0.74	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.7	0.74	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.7	0.74	ug/kg	
75-15-0	Carbon Disulfide	ND	3.7	1.1	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.7	0.74	ug/kg	
108-90-7	Chlorobenzene	ND	3.7	0.74	ug/kg	
75-00-3	Chloroethane	ND	3.7	1.5	ug/kg	
110-75-8	2-Chloroethyl Vinyl Ether	ND	18	7.4	ug/kg	
67-66-3	Chloroform	ND	3.7	0.74	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.7	0.74	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.7	0.74	ug/kg	
124-48-1	Dibromochloromethane	ND	3.7	0.74	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.7	1.0	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.7	0.74	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.7	1.0	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.7	0.74	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.7	0.74	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.7	0.74	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.7	0.74	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.7	0.74	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.7	0.97	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.7	0.74	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.7	0.74	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 0-2	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-3	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	93.8
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	3.7	0.74	ug/kg	
142-28-9	1,3-Dichloropropane	ND	3.7	0.74	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.7	0.82	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.7	0.74	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.7	0.74	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.7	0.74	ug/kg	
100-41-4	Ethylbenzene	ND	3.7	0.74	ug/kg	
87-68-3	Hexachlorobutadiene	ND	3.7	1.0	ug/kg	
591-78-6	2-Hexanone	ND	18	6.0	ug/kg	
98-82-8	Isopropylbenzene	ND	3.7	0.74	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.7	0.74	ug/kg	
74-83-9	Methyl Bromide	ND	3.7	1.6	ug/kg	
74-87-3	Methyl Chloride	ND	3.7	1.5	ug/kg	
74-95-3	Methylene Bromide	ND	3.7	0.74	ug/kg	
75-09-2	Methylene Chloride	ND	7.4	3.0	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	18	3.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.7	0.89	ug/kg	
91-20-3	Naphthalene	ND	3.7	1.5	ug/kg	
103-65-1	n-Propylbenzene	ND	3.7	0.74	ug/kg	
100-42-5	Styrene	ND	3.7	0.74	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	3.7	0.74	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.7	0.82	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.7	1.2	ug/kg	
108-88-3	Toluene	ND	3.7	0.74	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.7	0.74	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.7	0.74	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.7	0.97	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.7	0.93	ug/kg	
79-01-6	Trichloroethylene	ND	3.7	0.74	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.7	1.3	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.7	1.0	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.7	0.74	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.7	0.74	ug/kg	
108-05-4	Vinyl Acetate	ND	18	8.8	ug/kg	
75-01-4	Vinyl Chloride	ND	3.7	1.2	ug/kg	
	m,p-Xylene	ND	7.4	0.79	ug/kg	
95-47-6	o-Xylene	ND	3.7	0.74	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 0-2	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-3	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	93.8
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		75-124%
17060-07-0	1,2-Dichloroethane-D4	102%		72-135%
2037-26-5	Toluene-D8	109%		75-126%
460-00-4	4-Bromofluorobenzene	112%		71-133%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 0-2	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-3	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	93.8
Method:	SW846 8082A SW846 3546		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ST136292.D	1	10/30/15	RS	10/27/15	OP58104	GST3246
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	18	7.1	ug/kg	
11104-28-2	Aroclor 1221	ND	18	8.8	ug/kg	
11141-16-5	Aroclor 1232	ND	18	8.8	ug/kg	
53469-21-9	Aroclor 1242	ND	18	7.1	ug/kg	
12672-29-6	Aroclor 1248	ND	18	7.1	ug/kg	
11097-69-1	Aroclor 1254	ND	18	7.1	ug/kg	
11096-82-5	Aroclor 1260	ND	18	7.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		44-126%
2051-24-3	Decachlorobiphenyl	94%		41-145%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 2-4	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-4	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	90.1
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0073319.D	1	10/24/15	AD	n/a	n/a	VF2509
Run #2							

	Initial Weight	Final Volume
Run #1	8.29 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	33	10	ug/kg	
107-02-8	Acrolein	ND	17	9.0	ug/kg	
107-13-1	Acrylonitrile	ND	17	4.7	ug/kg	
71-43-2	Benzene	ND	3.3	0.67	ug/kg	
108-86-1	Bromobenzene	ND	3.3	0.67	ug/kg	
74-97-5	Bromochloromethane	ND	3.3	0.67	ug/kg	
75-27-4	Bromodichloromethane	ND	3.3	0.67	ug/kg	
75-25-2	Bromoform	ND	3.3	0.67	ug/kg	
78-93-3	2-Butanone (MEK)	ND	17	5.7	ug/kg	
104-51-8	n-Butylbenzene	ND	3.3	0.67	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.3	0.67	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.3	0.67	ug/kg	
75-15-0	Carbon Disulfide	ND	3.3	0.98	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.3	0.67	ug/kg	
108-90-7	Chlorobenzene	ND	3.3	0.67	ug/kg	
75-00-3	Chloroethane	ND	3.3	1.3	ug/kg	
110-75-8	2-Chloroethyl Vinyl Ether	ND	17	6.7	ug/kg	
67-66-3	Chloroform	ND	3.3	0.67	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.3	0.67	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.3	0.67	ug/kg	
124-48-1	Dibromochloromethane	ND	3.3	0.67	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.3	0.94	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.3	0.67	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.3	0.92	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.3	0.67	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.3	0.67	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.3	0.67	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.3	0.67	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.3	0.67	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.3	0.88	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.3	0.67	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.3	0.67	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 2-4	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-4	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	90.1
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	3.3	0.67	ug/kg	
142-28-9	1,3-Dichloropropane	ND	3.3	0.67	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.3	0.74	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.3	0.67	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.3	0.67	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.3	0.67	ug/kg	
100-41-4	Ethylbenzene	ND	3.3	0.67	ug/kg	
87-68-3	Hexachlorobutadiene	ND	3.3	0.92	ug/kg	
591-78-6	2-Hexanone	ND	17	5.5	ug/kg	
98-82-8	Isopropylbenzene	ND	3.3	0.67	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.3	0.67	ug/kg	
74-83-9	Methyl Bromide	ND	3.3	1.5	ug/kg	
74-87-3	Methyl Chloride	ND	3.3	1.3	ug/kg	
74-95-3	Methylene Bromide	ND	3.3	0.67	ug/kg	
75-09-2	Methylene Chloride	ND	6.7	2.7	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	17	3.6	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.3	0.80	ug/kg	
91-20-3	Naphthalene	ND	3.3	1.3	ug/kg	
103-65-1	n-Propylbenzene	ND	3.3	0.67	ug/kg	
100-42-5	Styrene	ND	3.3	0.67	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	3.3	0.67	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.3	0.74	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.3	1.1	ug/kg	
108-88-3	Toluene	ND	3.3	0.67	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.3	0.67	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.3	0.67	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.3	0.88	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.3	0.84	ug/kg	
79-01-6	Trichloroethylene	ND	3.3	0.67	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.3	1.2	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.3	0.92	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.3	0.67	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.3	0.67	ug/kg	
108-05-4	Vinyl Acetate	ND	17	8.0	ug/kg	
75-01-4	Vinyl Chloride	ND	3.3	1.1	ug/kg	
	m,p-Xylene	ND	6.7	0.72	ug/kg	
95-47-6	o-Xylene	ND	3.3	0.67	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 2-4	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-4	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	90.1
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		75-124%
17060-07-0	1,2-Dichloroethane-D4	103%		72-135%
2037-26-5	Toluene-D8	109%		75-126%
460-00-4	4-Bromofluorobenzene	110%		71-133%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 0-2	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-5	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	88.9
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0073322.D	1	10/24/15	AD	n/a	n/a	VF2509
Run #2							

	Initial Weight	Final Volume
Run #1	6.69 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	42	13	ug/kg	
107-02-8	Acrolein	ND	21	11	ug/kg	
107-13-1	Acrylonitrile	ND	21	5.9	ug/kg	
71-43-2	Benzene	ND	4.2	0.84	ug/kg	
108-86-1	Bromobenzene	ND	4.2	0.84	ug/kg	
74-97-5	Bromochloromethane	ND	4.2	0.84	ug/kg	
75-27-4	Bromodichloromethane	ND	4.2	0.84	ug/kg	
75-25-2	Bromoform	ND	4.2	0.84	ug/kg	
78-93-3	2-Butanone (MEK)	ND	21	7.1	ug/kg	
104-51-8	n-Butylbenzene	ND	4.2	0.84	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.2	0.84	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.2	0.84	ug/kg	
75-15-0	Carbon Disulfide	ND	4.2	1.2	ug/kg	
56-23-5	Carbon Tetrachloride	ND	4.2	0.84	ug/kg	
108-90-7	Chlorobenzene	ND	4.2	0.84	ug/kg	
75-00-3	Chloroethane	ND	4.2	1.7	ug/kg	
110-75-8	2-Chloroethyl Vinyl Ether	ND	21	8.4	ug/kg	
67-66-3	Chloroform	ND	4.2	0.84	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.2	0.84	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.2	0.84	ug/kg	
124-48-1	Dibromochloromethane	ND	4.2	0.84	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.2	1.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.2	0.84	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.2	1.2	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	4.2	0.84	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	4.2	0.84	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	4.2	0.84	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.2	0.84	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.2	0.84	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.2	1.1	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.2	0.84	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.2	0.84	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 0-2	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-5	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	88.9
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	4.2	0.84	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.2	0.84	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.2	0.93	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.2	0.84	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.2	0.84	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.2	0.84	ug/kg	
100-41-4	Ethylbenzene	ND	4.2	0.84	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.2	1.2	ug/kg	
591-78-6	2-Hexanone	ND	21	6.9	ug/kg	
98-82-8	Isopropylbenzene	ND	4.2	0.84	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.2	0.84	ug/kg	
74-83-9	Methyl Bromide	ND	4.2	1.8	ug/kg	
74-87-3	Methyl Chloride	ND	4.2	1.7	ug/kg	
74-95-3	Methylene Bromide	ND	4.2	0.84	ug/kg	
75-09-2	Methylene Chloride	ND	8.4	3.4	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	21	4.5	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.2	1.0	ug/kg	
91-20-3	Naphthalene	ND	4.2	1.7	ug/kg	
103-65-1	n-Propylbenzene	ND	4.2	0.84	ug/kg	
100-42-5	Styrene	ND	4.2	0.84	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.2	0.84	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.2	0.93	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.2	1.4	ug/kg	
108-88-3	Toluene	ND	4.2	0.84	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.2	0.84	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.2	0.84	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.2	1.1	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.2	1.1	ug/kg	
79-01-6	Trichloroethylene	ND	4.2	0.84	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.2	1.5	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.2	1.2	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.2	0.84	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.2	0.84	ug/kg	
108-05-4	Vinyl Acetate	ND	21	10	ug/kg	
75-01-4	Vinyl Chloride	ND	4.2	1.4	ug/kg	
	m,p-Xylene	ND	8.4	0.90	ug/kg	
95-47-6	o-Xylene	ND	4.2	0.84	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 0-2	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-5	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	88.9
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		75-124%
17060-07-0	1,2-Dichloroethane-D4	102%		72-135%
2037-26-5	Toluene-D8	111%		75-126%
460-00-4	4-Bromofluorobenzene	108%		71-133%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 0-2	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-5	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	88.9
Method:	SW846 8082A SW846 3546		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ST136293.D	1	10/30/15	RS	10/27/15	OP58104	GST3246
Run #2							

	Initial Weight	Final Volume
Run #1	15.0 g	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	19	7.5	ug/kg	
11104-28-2	Aroclor 1221	ND	19	9.4	ug/kg	
11141-16-5	Aroclor 1232	ND	19	9.4	ug/kg	
53469-21-9	Aroclor 1242	ND	19	7.5	ug/kg	
12672-29-6	Aroclor 1248	ND	19	7.5	ug/kg	
11097-69-1	Aroclor 1254	ND	19	7.5	ug/kg	
11096-82-5	Aroclor 1260	ND	19	7.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%		44-126%
2051-24-3	Decachlorobiphenyl	95%		41-145%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 2-4	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-6	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0073323.D	1	10/24/15	AD	n/a	n/a	VF2509
Run #2 ^a	F0073352.D	1	10/26/15	EP	n/a	n/a	VF2510
Run #3 ^a	F0073368.D	1	10/27/15	EP	n/a	n/a	VF2511

	Initial Weight	Final Volume
Run #1	7.97 g	5.0 ml
Run #2	7.76 g	5.0 ml
Run #3	4.91 g	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	34	10	ug/kg	
107-02-8	Acrolein	ND	17	9.2	ug/kg	
107-13-1	Acrylonitrile	ND	17	4.8	ug/kg	
71-43-2	Benzene	ND	3.4	0.68	ug/kg	
108-86-1	Bromobenzene	ND	3.4	0.68	ug/kg	
74-97-5	Bromochloromethane	ND	3.4	0.68	ug/kg	
75-27-4	Bromodichloromethane	ND	3.4	0.68	ug/kg	
75-25-2	Bromoform	ND	3.4	0.68	ug/kg	
78-93-3	2-Butanone (MEK)	ND	17	5.8	ug/kg	
104-51-8	n-Butylbenzene	ND	3.4	0.68	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.4	0.68	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.4	0.68	ug/kg	
75-15-0	Carbon Disulfide	ND	3.4	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.4	0.68	ug/kg	
108-90-7	Chlorobenzene	ND	3.4	0.68	ug/kg	
75-00-3	Chloroethane	ND	3.4	1.4	ug/kg	
110-75-8	2-Chloroethyl Vinyl Ether	ND	17	6.8	ug/kg	
67-66-3	Chloroform	ND	3.4	0.68	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.4	0.68	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.4	0.68	ug/kg	
124-48-1	Dibromochloromethane	ND	3.4	0.68	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.4	0.96	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.4	0.68	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.4	0.94	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.4	0.68	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.4	0.68	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.4	0.68	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.4	0.68	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.4	0.68	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.4	0.90	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 2-4	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-6	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-59-2	cis-1,2-Dichloroethylene	ND	3.4	0.68	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.4	0.68	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.4	0.68	ug/kg	
142-28-9	1,3-Dichloropropane	ND	3.4	0.68	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.4	0.76	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.4	0.68	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.4	0.68	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.4	0.68	ug/kg	
100-41-4	Ethylbenzene	ND	3.4	0.68	ug/kg	
87-68-3	Hexachlorobutadiene	ND	3.4	0.94	ug/kg	
591-78-6	2-Hexanone	ND	17	5.6	ug/kg	
98-82-8	Isopropylbenzene	ND	3.4	0.68	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.4	0.68	ug/kg	
74-83-9	Methyl Bromide	ND	3.4	1.5	ug/kg	
74-87-3	Methyl Chloride	ND	3.4	1.4	ug/kg	
74-95-3	Methylene Bromide	ND	3.4	0.68	ug/kg	
75-09-2	Methylene Chloride	ND	6.8	2.7	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	17	3.7	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.4	0.82	ug/kg	
91-20-3	Naphthalene	ND	3.4	1.4	ug/kg	
103-65-1	n-Propylbenzene	ND	3.4	0.68	ug/kg	
100-42-5	Styrene	ND	3.4	0.68	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	3.4	0.68	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.4	0.76	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.4	1.1	ug/kg	
108-88-3	Toluene	ND	3.4	0.68	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.4	0.68	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.4	0.68	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.4	0.90	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.4	0.86	ug/kg	
79-01-6	Trichloroethylene	ND	3.4	0.68	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.4	1.2	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.4	0.94	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.4	0.68	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.4	0.68	ug/kg	
108-05-4	Vinyl Acetate	ND	17	8.1	ug/kg	
75-01-4	Vinyl Chloride	ND	3.4	1.1	ug/kg	
	m,p-Xylene	ND	6.8	0.73	ug/kg	
95-47-6	o-Xylene	ND	3.4	0.68	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 2-4	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-6	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	102%	108%	101%	75-124%
17060-07-0	1,2-Dichloroethane-D4	106%	115%	105%	72-135%
2037-26-5	Toluene-D8	110%	102%	107%	75-126%
460-00-4	4-Bromofluorobenzene	100%	97%	108%	71-133%

(a) Confirmation run for internal standard areas.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-4 0-2	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-7	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	95.2
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0073353.D	1	10/26/15	EP	n/a	n/a	VF2510
Run #2							

	Initial Weight	Final Volume
Run #1	7.37 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	36	11	ug/kg	
107-02-8	Acrolein	ND	18	9.5	ug/kg	
107-13-1	Acrylonitrile	ND	18	5.0	ug/kg	
71-43-2	Benzene	ND	3.6	0.71	ug/kg	
108-86-1	Bromobenzene	ND	3.6	0.71	ug/kg	
74-97-5	Bromochloromethane	ND	3.6	0.71	ug/kg	
75-27-4	Bromodichloromethane	ND	3.6	0.71	ug/kg	
75-25-2	Bromoform	ND	3.6	0.71	ug/kg	
78-93-3	2-Butanone (MEK)	ND	18	6.0	ug/kg	
104-51-8	n-Butylbenzene	ND	3.6	0.71	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.6	0.71	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.6	0.71	ug/kg	
75-15-0	Carbon Disulfide	ND	3.6	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.6	0.71	ug/kg	
108-90-7	Chlorobenzene	ND	3.6	0.71	ug/kg	
75-00-3	Chloroethane	ND	3.6	1.4	ug/kg	
110-75-8	2-Chloroethyl Vinyl Ether	ND	18	7.1	ug/kg	
67-66-3	Chloroform	ND	3.6	0.71	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.6	0.71	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.6	0.71	ug/kg	
124-48-1	Dibromochloromethane	ND	3.6	0.71	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.6	1.0	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.6	0.71	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.6	0.98	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.6	0.71	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.6	0.71	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.6	0.71	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.6	0.71	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.6	0.71	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.6	0.94	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.6	0.71	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.6	0.71	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-4 0-2	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-7	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	95.2
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	3.6	0.71	ug/kg	
142-28-9	1,3-Dichloropropane	ND	3.6	0.71	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.6	0.79	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.6	0.71	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.6	0.71	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.6	0.71	ug/kg	
100-41-4	Ethylbenzene	ND	3.6	0.71	ug/kg	
87-68-3	Hexachlorobutadiene	ND	3.6	0.98	ug/kg	
591-78-6	2-Hexanone	ND	18	5.8	ug/kg	
98-82-8	Isopropylbenzene	ND	3.6	0.71	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.6	0.71	ug/kg	
74-83-9	Methyl Bromide	ND	3.6	1.5	ug/kg	
74-87-3	Methyl Chloride	ND	3.6	1.4	ug/kg	
74-95-3	Methylene Bromide	ND	3.6	0.71	ug/kg	
75-09-2	Methylene Chloride	ND	7.1	2.9	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	18	3.8	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.6	0.86	ug/kg	
91-20-3	Naphthalene	ND	3.6	1.4	ug/kg	
103-65-1	n-Propylbenzene	ND	3.6	0.71	ug/kg	
100-42-5	Styrene	ND	3.6	0.71	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	3.6	0.71	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.6	0.79	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.6	1.2	ug/kg	
108-88-3	Toluene	ND	3.6	0.71	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.6	0.71	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.6	0.71	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.6	0.93	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.6	0.90	ug/kg	
79-01-6	Trichloroethylene	ND	3.6	0.71	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.6	1.2	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.6	0.98	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.6	0.71	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.6	0.71	ug/kg	
108-05-4	Vinyl Acetate	ND	18	8.5	ug/kg	
75-01-4	Vinyl Chloride	ND	3.6	1.1	ug/kg	
	m,p-Xylene	ND	7.1	0.76	ug/kg	
95-47-6	o-Xylene	ND	3.6	0.71	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-4 0-2	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-7	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	95.2
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		75-124%
17060-07-0	1,2-Dichloroethane-D4	106%		72-135%
2037-26-5	Toluene-D8	107%		75-126%
460-00-4	4-Bromofluorobenzene	107%		71-133%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-4 0-2	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-7	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	95.2
Method:	SW846 8082A SW846 3546		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ST136288.D	1	10/30/15	RS	10/27/15	OP58104	GST3246
Run #2							

	Initial Weight	Final Volume
Run #1	14.8 g	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	18	7.1	ug/kg	
11104-28-2	Aroclor 1221	ND	18	8.9	ug/kg	
11141-16-5	Aroclor 1232	ND	18	8.9	ug/kg	
53469-21-9	Aroclor 1242	ND	18	7.1	ug/kg	
12672-29-6	Aroclor 1248	ND	18	7.1	ug/kg	
11097-69-1	Aroclor 1254	ND	18	7.1	ug/kg	
11096-82-5	Aroclor 1260	ND	18	7.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%		44-126%
2051-24-3	Decachlorobiphenyl	93%		41-145%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-4 2-4	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-8	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0073354.D	1	10/26/15	EP	n/a	n/a	VF2510
Run #2							

	Initial Weight	Final Volume
Run #1	7.54 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	37	11	ug/kg	
107-02-8	Acrolein	ND	18	9.8	ug/kg	
107-13-1	Acrylonitrile	ND	18	5.1	ug/kg	
71-43-2	Benzene	ND	3.7	0.73	ug/kg	
108-86-1	Bromobenzene	ND	3.7	0.73	ug/kg	
74-97-5	Bromochloromethane	ND	3.7	0.73	ug/kg	
75-27-4	Bromodichloromethane	ND	3.7	0.73	ug/kg	
75-25-2	Bromoform	ND	3.7	0.73	ug/kg	
78-93-3	2-Butanone (MEK)	ND	18	6.2	ug/kg	
104-51-8	n-Butylbenzene	ND	3.7	0.73	ug/kg	
135-98-8	sec-Butylbenzene	ND	3.7	0.73	ug/kg	
98-06-6	tert-Butylbenzene	ND	3.7	0.73	ug/kg	
75-15-0	Carbon Disulfide	ND	3.7	1.1	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.7	0.73	ug/kg	
108-90-7	Chlorobenzene	ND	3.7	0.73	ug/kg	
75-00-3	Chloroethane	ND	3.7	1.5	ug/kg	
110-75-8	2-Chloroethyl Vinyl Ether	ND	18	7.3	ug/kg	
67-66-3	Chloroform	ND	3.7	0.73	ug/kg	
95-49-8	o-Chlorotoluene	ND	3.7	0.73	ug/kg	
106-43-4	p-Chlorotoluene	ND	3.7	0.73	ug/kg	
124-48-1	Dibromochloromethane	ND	3.7	0.73	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.7	1.0	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.7	0.73	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.7	1.0	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.7	0.73	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.7	0.73	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.7	0.73	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.7	0.73	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.7	0.73	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.7	0.96	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.7	0.73	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.7	0.73	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-4 2-4	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-8	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	3.7	0.73	ug/kg	
142-28-9	1,3-Dichloropropane	ND	3.7	0.73	ug/kg	
594-20-7	2,2-Dichloropropane	ND	3.7	0.81	ug/kg	
563-58-6	1,1-Dichloropropene	ND	3.7	0.73	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.7	0.73	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.7	0.73	ug/kg	
100-41-4	Ethylbenzene	ND	3.7	0.73	ug/kg	
87-68-3	Hexachlorobutadiene	ND	3.7	1.0	ug/kg	
591-78-6	2-Hexanone	ND	18	6.0	ug/kg	
98-82-8	Isopropylbenzene	ND	3.7	0.73	ug/kg	
99-87-6	p-Isopropyltoluene	ND	3.7	0.73	ug/kg	
74-83-9	Methyl Bromide	ND	3.7	1.6	ug/kg	
74-87-3	Methyl Chloride	ND	3.7	1.5	ug/kg	
74-95-3	Methylene Bromide	ND	3.7	0.73	ug/kg	
75-09-2	Methylene Chloride	ND	7.3	2.9	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	18	3.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.7	0.88	ug/kg	
91-20-3	Naphthalene	ND	3.7	1.5	ug/kg	
103-65-1	n-Propylbenzene	ND	3.7	0.73	ug/kg	
100-42-5	Styrene	ND	3.7	0.73	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	3.7	0.73	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.7	0.81	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.7	1.2	ug/kg	
108-88-3	Toluene	ND	3.7	0.73	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	3.7	0.73	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.7	0.73	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.7	0.96	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.7	0.92	ug/kg	
79-01-6	Trichloroethylene	ND	3.7	0.73	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.7	1.3	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	3.7	1.0	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	3.7	0.73	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	3.7	0.73	ug/kg	
108-05-4	Vinyl Acetate	ND	18	8.7	ug/kg	
75-01-4	Vinyl Chloride	ND	3.7	1.2	ug/kg	
	m,p-Xylene	ND	7.3	0.78	ug/kg	
95-47-6	o-Xylene	ND	3.7	0.73	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-4 2-4	Date Sampled:	10/21/15
Lab Sample ID:	FA28651-8	Date Received:	10/23/15
Matrix:	SO - Soil	Percent Solids:	90.8
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		75-124%
17060-07-0	1,2-Dichloroethane-D4	105%		72-135%
2037-26-5	Toluene-D8	105%		75-126%
460-00-4	4-Bromofluorobenzene	104%		71-133%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA 28651

CLIENT: GANNETT FLEMING PROJECT: TH R

DATE/TIME RECEIVED: 10-23-15 08:00

(MM/DD/YY 24:00)

NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY:

FEDEX

UPS

ACCUTEST COURIER

DELIVERY

OTHER:

AIRBILL NUMBERS:

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
- ☒ TRIP BLANK NOT PROVIDED
- ☒ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM 5-GRAM

NUMBER OF 5035 FIELD KITS ?

NUMBER OF LAB FILTERED METALS ?

pH PAPER LOT#s WID/HCI131225

NARROW RANGE AO36133

OTHER (specify) 405-230010

SUMMARY OF COMMENTS:

TEMPERATURE INFORMATION

- ☐ IR THERM ID CORR. FACTOR -0.4
- ☐ OBSERVED TEMPS: 3.8
- ☐ CORRECTED TEMPS: 3.4

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
- ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
- ☐ INSUFFICIENT VOLUME FOR ANALYSIS
- ☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ☐ ID'S ON COC DO NOT MATCH LABEL
- ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- ☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- ☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
- ☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- ☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- ☐ % SOLIDS JAR NOT RECEIVED
- ☐ RESIDUAL CHLORINE PRESENT LOT#

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TECHNICIAN SIGNATURE/DATE

10-23-15

REVIEWER SIGNATURE/DATE

10/23/15

NF 10/14

YELLOW SHEET110514.xls

FA28651: Chain of Custody

Page 2 of 3

Job Change

FA28651

Requested Date:	10/26/2015	Received Date:	10/23/2015
Account Name:	Gannett Fleming	Due Date:	10/30/2015
Project	Trademark Metals Recycling; 2000 W Savannah,	Deliverable:	COMMB
CSR:	andrea	TAT (Days):	4

=====
Sample #: FA28651-2,4,6,8

Change:
Please put these samples on hold for PCBs.

=====
Sample #: FA28651-9

Change:
Please subcontract for PCB congeners-WHO list of 12 and dioxin/furan 1613.

SB-5 ~3
=====

Above Changes Per: Tony Hoffman

Date/Time: 10/26/2015 10:24:44 AM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

FA28651: Chain of Custody

Page 3 of 3

Page 1 of 1

GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 3

Job Number: FA28651**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2509-MB	F0073314.D	1	10/24/15	AD	n/a	n/a	VF2509

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA28651-1, FA28651-2, FA28651-3, FA28651-4, FA28651-5, FA28651-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	27.0	50	15	ug/kg	J
107-02-8	Acrolein	ND	25	13	ug/kg	
107-13-1	Acrylonitrile	ND	25	7.0	ug/kg	
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.0	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.0	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	8.5	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.0	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.0	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.0	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.5	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
110-75-8	2-Chloroethyl Vinyl Ether	ND	25	10	ug/kg	
67-66-3	Chloroform	ND	5.0	1.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.4	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.0	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.0	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.3	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	1.1	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.0	ug/kg	

Method Blank Summary

Page 2 of 3

Job Number: FA28651**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2509-MB	F0073314.D	1	10/24/15	AD	n/a	n/a	VF2509

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA28651-1, FA28651-2, FA28651-3, FA28651-4, FA28651-5, FA28651-6

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.4	ug/kg	
591-78-6	2-Hexanone	ND	25	8.2	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.0	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.0	ug/kg	
74-83-9	Methyl Bromide	ND	5.0	2.2	ug/kg	
74-87-3	Methyl Chloride	ND	5.0	2.0	ug/kg	
74-95-3	Methylene Bromide	ND	5.0	1.0	ug/kg	
75-09-2	Methylene Chloride	27.9	10	4.0	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	5.4	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.2	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.0	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.6	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.3	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.3	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.8	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.4	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	12	ug/kg	
75-01-4	Vinyl Chloride	ND	5.0	1.6	ug/kg	
	m,p-Xylene	ND	10	1.1	ug/kg	
95-47-6	o-Xylene	ND	5.0	1.0	ug/kg	

Method Blank Summary

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Job Number: FA28651

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2509-MB	F0073314.D	1	10/24/15	AD	n/a	n/a	VF2509

The QC reported here applies to the following samples:

Method: SW846 8260B

FA28651-1, FA28651-2, FA28651-3, FA28651-4, FA28651-5, FA28651-6

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	104% 75-124%
17060-07-0	1,2-Dichloroethane-D4	101% 72-135%
2037-26-5	Toluene-D8	108% 75-126%
460-00-4	4-Bromofluorobenzene	107% 71-133%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile ^a		0	ug/kg	

(a) No TICs detected.

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Job Number: FA28651**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2510-MB	F0073347.D	1	10/26/15	EP	n/a	n/a	VF2510

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA28651-7, FA28651-8

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	15	ug/kg	
107-02-8	Acrolein	ND	25	13	ug/kg	
107-13-1	Acrylonitrile	ND	25	7.0	ug/kg	
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.0	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.0	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	8.5	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.0	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.0	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.0	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.5	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
110-75-8	2-Chloroethyl Vinyl Ether	ND	25	10	ug/kg	
67-66-3	Chloroform	ND	5.0	1.0	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.4	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.0	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.0	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.3	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	1.1	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.0	ug/kg	

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Job Number: FA28651**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2510-MB	F0073347.D	1	10/26/15	EP	n/a	n/a	VF2510

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA28651-7, FA28651-8

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.4	ug/kg	
591-78-6	2-Hexanone	ND	25	8.2	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.0	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.0	ug/kg	
74-83-9	Methyl Bromide	ND	5.0	2.2	ug/kg	
74-87-3	Methyl Chloride	ND	5.0	2.0	ug/kg	
74-95-3	Methylene Bromide	ND	5.0	1.0	ug/kg	
75-09-2	Methylene Chloride	ND	10	4.0	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	5.4	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.2	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.0	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.6	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.3	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.3	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.8	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.4	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	12	ug/kg	
75-01-4	Vinyl Chloride	ND	5.0	1.6	ug/kg	
	m,p-Xylene	ND	10	1.1	ug/kg	
95-47-6	o-Xylene	ND	5.0	1.0	ug/kg	

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Job Number: FA28651

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2510-MB	F0073347.D	1	10/26/15	EP	n/a	n/a	VF2510

The QC reported here applies to the following samples:

Method: SW846 8260B

FA28651-7, FA28651-8

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	101% 75-124%
17060-07-0	1,2-Dichloroethane-D4	104% 72-135%
2037-26-5	Toluene-D8	106% 75-126%
460-00-4	4-Bromofluorobenzene	111% 71-133%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile ^a		0	ug/kg	

(a) No TICs detected.

Blank Spike Summary

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Job Number: FA28651**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2509-BS	F0073313.D	1	10/24/15	AD	n/a	n/a	VF2509

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA28651-1, FA28651-2, FA28651-3, FA28651-4, FA28651-5, FA28651-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	246	98	61-152
107-02-8	Acrolein	250	209	84	48-178
107-13-1	Acrylonitrile	250	250	100	66-134
71-43-2	Benzene	50	52.3	105	76-126
108-86-1	Bromobenzene	50	52.2	104	76-122
74-97-5	Bromochloromethane	50	54.9	110	77-120
75-27-4	Bromodichloromethane	50	56.1	112	74-130
75-25-2	Bromoform	50	56.7	113	76-127
78-93-3	2-Butanone (MEK)	250	243	97	75-137
104-51-8	n-Butylbenzene	50	52.8	106	71-128
135-98-8	sec-Butylbenzene	50	52.8	106	79-135
98-06-6	tert-Butylbenzene	50	51.2	102	77-133
75-15-0	Carbon Disulfide	50	53.0	106	72-122
56-23-5	Carbon Tetrachloride	50	51.9	104	78-133
108-90-7	Chlorobenzene	50	53.9	108	81-129
75-00-3	Chloroethane	50	53.7	107	68-133
110-75-8	2-Chloroethyl Vinyl Ether	250	253	101	45-159
67-66-3	Chloroform	50	53.3	107	72-123
95-49-8	o-Chlorotoluene	50	51.6	103	77-129
106-43-4	p-Chlorotoluene	50	53.1	106	80-134
124-48-1	Dibromochloromethane	50	56.9	114	76-127
96-12-8	1,2-Dibromo-3-chloropropane	50	47.3	95	70-137
106-93-4	1,2-Dibromoethane	50	55.1	110	77-126
75-71-8	Dichlorodifluoromethane	50	51.1	102	68-168
95-50-1	1,2-Dichlorobenzene	50	53.7	107	80-129
541-73-1	1,3-Dichlorobenzene	50	54.6	109	81-129
106-46-7	1,4-Dichlorobenzene	50	54.6	109	76-130
75-34-3	1,1-Dichloroethane	50	51.1	102	73-125
107-06-2	1,2-Dichloroethane	50	55.1	110	74-128
75-35-4	1,1-Dichloroethylene	50	54.3	109	81-136
156-59-2	cis-1,2-Dichloroethylene	50	52.9	106	74-126
156-60-5	trans-1,2-Dichloroethylene	50	54.1	108	70-127
78-87-5	1,2-Dichloropropane	50	50.0	100	74-125
142-28-9	1,3-Dichloropropane	50	50.7	101	76-122
594-20-7	2,2-Dichloropropane	50	54.2	108	77-133
563-58-6	1,1-Dichloropropene	50	54.1	108	75-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA28651**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2509-BS	F0073313.D	1	10/24/15	AD	n/a	n/a	VF2509

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA28651-1, FA28651-2, FA28651-3, FA28651-4, FA28651-5, FA28651-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	54.4	109	80-123
10061-02-6	trans-1,3-Dichloropropene	50	57.3	115	75-131
100-41-4	Ethylbenzene	50	54.0	108	77-123
87-68-3	Hexachlorobutadiene	50	49.8	100	74-136
591-78-6	2-Hexanone	250	247	99	72-133
98-82-8	Isopropylbenzene	50	54.4	109	80-136
99-87-6	p-Isopropyltoluene	50	53.5	107	77-131
74-83-9	Methyl Bromide	50	40.0	80	65-139
74-87-3	Methyl Chloride	50	46.1	92	71-144
74-95-3	Methylene Bromide	50	55.3	111	74-124
75-09-2	Methylene Chloride	50	57.9	116	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	250	241	96	76-132
1634-04-4	Methyl Tert Butyl Ether	50	55.3	111	77-120
91-20-3	Naphthalene	50	57.5	115	79-129
103-65-1	n-Propylbenzene	50	53.6	107	80-135
100-42-5	Styrene	50	52.7	105	78-125
630-20-6	1,1,1,2-Tetrachloroethane	50	55.8	112	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	49.5	99	71-126
127-18-4	Tetrachloroethylene	50	55.8	112	79-130
108-88-3	Toluene	50	51.7	103	76-124
87-61-6	1,2,3-Trichlorobenzene	50	52.8	106	77-128
120-82-1	1,2,4-Trichlorobenzene	50	56.7	113	78-130
71-55-6	1,1,1-Trichloroethane	50	53.0	106	70-129
79-00-5	1,1,2-Trichloroethane	50	53.7	107	74-124
79-01-6	Trichloroethylene	50	54.6	109	75-128
75-69-4	Trichlorofluoromethane	50	60.7	121	73-145
96-18-4	1,2,3-Trichloropropane	50	55.3	111	74-127
95-63-6	1,2,4-Trimethylbenzene	50	49.9	100	74-123
108-67-8	1,3,5-Trimethylbenzene	50	47.1	94	73-122
108-05-4	Vinyl Acetate	250	248	99	48-164
75-01-4	Vinyl Chloride	50	50.8	102	76-141
	m,p-Xylene	100	115	115	80-128
95-47-6	o-Xylene	50	53.4	107	80-132

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA28651

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2509-BS	F0073313.D	1	10/24/15	AD	n/a	n/a	VF2509

The QC reported here applies to the following samples:

Method: SW846 8260B

FA28651-1, FA28651-2, FA28651-3, FA28651-4, FA28651-5, FA28651-6

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	105%	75-124%
17060-07-0	1,2-Dichloroethane-D4	103%	72-135%
2037-26-5	Toluene-D8	98%	75-126%
460-00-4	4-Bromofluorobenzene	97%	71-133%

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA28651**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2510-BS	F0073346.D	1	10/26/15	EP	n/a	n/a	VF2510

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA28651-7, FA28651-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	235	94	61-152
107-02-8	Acrolein	250	232	93	48-178
107-13-1	Acrylonitrile	250	232	93	66-134
71-43-2	Benzene	50	53.1	106	76-126
108-86-1	Bromobenzene	50	52.3	105	76-122
74-97-5	Bromochloromethane	50	51.9	104	77-120
75-27-4	Bromodichloromethane	50	52.8	106	74-130
75-25-2	Bromoform	50	53.4	107	76-127
78-93-3	2-Butanone (MEK)	250	221	88	75-137
104-51-8	n-Butylbenzene	50	57.4	115	71-128
135-98-8	sec-Butylbenzene	50	58.3	117	79-135
98-06-6	tert-Butylbenzene	50	54.8	110	77-133
75-15-0	Carbon Disulfide	50	47.1	94	72-122
56-23-5	Carbon Tetrachloride	50	57.9	116	78-133
108-90-7	Chlorobenzene	50	54.9	110	81-129
75-00-3	Chloroethane	50	51.9	104	68-133
110-75-8	2-Chloroethyl Vinyl Ether	250	233	93	45-159
67-66-3	Chloroform	50	52.6	105	72-123
95-49-8	o-Chlorotoluene	50	56.2	112	77-129
106-43-4	p-Chlorotoluene	50	56.6	113	80-134
124-48-1	Dibromochloromethane	50	55.1	110	76-127
96-12-8	1,2-Dibromo-3-chloropropane	50	46.5	93	70-137
106-93-4	1,2-Dibromoethane	50	52.3	105	77-126
75-71-8	Dichlorodifluoromethane	50	54.0	108	68-168
95-50-1	1,2-Dichlorobenzene	50	54.0	108	80-129
541-73-1	1,3-Dichlorobenzene	50	56.3	113	81-129
106-46-7	1,4-Dichlorobenzene	50	54.3	109	76-130
75-34-3	1,1-Dichloroethane	50	49.9	100	73-125
107-06-2	1,2-Dichloroethane	50	52.2	104	74-128
75-35-4	1,1-Dichloroethylene	50	49.3	99	81-136
156-59-2	cis-1,2-Dichloroethylene	50	51.1	102	74-126
156-60-5	trans-1,2-Dichloroethylene	50	53.9	108	70-127
78-87-5	1,2-Dichloropropane	50	51.3	103	74-125
142-28-9	1,3-Dichloropropane	50	51.9	104	76-122
594-20-7	2,2-Dichloropropane	50	53.9	108	77-133
563-58-6	1,1-Dichloropropene	50	55.2	110	75-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA28651**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2510-BS	F0073346.D	1	10/26/15	EP	n/a	n/a	VF2510

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA28651-7, FA28651-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	54.2	108	80-123
10061-02-6	trans-1,3-Dichloropropene	50	56.1	112	75-131
100-41-4	Ethylbenzene	50	56.4	113	77-123
87-68-3	Hexachlorobutadiene	50	53.0	106	74-136
591-78-6	2-Hexanone	250	227	91	72-133
98-82-8	Isopropylbenzene	50	52.5	105	80-136
99-87-6	p-Isopropyltoluene	50	58.0	116	77-131
74-83-9	Methyl Bromide	50	44.5	89	65-139
74-87-3	Methyl Chloride	50	50.4	101	71-144
74-95-3	Methylene Bromide	50	52.1	104	74-124
75-09-2	Methylene Chloride	50	50.0	100	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	250	228	91	76-132
1634-04-4	Methyl Tert Butyl Ether	50	51.3	103	77-120
91-20-3	Naphthalene	50	56.0	112	79-129
103-65-1	n-Propylbenzene	50	51.9	104	80-135
100-42-5	Styrene	50	54.0	108	78-125
630-20-6	1,1,1,2-Tetrachloroethane	50	56.0	112	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	48.1	96	71-126
127-18-4	Tetrachloroethylene	50	55.3	111	79-130
108-88-3	Toluene	50	53.5	107	76-124
87-61-6	1,2,3-Trichlorobenzene	50	54.0	108	77-128
120-82-1	1,2,4-Trichlorobenzene	50	56.7	113	78-130
71-55-6	1,1,1-Trichloroethane	50	50.2	100	70-129
79-00-5	1,1,2-Trichloroethane	50	52.5	105	74-124
79-01-6	Trichloroethylene	50	53.3	107	75-128
75-69-4	Trichlorofluoromethane	50	51.0	102	73-145
96-18-4	1,2,3-Trichloropropane	50	50.1	100	74-127
95-63-6	1,2,4-Trimethylbenzene	50	57.6	115	74-123
108-67-8	1,3,5-Trimethylbenzene	50	56.3	113	73-122
108-05-4	Vinyl Acetate	250	251	100	48-164
75-01-4	Vinyl Chloride	50	50.7	101	76-141
	m,p-Xylene	100	111	111	80-128
95-47-6	o-Xylene	50	54.2	108	80-132

* = Outside of Control Limits.

Blank Spike Summary

Page 3 of 3

Job Number: FA28651

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2510-BS	F0073346.D	1	10/26/15	EP	n/a	n/a	VF2510

The QC reported here applies to the following samples:

Method: SW846 8260B

FA28651-7, FA28651-8

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	75-124%
17060-07-0	1,2-Dichloroethane-D4	95%	72-135%
2037-26-5	Toluene-D8	99%	75-126%
460-00-4	4-Bromofluorobenzene	98%	71-133%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA28651

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA28651-4MS	F0073320.D	1	10/24/15	AD	n/a	n/a	VF2509
FA28651-4MSD	F0073321.D	1	10/24/15	AD	n/a	n/a	VF2509
FA28651-4	F0073319.D	1	10/24/15	AD	n/a	n/a	VF2509

The QC reported here applies to the following samples:

Method: SW846 8260B

FA28651-1, FA28651-2, FA28651-3, FA28651-4, FA28651-5, FA28651-6

CAS No.	Compound	FA28651-4 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	333	285	85	343	293	86	3	61-152/27
107-02-8	Acrolein	ND	333	312	94	343	273	80	13	48-178/37
107-13-1	Acrylonitrile	ND	333	298	89	343	320	93	7	66-134/26
71-43-2	Benzene	ND	66.7	63.0	94	68.5	65.1	95	3	76-126/26
108-86-1	Bromobenzene	ND	66.7	66.5	100	68.5	65.7	96	1	76-122/32
74-97-5	Bromochloromethane	ND	66.7	63.1	95	68.5	65.5	96	4	77-120/24
75-27-4	Bromodichloromethane	ND	66.7	64.2	96	68.5	67.0	98	4	74-130/25
75-25-2	Bromoform	ND	66.7	60.7	91	68.5	64.9	95	7	76-127/26
78-93-3	2-Butanone (MEK)	ND	333	285	85	343	310	90	8	75-137/25
104-51-8	n-Butylbenzene	ND	66.7	62.8	94	68.5	65.3	95	4	71-128/35
135-98-8	sec-Butylbenzene	ND	66.7	63.0	94	68.5	65.5	96	4	79-135/34
98-06-6	tert-Butylbenzene	ND	66.7	59.9	90	68.5	62.9	92	5	77-133/34
75-15-0	Carbon Disulfide	ND	66.7	59.8	90	68.5	59.2	86	1	72-122/29
56-23-5	Carbon Tetrachloride	ND	66.7	53.8	81	68.5	55.7	81	3	78-133/29
108-90-7	Chlorobenzene	ND	66.7	64.9	97	68.5	67.1	98	3	81-129/29
75-00-3	Chloroethane	ND	66.7	62.7	94	68.5	67.6	99	8	68-133/29
110-75-8	2-Chloroethyl Vinyl Ether	ND	333	307	92	343	316	92	3	45-159/26
67-66-3	Chloroform	ND	66.7	63.3	95	68.5	62.8	92	1	72-123/26
95-49-8	o-Chlorotoluene	ND	66.7	65.9	99	68.5	67.7	99	3	77-129/33
106-43-4	p-Chlorotoluene	ND	66.7	69.6	104	68.5	70.2	102	1	80-134/33
124-48-1	Dibromochloromethane	ND	66.7	63.4	95	68.5	67.7	99	7	76-127/27
96-12-8	1,2-Dibromo-3-chloropropane	ND	66.7	55.3	83	68.5	60.5	88	9	70-137/29
106-93-4	1,2-Dibromoethane	ND	66.7	62.5	94	68.5	67.9	99	8	77-126/26
75-71-8	Dichlorodifluoromethane	ND	66.7	49.8	75	68.5	52.0	76	4	68-168/29
95-50-1	1,2-Dichlorobenzene	ND	66.7	66.5	100	68.5	68.0	99	2	80-129/32
541-73-1	1,3-Dichlorobenzene	ND	66.7	69.4	104	68.5	70.4	103	1	81-129/33
106-46-7	1,4-Dichlorobenzene	ND	66.7	68.5	103	68.5	71.1	104	4	76-130/32
75-34-3	1,1-Dichloroethane	ND	66.7	64.6	97	68.5	62.7	92	3	73-125/27
107-06-2	1,2-Dichloroethane	ND	66.7	63.2	95	68.5	64.7	94	2	74-128/23
75-35-4	1,1-Dichloroethylene	ND	66.7	61.1	92	68.5	62.1	91	2	81-136/28
156-59-2	cis-1,2-Dichloroethylene	ND	66.7	61.4	92	68.5	60.8	89	1	74-126/26
156-60-5	trans-1,2-Dichloroethylene	ND	66.7	62.7	94	68.5	64.8	95	3	70-127/27
78-87-5	1,2-Dichloropropane	ND	66.7	64.2	96	68.5	63.2	92	2	74-125/25
142-28-9	1,3-Dichloropropane	ND	66.7	62.5	94	68.5	66.6	97	6	76-122/26
594-20-7	2,2-Dichloropropane	ND	66.7	60.0	90	68.5	59.8	87	0	77-133/28
563-58-6	1,1-Dichloropropene	ND	66.7	63.5	95	68.5	61.8	90	3	75-130/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA28651

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA28651-4MS	F0073320.D	1	10/24/15	AD	n/a	n/a	VF2509
FA28651-4MSD	F0073321.D	1	10/24/15	AD	n/a	n/a	VF2509
FA28651-4	F0073319.D	1	10/24/15	AD	n/a	n/a	VF2509

The QC reported here applies to the following samples:

Method: SW846 8260B

FA28651-1, FA28651-2, FA28651-3, FA28651-4, FA28651-5, FA28651-6

CAS No.	Compound	FA28651-4 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND	66.7	64.7	97	68.5	66.2	97	2	80-123/26
10061-02-6	trans-1,3-Dichloropropene	ND	66.7	65.6	98	68.5	70.2	102	7	75-131/28
100-41-4	Ethylbenzene	ND	66.7	64.3	96	68.5	67.2	98	4	77-123/31
87-68-3	Hexachlorobutadiene	ND	66.7	43.1	65*	68.5	42.8	62*	1	74-136/38
591-78-6	2-Hexanone	ND	333	287	86	343	327	95	13	72-133/26
98-82-8	Isopropylbenzene	ND	66.7	63.9	96	68.5	66.3	97	4	80-136/32
99-87-6	p-Isopropyltoluene	ND	66.7	64.3	96	68.5	65.5	96	2	77-131/34
74-83-9	Methyl Bromide	ND	66.7	81.5	122	68.5	63.0	92	26	65-139/31
74-87-3	Methyl Chloride	ND	66.7	62.0	93	68.5	64.5	94	4	71-144/27
74-95-3	Methylene Bromide	ND	66.7	63.3	95	68.5	66.7	97	5	74-124/24
75-09-2	Methylene Chloride	ND	66.7	61.6	92	68.5	33.8	49*	58*	74-137/28
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	333	298	89	343	325	95	9	76-132/26
1634-04-4	Methyl Tert Butyl Ether	ND	66.7	60.7	91	68.5	64.4	94	6	77-120/24
91-20-3	Naphthalene	ND	66.7	61.3	92	68.5	65.3	95	6	79-129/33
103-65-1	n-Propylbenzene	ND	66.7	67.6	101	68.5	69.1	101	2	80-135/33
100-42-5	Styrene	ND	66.7	62.6	94	68.5	65.6	96	5	78-125/30
630-20-6	1,1,1,2-Tetrachloroethane	ND	66.7	64.3	96	68.5	67.8	99	5	78-126/27
79-34-5	1,1,2,2-Tetrachloroethane	ND	66.7	62.3	93	68.5	67.3	98	8	71-126/30
127-18-4	Tetrachloroethylene	ND	66.7	60.2	90	68.5	61.5	90	2	79-130/31
108-88-3	Toluene	ND	66.7	63.4	95	68.5	65.5	96	3	76-124/30
87-61-6	1,2,3-Trichlorobenzene	ND	66.7	57.2	86	68.5	59.5	87	4	77-128/35
120-82-1	1,2,4-Trichlorobenzene	ND	66.7	62.8	94	68.5	65.5	96	4	78-130/34
71-55-6	1,1,1-Trichloroethane	ND	66.7	59.5	89	68.5	59.5	87	0	70-129/27
79-00-5	1,1,2-Trichloroethane	ND	66.7	64.9	97	68.5	67.1	98	3	74-124/28
79-01-6	Trichloroethylene	ND	66.7	61.7	93	68.5	63.6	93	3	75-128/27
75-69-4	Trichlorofluoromethane	ND	66.7	55.4	83	68.5	57.7	84	4	73-145/31
96-18-4	1,2,3-Trichloropropane	ND	66.7	65.9	99	68.5	70.5	103	7	74-127/27
95-63-6	1,2,4-Trimethylbenzene	ND	66.7	63.4	95	68.5	65.5	96	3	74-123/34
108-67-8	1,3,5-Trimethylbenzene	ND	66.7	59.2	89	68.5	60.6	88	2	73-122/33
108-05-4	Vinyl Acetate	ND	333	136	41*	343	90.2	26*	40*	48-164/37
75-01-4	Vinyl Chloride	ND	66.7	58.7	88	68.5	59.4	87	1	76-141/27
	m,p-Xylene	ND	133	138	103	137	140	102	1	80-128/30
95-47-6	o-Xylene	ND	66.7	64.4	97	68.5	65.6	96	2	80-132/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: FA28651

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA28651-4MS	F0073320.D	1	10/24/15	AD	n/a	n/a	VF2509
FA28651-4MSD	F0073321.D	1	10/24/15	AD	n/a	n/a	VF2509
FA28651-4	F0073319.D	1	10/24/15	AD	n/a	n/a	VF2509

The QC reported here applies to the following samples:

Method: SW846 8260B

FA28651-1, FA28651-2, FA28651-3, FA28651-4, FA28651-5, FA28651-6

CAS No.	Surrogate Recoveries	MS	MSD	FA28651-4	Limits
1868-53-7	Dibromofluoromethane	99%	98%	105%	75-124%
17060-07-0	1,2-Dichloroethane-D4	97%	96%	103%	72-135%
2037-26-5	Toluene-D8	100%	101%	109%	75-126%
460-00-4	4-Bromofluorobenzene	98%	99%	110%	71-133%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA28651

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA28651-6MS	F0073357.D	1	10/26/15	EP	n/a	n/a	VF2510
FA28651-6MSD	F0073358.D	1	10/26/15	EP	n/a	n/a	VF2510
FA28651-6 ^a	F0073352.D	1	10/26/15	EP	n/a	n/a	VF2510

The QC reported here applies to the following samples:

Method: SW846 8260B

FA28651-7, FA28651-8

CAS No.	Compound	FA28651-6 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	290	300	104	289	281	97	7	61-152/27
107-02-8	Acrolein	ND	290	218	75	289	200	69	9	48-178/37
107-13-1	Acrylonitrile	ND	290	296	102	289	264	91	11	66-134/26
71-43-2	Benzene	ND	57.9	62.3	108	57.8	60.0	104	4	76-126/26
108-86-1	Bromobenzene	ND	57.9	58.7	101	57.8	59.3	103	1	76-122/32
74-97-5	Bromochloromethane	ND	57.9	60.8	105	57.8	59.7	103	2	77-120/24
75-27-4	Bromodichloromethane	ND	57.9	62.8	108	57.8	60.7	105	3	74-130/25
75-25-2	Bromoform	ND	57.9	60.0	104	57.8	59.5	103	1	76-127/26
78-93-3	2-Butanone (MEK)	ND	290	282	97	289	257	89	9	75-137/25
104-51-8	n-Butylbenzene	ND	57.9	55.0	95	57.8	54.3	94	1	71-128/35
135-98-8	sec-Butylbenzene	ND	57.9	62.3	108	57.8	61.0	105	2	79-135/34
98-06-6	tert-Butylbenzene	ND	57.9	61.4	106	57.8	59.8	103	3	77-133/34
75-15-0	Carbon Disulfide	ND	57.9	56.5	98	57.8	51.6	89	9	72-122/29
56-23-5	Carbon Tetrachloride	ND	57.9	55.7	96	57.8	54.3	94	3	78-133/29
108-90-7	Chlorobenzene	ND	57.9	61.0	105	57.8	59.9	104	2	81-129/29
75-00-3	Chloroethane	ND	57.9	60.4	104	57.8	57.4	99	5	68-133/29
110-75-8	2-Chloroethyl Vinyl Ether	ND	290	275	95	289	259	90	6	45-159/26
67-66-3	Chloroform	ND	57.9	61.3	106	57.8	59.7	103	3	72-123/26
95-49-8	o-Chlorotoluene	ND	57.9	61.4	106	57.8	62.2	108	1	77-129/33
106-43-4	p-Chlorotoluene	ND	57.9	62.0	107	57.8	62.0	107	0	80-134/33
124-48-1	Dibromochloromethane	ND	57.9	62.9	109	57.8	61.7	107	2	76-127/27
96-12-8	1,2-Dibromo-3-chloropropane	ND	57.9	59.0	102	57.8	54.7	95	8	70-137/29
106-93-4	1,2-Dibromoethane	ND	57.9	60.2	104	57.8	60.2	104	0	77-126/26
75-71-8	Dichlorodifluoromethane	ND	57.9	57.5	99	57.8	54.3	94	6	68-168/29
95-50-1	1,2-Dichlorobenzene	ND	57.9	60.9	105	57.8	60.7	105	0	80-129/32
541-73-1	1,3-Dichlorobenzene	ND	57.9	62.0	107	57.8	61.7	107	0	81-129/33
106-46-7	1,4-Dichlorobenzene	ND	57.9	58.8	101	57.8	59.4	103	1	76-130/32
75-34-3	1,1-Dichloroethane	ND	57.9	61.3	106	57.8	58.6	101	5	73-125/27
107-06-2	1,2-Dichloroethane	ND	57.9	63.5	110	57.8	59.5	103	7	74-128/23
75-35-4	1,1-Dichloroethylene	ND	57.9	58.6	101	57.8	55.2	95	6	81-136/28
156-59-2	cis-1,2-Dichloroethylene	ND	57.9	57.5	99	57.8	55.7	96	3	74-126/26
156-60-5	trans-1,2-Dichloroethylene	ND	57.9	62.7	108	57.8	60.1	104	4	70-127/27
78-87-5	1,2-Dichloropropane	ND	57.9	61.3	106	57.8	59.4	103	3	74-125/25
142-28-9	1,3-Dichloropropane	ND	57.9	59.6	103	57.8	59.6	103	0	76-122/26
594-20-7	2,2-Dichloropropane	ND	57.9	62.6	108	57.8	56.6	98	10	77-133/28
563-58-6	1,1-Dichloropropene	ND	57.9	60.7	105	57.8	57.9	100	5	75-130/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA28651

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA28651-6MS	F0073357.D	1	10/26/15	EP	n/a	n/a	VF2510
FA28651-6MSD	F0073358.D	1	10/26/15	EP	n/a	n/a	VF2510
FA28651-6 ^a	F0073352.D	1	10/26/15	EP	n/a	n/a	VF2510

The QC reported here applies to the following samples:

Method: SW846 8260B

FA28651-7, FA28651-8

CAS No.	Compound	FA28651-6 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND	57.9	62.0	107	57.8	60.6	105	2	80-123/26
10061-02-6	trans-1,3-Dichloropropene	ND	57.9	64.7	112	57.8	62.9	109	3	75-131/28
100-41-4	Ethylbenzene	ND	57.9	61.2	106	57.8	60.4	104	1	77-123/31
87-68-3	Hexachlorobutadiene	ND	57.9	45.4	78	57.8	42.6	74	6	74-136/38
591-78-6	2-Hexanone	ND	290	280	97	289	263	91	6	72-133/26
98-82-8	Isopropylbenzene	ND	57.9	56.4	97	57.8	54.7	95	3	80-136/32
99-87-6	p-Isopropyltoluene	ND	57.9	60.6	105	57.8	59.8	103	1	77-131/34
74-83-9	Methyl Bromide	ND	57.9	62.3	108	57.8	56.9	98	9	65-139/31
74-87-3	Methyl Chloride	ND	57.9	60.9	105	57.8	58.2	101	5	71-144/27
74-95-3	Methylene Bromide	ND	57.9	63.6	110	57.8	59.5	103	7	74-124/24
75-09-2	Methylene Chloride	ND	57.9	68.5	118	57.8	33.6	58*	68*	74-137/28
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	290	291	100	289	271	94	7	76-132/26
1634-04-4	Methyl Tert Butyl Ether	ND	57.9	59.4	103	57.8	57.3	99	4	77-120/24
91-20-3	Naphthalene	ND	57.9	62.8	108	57.8	61.6	107	2	79-129/33
103-65-1	n-Propylbenzene	ND	57.9	57.0	98	57.8	55.4	96	3	80-135/33
100-42-5	Styrene	ND	57.9	57.5	99	57.8	57.7	100	0	78-125/30
630-20-6	1,1,1,2-Tetrachloroethane	ND	57.9	61.8	107	57.8	61.5	106	0	78-126/27
79-34-5	1,1,2,2-Tetrachloroethane	ND	57.9	61.0	105	57.8	58.4	101	4	71-126/30
127-18-4	Tetrachloroethylene	ND	57.9	55.6	96	57.8	56.0	97	1	79-130/31
108-88-3	Toluene	ND	57.9	60.6	105	57.8	59.5	103	2	76-124/30
87-61-6	1,2,3-Trichlorobenzene	ND	57.9	54.3	94	57.8	54.0	93	1	77-128/35
120-82-1	1,2,4-Trichlorobenzene	ND	57.9	53.7	93	57.8	55.5	96	3	78-130/34
71-55-6	1,1,1-Trichloroethane	ND	57.9	60.0	104	57.8	56.9	98	5	70-129/27
79-00-5	1,1,2-Trichloroethane	ND	57.9	60.9	105	57.8	59.3	103	3	74-124/28
79-01-6	Trichloroethylene	ND	57.9	60.8	105	57.8	57.9	100	5	75-128/27
75-69-4	Trichlorofluoromethane	ND	57.9	59.6	103	57.8	53.6	93	11	73-145/31
96-18-4	1,2,3-Trichloropropane	ND	57.9	62.9	109	57.8	60.5	105	4	74-127/27
95-63-6	1,2,4-Trimethylbenzene	ND	57.9	63.1	109	57.8	62.7	108	1	74-123/34
108-67-8	1,3,5-Trimethylbenzene	ND	57.9	60.5	104	57.8	61.5	106	2	73-122/33
108-05-4	Vinyl Acetate	ND	290	77.7	27*	289	79.1	27*	2	48-164/37
75-01-4	Vinyl Chloride	ND	57.9	58.3	101	57.8	55.0	95	6	76-141/27
	m,p-Xylene	ND	116	119	103	116	117	101	2	80-128/30
95-47-6	o-Xylene	ND	57.9	57.9	100	57.8	57.6	100	1	80-132/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: FA28651

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA28651-6MS	F0073357.D	1	10/26/15	EP	n/a	n/a	VF2510
FA28651-6MSD	F0073358.D	1	10/26/15	EP	n/a	n/a	VF2510
FA28651-6 ^a	F0073352.D	1	10/26/15	EP	n/a	n/a	VF2510

The QC reported here applies to the following samples:

Method: SW846 8260B

FA28651-7, FA28651-8

CAS No.	Surrogate Recoveries	MS	MSD	FA28651-6	Limits
1868-53-7	Dibromofluoromethane	100%	99%	108%	75-124%
17060-07-0	1,2-Dichloroethane-D4	102%	97%	115%	72-135%
2037-26-5	Toluene-D8	100%	101%	102%	75-126%
460-00-4	4-Bromofluorobenzene	97%	101%	97%	71-133%

(a) Confirmation run for internal standard areas.

* = Outside of Control Limits.

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 1

Job Number: FA28651

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP58104-MB	ST136285.D	1	10/30/15	RS	10/27/15	OP58104	GST3246

The QC reported here applies to the following samples:

Method: SW846 8082A

FA28651-1, FA28651-3, FA28651-5, FA28651-7

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	17	6.7	ug/kg	
11104-28-2	Aroclor 1221	ND	17	8.3	ug/kg	
11141-16-5	Aroclor 1232	ND	17	8.3	ug/kg	
53469-21-9	Aroclor 1242	ND	17	6.7	ug/kg	
12672-29-6	Aroclor 1248	ND	17	6.7	ug/kg	
11097-69-1	Aroclor 1254	ND	17	6.7	ug/kg	
11096-82-5	Aroclor 1260	ND	17	6.7	ug/kg	

CAS No.	Surrogate Recoveries	Limits
877-09-8	Tetrachloro-m-xylene	82% 44-126%
2051-24-3	Decachlorobiphenyl	98% 41-145%

Blank Spike Summary

Page 1 of 1

Job Number: FA28651

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP58104-BS	ST136284.D	1	10/30/15	RS	10/27/15	OP58104	GST3246

The QC reported here applies to the following samples:

Method: SW846 8082A

FA28651-1, FA28651-3, FA28651-5, FA28651-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	133	113	85	58-126
11096-82-5	Aroclor 1260	133	119	89	59-133

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	86%	44-126%
2051-24-3	Decachlorobiphenyl	100%	41-145%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: FA28651

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP58104-MS	ST136289.D	1	10/30/15	RS	10/27/15	OP58104	GST3246
OP58104-MSD	ST136290.D	1	10/30/15	RS	10/27/15	OP58104	GST3246
FA28651-7	ST136288.D	1	10/30/15	RS	10/27/15	OP58104	GST3246

The QC reported here applies to the following samples:

Method: SW846 8082A

FA28651-1, FA28651-3, FA28651-5, FA28651-7

CAS No.	Compound	FA28651-7 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	140	101	72	140	105	75	4	58-126/25
11096-82-5	Aroclor 1260	ND	140	122	87	140	127	91	4	59-133/31

CAS No.	Surrogate Recoveries	MS	MSD	FA28651-7	Limits
877-09-8	Tetrachloro-m-xylene	73%	74%	78%	44-126%
2051-24-3	Decachlorobiphenyl	90%	92%	93%	41-145%

* = Outside of Control Limits.



10/29/15

Technical Report for

Gannett Fleming

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
57524

Accutest Job Number: FA28653

Sampling Dates: 10/19/15 - 10/20/15

Report to:

Gannett Fleming
West Lake Corporate Center 9119 Corporate Lake Dr, Suite 150
Tampa, FL 33634-6323
axhoffman@gfnet.com; tfalkner@gfnet.com

ATTN: Todd Falkner

Total number of pages in report: **98**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read 'Norm Farmer'.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001)
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Test results relate only to samples analyzed.

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Sample Summary

Gannett Fleming

Job No: FA28653

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA28653-1	10/19/15	15:37	DMTF 10/23/15	AQ	Ground Water	MW-1D
FA28653-2	10/19/15	15:45	DMTF 10/23/15	AQ	Ground Water	MW-1DD
FA28653-3	10/20/15	08:52	DMTF 10/23/15	AQ	Ground Water	MW-1R
FA28653-4	10/20/15	09:29	DMTF 10/23/15	AQ	Ground Water	MW-2R
FA28653-5	10/20/15	09:54	DMTF 10/23/15	AQ	Ground Water	MW-14
FA28653-6	10/20/15	10:30	DMTF 10/23/15	AQ	Ground Water	MW-4
FA28653-7	10/20/15	10:32	DMTF 10/23/15	AQ	Ground Water	MW-15
FA28653-8	10/20/15	11:12	DMTF 10/23/15	AQ	Ground Water	MW-10
FA28653-9	10/20/15	11:19	DMTF 10/23/15	AQ	Ground Water	MW-3
FA28653-10	10/20/15	11:42	DMTF 10/23/15	AQ	Ground Water	WATER WELL
FA28653-11	10/20/15	13:10	DMTF 10/23/15	AQ	Ground Water	MW-5
FA28653-12	10/20/15	13:37	DMTF 10/23/15	AQ	Ground Water	MW-5D
FA28653-13	10/20/15	13:56	DMTF 10/23/15	AQ	Ground Water	MW-6



Sample Summary
(continued)

Gannett Fleming

Job No: FA28653

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA28653-14	10/20/15	14:27	DMTF 10/23/15	AQ	Ground Water	MW-13
FA28653-15	10/20/15	14:34	DMTF 10/23/15	AQ	Ground Water	MW-11
FA28653-16	10/20/15	15:21	DMTF 10/23/15	AQ	Ground Water	MW-8
FA28653-17	10/20/15	15:25	DMTF 10/23/15	AQ	Ground Water	MW-12

Summary of Hits

Job Number: FA28653

Account: Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Collected: 10/19/15 thru 10/20/15

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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FA28653-1 MW-1D

No hits reported in this sample.

FA28653-2 MW-1DD

Chloroform	1.1	1.0	0.30	ug/l	SW846 8260B
Tetrachloroethylene	12.6	1.0	0.33	ug/l	SW846 8260B
Trichloroethylene	1.4	1.0	0.22	ug/l	SW846 8260B

FA28653-3 MW-1R

1,1-Dichloroethylene	11.5 J	25	6.8	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	473	25	5.5	ug/l	SW846 8260B
trans-1,2-Dichloroethylene	7.9 J	25	5.2	ug/l	SW846 8260B
Ethylbenzene	8.8 J	25	5.0	ug/l	SW846 8260B
Tetrachloroethylene	464	25	8.1	ug/l	SW846 8260B
Trichloroethylene	1830	25	5.4	ug/l	SW846 8260B
o-Xylene	7.0 J	25	5.0	ug/l	SW846 8260B
Arsenic	265	10		ug/l	SW846 6010C

FA28653-4 MW-2R

Tetrachloroethylene	2.2	1.0	0.33	ug/l	SW846 8260B
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FA28653-5 MW-14

No hits reported in this sample.

FA28653-6 MW-4

No hits reported in this sample.

FA28653-7 MW-15

No hits reported in this sample.

FA28653-8 MW-10

No hits reported in this sample.

FA28653-9 MW-3

No hits reported in this sample.

Summary of Hits

Job Number: FA28653
Account: Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Collected: 10/19/15 thru 10/20/15

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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FA28653-10 WATER WELL

No hits reported in this sample.

FA28653-11 MW-5

Benzene	1.4	1.0	0.20	ug/l	SW846 8260B
Methyl Tert Butyl Ether	33.1	1.0	0.30	ug/l	SW846 8260B

FA28653-12 MW-5D

1,3-Dichlorobenzene	0.23 J	1.0	0.22	ug/l	SW846 8260B
1,1-Dichloroethane	0.30 J	1.0	0.20	ug/l	SW846 8260B
Methyl Tert Butyl Ether	0.51 J	1.0	0.30	ug/l	SW846 8260B
1,2,3-Trichlorobenzene	0.68 J	1.0	0.50	ug/l	SW846 8260B
1,2,4-Trichlorobenzene	1.6	1.0	0.50	ug/l	SW846 8260B

FA28653-13 MW-6

Methyl Tert Butyl Ether	1.0	1.0	0.30	ug/l	SW846 8260B
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FA28653-14 MW-13

No hits reported in this sample.

FA28653-15 MW-11

No hits reported in this sample.

FA28653-16 MW-8

No hits reported in this sample.

FA28653-17 MW-12

Methyl Tert Butyl Ether	1.5	1.0	0.30	ug/l	SW846 8260B
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Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-1D		
Lab Sample ID:	FA28653-1	Date Sampled:	10/19/15
Matrix:	AQ - Ground Water	Date Received:	10/23/15
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0089517.D	1	10/27/15	RB	n/a	n/a	VN4020
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	10/19/15
Lab Sample ID:	FA28653-1	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	10/19/15
Lab Sample ID:	FA28653-1	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	107%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1D		
Lab Sample ID:	FA28653-1	Date Sampled:	10/19/15
Matrix:	AQ - Ground Water	Date Received:	10/23/15
		Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	10/26/15	10/26/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12737
(2) Prep QC Batch: MP29573

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	10/19/15
Lab Sample ID:	FA28653-2	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0089518.D	1	10/27/15	RB	n/a	n/a	VN4020
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	1.1	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	10/19/15
Lab Sample ID:	FA28653-2	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	12.6	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	1.4	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	10/19/15
Lab Sample ID:	FA28653-2	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	108%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	96%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	10/19/15
Lab Sample ID:	FA28653-2	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	10/26/15	10/26/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12737
(2) Prep QC Batch: MP29573

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-3	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0089519.D	25	10/27/15	RB	n/a	n/a	VN4020
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	630	250	ug/l	
107-02-8	Acrolein	ND	500	130	ug/l	
107-13-1	Acrylonitrile	ND	250	50	ug/l	
71-43-2	Benzene	ND	25	5.0	ug/l	
108-86-1	Bromobenzene	ND	25	6.7	ug/l	
74-97-5	Bromochloromethane	ND	25	8.4	ug/l	
75-27-4	Bromodichloromethane	ND	25	5.4	ug/l	
75-25-2	Bromoform	ND	25	8.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	130	29	ug/l	
104-51-8	n-Butylbenzene	ND	25	5.6	ug/l	
135-98-8	sec-Butylbenzene	ND	25	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	25	5.0	ug/l	
75-15-0	Carbon Disulfide	ND	50	7.4	ug/l	
56-23-5	Carbon Tetrachloride	ND	25	7.0	ug/l	
108-90-7	Chlorobenzene	ND	25	5.0	ug/l	
75-00-3	Chloroethane	ND	50	13	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	130	25	ug/l	
67-66-3	Chloroform	ND	25	7.5	ug/l	
95-49-8	o-Chlorotoluene	ND	25	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	25	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	25	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	15	ug/l	
106-93-4	1,2-Dibromoethane	ND	50	10	ug/l	
75-71-8	Dichlorodifluoromethane	ND	50	13	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	25	5.6	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	25	5.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	25	6.1	ug/l	
75-34-3	1,1-Dichloroethane	ND	25	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	25	5.0	ug/l	
75-35-4	1,1-Dichloroethylene	11.5	25	6.8	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	473	25	5.5	ug/l	
156-60-5	trans-1,2-Dichloroethylene	7.9	25	5.2	ug/l	J

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-3	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	25	6.3	ug/l	
142-28-9	1,3-Dichloropropane	ND	25	6.6	ug/l	
594-20-7	2,2-Dichloropropane	ND	25	6.6	ug/l	
563-58-6	1,1-Dichloropropene	ND	25	5.3	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	25	6.3	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	ND	25	6.5	ug/l	
100-41-4	Ethylbenzene	8.8	25	5.0	ug/l	J
87-68-3	Hexachlorobutadiene	ND	50	13	ug/l	
591-78-6	2-Hexanone	ND	250	50	ug/l	
98-82-8	Isopropylbenzene	ND	25	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	25	5.0	ug/l	
74-83-9	Methyl Bromide	ND	50	13	ug/l	
74-87-3	Methyl Chloride	ND	50	13	ug/l	
74-95-3	Methylene Bromide	ND	50	6.3	ug/l	
75-09-2	Methylene Chloride	ND	130	50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	130	25	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	25	7.5	ug/l	
91-20-3	Naphthalene	ND	130	25	ug/l	
103-65-1	n-Propylbenzene	ND	25	5.0	ug/l	
100-42-5	Styrene	ND	25	7.1	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	25	5.4	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	5.6	ug/l	
127-18-4	Tetrachloroethylene	464	25	8.1	ug/l	
108-88-3	Toluene	ND	25	10	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	25	13	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	25	13	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	25	6.4	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	25	7.9	ug/l	
79-01-6	Trichloroethylene	1830	25	5.4	ug/l	
75-69-4	Trichlorofluoromethane	ND	50	13	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	50	17	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	50	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	50	5.6	ug/l	
108-05-4	Vinyl Acetate	ND	250	50	ug/l	
75-01-4	Vinyl Chloride	ND	25	6.3	ug/l	
	m,p-Xylene	ND	50	7.9	ug/l	
95-47-6	o-Xylene	7.0	25	5.0	ug/l	J

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-3	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	109%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-3	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	265	10	ug/l	1	10/26/15	10/26/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12737
(2) Prep QC Batch: MP29573

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-4	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0089520.D	1	10/27/15	RB	n/a	n/a	VN4020
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-4	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	2.2	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-4	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		83-118%
17060-07-0	1,2-Dichloroethane-D4	107%		79-125%
2037-26-5	Toluene-D8	95%		85-112%
460-00-4	4-Bromofluorobenzene	96%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-4	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	10/26/15	10/26/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12737
(2) Prep QC Batch: MP29573

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-5	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0089556.D	1	10/28/15	RB	n/a	n/a	VN4021
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-5	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-5	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		83-118%
17060-07-0	1,2-Dichloroethane-D4	111%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	95%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-5	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	10/26/15	10/26/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12737
(2) Prep QC Batch: MP29573

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-6	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0089522.D	1	10/27/15	RB	n/a	n/a	VN4020
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-6	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-6	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		83-118%
17060-07-0	1,2-Dichloroethane-D4	111%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-6	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	10/26/15	10/26/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12737
(2) Prep QC Batch: MP29573

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-7	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0089523.D	1	10/27/15	RB	n/a	n/a	VN4020
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-7	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-7	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		83-118%
17060-07-0	1,2-Dichloroethane-D4	110%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-7	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	10/26/15	10/26/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12737
(2) Prep QC Batch: MP29573

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-8	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0089524.D	1	10/27/15	RB	n/a	n/a	VN4020
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-8	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-8	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	110%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-8	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	10/26/15	10/26/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12737
(2) Prep QC Batch: MP29573

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-9	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0089525.D	1	10/27/15	RB	n/a	n/a	VN4020
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-9	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-9	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	109%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-9	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	10/26/15	10/26/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12737
(2) Prep QC Batch: MP29573

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WATER WELL	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-10	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0089526.D	1	10/27/15	RB	n/a	n/a	VN4020
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WATER WELL	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-10	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WATER WELL	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-10	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		83-118%
17060-07-0	1,2-Dichloroethane-D4	108%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	97%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WATER WELL	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-10	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	10/26/15	10/26/15 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA12737
(2) Prep QC Batch: MP29573

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-11	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0089527.D	1	10/27/15	RB	n/a	n/a	VN4020
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	1.4	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-11	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene ^a	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	33.1	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-11	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		83-118%
17060-07-0	1,2-Dichloroethane-D4	111%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	95%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5D	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-12	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0089540.D	1	10/28/15	RB	n/a	n/a	VN4021
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	0.23	1.0	0.22	ug/l	J
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	0.30	1.0	0.20	ug/l	J
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5D	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-12	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.51	1.0	0.30	ug/l	J
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.68	1.0	0.50	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	1.6	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5D	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-12	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		83-118%
17060-07-0	1,2-Dichloroethane-D4	108%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-13	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0089541.D	1	10/28/15	RB	n/a	n/a	VN4021
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-13	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.0	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-13	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		83-118%
17060-07-0	1,2-Dichloroethane-D4	108%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	96%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-14	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0089542.D	1	10/28/15	RB	n/a	n/a	VN4021
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-14	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-14	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		83-118%
17060-07-0	1,2-Dichloroethane-D4	108%		79-125%
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11	
Lab Sample ID:	FA28653-15	Date Sampled: 10/20/15
Matrix:	AQ - Ground Water	Date Received: 10/23/15
Method:	SW846 8260B	Percent Solids: n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0089543.D	1	10/28/15	RB	n/a	n/a	VN4021
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-15	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-15	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		83-118%
17060-07-0	1,2-Dichloroethane-D4	87%		79-125%
2037-26-5	Toluene-D8	103%		85-112%
460-00-4	4-Bromofluorobenzene	97%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-16	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0089544.D	1	10/28/15	RB	n/a	n/a	VN4021
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-16	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-16	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	109%		79-125%
2037-26-5	Toluene-D8	98%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-12	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-17	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0089545.D	1	10/28/15	RB	n/a	n/a	VN4021
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-12	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-17	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.5	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-12	Date Sampled:	10/20/15
Lab Sample ID:	FA28653-17	Date Received:	10/23/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	109%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



Accutest Laboratories Southeast

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB #

FA28653

PAGE 1 OF 2

Accutest Quote #

SKIFF#

Client / Reporting Information			Project Information			Analytical Information															Matrix Codes
Company Name <u>Garnett Fleming</u>			Project Name <u>TMR Valdosta</u>																		DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe
Address <u>9119 Corporate Lane Suite 150</u>			Street <u>200 West Savannah Ave</u>																		
City <u>Tampa</u> State <u>FL</u> Zip <u>33634</u>			City <u>Valdosta</u> State <u>GA</u>																		
Project Contact <u>Tony Hoffman</u> E-mail <u>tony.hoffman@garnettfleming.com</u>			Project #																		
Phone# <u>813 862 4344</u>			Fax # <u>813 884 4609</u>																		
Sampler(s) Name(s) (Printed) <u>Tom Hoffman</u>			Client Purchase Order #																		
COLLECTION CONTAINER INFORMATION																		LAB USE ONLY			
Accutest Sample #	Field ID / Point of Collection	DATE	TIME	SAMPLED BY	MATRIX	TOTAL # OF BOTTLES	OTHER	NOISE	FOG	NUCH	FINES	RESCH	HAZARDOUS	IN WATER	WCH						
1	MW-10	10/16/15	1537	PA TE GW	4				3	1						X	X				
2	MW-1DD	↓	1545						3	1						X	X				
3	MW-1R	10/15/15	0852						3	1						X	X				
4	MW-2R		0929						3	1						X	X				
5	MW-14		0954						3	1						X	X				
6	MW-4		1030						3	1						X	X				
7	MW-15		1032						3	1						X	X				
8	MW-10		1112						3	1						X	X				
9	MW-3		1119						3	1						X	X				
10	water well		1142			✓			3	1						X	X				
11	MW-5	↓	1310			3			3							X					
12	MW-SD	↓	0357	↓	↓	↓			3							X					
TURNAROUND TIME (Business Days)																		Comments / Remarks			
☒ 10 Days Standard ☐ 7 Day RUSH ☐ 5 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY ☐ OTHER																		Approved By: / Rush Code			
☐ COMMERCIAL "A" (RESULTS ONLY) ☒ COMMERCIAL "B" (RESULTS PLUS QC) ☐ REDT1 (EPA LEVEL 3) ☐ FULT1 (EPA LEVEL 4) ☐ EDD'S																					
Emergency or Rush T/A Data Available VIA Email or Lablink																					
Sample Custody must be documented below each time samples change possession, including courier delivery.																					
Relinquished by Sampler: <u>1 R</u>		Date Time: <u>10/22/15 1310</u>		Received By: <u>Sandra Brown</u>		Date Time: <u>10-22-15</u>		Relinquished by: <u>3 James Olmeca</u>		Date Time: <u>10-22-15 1800</u>		Received By: <u>4 J. Brown</u>		Date Time: <u>10-23-15</u>		Received By: <u>5</u>					
Relinquished by: <u>5</u>		Date Time: <u>6</u>		Received By: <u>6</u>		Date Time: <u>7</u>		Relinquished by: <u>7</u>		Date Time: <u>8</u>		Received By: <u>8</u>		Date Time: <u>9</u>		Received By: <u>9</u>					
Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: (Cooler Temperature (s) Celsius: <u>3.2</u>																					

FA28653: Chain of Custody

Page 1 of 3

[illegible]

FA28653: Chain of Custody

Page 2 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA 28653 CLIENT: GANNETT FLEMING PROJECT: TMR
 DATE/TIME RECEIVED: 10-23-15 08:00 [MM/DD/YY 24:00] NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: _____
 AIRBILL NUMBERS: _____

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
☒ TRIP BLANK NOT PROVIDED
☒ TRIP BLANK NOT ON COC
☐ TRIP BLANK INTACT
☐ TRIP BLANK NOT INTACT
☐ RECEIVED WATER TRIP BLANK
☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____
 NUMBER OF 5035 FIELD KITS ? _____
 NUMBER OF LAB FILTERED METALS ? _____

pH PAPER LOT#s WID|HC131225

NARROW RANGE AO36133

OTHER (specify) 405-230010

SUMMARY OF COMMENTS: _____

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR -0.4
☐ OBSERVED TEMPS: 3.6
☐ CORRECTED TEMPS: 3.2

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
☐ INSUFFICIENT VOLUME FOR ANALYSIS
☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
☐ ID'S ON COC DO NOT MATCH LABEL
☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
☐ % SOLIDS JAR NOT RECEIVED
☐ RESIDUAL CHLORINE PRESENT LOT# _____

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TECHNICIAN SIGNATURE/DATE [Signature] 10-23-15

REVIEWER SIGNATURE/DATE [Signature] 10/23/15

NF 10/14

YELLOWSHEET110514.xls

FA28653: Chain of Custody

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GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

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Job Number: FA28653**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4020-MB	N0089510.D	1	10/27/15	RB	n/a	n/a	VN4020

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA28653-1, FA28653-2, FA28653-3, FA28653-4, FA28653-6, FA28653-7, FA28653-8, FA28653-9, FA28653-10, FA28653-11

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	

Method Blank Summary

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Job Number: FA28653**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4020-MB	N0089510.D	1	10/27/15	RB	n/a	n/a	VN4020

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA28653-1, FA28653-2, FA28653-3, FA28653-4, FA28653-6, FA28653-7, FA28653-8, FA28653-9, FA28653-10, FA28653-11

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA28653
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4020-MB	N0089510.D	1	10/27/15	RB	n/a	n/a	VN4020

The QC reported here applies to the following samples: Method: SW846 8260B

FA28653-1, FA28653-2, FA28653-3, FA28653-4, FA28653-6, FA28653-7, FA28653-8, FA28653-9, FA28653-10, FA28653-11

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	101% 83-118%
17060-07-0	1,2-Dichloroethane-D4	104% 79-125%
2037-26-5	Toluene-D8	99% 85-112%
460-00-4	4-Bromofluorobenzene	101% 83-118%

Method Blank Summary

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Job Number: FA28653**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4021-MB	N0089539.D	1	10/28/15	RB	n/a	n/a	VN4021

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA28653-5, FA28653-12, FA28653-13, FA28653-14, FA28653-15, FA28653-16, FA28653-17

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
107-02-8	Acrolein	ND	20	5.0	ug/l	
107-13-1	Acrylonitrile	ND	10	2.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.27	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	1.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	1.2	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.22	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.20	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.29	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl Vinyl Ether	ND	5.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.61	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.42	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.22	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.25	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.27	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.21	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.25	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.26	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.21	ug/l	

Method Blank Summary

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Job Number: FA28653**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4021-MB	N0089539.D	1	10/28/15	RB	n/a	n/a	VN4021

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA28653-5, FA28653-12, FA28653-13, FA28653-14, FA28653-15, FA28653-16, FA28653-17

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.20	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.25	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.30	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.28	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.22	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.33	ug/l	
108-88-3	Toluene	ND	1.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.31	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.22	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.22	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.25	ug/l	
	m,p-Xylene	ND	2.0	0.31	ug/l	
95-47-6	o-Xylene	ND	1.0	0.20	ug/l	

Method Blank Summary

Job Number: FA28653
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4021-MB	N0089539.D	1	10/28/15	RB	n/a	n/a	VN4021

The QC reported here applies to the following samples: Method: SW846 8260B

FA28653-5, FA28653-12, FA28653-13, FA28653-14, FA28653-15, FA28653-16, FA28653-17

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	106% 83-118%
17060-07-0	1,2-Dichloroethane-D4	109% 79-125%
2037-26-5	Toluene-D8	99% 85-112%
460-00-4	4-Bromofluorobenzene	99% 83-118%

Blank Spike Summary

Page 1 of 3

Job Number: FA28653**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4020-BS	N0089511.D	1	10/27/15	RB	n/a	n/a	VN4020

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA28653-1, FA28653-2, FA28653-3, FA28653-4, FA28653-6, FA28653-7, FA28653-8, FA28653-9, FA28653-10, FA28653-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	132	106	50-147
107-02-8	Acrolein	125	162	130	31-154
107-13-1	Acrylonitrile	125	122	98	58-126
71-43-2	Benzene	25	27.1	108	81-122
108-86-1	Bromobenzene	25	25.7	103	80-121
74-97-5	Bromochloromethane	25	23.9	96	76-123
75-27-4	Bromodichloromethane	25	27.9	112	79-123
75-25-2	Bromoform	25	27.3	109	66-123
78-93-3	2-Butanone (MEK)	125	124	99	56-143
104-51-8	n-Butylbenzene	25	29.2	117	79-126
135-98-8	sec-Butylbenzene	25	29.6	118	83-133
98-06-6	tert-Butylbenzene	25	28.1	112	80-133
75-15-0	Carbon Disulfide	25	25.0	100	66-148
56-23-5	Carbon Tetrachloride	25	29.3	117	76-136
108-90-7	Chlorobenzene	25	26.7	107	82-124
75-00-3	Chloroethane	25	29.9	120	62-144
110-75-8	2-Chloroethyl Vinyl Ether	125	126	101	56-122
67-66-3	Chloroform	25	26.6	106	80-124
95-49-8	o-Chlorotoluene	25	28.1	112	81-127
106-43-4	p-Chlorotoluene	25	27.8	111	83-130
124-48-1	Dibromochloromethane	25	27.1	108	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	24.9	100	64-123
106-93-4	1,2-Dibromoethane	25	26.0	104	75-120
75-71-8	Dichlorodifluoromethane	25	26.5	106	42-167
95-50-1	1,2-Dichlorobenzene	25	26.2	105	82-124
541-73-1	1,3-Dichlorobenzene	25	27.6	110	84-125
106-46-7	1,4-Dichlorobenzene	25	26.4	106	78-120
75-34-3	1,1-Dichloroethane	25	28.0	112	81-122
107-06-2	1,2-Dichloroethane	25	26.6	106	75-125
75-35-4	1,1-Dichloroethylene	25	30.0	120	78-137
156-59-2	cis-1,2-Dichloroethylene	25	26.5	106	78-120
156-60-5	trans-1,2-Dichloroethylene	25	30.2	121	76-127
78-87-5	1,2-Dichloropropane	25	26.4	106	76-124
142-28-9	1,3-Dichloropropane	25	25.1	100	80-118
594-20-7	2,2-Dichloropropane	25	30.6	122	74-139
563-58-6	1,1-Dichloropropene	25	29.3	117	79-131

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA28653**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4020-BS	N0089511.D	1	10/27/15	RB	n/a	n/a	VN4020

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA28653-1, FA28653-2, FA28653-3, FA28653-4, FA28653-6, FA28653-7, FA28653-8, FA28653-9, FA28653-10, FA28653-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	25	27.8	111	75-118
10061-02-6	trans-1,3-Dichloropropene	25	30.4	122*	80-120
100-41-4	Ethylbenzene	25	27.7	111	81-121
87-68-3	Hexachlorobutadiene	25	25.7	103	75-142
591-78-6	2-Hexanone	125	114	91	61-129
98-82-8	Isopropylbenzene	25	29.4	118	83-132
99-87-6	p-Isopropyltoluene	25	28.8	115	79-130
74-83-9	Methyl Bromide	25	28.8	115	59-143
74-87-3	Methyl Chloride	25	24.7	99	50-159
74-95-3	Methylene Bromide	25	26.6	106	78-119
75-09-2	Methylene Chloride	25	31.5	126	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	123	98	66-122
1634-04-4	Methyl Tert Butyl Ether	25	24.6	98	72-117
91-20-3	Naphthalene	25	27.8	111	63-132
103-65-1	n-Propylbenzene	25	29.0	116	82-133
100-42-5	Styrene	25	27.5	110	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	26.6	106	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	25.3	101	72-120
127-18-4	Tetrachloroethylene	25	28.4	114	76-135
108-88-3	Toluene	25	29.4	118	80-120
87-61-6	1,2,3-Trichlorobenzene	25	25.8	103	68-131
120-82-1	1,2,4-Trichlorobenzene	25	26.0	104	73-129
71-55-6	1,1,1-Trichloroethane	25	27.8	111	75-130
79-00-5	1,1,2-Trichloroethane	25	26.2	105	76-119
79-01-6	Trichloroethylene	25	27.3	109	81-126
75-69-4	Trichlorofluoromethane	25	28.4	114	71-156
96-18-4	1,2,3-Trichloropropane	25	27.4	110	77-120
95-63-6	1,2,4-Trimethylbenzene	25	28.4	114	79-120
108-67-8	1,3,5-Trimethylbenzene	25	28.0	112	79-120
108-05-4	Vinyl Acetate	125	130	104	43-154
75-01-4	Vinyl Chloride	25	28.8	115	69-159
	m,p-Xylene	50	56.3	113	79-126
95-47-6	o-Xylene	25	27.8	111	80-127

* = Outside of Control Limits.

Blank Spike Summary

Page 3 of 3

Job Number: FA28653

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4020-BS	N0089511.D	1	10/27/15	RB	n/a	n/a	VN4020

The QC reported here applies to the following samples:

Method: SW846 8260B

FA28653-1, FA28653-2, FA28653-3, FA28653-4, FA28653-6, FA28653-7, FA28653-8, FA28653-9, FA28653-10, FA28653-11

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	79-125%
2037-26-5	Toluene-D8	96%	85-112%
460-00-4	4-Bromofluorobenzene	98%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 3

Job Number: FA28653**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4021-BS	N0089538.D	1	10/28/15	RB	n/a	n/a	VN4021

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA28653-5, FA28653-12, FA28653-13, FA28653-14, FA28653-15, FA28653-16, FA28653-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	120	96	50-147
107-02-8	Acrolein	125	189	151	31-154
107-13-1	Acrylonitrile	125	118	94	58-126
71-43-2	Benzene	25	26.8	107	81-122
108-86-1	Bromobenzene	25	25.7	103	80-121
74-97-5	Bromochloromethane	25	23.9	96	76-123
75-27-4	Bromodichloromethane	25	27.1	108	79-123
75-25-2	Bromoform	25	27.1	108	66-123
78-93-3	2-Butanone (MEK)	125	113	90	56-143
104-51-8	n-Butylbenzene	25	27.5	110	79-126
135-98-8	sec-Butylbenzene	25	29.1	116	83-133
98-06-6	tert-Butylbenzene	25	27.7	111	80-133
75-15-0	Carbon Disulfide	25	24.8	99	66-148
56-23-5	Carbon Tetrachloride	25	28.6	114	76-136
108-90-7	Chlorobenzene	25	26.2	105	82-124
75-00-3	Chloroethane	25	31.3	125	62-144
110-75-8	2-Chloroethyl Vinyl Ether	125	120	96	56-122
67-66-3	Chloroform	25	27.6	110	80-124
95-49-8	o-Chlorotoluene	25	27.9	112	81-127
106-43-4	p-Chlorotoluene	25	27.0	108	83-130
124-48-1	Dibromochloromethane	25	26.4	106	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	23.8	95	64-123
106-93-4	1,2-Dibromoethane	25	25.3	101	75-120
75-71-8	Dichlorodifluoromethane	25	26.1	104	42-167
95-50-1	1,2-Dichlorobenzene	25	25.9	104	82-124
541-73-1	1,3-Dichlorobenzene	25	26.9	108	84-125
106-46-7	1,4-Dichlorobenzene	25	26.6	106	78-120
75-34-3	1,1-Dichloroethane	25	28.4	114	81-122
107-06-2	1,2-Dichloroethane	25	26.3	105	75-125
75-35-4	1,1-Dichloroethylene	25	31.0	124	78-137
156-59-2	cis-1,2-Dichloroethylene	25	26.0	104	78-120
156-60-5	trans-1,2-Dichloroethylene	25	29.5	118	76-127
78-87-5	1,2-Dichloropropane	25	25.8	103	76-124
142-28-9	1,3-Dichloropropane	25	24.5	98	80-118
594-20-7	2,2-Dichloropropane	25	27.1	108	74-139
563-58-6	1,1-Dichloropropene	25	29.1	116	79-131

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA28653**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4021-BS	N0089538.D	1	10/28/15	RB	n/a	n/a	VN4021

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA28653-5, FA28653-12, FA28653-13, FA28653-14, FA28653-15, FA28653-16, FA28653-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	25	26.8	107	75-118
10061-02-6	trans-1,3-Dichloropropene	25	29.1	116	80-120
100-41-4	Ethylbenzene	25	27.2	109	81-121
87-68-3	Hexachlorobutadiene	25	25.0	100	75-142
591-78-6	2-Hexanone	125	109	87	61-129
98-82-8	Isopropylbenzene	25	28.5	114	83-132
99-87-6	p-Isopropyltoluene	25	27.8	111	79-130
74-83-9	Methyl Bromide	25	30.8	123	59-143
74-87-3	Methyl Chloride	25	25.0	100	50-159
74-95-3	Methylene Bromide	25	26.3	105	78-119
75-09-2	Methylene Chloride	25	30.7	123	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	118	94	66-122
1634-04-4	Methyl Tert Butyl Ether	25	23.6	94	72-117
91-20-3	Naphthalene	25	26.7	107	63-132
103-65-1	n-Propylbenzene	25	28.2	113	82-133
100-42-5	Styrene	25	27.1	108	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	26.1	104	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	23.4	94	72-120
127-18-4	Tetrachloroethylene	25	28.7	115	76-135
108-88-3	Toluene	25	28.9	116	80-120
87-61-6	1,2,3-Trichlorobenzene	25	25.6	102	68-131
120-82-1	1,2,4-Trichlorobenzene	25	24.8	99	73-129
71-55-6	1,1,1-Trichloroethane	25	27.1	108	75-130
79-00-5	1,1,2-Trichloroethane	25	25.8	103	76-119
79-01-6	Trichloroethylene	25	27.9	112	81-126
75-69-4	Trichlorofluoromethane	25	29.3	117	71-156
96-18-4	1,2,3-Trichloropropane	25	26.4	106	77-120
95-63-6	1,2,4-Trimethylbenzene	25	27.8	111	79-120
108-67-8	1,3,5-Trimethylbenzene	25	27.7	111	79-120
108-05-4	Vinyl Acetate	125	106	85	43-154
75-01-4	Vinyl Chloride	25	30.4	122	69-159
	m,p-Xylene	50	55.3	111	79-126
95-47-6	o-Xylene	25	27.1	108	80-127

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA28653

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4021-BS	N0089538.D	1	10/28/15	RB	n/a	n/a	VN4021

The QC reported here applies to the following samples:

Method: SW846 8260B

FA28653-5, FA28653-12, FA28653-13, FA28653-14, FA28653-15, FA28653-16, FA28653-17

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	79-125%
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	96%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA28653

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA28521-20MS	N0089532.D	1	10/28/15	RB	n/a	n/a	VN4020
FA28521-20MSD	N0089533.D	1	10/28/15	RB	n/a	n/a	VN4020
FA28521-20	N0089516.D	1	10/27/15	RB	n/a	n/a	VN4020

The QC reported here applies to the following samples:

Method: SW846 8260B

FA28653-1, FA28653-2, FA28653-3, FA28653-4, FA28653-6, FA28653-7, FA28653-8, FA28653-9, FA28653-10, FA28653-11

CAS No.	Compound	FA28521-20 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	125	110	88	125	106	85	4	50-147/21
107-02-8	Acrolein	ND	125	180	144	125	218	174*	19	31-154/29
107-13-1	Acrylonitrile	ND	125	107	86	125	108	86	1	58-126/16
71-43-2	Benzene	ND	25	24.6	98	25	23.9	96	3	81-122/14
108-86-1	Bromobenzene	ND	25	23.4	94	25	23.1	92	1	80-121/14
74-97-5	Bromochloromethane	ND	25	21.9	88	25	21.0	84	4	76-123/14
75-27-4	Bromodichloromethane	ND	25	25.0	100	25	23.8	95	5	79-123/19
75-25-2	Bromoform	ND	25	20.0	80	25	19.3	77	4	66-123/21
78-93-3	2-Butanone (MEK)	ND	125	106	85	125	105	84	1	56-143/18
104-51-8	n-Butylbenzene	ND	25	25.2	101	25	24.1	96	4	79-126/16
135-98-8	sec-Butylbenzene	ND	25	26.2	105	25	25.4	102	3	83-133/16
98-06-6	tert-Butylbenzene	ND	25	25.4	102	25	24.4	98	4	80-133/16
75-15-0	Carbon Disulfide	ND	25	20.3	81	25	19.4	78	5	66-148/23
56-23-5	Carbon Tetrachloride	ND	25	26.1	104	25	25.8	103	1	76-136/23
108-90-7	Chlorobenzene	ND	25	24.1	96	25	23.4	94	3	82-124/14
75-00-3	Chloroethane	ND	25	32.2	129	25	32.7	131	2	62-144/20
110-75-8	2-Chloroethyl Vinyl Ether	ND	125	ND	0*	125	ND	0*	nc	56-122/23
67-66-3	Chloroform	ND	25	24.8	99	25	24.0	96	3	80-124/15
95-49-8	o-Chlorotoluene	ND	25	25.2	101	25	24.4	98	3	81-127/15
106-43-4	p-Chlorotoluene	ND	25	23.8	95	25	23.8	95	0	83-130/15
124-48-1	Dibromochloromethane	ND	25	21.2	85	25	21.6	86	2	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	ND	25	19.7	79	25	19.3	77	2	64-123/18
106-93-4	1,2-Dibromoethane	ND	25	22.2	89	25	22.6	90	2	75-120/13
75-71-8	Dichlorodifluoromethane	ND	25	25.6	102	25	26.9	108	5	42-167/19
95-50-1	1,2-Dichlorobenzene	ND	25	23.7	95	25	23.2	93	2	82-124/14
541-73-1	1,3-Dichlorobenzene	ND	25	24.9	100	25	24.1	96	3	84-125/14
106-46-7	1,4-Dichlorobenzene	ND	25	23.7	95	25	23.4	94	1	78-120/15
75-34-3	1,1-Dichloroethane	ND	25	25.6	102	25	24.7	99	4	81-122/15
107-06-2	1,2-Dichloroethane	ND	25	24.0	96	25	24.0	96	0	75-125/14
75-35-4	1,1-Dichloroethylene	ND	25	27.7	111	25	28.2	113	2	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND	25	22.2	89	25	22.6	90	2	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND	25	26.9	108	25	26.6	106	1	76-127/17
78-87-5	1,2-Dichloropropane	ND	25	23.8	95	25	23.0	92	3	76-124/14
142-28-9	1,3-Dichloropropane	ND	25	21.8	87	25	21.5	86	1	80-118/13
594-20-7	2,2-Dichloropropane	ND	25	26.6	106	25	26.1	104	2	74-139/17
563-58-6	1,1-Dichloropropene	ND	25	26.1	104	25	25.8	103	1	79-131/16

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA28653

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA28521-20MS	N0089532.D	1	10/28/15	RB	n/a	n/a	VN4020
FA28521-20MSD	N0089533.D	1	10/28/15	RB	n/a	n/a	VN4020
FA28521-20	N0089516.D	1	10/27/15	RB	n/a	n/a	VN4020

The QC reported here applies to the following samples:

Method: SW846 8260B

FA28653-1, FA28653-2, FA28653-3, FA28653-4, FA28653-6, FA28653-7, FA28653-8, FA28653-9, FA28653-10, FA28653-11

CAS No.	Compound	FA28521-20 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND	25	21.5	86	25	21.3	85	1	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND	25	25.3	101	25	25.2	101	0	80-120/22
100-41-4	Ethylbenzene	ND	25	24.6	98	25	24.4	98	1	81-121/14
87-68-3	Hexachlorobutadiene	ND	25	20.9	84	25	20.3	81	3	75-142/19
591-78-6	2-Hexanone	ND	125	99.7	80	125	101	81	1	61-129/18
98-82-8	Isopropylbenzene	ND	25	25.8	103	25	25.0	100	3	83-132/15
99-87-6	p-Isopropyltoluene	ND	25	25.3	101	25	24.2	97	4	79-130/16
74-83-9	Methyl Bromide	ND	25	31.9	128	25	32.5	130	2	59-143/19
74-87-3	Methyl Chloride	ND	25	25.8	103	25	26.4	106	2	50-159/19
74-95-3	Methylene Bromide	ND	25	23.8	95	25	23.0	92	3	78-119/14
75-09-2	Methylene Chloride	ND	25	29.2	117	25	28.4	114	3	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	125	111	89	125	113	90	2	66-122/16
1634-04-4	Methyl Tert Butyl Ether	ND	25	20.4	82	25	20.4	82	0	72-117/14
91-20-3	Naphthalene	ND	25	22.3	89	25	22.3	89	0	63-132/25
103-65-1	n-Propylbenzene	ND	25	25.4	102	25	24.8	99	2	82-133/15
100-42-5	Styrene	ND	25	21.2	85	25	20.5	82	3	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND	25	23.6	94	25	23.5	94	0	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	22.0	88	25	21.7	87	1	72-120/14
127-18-4	Tetrachloroethylene	0.57	J	25	103	25	25.8	101	2	76-135/16
108-88-3	Toluene	ND	25	25.8	103	25	25.8	103	0	80-120/14
87-61-6	1,2,3-Trichlorobenzene	ND	25	21.4	86	25	21.3	85	0	68-131/25
120-82-1	1,2,4-Trichlorobenzene	ND	25	21.1	84	25	20.8	83	1	73-129/20
71-55-6	1,1,1-Trichloroethane	ND	25	25.3	101	25	24.6	98	3	75-130/16
79-00-5	1,1,2-Trichloroethane	ND	25	22.6	90	25	22.7	91	0	76-119/14
79-01-6	Trichloroethylene	ND	25	25.3	101	25	24.3	97	4	81-126/15
75-69-4	Trichlorofluoromethane	ND	25	29.3	117	25	30.1	120	3	71-156/21
96-18-4	1,2,3-Trichloropropane	ND	25	24.6	98	25	23.9	96	3	77-120/16
95-63-6	1,2,4-Trimethylbenzene	ND	25	24.0	96	25	23.0	92	4	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND	25	24.1	96	25	23.3	93	3	79-120/19
108-05-4	Vinyl Acetate	ND	125	125	100	125	127	102	2	43-154/14
75-01-4	Vinyl Chloride	ND	25	29.2	117	25	30.7	123	5	69-159/18
	m,p-Xylene	ND	50	49.6	99	50	48.3	97	3	79-126/15
95-47-6	o-Xylene	ND	25	23.7	95	25	24.0	96	1	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA28653

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA28521-20MS	N0089532.D	1	10/28/15	RB	n/a	n/a	VN4020
FA28521-20MSD	N0089533.D	1	10/28/15	RB	n/a	n/a	VN4020
FA28521-20	N0089516.D	1	10/27/15	RB	n/a	n/a	VN4020

The QC reported here applies to the following samples:

Method: SW846 8260B

FA28653-1, FA28653-2, FA28653-3, FA28653-4, FA28653-6, FA28653-7, FA28653-8, FA28653-9, FA28653-10, FA28653-11

CAS No.	Surrogate Recoveries	MS	MSD	FA28521-20	Limits
1868-53-7	Dibromofluoromethane	103%	102%	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	106%	104%	110%	79-125%
2037-26-5	Toluene-D8	95%	96%	99%	85-112%
460-00-4	4-Bromofluorobenzene	92%	93%	97%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA28653

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA28628-1MS	N0089558.D	1	10/28/15	RB	n/a	n/a	VN4021
FA28628-1MSD	N0089559.D	1	10/28/15	RB	n/a	n/a	VN4021
FA28628-1	N0089546.D	1	10/28/15	RB	n/a	n/a	VN4021

The QC reported here applies to the following samples:

Method: SW846 8260B

FA28653-5, FA28653-12, FA28653-13, FA28653-14, FA28653-15, FA28653-16, FA28653-17

CAS No.	Compound	FA28628-1 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	125	119	95	125	118	94	1	50-147/21
107-02-8	Acrolein	ND	125	164	131	125	160	128	2	31-154/29
107-13-1	Acrylonitrile	ND	125	118	94	125	115	92	3	58-126/16
71-43-2	Benzene	ND	25	23.4	94	25	21.0	84	11	81-122/14
108-86-1	Bromobenzene	ND	25	21.6	86	25	20.8	83	4	80-121/14
74-97-5	Bromochloromethane	ND	25	21.7	87	25	19.9	80	9	76-123/14
75-27-4	Bromodichloromethane	ND	25	23.6	94	25	21.4	86	10	79-123/19
75-25-2	Bromoform	ND	25	20.9	84	25	20.4	82	2	66-123/21
78-93-3	2-Butanone (MEK)	ND	125	117	94	125	116	93	1	56-143/18
104-51-8	n-Butylbenzene	ND	25	22.9	92	25	21.3	85	7	79-126/16
135-98-8	sec-Butylbenzene	ND	25	24.1	96	25	22.4	90	7	83-133/16
98-06-6	tert-Butylbenzene	ND	25	22.4	90	25	21.1	84	6	80-133/16
75-15-0	Carbon Disulfide	ND	25	18.4	74	25	16.0	64*	14	66-148/23
56-23-5	Carbon Tetrachloride	ND	25	25.6	102	25	22.2	89	14	76-136/23
108-90-7	Chlorobenzene	ND	25	22.6	90	25	20.7	83	9	82-124/14
75-00-3	Chloroethane	ND	25	29.6	118	25	26.7	107	10	62-144/20
110-75-8	2-Chloroethyl Vinyl Ether	ND	125	ND	0*	125	ND	0*	nc	56-122/23
67-66-3	Chloroform	ND	25	23.9	96	25	21.6	86	10	80-124/15
95-49-8	o-Chlorotoluene	ND	25	22.7	91	25	21.6	86	5	81-127/15
106-43-4	p-Chlorotoluene	ND	25	22.2	89	25	20.4	82*	8	83-130/15
124-48-1	Dibromochloromethane	ND	25	21.8	87	25	20.7	83	5	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	ND	25	20.7	83	25	21.1	84	2	64-123/18
106-93-4	1,2-Dibromoethane	ND	25	21.9	88	25	20.9	84	5	75-120/13
75-71-8	Dichlorodifluoromethane	ND	25	25.1	100	25	22.5	90	11	42-167/19
95-50-1	1,2-Dichlorobenzene	ND	25	22.1	88	25	20.6	82	7	82-124/14
541-73-1	1,3-Dichlorobenzene	ND	25	22.9	92	25	21.5	86	6	84-125/14
106-46-7	1,4-Dichlorobenzene	ND	25	22.6	90	25	20.9	84	8	78-120/15
75-34-3	1,1-Dichloroethane	ND	25	24.1	96	25	21.7	87	10	81-122/15
107-06-2	1,2-Dichloroethane	ND	25	23.7	95	25	21.8	87	8	75-125/14
75-35-4	1,1-Dichloroethylene	ND	25	27.1	108	25	24.4	98	10	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND	25	21.4	86	25	19.9	80	7	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND	25	25.0	100	25	22.4	90	11	76-127/17
78-87-5	1,2-Dichloropropane	ND	25	21.9	88	25	20.3	81	8	76-124/14
142-28-9	1,3-Dichloropropane	ND	25	20.8	83	25	20.4	82	2	80-118/13
594-20-7	2,2-Dichloropropane	ND	25	22.5	90	25	20.4	82	10	74-139/17
563-58-6	1,1-Dichloropropene	ND	25	24.7	99	25	22.1	88	11	79-131/16

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA28653

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA28628-1MS	N0089558.D	1	10/28/15	RB	n/a	n/a	VN4021
FA28628-1MSD	N0089559.D	1	10/28/15	RB	n/a	n/a	VN4021
FA28628-1	N0089546.D	1	10/28/15	RB	n/a	n/a	VN4021

The QC reported here applies to the following samples:

Method: SW846 8260B

FA28653-5, FA28653-12, FA28653-13, FA28653-14, FA28653-15, FA28653-16, FA28653-17

CAS No.	Compound	FA28628-1 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	ND	25	19.5	78	25	18.1	72*	7	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND	25	24.1	96	25	23.1	92	4	80-120/22
100-41-4	Ethylbenzene	ND	25	23.2	93	25	20.9	84	10	81-121/14
87-68-3	Hexachlorobutadiene	ND	25	20.9	84	25	19.5	78	7	75-142/19
591-78-6	2-Hexanone	ND	125	105	84	125	108	86	3	61-129/18
98-82-8	Isopropylbenzene	ND	25	23.3	93	25	21.4	86	9	83-132/15
99-87-6	p-Isopropyltoluene	ND	25	23.0	92	25	21.4	86	7	79-130/16
74-83-9	Methyl Bromide	ND	25	28.9	116	25	27.4	110	5	59-143/19
74-87-3	Methyl Chloride	ND	25	24.1	96	25	21.2	85	13	50-159/19
74-95-3	Methylene Bromide	ND	25	23.0	92	25	21.7	87	6	78-119/14
75-09-2	Methylene Chloride	ND	25	27.8	111	25	25.3	101	9	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	125	118	94	125	117	94	1	66-122/16
1634-04-4	Methyl Tert Butyl Ether	ND	25	19.5	78	25	19.5	78	0	72-117/14
91-20-3	Naphthalene	ND	25	21.2	85	25	22.0	88	4	63-132/25
103-65-1	n-Propylbenzene	ND	25	22.9	92	25	21.2	85	8	82-133/15
100-42-5	Styrene	ND	25	22.1	88	25	20.6	82	7	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND	25	22.2	89	25	20.7	83	7	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	21.4	86	25	21.6	86	1	72-120/14
127-18-4	Tetrachloroethylene	ND	25	24.6	98	25	22.0	88	11	76-135/16
108-88-3	Toluene	ND	25	24.6	98	25	22.2	89	10	80-120/14
87-61-6	1,2,3-Trichlorobenzene	ND	25	21.3	85	25	20.2	81	5	68-131/25
120-82-1	1,2,4-Trichlorobenzene	ND	25	19.7	79	25	19.6	78	1	73-129/20
71-55-6	1,1,1-Trichloroethane	ND	25	23.8	95	25	21.0	84	13	75-130/16
79-00-5	1,1,2-Trichloroethane	ND	25	22.6	90	25	21.6	86	5	76-119/14
79-01-6	Trichloroethylene	ND	25	24.0	96	25	21.6	86	11	81-126/15
75-69-4	Trichlorofluoromethane	ND	25	28.0	112	25	25.5	102	9	71-156/21
96-18-4	1,2,3-Trichloropropane	ND	25	23.9	96	25	23.2	93	3	77-120/16
95-63-6	1,2,4-Trimethylbenzene	ND	25	22.8	91	25	21.3	85	7	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND	25	22.4	90	25	21.0	84	6	79-120/19
108-05-4	Vinyl Acetate	ND	125	126	101	125	121	97	4	43-154/14
75-01-4	Vinyl Chloride	ND	25	27.2	109	25	25.0	100	8	69-159/18
	m,p-Xylene	ND	50	46.7	93	50	42.9	86	8	79-126/15
95-47-6	o-Xylene	ND	25	21.9	88	25	20.1	80	9	80-127/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: FA28653

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA28628-1MS	N0089558.D	1	10/28/15	RB	n/a	n/a	VN4021
FA28628-1MSD	N0089559.D	1	10/28/15	RB	n/a	n/a	VN4021
FA28628-1	N0089546.D	1	10/28/15	RB	n/a	n/a	VN4021

The QC reported here applies to the following samples:

Method: SW846 8260B

FA28653-5, FA28653-12, FA28653-13, FA28653-14, FA28653-15, FA28653-16, FA28653-17

CAS No.	Surrogate Recoveries	MS	MSD	FA28628-1	Limits
1868-53-7	Dibromofluoromethane	104%	102%	107%	83-118%
17060-07-0	1,2-Dichloroethane-D4	108%	103%	111%	79-125%
2037-26-5	Toluene-D8	96%	94%	100%	85-112%
460-00-4	4-Bromofluorobenzene	89%	92%	100%	83-118%

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA28653
Account: GFLEMLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP29573
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 10/26/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14		
Antimony	6.0	1	1		
Arsenic	10	1.3	1.3	-0.30	<10
Barium	200	1	1		
Beryllium	4.0	.2	.2		
Cadmium	5.0	.2	.2		
Calcium	1000	50	50		
Chromium	10	1	1		
Cobalt	50	.2	.2		
Copper	25	1	1		
Iron	300	17	17		
Lead	5.0	1	1.1		
Magnesium	5000	35	35		
Manganese	15	.5	1		
Molybdenum	50	.3	.3		
Nickel	40	.4	.4		
Potassium	10000	200	200		
Selenium	10	2.4	2.9		
Silver	10	.7	.7		
Sodium	10000	500	500		
Strontium	10	.5	.5		
Thallium	10	1.1	1.4		
Tin	50	.9	1		
Titanium	10	.5	1		
Vanadium	50	.5	.6		
Zinc	20	3	4.4		

Associated samples MP29573: FA28653-1, FA28653-2, FA28653-3, FA28653-4, FA28653-5, FA28653-6, FA28653-7, FA28653-8, FA28653-9, FA28653-10

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA28653
 Account: GFLEMLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP29573
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 10/26/15 10/26/15

Metal	FA28633-1 Original	DUP	RPD	QC Limits	FA28633-1 Original MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum								
Antimony								
Arsenic	3.8	3.0	23.5 (a)	0-20	3.8	2060	2000	102.8
Barium	anr							
Beryllium								
Cadmium	anr							
Calcium								
Chromium	anr							
Cobalt								
Copper								
Iron								
Lead	anr							
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium	anr							
Silver								
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP29573: FA28653-1, FA28653-2, FA28653-3, FA28653-4, FA28653-5, FA28653-6, FA28653-7, FA28653-8, FA28653-9, FA28653-10

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA28653
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP29573
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 10/26/15

Metal	FA28633-1 Original MSD	Spike lot MPFLICP2 % Rec	MSD RPD	QC Limit
Aluminum				
Antimony				
Arsenic	3.8	2050	2000	102.3
Barium	anr			
Beryllium				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron				
Lead	anr			
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	anr			
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP29573: FA28653-1, FA28653-2, FA28653-3, FA28653-4, FA28653-5, FA28653-6, FA28653-7, FA28653-8, FA28653-9, FA28653-10

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA28653
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP29573
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 10/26/15

Metal	BSP Result	Spike lot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	2070	2000	103.5	80-120
Barium	anr			
Beryllium				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron				
Lead	anr			
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	anr			
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP29573: FA28653-1, FA28653-2, FA28653-3, FA28653-4, FA28653-5, FA28653-6, FA28653-7, FA28653-8, FA28653-9, FA28653-10

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA28653
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP29573
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 10/26/15

Metal	FA28633-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	3.80	0.00	100.0(a)	0-10
Barium	anr			
Beryllium				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron				
Lead	anr			
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	anr			
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP29573: FA28653-1, FA28653-2, FA28653-3, FA28653-4, FA28653-5, FA28653-6, FA28653-7, FA28653-8, FA28653-9, FA28653-10

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: FA28653
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP29573
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 10/26/15

Metal	Sample ml	Final ml	FA28633-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic	9.8	10	3.8	3.724	109.7	0.2	5	100	106.0	80-120
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP29573: FA28653-1, FA28653-2, FA28653-3, FA28653-4, FA28653-5, FA28653-6, FA28653-7, FA28653-8, FA28653-9, FA28653-10

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested

November 13, 2015

Ms. Andrea Colby
Accutest Laboratories
4405 Vineland Road
Orlando, Florida 32811

Re: Florida Dioxins & Furans
Work Order: 8391
SDG: FA28651X

Dear Ms. Colby:

Cape Fear Analytical LLC (CFA) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on October 27, 2015. This original data report has been prepared and reviewed in accordance with CFA's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at 910-795-0421.

Sincerely,



Cynde Larkins
Project Manager

Enclosures

CHAIN OF CUSTODY

44405 Vineland Rd, Suite C-15, Orlando, FL 32811
TEL: 407-425-6700 FAX: 407-425-0707
www.acctest.com

www.accutest.com

Page 1 of 1

CEA NO#8391

[illegible]

SAMPLE RECEIPT CHECKLIST
Cape Fear Analytical

Client: <u>Accu</u>	Work Order: <u>8391</u>
Shipping Company: <u>FedEx</u>	Date/Time Received: <u>27OCT15</u> <u>1030</u>

Suspected Hazard Information	Yes	NA	No
Shipped as DOT Hazardous?			☒
Samples identified as Foreign Soil?			☒

DOE Site Sample Packages	Yes	NA	No*
Screened <0.5 mR/hr?		☒	
Samples < 2x background?		☒	

* Notify RSO of any responses in this column immediately.

Air Sample Receipt Specifics	Yes	NA	No
Air sample in shipment?			☒

Air Witness: _____

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	☒			Circle Applicable: seals broken damaged container leaking container other(describe)
2 Chain of Custody documents included with shipment?	☒			
3 Samples requiring cold preservation within 0-6°C?	☒			Preservation Method: ice bags blue ice dry ice none other(describe) <u>2.2° - 1.7° = 0.5°C</u>
4 Aqueous samples found to have visible solids?		☒		Sample IDs, containers affected:
5 Samples requiring chemical preservation at proper pH?		☒		Sample IDs, containers affected and pH observed:
6 Samples requiring preservation have no residual chlorine?		☒		If preservative added, Lot#: Sample IDs, containers affected:
7 Samples received within holding time?	☒			If preservative added, Lot#: Sample IDs, tests affected:
8 Sample IDs on COC match IDs on containers?	☒			Sample IDs, containers affected:
9 Date & time of COC match date & time on containers?	☒			Sample IDs, containers affected:
10 Number of containers received match number indicated on COC?	☒			Sample IDs, containers affected: <u>1 - 4oz amber soil jar</u>
11 COC form is properly signed in relinquished/received sections?	☒			

Comments:

Checklist performed by: Initials: CL

Date: 27OCT15

High Resolution Dioxins and Furans Analysis

Case Narrative

**HDOX Case Narrative
Accutest Laboratories (ACCU)
SDG FA28651X
Work Order 8391**

Method/Analysis Information

Product: Dioxins/Furans by EPA Method 1613B in Solids
Analytical Method: EPA Method 1613B
Extraction Method: SW846 3540C
Analytical Batch Number: 30469
Clean Up Batch Number: 30468
Extraction Batch Number: 30467

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA Method 1613B:

Sample ID	Client ID
8391001	FA28651X-9X
12014737	Method Blank (MB)
12014738	Laboratory Control Sample (LCS)
12014739	Laboratory Control Sample Duplicate (LCSD)
12014740	8391001(FA28651X-9X) Matrix Spike (MS)
12014741	8391001(FA28651X-9X) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by Cape Fear Analytical LLC (CFA) as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with CF-OA-E-002 REV# 14.

Raw data reports are processed and reviewed by the analyst using the TargetLynx software package.

Calibration Information

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

Continuing Calibration Verification (CCV) Requirements

All associated calibration verification standard(s) (CCV) met the acceptance criteria.

Quality Control (QC) Information**Certification Statement**

The test results presented in this document are certified to meet all requirements of the 2009 TNI Standard.

Method Blank (MB) Statement

The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Laboratory Control Sample Duplicate (LCSD) Recovery

The LCSD spike recoveries met the acceptance limits.

LCS/LCSD Relative Percent Difference (RPD) Statement

The RPD(s) between the LCS and LCSD met the acceptance limits.

QC Sample Designation

Sample 8391001 (FA28651X-9X) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike/Duplicate (MS/MSD) Recovery Statement

One MS recovery for this SDG was not within the acceptance limits. The failure confirms in the matrix spike duplicate and is attributed to matrix interference. 12014740 (FA28651X-9X) and 12014741 (FA28651X-9X).

MS/MSD Relative Percent Difference (RPD) Statement

The RPD(s) between the MS and MSD met the acceptance limits.

Technical Information**Holding Time Specifications**

CFA assigns holding times based on the associated methodology, which assigns the date and time from sample collection. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Nonconformance (NCR) Documentation

The following NCR was generated for this SDG: 645552 12014740 (FA28651X-9X) and 12014741 (FA28651X-9X).

Manual Integrations

Certain standards and QC samples required manual integrations to correctly position the baseline as set in the calibration standard injections. Where manual integrations were performed, copies of all manual integration peak profiles are included in the raw data section of this fraction. Manual integrations were required for data files in this SDG.

System Configuration

This analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
HRP763_1	Primary Dioxin Analysis	Dioxin Analysis	DB-5MS	60m x 0.25mm, 0.25um

Electronic Packaging Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted: Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Sample Data Summary

Cape Fear Analytical, LLC

3306 Kitty Hawk Road Suite 120, Wilmington, NC 28405 - (910) 795-0421 - www.capefearanalytical.com

Certificate of Analysis Report for

ACCU001 Accutest Laboratories

Client SDG: FA28651X CFA Work Order: 8391

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a surrogate compound
- K Estimated Maximum Possible Concentration
- U Analyte was analyzed for, but not detected above the specified detection limit.

Review/Validation

Cape Fear Analytical requires all analytical data to be verified by a qualified data reviewer.

The following data validator verified the information presented in this case narrative:

Signature:



Name: Heather Patterson

Date: 13 NOV 2015

Title: Group Leader

**Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary**

Page 1 of 2

SDG Number: FA28651X
Lab Sample ID: 8391001
Client Sample: 1668A/1613B Soil
Client ID: FA28651X-9X
Batch ID: 30469
Run Date: 11/11/2015 01:02
Data File: b10nov15a_2-4
Prep Batch: 30467
Prep Date: 09-NOV-15

Client: ACCU001
Date Collected: 10/21/2015 09:45
Date Received: 10/27/2015 10:30

Method: EPA Method 1613B
Analyst: CLP

Prep Method: SW846 3540C
Prep Aliquot: 11.87 g

Project: ACCU00414
Matrix: SOIL
%Moisture: 14.4

Prep Basis: Dry Weight

Instrument: HRP763
Dilution: 1

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	.984	pg/g	0.984
40321-76-4	1,2,3,7,8-PeCDD	U	4.92	pg/g	4.92
39227-28-6	1,2,3,4,7,8-HxCDD	U	4.92	pg/g	4.92
57653-85-7	1,2,3,6,7,8-HxCDD	U	4.92	pg/g	4.92
19408-74-3	1,2,3,7,8,9-HxCDD	U	4.92	pg/g	4.92
35822-46-9	1,2,3,4,6,7,8-HpCDD		21.5	pg/g	4.92
3268-87-9	1,2,3,4,6,7,8,9-OCDD		229	pg/g	9.84
51207-31-9	2,3,7,8-TCDF	U	.984	pg/g	0.984
57117-41-6	1,2,3,7,8-PeCDF	U	4.92	pg/g	4.92
57117-31-4	2,3,4,7,8-PeCDF	U	4.92	pg/g	4.92
70648-26-9	1,2,3,4,7,8-HxCDF	U	4.92	pg/g	4.92
57117-44-9	1,2,3,6,7,8-HxCDF	U	4.92	pg/g	4.92
60851-34-5	2,3,4,6,7,8-HxCDF	U	4.92	pg/g	4.92
72918-21-9	1,2,3,7,8,9-HxCDF	U	4.92	pg/g	4.92
67562-39-4	1,2,3,4,6,7,8-HpCDF	U	4.92	pg/g	4.92
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	4.92	pg/g	4.92
39001-02-0	1,2,3,4,6,7,8,9-OCDF	U	9.84	pg/g	9.84
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	U	.984	pg/g	0.984
36088-22-9	Total Pentachlorodibenzo-p-dioxin	U	4.92	pg/g	4.92
34465-46-8	Total Hexachlorodibenzo-p-dioxin	U	4.92	pg/g	4.92
37871-00-4	Total Heptachlorodibenzo-p-dioxin		50.3	pg/g	4.92
30402-14-3	Total Tetrachlorodibenzofuran	U	.984	pg/g	0.984
30402-15-4	Total Pentachlorodibenzofuran	U	4.92	pg/g	4.92
55684-94-1	Total Hexachlorodibenzofuran	U	4.92	pg/g	4.92
38998-75-3	Total Heptachlorodibenzofuran		6.42	pg/g	4.92
3333-30-0	TEQ WHO2005 ND=0		0.284	pg/g	
3333-30-1	TEQ WHO2005 ND=0.5		5.87	pg/g	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		167	197	pg/g	85.1	(25%-164%)
13C-1,2,3,7,8-PeCDD		166	197	pg/g	84.3	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		166	197	pg/g	84.2	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		165	197	pg/g	83.7	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		182	197	pg/g	92.3	(23%-140%)
13C-OCDD		353	393	pg/g	89.8	(17%-157%)
13C-2,3,7,8-TCDF		160	197	pg/g	81.1	(24%-169%)
13C-1,2,3,7,8-PeCDF		167	197	pg/g	84.8	(24%-185%)
13C-2,3,4,7,8-PeCDF		167	197	pg/g	85.1	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		166	197	pg/g	84.4	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		160	197	pg/g	81.3	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		171	197	pg/g	87.2	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		171	197	pg/g	86.8	(29%-147%)

**Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary**

Page 2 of 2

SDG Number:	FA28651X	Client:	ACCU001	Project:	ACCU00414
Lab Sample ID:	8391001	Date Collected:	10/21/2015 09:45	Matrix:	SOIL
Client Sample:	1668A/1613B Soil	Date Received:	10/27/2015 10:30	%Moisture:	14.4
Client ID:	FA28651X-9X			Prep Basis:	Dry Weight
Batch ID:	30469	Method:	EPA Method 1613B		
Run Date:	11/11/2015 01:02	Analyst:	CLP	Instrument:	HRP763
Data File:	b10nov15a_2-4			Dilution:	1
Prep Batch:	30467	Prep Method:	SW846 3540C		
Prep Date:	09-NOV-15	Prep Aliquot:	11.87 g		

CAS No.	Parmname	Qual	Result	Units	PQL		
Surrogate/Tracer recovery		Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF			171	197	pg/g	86.7	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF			172	197	pg/g	87.6	(26%-138%)
37Cl-2,3,7,8-TCDD			17.4	19.7	pg/g	88.6	(35%-197%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Quality Control Summary

Hi-Res Dioxins/Furans **Surrogate Recovery Report**

Page 1 of 3

SDG Number: FA28651X

Matrix Type: SOLID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
12014738	LCS for batch 30467	13C-2,3,7,8-TCDD		76.5	(20%-175%)
		13C-1,2,3,7,8-PeCDD		73.7	(21%-227%)
		13C-1,2,3,4,7,8-HxCDD		74.0	(21%-193%)
		13C-1,2,3,6,7,8-HxCDD		72.9	(25%-163%)
		13C-1,2,3,4,6,7,8-HpCDD		77.9	(22%-166%)
		13C-OCDD		72.6	(13%-199%)
		13C-2,3,7,8-TCDF		75.2	(22%-152%)
		13C-1,2,3,7,8-PeCDF		75.0	(21%-192%)
		13C-2,3,4,7,8-PeCDF		74.1	(13%-328%)
		13C-1,2,3,4,7,8-HxCDF		73.6	(19%-202%)
		13C-1,2,3,6,7,8-HxCDF		71.9	(21%-159%)
		13C-2,3,4,6,7,8-HxCDF		73.2	(22%-176%)
		13C-1,2,3,7,8,9-HxCDF		75.2	(17%-205%)
		13C-1,2,3,4,6,7,8-HpCDF		74.3	(21%-158%)
		13C-1,2,3,4,7,8,9-HpCDF		74.0	(20%-186%)
		37Cl-2,3,7,8-TCDD		90.6	(31%-191%)
12014739	LCSD for batch 30467	13C-2,3,7,8-TCDD		66.5	(20%-175%)
		13C-1,2,3,7,8-PeCDD		75.5	(21%-227%)
		13C-1,2,3,4,7,8-HxCDD		74.0	(21%-193%)
		13C-1,2,3,6,7,8-HxCDD		73.3	(25%-163%)
		13C-1,2,3,4,6,7,8-HpCDD		77.8	(22%-166%)
		13C-OCDD		75.2	(13%-199%)
		13C-2,3,7,8-TCDF		65.6	(22%-152%)
		13C-1,2,3,7,8-PeCDF		71.0	(21%-192%)
		13C-2,3,4,7,8-PeCDF		76.6	(13%-328%)
		13C-1,2,3,4,7,8-HxCDF		75.4	(19%-202%)
		13C-1,2,3,6,7,8-HxCDF		72.7	(21%-159%)
		13C-2,3,4,6,7,8-HxCDF		77.3	(22%-176%)
		13C-1,2,3,7,8,9-HxCDF		79.4	(17%-205%)
		13C-1,2,3,4,6,7,8-HpCDF		76.5	(21%-158%)
		13C-1,2,3,4,7,8,9-HpCDF		76.5	(20%-186%)
		37Cl-2,3,7,8-TCDD		71.3	(31%-191%)
12014737	MB for batch 30467	13C-2,3,7,8-TCDD		85.5	(25%-164%)
		13C-1,2,3,7,8-PeCDD		84.4	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		85.6	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		81.0	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		84.9	(23%-140%)
		13C-OCDD		77.5	(17%-157%)
		13C-2,3,7,8-TCDF		83.9	(24%-169%)
		13C-1,2,3,7,8-PeCDF		82.2	(24%-185%)
		13C-2,3,4,7,8-PeCDF		82.9	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		85.0	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		76.4	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		84.9	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		85.8	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		79.8	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		81.8	(26%-138%)
		37Cl-2,3,7,8-TCDD		89.1	(35%-197%)
8391001	FA28651X-9X	13C-2,3,7,8-TCDD		85.1	(25%-164%)

Hi-Res Dioxins/Furans **Surrogate Recovery Report**

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SDG Number: FA28651X

Matrix Type: SOLID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
8391001	FA28651X-9X	13C-1,2,3,7,8-PeCDD		84.3	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		84.2	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		83.7	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		92.3	(23%-140%)
		13C-OCDD		89.8	(17%-157%)
		13C-2,3,7,8-TCDF		81.1	(24%-169%)
		13C-1,2,3,7,8-PeCDF		84.8	(24%-185%)
		13C-2,3,4,7,8-PeCDF		85.1	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		84.4	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		81.3	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		87.2	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		86.8	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		86.7	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		87.6	(26%-138%)
		37Cl-2,3,7,8-TCDD		88.6	(35%-197%)
12014740	FA28651X-9X(8391001MS)	13C-2,3,7,8-TCDD		64.4	(25%-164%)
		13C-1,2,3,7,8-PeCDD		66.3	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		64.8	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		62.3	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		67.4	(23%-140%)
		13C-OCDD		65.6	(17%-157%)
		13C-2,3,7,8-TCDF		61.3	(24%-169%)
		13C-1,2,3,7,8-PeCDF		66.1	(24%-185%)
		13C-2,3,4,7,8-PeCDF		67.1	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		63.9	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		60.3	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		62.6	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		64.6	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		65.0	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		64.0	(26%-138%)
		37Cl-2,3,7,8-TCDD		86.5	(35%-197%)
12014741	FA28651X-9X(8391001MSD)	13C-2,3,7,8-TCDD		85.7	(25%-164%)
		13C-1,2,3,7,8-PeCDD		89.1	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		80.9	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		79.9	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		83.1	(23%-140%)
		13C-OCDD		82.2	(17%-157%)
		13C-2,3,7,8-TCDF		81.8	(24%-169%)
		13C-1,2,3,7,8-PeCDF		87.8	(24%-185%)
		13C-2,3,4,7,8-PeCDF		86.8	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		79.2	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		75.4	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		80.2	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		84.2	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		79.0	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		83.0	(26%-138%)
		37Cl-2,3,7,8-TCDD		89.5	(35%-197%)

* Recovery outside Acceptance Limits

Hi-Res Dioxins/Furans
Surrogate Recovery Report

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SDG Number: FA28651X

Matrix Type: SOLID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
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* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

Hi-Res Dioxins/Furans
Quality Control Summary
Spike Recovery Report

Page 1 of 2

SDG Number: FA28651X
Client ID: LCS for batch 30467
Lab Sample ID: 12014738
Instrument: HRP763
Analyst: CLP

Sample Type: Laboratory Control Sample
Matrix: SOIL

Analysis Date: 11/10/2015 22:36
Prep Batch ID: 30467
Batch ID: 30469

Dilution: 1

CAS No.	Parmname	Amount Added pg/g	Spike Conc. pg/g	Recovery %	Acceptance Limits
1746-01-6	LCS 2,3,7,8-TCDD	20.0	21.4	107	67-158
40321-76-4	LCS 1,2,3,7,8-PeCDD	100	108	108	70-142
39227-28-6	LCS 1,2,3,4,7,8-HxCDD	100	107	107	70-164
57653-85-7	LCS 1,2,3,6,7,8-HxCDD	100	107	107	76-134
19408-74-3	LCS 1,2,3,7,8,9-HxCDD	100	107	107	64-162
35822-46-9	LCS 1,2,3,4,6,7,8-HpCDD	100	111	111	70-140
3268-87-9	LCS 1,2,3,4,6,7,8,9-OCDD	200	218	109	78-144
51207-31-9	LCS 2,3,7,8-TCDF	20.0	21.0	105	75-158
57117-41-6	LCS 1,2,3,7,8-PeCDF	100	107	107	80-134
57117-31-4	LCS 2,3,4,7,8-PeCDF	100	107	107	68-160
70648-26-9	LCS 1,2,3,4,7,8-HxCDF	100	107	107	72-134
57117-44-9	LCS 1,2,3,6,7,8-HxCDF	100	108	108	84-130
60851-34-5	LCS 2,3,4,6,7,8-HxCDF	100	111	111	70-156
72918-21-9	LCS 1,2,3,7,8,9-HxCDF	100	115	115	78-130
67562-39-4	LCS 1,2,3,4,6,7,8-HpCDF	100	106	106	82-122
55673-89-7	LCS 1,2,3,4,7,8,9-HpCDF	100	113	113	78-138
39001-02-0	LCS 1,2,3,4,6,7,8,9-OCDF	200	224	112	63-170

Hi-Res Dioxins/Furans
Quality Control Summary
Spike Recovery Report

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SDG Number: FA28651X
Client ID: LCSD for batch 30467
Lab Sample ID: 12014739
Instrument: HRP763
Analyst: CLP

Sample Type: Laboratory Control Sample Duplicate
Matrix: SOIL

Analysis Date: 11/10/2015 23:24 **Dilution:** 1
Prep Batch ID: 30467
Batch ID: 30469

CAS No.	Parmname	Amount Added pg/g	Spike Conc. pg/g	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
1746-01-6	LCSD 2,3,7,8-TCDD	20.0	20.6	103	67-158	3.99	0-20
40321-76-4	LCSD 1,2,3,7,8-PeCDD	100	101	101	70-142	6.36	0-20
39227-28-6	LCSD 1,2,3,4,7,8-HxCDD	100	103	103	70-164	4.38	0-20
57653-85-7	LCSD 1,2,3,6,7,8-HxCDD	100	108	108	76-134	0.989	0-20
19408-74-3	LCSD 1,2,3,7,8,9-HxCDD	100	112	112	64-162	4.50	0-20
35822-46-9	LCSD 1,2,3,4,6,7,8-HpCDD	100	103	103	70-140	6.80	0-20
3268-87-9	LCSD 1,2,3,4,6,7,8,9-OCDD	200	200	99.9	78-144	8.78	0-20
51207-31-9	LCSD 2,3,7,8-TCDF	20.0	19.9	99.7	75-158	5.06	0-20
57117-41-6	LCSD 1,2,3,7,8-PeCDF	100	105	105	80-134	2.51	0-20
57117-31-4	LCSD 2,3,4,7,8-PeCDF	100	99.8	99.8	68-160	7.27	0-20
70648-26-9	LCSD 1,2,3,4,7,8-HxCDF	100	102	102	72-134	4.28	0-20
57117-44-9	LCSD 1,2,3,6,7,8-HxCDF	100	106	106	84-130	2.06	0-20
60851-34-5	LCSD 2,3,4,6,7,8-HxCDF	100	104	104	70-156	6.84	0-20
72918-21-9	LCSD 1,2,3,7,8,9-HxCDF	100	103	103	78-130	10.9	0-20
67562-39-4	LCSD 1,2,3,4,6,7,8-HpCDF	100	104	104	82-122	2.46	0-20
55673-89-7	LCSD 1,2,3,4,7,8,9-HpCDF	100	105	105	78-138	6.86	0-20
39001-02-0	LCSD 1,2,3,4,6,7,8,9-OCDF	200	208	104	63-170	7.10	0-20

Hi-Res Dioxins/Furans
Quality Control Summary
Spike Recovery Report

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SDG Number: FA28651X
Client ID: FA28651X-9X(8391001MS)
Lab Sample ID: 12014740
Instrument: HRP763
Analyst: CLP

Sample Type: Matrix Spike
Matrix: SOIL
%Moisture: 14.4
Analysis Date: 11/11/2015 01:51
Prep Batch ID: 30467
Batch ID: 30469
Dilution: 1

CAS No.	Parmname	Amount Added pg/g		Spike Conc. pg/g	Recovery %	Acceptance Limits
1746-01-6	MS 2,3,7,8-TCDD	19.6	U	19.8	101	70-130
40321-76-4	MS 1,2,3,7,8-PeCDD	97.8	U	102	104	70-130
39227-28-6	MS 1,2,3,4,7,8-HxCDD	97.8	U	99.9	102	70-130
57653-85-7	MS 1,2,3,6,7,8-HxCDD	97.8	U	101	103	70-130
19408-74-3	MS 1,2,3,7,8,9-HxCDD	97.8	U	102	104	70-130
35822-46-9	MS 1,2,3,4,6,7,8-HpCDD	97.8		137	118	70-130
3268-87-9	MS 1,2,3,4,6,7,8,9-OCDD	196		594	187 *	70-130
51207-31-9	MS 2,3,7,8-TCDF	19.6	U	20.3	104	70-130
57117-41-6	MS 1,2,3,7,8-PeCDF	97.8	U	104	106	70-130
57117-31-4	MS 2,3,4,7,8-PeCDF	97.8	U	101	103	70-130
70648-26-9	MS 1,2,3,4,7,8-HxCDF	97.8	U	100	103	70-130
57117-44-9	MS 1,2,3,6,7,8-HxCDF	97.8	U	102	104	70-130
60851-34-5	MS 2,3,4,6,7,8-HxCDF	97.8	U	106	108	70-130
72918-21-9	MS 1,2,3,7,8,9-HxCDF	97.8	U	103	106	70-130
67562-39-4	MS 1,2,3,4,6,7,8-HpCDF	97.8	U	107	109	70-130
55673-89-7	MS 1,2,3,4,7,8,9-HpCDF	97.8	U	103	106	70-130
39001-02-0	MS 1,2,3,4,6,7,8,9-OCDF	196	U	215	110	70-130

Hi-Res Dioxins/Furans
Quality Control Summary
Spike Recovery Report

Page 2 of 2

SDG Number: FA28651X
Client ID: FA28651X-9X(8391001MSD)
Lab Sample ID: 12014741
Instrument: HRP763
Analyst: CLP

Sample Type: Matrix Spike Duplicate
Matrix: SOIL
%Moisture: 14.4
Analysis Date: 11/11/2015 02:40
Dilution: 1
Prep Batch ID: 30467
Batch ID: 30469

CAS No.	Parmname	Amount Added pg/g		Spike Conc. pg/g	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
1746-01-6	MSD	2,3,7,8-TCDD	19.5 U	20.5	105	70-130	3.26	0-20
40321-76-4	MSD	1,2,3,7,8-PeCDD	97.7 U	99.7	102	70-130	2.27	0-20
39227-28-6	MSD	1,2,3,4,7,8-HxCDD	97.7 U	101	104	70-130	1.47	0-20
57653-85-7	MSD	1,2,3,6,7,8-HxCDD	97.7 U	105	107	70-130	3.75	0-20
19408-74-3	MSD	1,2,3,7,8,9-HxCDD	97.7 U	111	114	70-130	9.23	0-20
35822-46-9	MSD	1,2,3,4,6,7,8-HpCDD	97.7	131	113	70-130	3.76	0-20
3268-87-9	MSD	1,2,3,4,6,7,8,9-OCDD	195	489	133 *	70-130	19.3	0-20
51207-31-9	MSD	2,3,7,8-TCDF	19.5 U	21.2	109	70-130	4.48	0-20
57117-41-6	MSD	1,2,3,7,8-PeCDF	97.7 U	103	105	70-130	0.760	0-20
57117-31-4	MSD	2,3,4,7,8-PeCDF	97.7 U	102	105	70-130	1.62	0-20
70648-26-9	MSD	1,2,3,4,7,8-HxCDF	97.7 U	102	104	70-130	1.64	0-20
57117-44-9	MSD	1,2,3,6,7,8-HxCDF	97.7 U	100	103	70-130	1.96	0-20
60851-34-5	MSD	2,3,4,6,7,8-HxCDF	97.7 U	107	109	70-130	0.946	0-20
72918-21-9	MSD	1,2,3,7,8,9-HxCDF	97.7 U	103	106	70-130	0.105	0-20
67562-39-4	MSD	1,2,3,4,6,7,8-HpCDF	97.7 U	108	111	70-130	1.31	0-20
55673-89-7	MSD	1,2,3,4,7,8,9-HpCDF	97.7 U	103	106	70-130	0.103	0-20
39001-02-0	MSD	1,2,3,4,6,7,8,9-OCDF	195 U	217	111	70-130	1.36	0-20

Method Blank Summary

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SDG Number: FA28651X
Client ID: MB for batch 30467
Lab Sample ID: 12014737
Column:

Client: ACCU001
Instrument ID: HRP763
Prep Date: 09-NOV-15

Matrix: SOIL
Data File: b10nov15a_2-3
Analyzed: 11/11/15 00:13

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 30467	12014738	b10nov15a_2-1	11/10/15	2236
02 LCSD for batch 30467	12014739	b10nov15a_2-2	11/10/15	2324
03 FA28651X-9X	8391001	b10nov15a_2-4	11/11/15	0102
04 FA28651X-9X(8391001MS)	12014740	b10nov15a_2-5	11/11/15	0151
05 FA28651X-9X(8391001MSD)	12014741	b10nov15a_2-6	11/11/15	0240

**Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary**

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SDG Number: FA28651X
Lab Sample ID: 12014737
Client Sample: QC for batch 30467
Client ID: MB for batch 30467
Batch ID: 30469
Run Date: 11/11/2015 00:13
Data File: b10nov15a_2-3
Prep Batch: 30467
Prep Date: 09-NOV-15

Client: ACCU001

Method: EPA Method 1613B
Analyst: CLP

Prep Method: SW846 3540C
Prep Aliquot: 10 g

Project: ACCU00414
Matrix: SOIL

Prep Basis: As Received

Instrument: HRP763
Dilution: 1

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	1	pg/g	1.00
40321-76-4	1,2,3,7,8-PeCDD	U	5	pg/g	5.00
39227-28-6	1,2,3,4,7,8-HxCDD	U	5	pg/g	5.00
57653-85-7	1,2,3,6,7,8-HxCDD	U	5	pg/g	5.00
19408-74-3	1,2,3,7,8,9-HxCDD	U	5	pg/g	5.00
35822-46-9	1,2,3,4,6,7,8-HpCDD	U	5	pg/g	5.00
3268-87-9	1,2,3,4,6,7,8,9-OCDD	U	10	pg/g	10.0
51207-31-9	2,3,7,8-TCDF	U	1	pg/g	1.00
57117-41-6	1,2,3,7,8-PeCDF	U	5	pg/g	5.00
57117-31-4	2,3,4,7,8-PeCDF	U	5	pg/g	5.00
70648-26-9	1,2,3,4,7,8-HxCDF	U	5	pg/g	5.00
57117-44-9	1,2,3,6,7,8-HxCDF	U	5	pg/g	5.00
60851-34-5	2,3,4,6,7,8-HxCDF	U	5	pg/g	5.00
72918-21-9	1,2,3,7,8,9-HxCDF	U	5	pg/g	5.00
67562-39-4	1,2,3,4,6,7,8-HpCDF	U	5	pg/g	5.00
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	5	pg/g	5.00
39001-02-0	1,2,3,4,6,7,8,9-OCDF	U	10	pg/g	10.0
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	U	1	pg/g	1.00
36088-22-9	Total Pentachlorodibenzo-p-dioxin	U	5	pg/g	5.00
34465-46-8	Total Hexachlorodibenzo-p-dioxin	U	5	pg/g	5.00
37871-00-4	Total Heptachlorodibenzo-p-dioxin	U	5	pg/g	5.00
30402-14-3	Total Tetrachlorodibenzofuran	U	1	pg/g	1.00
30402-15-4	Total Pentachlorodibenzofuran	U	5	pg/g	5.00
55684-94-1	Total Hexachlorodibenzofuran	U	5	pg/g	5.00
38998-75-3	Total Heptachlorodibenzofuran	U	5	pg/g	5.00
3333-30-0	TEQ WHO2005 ND=0		0.00	pg/g	
3333-30-1	TEQ WHO2005 ND=0.5		5.70	pg/g	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		171	200	pg/g	85.5	(25%-164%)
13C-1,2,3,7,8-PeCDD		169	200	pg/g	84.4	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		171	200	pg/g	85.6	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		162	200	pg/g	81.0	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		170	200	pg/g	84.9	(23%-140%)
13C-OCDD		310	400	pg/g	77.5	(17%-157%)
13C-2,3,7,8-TCDF		168	200	pg/g	83.9	(24%-169%)
13C-1,2,3,7,8-PeCDF		164	200	pg/g	82.2	(24%-185%)
13C-2,3,4,7,8-PeCDF		166	200	pg/g	82.9	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		170	200	pg/g	85.0	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		153	200	pg/g	76.4	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		170	200	pg/g	84.9	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		172	200	pg/g	85.8	(29%-147%)

**Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary**

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SDG Number:	FA28651X	Client:	ACCU001	Project:	ACCU00414
Lab Sample ID:	12014737			Matrix:	SOIL
Client Sample:	QC for batch 30467				
Client ID:	MB for batch 30467			Prep Basis:	As Received
Batch ID:	30469	Method:	EPA Method 1613B		
Run Date:	11/11/2015 00:13	Analyst:	CLP	Instrument:	HRP763
Data File:	b10nov15a_2-3			Dilution:	1
Prep Batch:	30467	Prep Method:	SW846 3540C		
Prep Date:	09-NOV-15	Prep Aliquot:	10 g		

CAS No.	Parmname	Qual	Result	Units	PQL		
Surrogate/Tracer recovery		Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF			160	200	pg/g	79.8	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF			164	200	pg/g	81.8	(26%-138%)
37Cl-2,3,7,8-TCDD			17.8	20.0	pg/g	89.1	(35%-197%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

**Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary**

Page 1 of 1

SDG Number: FA28651X
Lab Sample ID: 12014738
Client Sample: QC for batch 30467
Client ID: LCS for batch 30467
Batch ID: 30469
Run Date: 11/10/2015 22:36
Data File: b10nov15a_2-1
Prep Batch: 30467
Prep Date: 09-NOV-15

Client: ACCU001

Method: EPA Method 1613B
Analyst: CLP

Prep Method: SW846 3540C
Prep Aliquot: 10 g

Project: ACCU00414
Matrix: SOIL

Prep Basis: As Received

Instrument: HRP763
Dilution: 1

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		21.4	pg/g	1.00
40321-76-4	1,2,3,7,8-PeCDD		108	pg/g	5.00
39227-28-6	1,2,3,4,7,8-HxCDD		107	pg/g	5.00
57653-85-7	1,2,3,6,7,8-HxCDD		107	pg/g	5.00
19408-74-3	1,2,3,7,8,9-HxCDD		107	pg/g	5.00
35822-46-9	1,2,3,4,6,7,8-HpCDD		111	pg/g	5.00
3268-87-9	1,2,3,4,6,7,8,9-OCDD		218	pg/g	10.0
51207-31-9	2,3,7,8-TCDF		21.0	pg/g	1.00
57117-41-6	1,2,3,7,8-PeCDF		107	pg/g	5.00
57117-31-4	2,3,4,7,8-PeCDF		107	pg/g	5.00
70648-26-9	1,2,3,4,7,8-HxCDF		107	pg/g	5.00
57117-44-9	1,2,3,6,7,8-HxCDF		108	pg/g	5.00
60851-34-5	2,3,4,6,7,8-HxCDF		111	pg/g	5.00
72918-21-9	1,2,3,7,8,9-HxCDF		115	pg/g	5.00
67562-39-4	1,2,3,4,6,7,8-HpCDF		106	pg/g	5.00
55673-89-7	1,2,3,4,7,8,9-HpCDF		113	pg/g	5.00
39001-02-0	1,2,3,4,6,7,8,9-OCDF		224	pg/g	10.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		153	200	pg/g	76.5	(20%-175%)
13C-1,2,3,7,8-PeCDD		147	200	pg/g	73.7	(21%-227%)
13C-1,2,3,4,7,8-HxCDD		148	200	pg/g	74.0	(21%-193%)
13C-1,2,3,6,7,8-HxCDD		146	200	pg/g	72.9	(25%-163%)
13C-1,2,3,4,6,7,8-HpCDD		156	200	pg/g	77.9	(22%-166%)
13C-OCDD		291	400	pg/g	72.6	(13%-199%)
13C-2,3,7,8-TCDF		150	200	pg/g	75.2	(22%-152%)
13C-1,2,3,7,8-PeCDF		150	200	pg/g	75.0	(21%-192%)
13C-2,3,4,7,8-PeCDF		148	200	pg/g	74.1	(13%-328%)
13C-1,2,3,4,7,8-HxCDF		147	200	pg/g	73.6	(19%-202%)
13C-1,2,3,6,7,8-HxCDF		144	200	pg/g	71.9	(21%-159%)
13C-2,3,4,6,7,8-HxCDF		146	200	pg/g	73.2	(22%-176%)
13C-1,2,3,7,8,9-HxCDF		150	200	pg/g	75.2	(17%-205%)
13C-1,2,3,4,6,7,8-HpCDF		149	200	pg/g	74.3	(21%-158%)
13C-1,2,3,4,7,8,9-HpCDF		148	200	pg/g	74.0	(20%-186%)
37Cl-2,3,7,8-TCDD		18.1	20.0	pg/g	90.6	(31%-191%)

Comments:

**Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary**

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SDG Number:	FA28651X	Client:	ACCU001	Project:	ACCU00414
Lab Sample ID:	12014739			Matrix:	SOIL
Client Sample:	QC for batch 30467				
Client ID:	LCSD for batch 30467			Prep Basis:	As Received
Batch ID:	30469	Method:	EPA Method 1613B		
Run Date:	11/10/2015 23:24	Analyst:	CLP	Instrument:	HRP763
Data File:	b10nov15a_2-2			Dilution:	1
Prep Batch:	30467	Prep Method:	SW846 3540C		
Prep Date:	09-NOV-15	Prep Aliquot:	10 g		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		20.6	pg/g	1.00
40321-76-4	1,2,3,7,8-PeCDD		101	pg/g	5.00
39227-28-6	1,2,3,4,7,8-HxCDD		103	pg/g	5.00
57653-85-7	1,2,3,6,7,8-HxCDD		108	pg/g	5.00
19408-74-3	1,2,3,7,8,9-HxCDD		112	pg/g	5.00
35822-46-9	1,2,3,4,6,7,8-HpCDD		103	pg/g	5.00
3268-87-9	1,2,3,4,6,7,8,9-OCDD		200	pg/g	10.0
51207-31-9	2,3,7,8-TCDF		19.9	pg/g	1.00
57117-41-6	1,2,3,7,8-PeCDF		105	pg/g	5.00
57117-31-4	2,3,4,7,8-PeCDF		99.8	pg/g	5.00
70648-26-9	1,2,3,4,7,8-HxCDF		102	pg/g	5.00
57117-44-9	1,2,3,6,7,8-HxCDF		106	pg/g	5.00
60851-34-5	2,3,4,6,7,8-HxCDF		104	pg/g	5.00
72918-21-9	1,2,3,7,8,9-HxCDF		103	pg/g	5.00
67562-39-4	1,2,3,4,6,7,8-HpCDF		104	pg/g	5.00
55673-89-7	1,2,3,4,7,8,9-HpCDF		105	pg/g	5.00
39001-02-0	1,2,3,4,6,7,8,9-OCDF		208	pg/g	10.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		133	200	pg/g	66.5	(20%-175%)
13C-1,2,3,7,8-PeCDD		151	200	pg/g	75.5	(21%-227%)
13C-1,2,3,4,7,8-HxCDD		148	200	pg/g	74.0	(21%-193%)
13C-1,2,3,6,7,8-HxCDD		147	200	pg/g	73.3	(25%-163%)
13C-1,2,3,4,6,7,8-HpCDD		156	200	pg/g	77.8	(22%-166%)
13C-OCDD		301	400	pg/g	75.2	(13%-199%)
13C-2,3,7,8-TCDF		131	200	pg/g	65.6	(22%-152%)
13C-1,2,3,7,8-PeCDF		142	200	pg/g	71.0	(21%-192%)
13C-2,3,4,7,8-PeCDF		153	200	pg/g	76.6	(13%-328%)
13C-1,2,3,4,7,8-HxCDF		151	200	pg/g	75.4	(19%-202%)
13C-1,2,3,6,7,8-HxCDF		145	200	pg/g	72.7	(21%-159%)
13C-2,3,4,6,7,8-HxCDF		155	200	pg/g	77.3	(22%-176%)
13C-1,2,3,7,8,9-HxCDF		159	200	pg/g	79.4	(17%-205%)
13C-1,2,3,4,6,7,8-HpCDF		153	200	pg/g	76.5	(21%-158%)
13C-1,2,3,4,7,8,9-HpCDF		153	200	pg/g	76.5	(20%-186%)
37Cl-2,3,7,8-TCDD		14.3	20.0	pg/g	71.3	(31%-191%)

Comments:

**Hi-Res Dioxins/Furans
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Sample Summary**

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SDG Number:	FA28651X	Client:	ACCU001	Project:	ACCU00414
Lab Sample ID:	12014740	Date Collected:	10/21/2015 09:45	Matrix:	SOIL
Client Sample:	QC for batch 30467	Date Received:	10/27/2015 10:30	%Moisture:	14.4
Client ID:	FA28651X-9X(8391001MS)			Prep Basis:	Dry Weight
Batch ID:	30469	Method:	EPA Method 1613B		
Run Date:	11/11/2015 01:51	Analyst:	CLP	Instrument:	HRP763
Data File:	b10nov15a_2-5			Dilution:	1
Prep Batch:	30467	Prep Method:	SW846 3540C		
Prep Date:	09-NOV-15	Prep Aliquot:	11.94 g		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		19.8	pg/g	0.978
40321-76-4	1,2,3,7,8-PeCDD		102	pg/g	4.89
39227-28-6	1,2,3,4,7,8-HxCDD		99.9	pg/g	4.89
57653-85-7	1,2,3,6,7,8-HxCDD		101	pg/g	4.89
19408-74-3	1,2,3,7,8,9-HxCDD		102	pg/g	4.89
35822-46-9	1,2,3,4,6,7,8-HpCDD		137	pg/g	4.89
3268-87-9	1,2,3,4,6,7,8,9-OCDD		594	pg/g	9.78
51207-31-9	2,3,7,8-TCDF		20.3	pg/g	0.978
57117-41-6	1,2,3,7,8-PeCDF		104	pg/g	4.89
57117-31-4	2,3,4,7,8-PeCDF		101	pg/g	4.89
70648-26-9	1,2,3,4,7,8-HxCDF		100	pg/g	4.89
57117-44-9	1,2,3,6,7,8-HxCDF		102	pg/g	4.89
60851-34-5	2,3,4,6,7,8-HxCDF		106	pg/g	4.89
72918-21-9	1,2,3,7,8,9-HxCDF		103	pg/g	4.89
67562-39-4	1,2,3,4,6,7,8-HpCDF		107	pg/g	4.89
55673-89-7	1,2,3,4,7,8,9-HpCDF		103	pg/g	4.89
39001-02-0	1,2,3,4,6,7,8,9-OCDF		215	pg/g	9.78

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		126	196	pg/g	64.4	(25%-164%)
13C-1,2,3,7,8-PeCDD		130	196	pg/g	66.3	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		127	196	pg/g	64.8	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		122	196	pg/g	62.3	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		132	196	pg/g	67.4	(23%-140%)
13C-OCDD		257	391	pg/g	65.6	(17%-157%)
13C-2,3,7,8-TCDF		120	196	pg/g	61.3	(24%-169%)
13C-1,2,3,7,8-PeCDF		129	196	pg/g	66.1	(24%-185%)
13C-2,3,4,7,8-PeCDF		131	196	pg/g	67.1	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		125	196	pg/g	63.9	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		118	196	pg/g	60.3	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		122	196	pg/g	62.6	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		126	196	pg/g	64.6	(29%-147%)
13C-1,2,3,4,6,7,8-HpCDF		127	196	pg/g	65.0	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		125	196	pg/g	64.0	(26%-138%)
37Cl-2,3,7,8-TCDD		16.9	19.6	pg/g	86.5	(35%-197%)

Comments:

**Hi-Res Dioxins/Furans
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Sample Summary**

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SDG Number:	FA28651X	Client:	ACCU001	Project:	ACCU00414
Lab Sample ID:	12014741	Date Collected:	10/21/2015 09:45	Matrix:	SOIL
Client Sample:	QC for batch 30467	Date Received:	10/27/2015 10:30	%Moisture:	14.4
Client ID:	FA28651X-9X(8391001MSD)			Prep Basis:	Dry Weight
Batch ID:	30469	Method:	EPA Method 1613B		
Run Date:	11/11/2015 02:40	Analyst:	CLP	Instrument:	HRP763
Data File:	b10nov15a_2-6			Dilution:	1
Prep Batch:	30467	Prep Method:	SW846 3540C		
Prep Date:	09-NOV-15	Prep Aliquot:	11.95 g		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		20.5	pg/g	0.977
40321-76-4	1,2,3,7,8-PeCDD		99.7	pg/g	4.89
39227-28-6	1,2,3,4,7,8-HxCDD		101	pg/g	4.89
57653-85-7	1,2,3,6,7,8-HxCDD		105	pg/g	4.89
19408-74-3	1,2,3,7,8,9-HxCDD		111	pg/g	4.89
35822-46-9	1,2,3,4,6,7,8-HpCDD		131	pg/g	4.89
3268-87-9	1,2,3,4,6,7,8,9-OCDD		489	pg/g	9.77
51207-31-9	2,3,7,8-TCDF		21.2	pg/g	0.977
57117-41-6	1,2,3,7,8-PeCDF		103	pg/g	4.89
57117-31-4	2,3,4,7,8-PeCDF		102	pg/g	4.89
70648-26-9	1,2,3,4,7,8-HxCDF		102	pg/g	4.89
57117-44-9	1,2,3,6,7,8-HxCDF		100	pg/g	4.89
60851-34-5	2,3,4,6,7,8-HxCDF		107	pg/g	4.89
72918-21-9	1,2,3,7,8,9-HxCDF		103	pg/g	4.89
67562-39-4	1,2,3,4,6,7,8-HpCDF		108	pg/g	4.89
55673-89-7	1,2,3,4,7,8,9-HpCDF		103	pg/g	4.89
39001-02-0	1,2,3,4,6,7,8,9-OCDF		217	pg/g	9.77

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		167	195	pg/g	85.7	(25%-164%)
13C-1,2,3,7,8-PeCDD		174	195	pg/g	89.1	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		158	195	pg/g	80.9	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		156	195	pg/g	79.9	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		162	195	pg/g	83.1	(23%-140%)
13C-OCDD		321	391	pg/g	82.2	(17%-157%)
13C-2,3,7,8-TCDF		160	195	pg/g	81.8	(24%-169%)
13C-1,2,3,7,8-PeCDF		172	195	pg/g	87.8	(24%-185%)
13C-2,3,4,7,8-PeCDF		170	195	pg/g	86.8	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		155	195	pg/g	79.2	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		147	195	pg/g	75.4	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		157	195	pg/g	80.2	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		165	195	pg/g	84.2	(29%-147%)
13C-1,2,3,4,6,7,8-HpCDF		154	195	pg/g	79.0	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		162	195	pg/g	83.0	(26%-138%)
37Cl-2,3,7,8-TCDD		17.5	19.5	pg/g	89.5	(35%-197%)

Comments:**K Estimated Maximum Possible Concentration**

PCB Congeners Analysis

Case Narrative

**PCBC Case Narrative
Accutest Laboratories (ACCU)
SDG FA28651X
Work Order 8391**

Method/Analysis Information

Product: PCB Congeners (WHO) EPA Method 1668A in Solids
Analytical Method: EPA Method 1668A
Extraction Method: SW846 3540C
Analytical Batch Number: 30380
Clean Up Batch Number: 30379
Extraction Batch Number: 30378

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA Method 1668A:

Sample ID	Client ID
8391001	FA28651X-9X
12014620	Method Blank (MB)
12014621	Laboratory Control Sample (LCS)
12014622	Laboratory Control Sample Duplicate (LCSD)

The samples in this SDG were analyzed on a "dry weight" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by Cape Fear Analytical LLC (CFA) as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with CF-OA-E-003 REV# 6.

Raw data reports are processed and reviewed by the analyst using the TargetLynx software package.

Calibration Information

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

Continuing Calibration Verification (CCV) Requirements

All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Certification Statement

The test results presented in this document are certified to meet all requirements of the 2009 TNI Standard.

Method Blank (MB) Statement

The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries

All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

Laboratory Control Sample Duplicate (LCSD) Recovery

The LCSD spike recoveries met the acceptance limits.

LCS/LCSD Relative Percent Difference (RPD) Statement

The RPD(s) between the LCS and LCSD met the acceptance limits.

QC Sample Designation

A matrix spike and matrix spike duplicate analysis was not required for this SDG.

Technical Information

Holding Time Specifications

CFA assigns holding times based on the associated methodology, which assigns the date and time from sample collection. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification

All procedures were performed as stated in the SOP.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis

Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Nonconformance (NCR) Documentation

A NCR was not required for this SDG.

Manual Integrations

Manual integrations were required for data files in this SDG. Certain standards and QC samples required manual integrations to correctly position the baseline as set in the calibration standard injections. Where manual integrations were performed, copies of all manual integration peak profiles are included in the raw data section of this fraction.

System Configuration

This analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
HRP875_1	PCB Analysis	PCB Analysis	SPB-Octyl	30m x 0.25mm, 0.25um

Electronic Packaging Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted: Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Sample Data Summary

Cape Fear Analytical, LLC

3306 Kitty Hawk Road Suite 120, Wilmington, NC 28405 - (910) 795-0421 - www.capefearanalytical.com

Qualifier Definition Report for

ACCU001 Accutest Laboratories

Client SDG: FA28651X CFA Work Order: 8391

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a surrogate compound
- C Congener has coeluters. When Cxxx, refer to congener number xxx for data
- U Analyte was analyzed for, but not detected above the specified detection limit.
- DL Indicates that sample is diluted.
- RA Indicates that sample is re-analyzed without re-extraction.
- RE Indicates that sample is re-extracted.

Review/Validation

Cape Fear Analytical requires all analytical data to be verified by a qualified data reviewer.

The following data validator verified the information presented in this case narrative:

Signature: 

Name: Heather Patterson

Date: 13 NOV 2015

Title: Group Leader

PCB Congeners
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: FA28651X
Lab Sample ID: 8391001
Client Sample: 1668A/1613B Soil
Client ID: FA28651X-9X
Batch ID: 30380
Run Date: 11/01/2015 15:49
Data File: d31oct15a_3-6
Prep Batch: 30378
Prep Date: 29-OCT-15

Client: ACCU001
Date Collected: 10/21/2015 09:45
Date Received: 10/27/2015 10:30

Method: EPA Method 1668A
Analyst: MJC

Prep Method: SW846 3540C
Prep Aliquot: 12.03 g

Project: ACCU00414
Matrix: SOIL
%Moisture: 14.4
Prep Basis: Dry Weight

Instrument: HRP875
Dilution: 1
Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	Units	PQL
32598-13-3	77-TeCB		104	pg/g	1.94
70362-50-4	81-TeCB		4.32	pg/g	1.94
32598-14-4	105-PeCB		942	pg/g	1.94
74472-37-0	114-PeCB		52.1	pg/g	1.94
31508-00-6	118-PeCB		2080	pg/g	1.94
65510-44-3	123-PeCB		35.2	pg/g	1.94
57465-28-8	126-PeCB		6.99	pg/g	1.94
38380-08-4	156-HxCB	C	342	pg/g	3.88
69782-90-7	157-HxCB	C156			
52663-72-6	167-HxCB		109	pg/g	1.94
32774-16-6	169-HxCB	U	1.94	pg/g	1.94
39635-31-9	189-HpCB		28.9	pg/g	1.94

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-77-TeCB		182	194	pg/g	93.5	(25%-150%)
13C-81-TeCB		181	194	pg/g	93.1	(25%-150%)
13C-105-PeCB		157	194	pg/g	81.0	(25%-150%)
13C-114-PeCB		158	194	pg/g	81.5	(25%-150%)
13C-118-PeCB		162	194	pg/g	83.6	(25%-150%)
13C-123-PeCB		165	194	pg/g	85.1	(25%-150%)
13C-126-PeCB		175	194	pg/g	90.2	(25%-150%)
13C-156-HxCB	C	325	388	pg/g	83.8	(25%-150%)
13C-157-HxCB	C156L					
13C-167-HxCB		163	194	pg/g	83.7	(25%-150%)
13C-169-HxCB		168	194	pg/g	86.4	(25%-150%)
13C-189-HpCB		140	194	pg/g	72.3	(25%-150%)
13C-111-PeCB		161	194	pg/g	83.1	(30%-135%)
13C-178-HpCB		169	194	pg/g	87.1	(30%-135%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Quality Control Summary

PCB Congeners

Surrogate Recovery Report

Page 1 of 2

SDG Number: FA28651X

Matrix Type: SOLID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
12014621	LCS for batch 30378	13C-77-TeCB	C C156L	84.4	(30%-140%)
		13C-81-TeCB		80.6	(30%-140%)
		13C-105-PeCB		96.2	(30%-140%)
		13C-114-PeCB		94.4	(30%-140%)
		13C-118-PeCB		95.2	(30%-140%)
		13C-123-PeCB		95.4	(30%-140%)
		13C-126-PeCB		104	(30%-140%)
		13C-156-HxCB		80.2	(30%-140%)
		13C-157-HxCB			
		13C-167-HxCB		80.1	(30%-140%)
		13C-169-HxCB		90.0	(30%-140%)
		13C-189-HpCB		71.8	(30%-140%)
		13C-111-PeCB		101	(40%-125%)
		13C-178-HpCB		92.8	(40%-125%)
12014622	LCSD for batch 30378	13C-77-TeCB	C C156L	85.3	(30%-140%)
		13C-81-TeCB		83.7	(30%-140%)
		13C-105-PeCB		85.6	(30%-140%)
		13C-114-PeCB		83.6	(30%-140%)
		13C-118-PeCB		83.4	(30%-140%)
		13C-123-PeCB		86.7	(30%-140%)
		13C-126-PeCB		87.5	(30%-140%)
		13C-156-HxCB		76.0	(30%-140%)
		13C-157-HxCB			
		13C-167-HxCB		76.4	(30%-140%)
		13C-169-HxCB		81.0	(30%-140%)
		13C-189-HpCB		68.6	(30%-140%)
		13C-111-PeCB		86.9	(40%-125%)
		13C-178-HpCB		83.1	(40%-125%)
12014620	MB for batch 30378	13C-77-TeCB	C C156L	91.4	(25%-150%)
		13C-81-TeCB		88.5	(25%-150%)
		13C-105-PeCB		84.5	(25%-150%)
		13C-114-PeCB		83.0	(25%-150%)
		13C-118-PeCB		83.1	(25%-150%)
		13C-123-PeCB		85.9	(25%-150%)
		13C-126-PeCB		92.7	(25%-150%)
		13C-156-HxCB		80.7	(25%-150%)
		13C-157-HxCB			
		13C-167-HxCB		81.6	(25%-150%)
		13C-169-HxCB		84.5	(25%-150%)
		13C-189-HpCB		71.8	(25%-150%)
		13C-111-PeCB		91.7	(30%-135%)
		13C-178-HpCB		94.4	(30%-135%)
8391001	FA28651X-9X	13C-77-TeCB		93.5	(25%-150%)
		13C-81-TeCB		93.1	(25%-150%)
		13C-105-PeCB		81.0	(25%-150%)
		13C-114-PeCB		81.5	(25%-150%)
		13C-118-PeCB		83.6	(25%-150%)
		13C-123-PeCB		85.1	(25%-150%)
		13C-126-PeCB		90.2	(25%-150%)

PCB Congeners
Surrogate Recovery Report

Page 2 of 2

SDG Number: FA28651X

Matrix Type: SOLID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
8391001	FA28651X-9X	13C-156-HxCB	C	83.8	(25%-150%)
		13C-157-HxCB	C156L		
		13C-167-HxCB		83.7	(25%-150%)
		13C-169-HxCB		86.4	(25%-150%)
		13C-189-HpCB		72.3	(25%-150%)
		13C-111-PeCB		83.1	(30%-135%)
		13C-178-HpCB		87.1	(30%-135%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

PCB Congeners
Quality Control Summary
Spike Recovery Report

Page 1 of 2

SDG Number: FA28651X
Client ID: LCS for batch 30378
Lab Sample ID: 12014621
Instrument: HRP875
Analyst: MJC

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 10/31/2015 11:08
Prep Batch ID: 30378
Batch ID: 30380

Dilution: 1

			Amount Added		Spike Conc.	Recovery	Acceptance Limits
CAS No.		Parmname	pg/g		pg/g	%	
32598-13-3	LCS	77-TeCB	100		100	100	50-150
70362-50-4	LCS	81-TeCB	100		107	107	50-150
32598-14-4	LCS	105-PeCB	100		126	126	50-150
74472-37-0	LCS	114-PeCB	100		115	115	50-150
31508-00-6	LCS	118-PeCB	100		106	106	50-150
65510-44-3	LCS	123-PeCB	100		99.3	99.3	50-150
57465-28-8	LCS	126-PeCB	100		116	116	50-150
38380-08-4	LCS	156-HxCB	200	C	239	120	50-150
69782-90-7	LCS	157-HxCB		C156			
52663-72-6	LCS	167-HxCB	100		123	123	50-150
32774-16-6	LCS	169-HxCB	100		116	116	50-150
39635-31-9	LCS	189-HpCB	100		108	108	50-150

PCB Congeners
Quality Control Summary
Spike Recovery Report

Page 2 of 2

SDG Number: FA28651X

Sample Type: Laboratory Control Sample Duplicate

Client ID: LCSD for batch 30378

Matrix: SOIL

Lab Sample ID: 12014622

Instrument: HRP875

Analysis Date: 10/31/2015 12:15

Dilution: 1

Analyst: MJC

Prep Batch ID: 30378

Batch ID: 30380

CAS No.	Parmname	Amount Added pg/g		Spike Conc. pg/g	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
32598-13-3	LCSD 77-TeCB	100		103	103	50-150	2.61	0-20
70362-50-4	LCSD 81-TeCB	100		112	112	50-150	4.07	0-20
32598-14-4	LCSD 105-PeCB	100		130	130	50-150	2.75	0-20
74472-37-0	LCSD 114-PeCB	100		116	116	50-150	1.67	0-20
31508-00-6	LCSD 118-PeCB	100		106	106	50-150	0.533	0-20
65510-44-3	LCSD 123-PeCB	100		100	100	50-150	0.740	0-20
57465-28-8	LCSD 126-PeCB	100		121	121	50-150	3.83	0-20
38380-08-4	LCSD 156-HxCB	200	C	243	121	50-150	1.48	0-20
69782-90-7	LCSD 157-HxCB		C156					
52663-72-6	LCSD 167-HxCB	100		127	127	50-150	3.02	0-20
32774-16-6	LCSD 169-HxCB	100		117	117	50-150	1.16	0-20
39635-31-9	LCSD 189-HpCB	100		111	111	50-150	2.63	0-20

Method Blank Summary

Page 1 of 1

SDG Number: FA28651X
Client ID: MB for batch 30378
Lab Sample ID: 12014620
Column:

Client: ACCU001
Instrument ID: HRP875
Prep Date: 29-OCT-15

Matrix: SOIL
Data File: d31oct15a-4
Analyzed: 10/31/15 13:23

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 30378	12014621	d31oct15a-2	10/31/15	1108
02 LCSD for batch 30378	12014622	d31oct15a-3	10/31/15	1215
03 FA28651X-9X	8391001	d31oct15a_3-6	11/01/15	1549

**PCB Congeners
Certificate of Analysis
Sample Summary**

Page 1 of 1

SDG Number: FA28651X
Lab Sample ID: 12014620
Client Sample: QC for batch 30378
Client ID: MB for batch 30378
Batch ID: 30380
Run Date: 10/31/2015 13:23
Data File: d31oct15a-4
Prep Batch: 30378
Prep Date: 29-OCT-15

Client: ACCU001

Method: EPA Method 1668A
Analyst: MJC

Prep Method: SW846 3540C
Prep Aliquot: 10 g

Project: ACCU00414
Matrix: SOIL

Prep Basis: As Received

Instrument: HRP875
Dilution: 1
Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	Units	PQL
32598-13-3	77-TeCB	U	2	pg/g	2.00
70362-50-4	81-TeCB	U	2	pg/g	2.00
32598-14-4	105-PeCB	U	2	pg/g	2.00
74472-37-0	114-PeCB	U	2	pg/g	2.00
31508-00-6	118-PeCB	U	2	pg/g	2.00
65510-44-3	123-PeCB	U	2	pg/g	2.00
57465-28-8	126-PeCB	U	2	pg/g	2.00
38380-08-4	156-HxCB	CU	4	pg/g	4.00
69782-90-7	157-HxCB	C156			
52663-72-6	167-HxCB	U	2	pg/g	2.00
32774-16-6	169-HxCB	U	2	pg/g	2.00
39635-31-9	189-HpCB	U	2	pg/g	2.00

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-77-TeCB		183	200	pg/g	91.4	(25%-150%)
13C-81-TeCB		177	200	pg/g	88.5	(25%-150%)
13C-105-PeCB		169	200	pg/g	84.5	(25%-150%)
13C-114-PeCB		166	200	pg/g	83.0	(25%-150%)
13C-118-PeCB		166	200	pg/g	83.1	(25%-150%)
13C-123-PeCB		172	200	pg/g	85.9	(25%-150%)
13C-126-PeCB		185	200	pg/g	92.7	(25%-150%)
13C-156-HxCB	C	323	400	pg/g	80.7	(25%-150%)
13C-157-HxCB	C156L					
13C-167-HxCB		163	200	pg/g	81.6	(25%-150%)
13C-169-HxCB		169	200	pg/g	84.5	(25%-150%)
13C-189-HpCB		144	200	pg/g	71.8	(25%-150%)
13C-111-PeCB		183	200	pg/g	91.7	(30%-135%)
13C-178-HpCB		189	200	pg/g	94.4	(30%-135%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

PCB Congeners
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: FA28651X
Lab Sample ID: 12014621
Client Sample: QC for batch 30378
Client ID: LCS for batch 30378
Batch ID: 30380
Run Date: 10/31/2015 11:08
Data File: d31oct15a-2
Prep Batch: 30378
Prep Date: 29-OCT-15

Client: ACCU001

Method: EPA Method 1668A
Analyst: MJC

Prep Method: SW846 3540C
Prep Aliquot: 10 g

Project: ACCU00414
Matrix: SOIL

Prep Basis: As Received

Instrument: HRP875
Dilution: 1
Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	Units	PQL
32598-13-3	77-TeCB		100	pg/g	2.00
70362-50-4	81-TeCB		107	pg/g	2.00
32598-14-4	105-PeCB		126	pg/g	2.00
74472-37-0	114-PeCB		115	pg/g	2.00
31508-00-6	118-PeCB		106	pg/g	2.00
65510-44-3	123-PeCB		99.3	pg/g	2.00
57465-28-8	126-PeCB		116	pg/g	2.00
38380-08-4	156-HxCB	C	239	pg/g	4.00
69782-90-7	157-HxCB	C156			
52663-72-6	167-HxCB		123	pg/g	2.00
32774-16-6	169-HxCB		116	pg/g	2.00
39635-31-9	189-HpCB		108	pg/g	2.00

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-77-TeCB		169	200	pg/g	84.4	(30%-140%)
13C-81-TeCB		161	200	pg/g	80.6	(30%-140%)
13C-105-PeCB		192	200	pg/g	96.2	(30%-140%)
13C-114-PeCB		189	200	pg/g	94.4	(30%-140%)
13C-118-PeCB		190	200	pg/g	95.2	(30%-140%)
13C-123-PeCB		191	200	pg/g	95.4	(30%-140%)
13C-126-PeCB		207	200	pg/g	104	(30%-140%)
13C-156-HxCB	C	321	400	pg/g	80.2	(30%-140%)
13C-157-HxCB	C156L					
13C-167-HxCB		160	200	pg/g	80.1	(30%-140%)
13C-169-HxCB		180	200	pg/g	90.0	(30%-140%)
13C-189-HpCB		144	200	pg/g	71.8	(30%-140%)
13C-111-PeCB		201	200	pg/g	101	(40%-125%)
13C-178-HpCB		186	200	pg/g	92.8	(40%-125%)

Comments:

PCB Congeners
Certificate of Analysis
Sample Summary

Page 1 of 1

SDG Number: FA28651X
Lab Sample ID: 12014622
Client Sample: QC for batch 30378
Client ID: LCSD for batch 30378
Batch ID: 30380
Run Date: 10/31/2015 12:15
Data File: d31oct15a-3
Prep Batch: 30378
Prep Date: 29-OCT-15

Client: ACCU001

Method: EPA Method 1668A
Analyst: MJC

Prep Method: SW846 3540C
Prep Aliquot: 10 g

Project: ACCU00414
Matrix: SOIL

Prep Basis: As Received

Instrument: HRP875
Dilution: 1
Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	Units	PQL
32598-13-3	77-TeCB		103	pg/g	2.00
70362-50-4	81-TeCB		112	pg/g	2.00
32598-14-4	105-PeCB		130	pg/g	2.00
74472-37-0	114-PeCB		116	pg/g	2.00
31508-00-6	118-PeCB		106	pg/g	2.00
65510-44-3	123-PeCB		100	pg/g	2.00
57465-28-8	126-PeCB		121	pg/g	2.00
38380-08-4	156-HxCB	C	243	pg/g	4.00
69782-90-7	157-HxCB	C156			
52663-72-6	167-HxCB		127	pg/g	2.00
32774-16-6	169-HxCB		117	pg/g	2.00
39635-31-9	189-HpCB		111	pg/g	2.00

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-77-TeCB		171	200	pg/g	85.3	(30%-140%)
13C-81-TeCB		167	200	pg/g	83.7	(30%-140%)
13C-105-PeCB		171	200	pg/g	85.6	(30%-140%)
13C-114-PeCB		167	200	pg/g	83.6	(30%-140%)
13C-118-PeCB		167	200	pg/g	83.4	(30%-140%)
13C-123-PeCB		173	200	pg/g	86.7	(30%-140%)
13C-126-PeCB		175	200	pg/g	87.5	(30%-140%)
13C-156-HxCB	C	304	400	pg/g	76.0	(30%-140%)
13C-157-HxCB	C156L					
13C-167-HxCB		153	200	pg/g	76.4	(30%-140%)
13C-169-HxCB		162	200	pg/g	81.0	(30%-140%)
13C-189-HpCB		137	200	pg/g	68.6	(30%-140%)
13C-111-PeCB		174	200	pg/g	86.9	(40%-125%)
13C-178-HpCB		166	200	pg/g	83.1	(40%-125%)

Comments:

Technical Report for

Gannett Fleming

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

57524

SGS Accutest Job Number: FA32993

Sampling Dates: 04/06/16 - 04/07/16

Report to:

Gannett Fleming
West Lake Corporate Center 9119 Corporate Lake Dr, Suite 150
Tampa, FL 33634-6323
axhoffman@gfnet.com; tfalkner@gfnet.com

ATTN: Todd Falkner

Total number of pages in report: **114**



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.



Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001)
DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177),
AK, AR, GA, KY, MA, NV, OK, UT, WA

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Test results relate only to samples analyzed.

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Sample Summary

Gannett Fleming

Job No: FA32993

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA32993-1	04/06/16	08:42	RFDD 04/09/16	AQ	Ground Water	MW-1R
FA32993-2	04/06/16	09:37	RFDD 04/09/16	AQ	Ground Water	MW-1DD
FA32993-3	04/06/16	09:52	RFDD 04/09/16	AQ	Ground Water	MW-1D
FA32993-4	04/06/16	10:56	RFDD 04/09/16	AQ	Ground Water	MW-15
FA32993-5	04/06/16	10:58	RFDD 04/09/16	AQ	Ground Water	MW-2R
FA32993-6	04/06/16	11:32	RFDD 04/09/16	AQ	Ground Water	MW-4
FA32993-7	04/06/16	11:52	RFDD 04/09/16	AQ	Ground Water	MW-14
FA32993-8	04/06/16	13:33	RFDD 04/09/16	AQ	Ground Water	MW-10
FA32993-9	04/06/16	13:53	RFDD 04/09/16	AQ	Ground Water	MW-3
FA32993-10	04/06/16	14:10	RFDD 04/09/16	AQ	Ground Water	WATER WELL
FA32993-11	04/06/16	15:08	RFDD 04/09/16	AQ	Ground Water	MW-8
FA32993-12	04/06/16	15:12	RFDD 04/09/16	AQ	Ground Water	MW-11
FA32993-13	04/07/16	08:37	RFDD 04/09/16	AQ	Ground Water	MW-12



Sample Summary
(continued)

Gannett Fleming

Job No: FA32993

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA32993-14	04/07/16	08:52	RFDD 04/09/16	AQ	Ground Water	MW-13
FA32993-15	04/07/16	09:32	RFDD 04/09/16	AQ	Ground Water	MW-5
FA32993-16	04/07/16	09:47	RFDD 04/09/16	AQ	Ground Water	MW-5D

Summary of Hits

Job Number: FA32993**Account:** Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA**Collected:** 04/06/16 thru 04/07/16

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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FA32993-1 MW-1R

1,1-Dichloroethylene	10.2 J	25	5.4	ug/l	SW846 8260B
cis-1,2-Dichloroethylene	385	25	7.8	ug/l	SW846 8260B
Ethylbenzene	6.9 J	25	6.3	ug/l	SW846 8260B
Methylene Chloride	178	130	50	ug/l	SW846 8260B
Tetrachloroethylene	321	25	7.6	ug/l	SW846 8260B
Trichloroethylene	1240	25	6.8	ug/l	SW846 8260B
Arsenic	232	10		ug/l	SW846 6010C

FA32993-2 MW-1DD

Chloroform	0.45 J	1.0	0.30	ug/l	SW846 8260B
Tetrachloroethylene	3.9	1.0	0.30	ug/l	SW846 8260B
Trichloroethylene	0.60 J	1.0	0.27	ug/l	SW846 8260B

FA32993-3 MW-1D

No hits reported in this sample.

FA32993-4 MW-15

No hits reported in this sample.

FA32993-5 MW-2R

cis-1,2-Dichloroethylene	0.37 J	1.0	0.31	ug/l	SW846 8260B
Tetrachloroethylene	2.3	1.0	0.30	ug/l	SW846 8260B
Trichloroethylene	0.33 J	1.0	0.27	ug/l	SW846 8260B

FA32993-6 MW-4

No hits reported in this sample.

FA32993-7 MW-14

No hits reported in this sample.

FA32993-8 MW-10

No hits reported in this sample.

FA32993-9 MW-3

No hits reported in this sample.

Summary of Hits

Job Number: FA32993
Account: Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Collected: 04/06/16 thru 04/07/16

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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FA32993-10 WATER WELL

No hits reported in this sample.

FA32993-11 MW-8

Acetone	37.6	25	10	ug/l	SW846 8260B
Benzene	1600	50	10	ug/l	SW846 8260B
2-Butanone (MEK)	13.1	5.0	2.6	ug/l	SW846 8260B
1,2-Dichlorobenzene	0.28 J	1.0	0.27	ug/l	SW846 8260B
Ethylbenzene	132	50	13	ug/l	SW846 8260B
2-Hexanone	7.4 J	10	2.0	ug/l	SW846 8260B
Isopropylbenzene	1.8	1.0	0.33	ug/l	SW846 8260B
Methyl Tert Butyl Ether	0.93 J	1.0	0.20	ug/l	SW846 8260B
Naphthalene	2.5 J	5.0	1.0	ug/l	SW846 8260B
n-Propylbenzene	2.1	1.0	0.20	ug/l	SW846 8260B
Toluene	3830	50	10	ug/l	SW846 8260B
1,2,4-Trimethylbenzene	32.6	1.0	0.20	ug/l	SW846 8260B
1,3,5-Trimethylbenzene	6.1	1.0	0.20	ug/l	SW846 8260B
Vinyl Chloride	0.45 J	1.0	0.31	ug/l	SW846 8260B
m,p-Xylene	536	100	15	ug/l	SW846 8260B
o-Xylene	283	50	13	ug/l	SW846 8260B

FA32993-12 MW-11

1,1-Dichloroethane	1.5	1.0	0.26	ug/l	SW846 8260B
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FA32993-13 MW-12

Methyl Tert Butyl Ether	1.1	1.0	0.20	ug/l	SW846 8260B
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FA32993-14 MW-13

No hits reported in this sample.

FA32993-15 MW-5

Benzene	0.72 J	1.0	0.20	ug/l	SW846 8260B
Methyl Tert Butyl Ether	22.3	1.0	0.20	ug/l	SW846 8260B

FA32993-16 MW-5D

1,1-Dichloroethane	0.32 J	1.0	0.26	ug/l	SW846 8260B
Methyl Tert Butyl Ether	0.46 J	1.0	0.20	ug/l	SW846 8260B

Summary of Hits

Job Number: FA32993
Account: Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Collected: 04/06/16 thru 04/07/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
1,2,4-Trichlorobenzene		0.71 J	2.0	0.50	ug/l	SW846 8260B

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-1	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0093864.D	25	04/13/16	RB	n/a	n/a	VN4246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	630	250	ug/l	
71-43-2	Benzene	ND	25	5.1	ug/l	
108-86-1	Bromobenzene	ND	25	11	ug/l	
74-97-5	Bromochloromethane	ND	25	11	ug/l	
75-27-4	Bromodichloromethane	ND	25	6.0	ug/l	
75-25-2	Bromoform	ND	25	12	ug/l	
78-93-3	2-Butanone (MEK)	ND	130	64	ug/l	
104-51-8	n-Butylbenzene	ND	25	11	ug/l	
135-98-8	sec-Butylbenzene	ND	25	6.3	ug/l	
98-06-6	tert-Butylbenzene	ND	25	10	ug/l	
75-15-0	Carbon Disulfide	ND	50	5.8	ug/l	
56-23-5	Carbon Tetrachloride	ND	25	7.5	ug/l	
108-90-7	Chlorobenzene	ND	25	5.0	ug/l	
75-00-3	Chloroethane	ND	50	16	ug/l	
67-66-3	Chloroform	ND	25	7.5	ug/l	
95-49-8	o-Chlorotoluene	ND	25	6.1	ug/l	
106-43-4	p-Chlorotoluene	ND	25	8.9	ug/l	
124-48-1	Dibromochloromethane	ND	25	6.5	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	130	20	ug/l	
106-93-4	1,2-Dibromoethane	ND	50	8.3	ug/l	
75-71-8	Dichlorodifluoromethane	ND	50	13	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	25	6.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	25	5.9	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	25	9.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	25	6.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	25	7.1	ug/l	
75-35-4	1,1-Dichloroethylene	10.2	25	5.4	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	385	25	7.8	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	25	8.3	ug/l	
78-87-5	1,2-Dichloropropane	ND	25	8.6	ug/l	
142-28-9	1,3-Dichloropropane	ND	25	7.9	ug/l	
594-20-7	2,2-Dichloropropane	ND	25	6.8	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-1	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	25	7.3	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	25	6.6	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	25	6.2	ug/l	
100-41-4	Ethylbenzene	6.9	25	6.3	ug/l	J
87-68-3	Hexachlorobutadiene	ND	50	14	ug/l	
591-78-6	2-Hexanone	ND	250	50	ug/l	
98-82-8	Isopropylbenzene	ND	25	8.2	ug/l	
99-87-6	p-Isopropyltoluene	ND	25	7.0	ug/l	
74-83-9	Methyl Bromide	ND	50	13	ug/l	
74-87-3	Methyl Chloride	ND	50	13	ug/l	
74-95-3	Methylene Bromide	ND	50	8.9	ug/l	
75-09-2	Methylene Chloride	178	130	50	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	130	35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	25	5.0	ug/l	
91-20-3	Naphthalene	ND	130	25	ug/l	
103-65-1	n-Propylbenzene	ND	25	5.0	ug/l	
100-42-5	Styrene	ND	25	6.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	25	7.1	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	8.2	ug/l	
127-18-4	Tetrachloroethylene	321	25	7.6	ug/l	
108-88-3	Toluene	ND	25	5.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	50	13	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	50	13	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	25	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	25	9.2	ug/l	
79-01-6	Trichloroethylene	1240	25	6.8	ug/l	
75-69-4	Trichlorofluoromethane	ND	50	13	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	50	16	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	25	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	25	5.0	ug/l	
108-05-4	Vinyl Acetate	ND	250	50	ug/l	
75-01-4	Vinyl Chloride	ND	25	7.9	ug/l	
	m,p-Xylene	ND	50	7.5	ug/l	
95-47-6	o-Xylene	ND	25	6.6	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	110%		79-125%
2037-26-5	Toluene-D8	108%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-1	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	110%		83-118%

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R		
Lab Sample ID:	FA32993-1	Date Sampled:	04/06/16
Matrix:	AQ - Ground Water	Date Received:	04/09/16
		Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	232	10	ug/l	1	04/11/16	04/11/16 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13085
(2) Prep QC Batch: MP30224

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-2	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0093868.D	1	04/13/16	RB	n/a	n/a	VN4246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	0.45	1.0	0.30	ug/l	J
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-2	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	3.9	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	0.60	1.0	0.27	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	109%		79-125%
2037-26-5	Toluene-D8	105%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-2	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	111%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-2	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	04/11/16	04/11/16 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13085
(2) Prep QC Batch: MP30224

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-3	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0093869.D	1	04/13/16	RB	n/a	n/a	VN4246
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-3	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	109%		79-125%
2037-26-5	Toluene-D8	108%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-3	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	108%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-3	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	04/12/16	04/12/16 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13088
(2) Prep QC Batch: MP30231

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-4	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0093890.D	1	04/13/16	RB	n/a	n/a	VN4248
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-4	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	96%		79-125%
2037-26-5	Toluene-D8	102%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-4	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	106%		83-118%

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-4	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	04/12/16	04/12/16 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13088
(2) Prep QC Batch: MP30231

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-5	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0093891.D	1	04/13/16	RB	n/a	n/a	VN4248
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.37	1.0	0.31	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-5	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	2.3	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	0.33	1.0	0.27	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	100%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-5	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	107%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-5	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	04/12/16	04/12/16 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13088
(2) Prep QC Batch: MP30231

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-6	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0093892.D	1	04/13/16	RB	n/a	n/a	VN4248
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-6	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	99%		79-125%
2037-26-5	Toluene-D8	103%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-6	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	107%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-6	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	04/12/16	04/12/16 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13088
(2) Prep QC Batch: MP30231

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-7	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0093893.D	1	04/13/16	RB	n/a	n/a	VN4248
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-7	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	104%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-7	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	110%		83-118%

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-7	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	04/12/16	04/12/16 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13088
(2) Prep QC Batch: MP30231

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-8	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0093894.D	1	04/13/16	RB	n/a	n/a	VN4248
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-8	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	103%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-8	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	109%		83-118%

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-8	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	04/12/16	04/12/16 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13088
(2) Prep QC Batch: MP30231

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-9	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0093895.D	1	04/13/16	RB	n/a	n/a	VN4248
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-9	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	104%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-9	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	109%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-9	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	04/12/16	04/12/16 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13088
(2) Prep QC Batch: MP30231

RL = Reporting Limit

Report of Analysis

Client Sample ID:	WATER WELL	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-10	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0093896.D	1	04/13/16	RB	n/a	n/a	VN4248
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WATER WELL	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-10	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	101%		79-125%
2037-26-5	Toluene-D8	104%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WATER WELL	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-10	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	108%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WATER WELL	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-10	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	04/12/16	04/12/16 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13088
(2) Prep QC Batch: MP30231

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-11	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0093905.D	1	04/14/16	RB	n/a	n/a	VN4249
Run #2	N0093935.D	50	04/14/16	RB	n/a	n/a	VN4252

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	37.6	25	10	ug/l	
71-43-2	Benzene	1600 ^a	50	10	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	13.1	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.28	1.0	0.27	ug/l	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-11	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	132 ^a	50	13	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	7.4	10	2.0	ug/l	J
98-82-8	Isopropylbenzene	1.8	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.93	1.0	0.20	ug/l	J
91-20-3	Naphthalene	2.5	5.0	1.0	ug/l	J
103-65-1	n-Propylbenzene	2.1	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	3830 ^a	50	10	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	32.6	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	6.1	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	0.45	1.0	0.31	ug/l	J
	m,p-Xylene	536 ^a	100	15	ug/l	
95-47-6	o-Xylene	283 ^a	50	13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	95%	105%	79-125%
2037-26-5	Toluene-D8	93%	105%	85-112%

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-11	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%	113%	83-118%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-12	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0093906.D	1	04/14/16	RB	n/a	n/a	VN4249
Run #2	N0093934.D	1	04/14/16	RB	n/a	n/a	VN4252

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	1.5	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-12	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND ^a	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	99%	105%	79-125%
2037-26-5	Toluene-D8	104%	105%	85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	04/06/16
Lab Sample ID:	FA32993-12	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	107%	110%	83-118%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-12	Date Sampled:	04/07/16
Lab Sample ID:	FA32993-13	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0093907.D	1	04/14/16	RB	n/a	n/a	VN4249
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-12	Date Sampled:	04/07/16
Lab Sample ID:	FA32993-13	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.1	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	101%		79-125%
2037-26-5	Toluene-D8	105%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-12	Date Sampled:	04/07/16
Lab Sample ID:	FA32993-13	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	109%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13	Date Sampled:	04/07/16
Lab Sample ID:	FA32993-14	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0093908.D	1	04/14/16	RB	n/a	n/a	VN4249
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13	Date Sampled:	04/07/16
Lab Sample ID:	FA32993-14	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	101%		79-125%
2037-26-5	Toluene-D8	107%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13	Date Sampled:	04/07/16
Lab Sample ID:	FA32993-14	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	107%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	04/07/16
Lab Sample ID:	FA32993-15	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0093909.D	1	04/14/16	RB	n/a	n/a	VN4249
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	J
71-43-2	Benzene	0.72	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	04/07/16
Lab Sample ID:	FA32993-15	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	22.3	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	106%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5	Date Sampled:	04/07/16
Lab Sample ID:	FA32993-15	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	111%		83-118%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5D	Date Sampled:	04/07/16
Lab Sample ID:	FA32993-16	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0093910.D	1	04/14/16	RB	n/a	n/a	VN4249
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	0.32	1.0	0.26	ug/l	J
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5D	Date Sampled:	04/07/16
Lab Sample ID:	FA32993-16	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.46	1.0	0.20	ug/l	J
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.71	2.0	0.50	ug/l	J
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	105%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-5D	Date Sampled:	04/07/16
Lab Sample ID:	FA32993-16	Date Received:	04/09/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	109%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA32993 CLIENT: Gannett Fleming PROJECT: 57524
 DATE/TIME RECEIVED: 4/9/16 800 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS **ACCUTEST COURIER** DELIVERY OTHER: _____
 AIRBILL NUMBERS: _____

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
- ☒ TRIP BLANK NOT PROVIDED
- ☒ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____
 NUMBER OF 5035 FIELD KITS ? _____
 NUMBER OF LAB FILTERED METALS ? _____

TEST STRIP LOT#s pH 0-3 230315

pH 10-12 219813A

OTHER (specify) _____

SUMMARY OF COMMENTS: _____

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR to .2
- ☐ OBSERVED TEMPS: 2.8
- ☐ CORRECTED TEMPS: 3.0 (USED FOR LIMS)

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
- ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
- ☐ INSUFFICIENT VOLUME FOR ANALYSIS
- ☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ☐ ID'S ON COC DO NOT MATCH LABEL
- ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- ☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- ☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
- ☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- ☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- ☐ % SOLIDS JAR NOT RECEIVED
- ☐ RESIDUAL CHLORINE PRESENT LOT# _____

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TECHNICIAN SIGNATURE/DATE

NF 11/15

REVIEWER SIGNATURE/DATE

RECEIPTLOG040416.xls

FA32993: Chain of Custody

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GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 3

Job Number: FA32993**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4246-MB	N0093852.D	1	04/12/16	RB	n/a	n/a	VN4246

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA32993-1, FA32993-2, FA32993-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: FA32993**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4246-MB	N0093852.D	1	04/12/16	RB	n/a	n/a	VN4246

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA32993-1, FA32993-2, FA32993-3

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	79-125%

Method Blank Summary

Job Number: FA32993
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4246-MB	N0093852.D	1	04/12/16	RB	n/a	n/a	VN4246

The QC reported here applies to the following samples: Method: SW846 8260B
FA32993-1, FA32993-2, FA32993-3

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	106% 85-112%
460-00-4	4-Bromofluorobenzene	113% 83-118%

5.1.1
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Method Blank Summary

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Job Number: FA32993**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4248-MB	N0093879.D	1	04/13/16	RB	n/a	n/a	VN4248

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA32993-4, FA32993-5, FA32993-6, FA32993-7, FA32993-8, FA32993-9, FA32993-10

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: FA32993

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4248-MB	N0093879.D	1	04/13/16	RB	n/a	n/a	VN4248

The QC reported here applies to the following samples:

Method: SW846 8260B

FA32993-4, FA32993-5, FA32993-6, FA32993-7, FA32993-8, FA32993-9, FA32993-10

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	79-125%

Method Blank Summary

Job Number: FA32993
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4248-MB	N0093879.D	1	04/13/16	RB	n/a	n/a	VN4248

The QC reported here applies to the following samples: Method: SW846 8260B

FA32993-4, FA32993-5, FA32993-6, FA32993-7, FA32993-8, FA32993-9, FA32993-10

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	106% 85-112%
460-00-4	4-Bromofluorobenzene	108% 83-118%

Method Blank Summary

Page 1 of 3

Job Number: FA32993**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4249-MB	N0093904.D	1	04/14/16	RB	n/a	n/a	VN4249

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA32993-11, FA32993-12, FA32993-13, FA32993-14, FA32993-15, FA32993-16

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	

Method Blank Summary

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Job Number: FA32993**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4249-MB	N0093904.D	1	04/14/16	RB	n/a	n/a	VN4249

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA32993-11, FA32993-12, FA32993-13, FA32993-14, FA32993-15, FA32993-16

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.60	2.0	0.51	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	99%
17060-07-0	1,2-Dichloroethane-D4	98%

Method Blank Summary

Job Number: FA32993
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4249-MB	N0093904.D	1	04/14/16	RB	n/a	n/a	VN4249

The QC reported here applies to the following samples: Method: SW846 8260B

FA32993-11, FA32993-12, FA32993-13, FA32993-14, FA32993-15, FA32993-16

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	103% 85-112%
460-00-4	4-Bromofluorobenzene	109% 83-118%

Method Blank Summary

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Job Number: FA32993

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4252-MB	N0093931.D	1	04/14/16	RB	n/a	n/a	VN4252

The QC reported here applies to the following samples:

Method: SW846 8260B

FA32993-11, FA32993-12

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 83-118%
17060-07-0	1,2-Dichloroethane-D4	101% 79-125%
2037-26-5	Toluene-D8	104% 85-112%
460-00-4	4-Bromofluorobenzene	112% 83-118%

Blank Spike Summary

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Job Number: FA32993

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4246-BS	N0093851.D	1	04/12/16	RB	n/a	n/a	VN4246

The QC reported here applies to the following samples:

Method: SW846 8260B

FA32993-1, FA32993-2, FA32993-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	130	104	50-147
71-43-2	Benzene	25	24.3	97	81-122
108-86-1	Bromobenzene	25	22.2	89	80-121
74-97-5	Bromochloromethane	25	22.4	90	76-123
75-27-4	Bromodichloromethane	25	24.8	99	79-123
75-25-2	Bromoform	25	23.8	95	66-123
78-93-3	2-Butanone (MEK)	125	107	86	56-143
104-51-8	n-Butylbenzene	25	25.0	100	79-126
135-98-8	sec-Butylbenzene	25	25.4	102	83-133
98-06-6	tert-Butylbenzene	25	23.8	95	80-133
75-15-0	Carbon Disulfide	25	25.8	103	66-148
56-23-5	Carbon Tetrachloride	25	25.3	101	76-136
108-90-7	Chlorobenzene	25	23.3	93	82-124
75-00-3	Chloroethane	25	31.1	124	62-144
67-66-3	Chloroform	25	24.6	98	80-124
95-49-8	o-Chlorotoluene	25	23.5	94	81-127
106-43-4	p-Chlorotoluene	25	23.7	95	83-130
124-48-1	Dibromochloromethane	25	24.3	97	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	21.8	87	64-123
106-93-4	1,2-Dibromoethane	25	23.2	93	75-120
75-71-8	Dichlorodifluoromethane	25	30.0	120	42-167
95-50-1	1,2-Dichlorobenzene	25	22.7	91	82-124
541-73-1	1,3-Dichlorobenzene	25	23.1	92	84-125
106-46-7	1,4-Dichlorobenzene	25	21.8	87	78-120
75-34-3	1,1-Dichloroethane	25	25.4	102	81-122
107-06-2	1,2-Dichloroethane	25	24.7	99	75-125
75-35-4	1,1-Dichloroethylene	25	28.0	112	78-137
156-59-2	cis-1,2-Dichloroethylene	25	22.7	91	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.6	106	76-127
78-87-5	1,2-Dichloropropane	25	24.0	96	76-124
142-28-9	1,3-Dichloropropane	25	22.3	89	80-118
594-20-7	2,2-Dichloropropane	25	26.9	108	74-139
563-58-6	1,1-Dichloropropene	25	26.0	104	79-131
10061-01-5	cis-1,3-Dichloropropene	25	25.1	100	75-118
10061-02-6	trans-1,3-Dichloropropene	25	26.8	107	80-120
100-41-4	Ethylbenzene	25	24.0	96	81-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA32993**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4246-BS	N0093851.D	1	04/12/16	RB	n/a	n/a	VN4246

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA32993-1, FA32993-2, FA32993-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
87-68-3	Hexachlorobutadiene	25	22.2	89	75-142
591-78-6	2-Hexanone	125	108	86	61-129
98-82-8	Isopropylbenzene	25	25.4	102	83-132
99-87-6	p-Isopropyltoluene	25	24.7	99	79-130
74-83-9	Methyl Bromide	25	27.8	111	59-143
74-87-3	Methyl Chloride	25	24.5	98	50-159
74-95-3	Methylene Bromide	25	23.9	96	78-119
75-09-2	Methylene Chloride	25	26.2	105	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	113	90	66-122
1634-04-4	Methyl Tert Butyl Ether	25	22.6	90	72-117
91-20-3	Naphthalene	25	23.4	94	63-132
103-65-1	n-Propylbenzene	25	25.4	102	82-133
100-42-5	Styrene	25	24.0	96	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	23.6	94	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	25.5	102	72-120
127-18-4	Tetrachloroethylene	25	23.4	94	76-135
108-88-3	Toluene	25	23.6	94	80-120
87-61-6	1,2,3-Trichlorobenzene	25	22.0	88	68-131
120-82-1	1,2,4-Trichlorobenzene	25	21.4	86	73-129
71-55-6	1,1,1-Trichloroethane	25	24.8	99	75-130
79-00-5	1,1,2-Trichloroethane	25	23.6	94	76-119
79-01-6	Trichloroethylene	25	24.5	98	81-126
75-69-4	Trichlorofluoromethane	25	30.1	120	71-156
96-18-4	1,2,3-Trichloropropane	25	22.3	89	77-120
95-63-6	1,2,4-Trimethylbenzene	25	24.6	98	79-120
108-67-8	1,3,5-Trimethylbenzene	25	24.0	96	79-120
108-05-4	Vinyl Acetate	125	96.7	77	43-154
75-01-4	Vinyl Chloride	25	30.0	120	69-159
	m,p-Xylene	50	48.7	97	79-126
95-47-6	o-Xylene	25	24.6	98	80-127

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	79-125%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA32993
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4246-BS	N0093851.D	1	04/12/16	RB	n/a	n/a	VN4246

The QC reported here applies to the following samples: Method: SW846 8260B
FA32993-1, FA32993-2, FA32993-3

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	101%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA32993**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4248-BS	N0093878.D	1	04/13/16	RB	n/a	n/a	VN4248

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA32993-4, FA32993-5, FA32993-6, FA32993-7, FA32993-8, FA32993-9, FA32993-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	126	101	50-147
71-43-2	Benzene	25	24.8	99	81-122
108-86-1	Bromobenzene	25	22.3	89	80-121
74-97-5	Bromochloromethane	25	22.4	90	76-123
75-27-4	Bromodichloromethane	25	26.0	104	79-123
75-25-2	Bromoform	25	24.2	97	66-123
78-93-3	2-Butanone (MEK)	125	110	88	56-143
104-51-8	n-Butylbenzene	25	26.0	104	79-126
135-98-8	sec-Butylbenzene	25	25.8	103	83-133
98-06-6	tert-Butylbenzene	25	24.4	98	80-133
75-15-0	Carbon Disulfide	25	26.6	106	66-148
56-23-5	Carbon Tetrachloride	25	25.9	104	76-136
108-90-7	Chlorobenzene	25	23.3	93	82-124
75-00-3	Chloroethane	25	26.9	108	62-144
67-66-3	Chloroform	25	24.9	100	80-124
95-49-8	o-Chlorotoluene	25	23.5	94	81-127
106-43-4	p-Chlorotoluene	25	23.6	94	83-130
124-48-1	Dibromochloromethane	25	25.1	100	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	25.2	101	64-123
106-93-4	1,2-Dibromoethane	25	23.7	95	75-120
75-71-8	Dichlorodifluoromethane	25	29.2	117	42-167
95-50-1	1,2-Dichlorobenzene	25	23.1	92	82-124
541-73-1	1,3-Dichlorobenzene	25	23.6	94	84-125
106-46-7	1,4-Dichlorobenzene	25	22.2	89	78-120
75-34-3	1,1-Dichloroethane	25	25.7	103	81-122
107-06-2	1,2-Dichloroethane	25	25.8	103	75-125
75-35-4	1,1-Dichloroethylene	25	28.0	112	78-137
156-59-2	cis-1,2-Dichloroethylene	25	23.0	92	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.9	108	76-127
78-87-5	1,2-Dichloropropane	25	24.2	97	76-124
142-28-9	1,3-Dichloropropane	25	22.8	91	80-118
594-20-7	2,2-Dichloropropane	25	27.4	110	74-139
563-58-6	1,1-Dichloropropene	25	26.8	107	79-131
10061-01-5	cis-1,3-Dichloropropene	25	25.8	103	75-118
10061-02-6	trans-1,3-Dichloropropene	25	27.2	109	80-120
100-41-4	Ethylbenzene	25	24.2	97	81-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA32993**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4248-BS	N0093878.D	1	04/13/16	RB	n/a	n/a	VN4248

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA32993-4, FA32993-5, FA32993-6, FA32993-7, FA32993-8, FA32993-9, FA32993-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
87-68-3	Hexachlorobutadiene	25	22.0	88	75-142
591-78-6	2-Hexanone	125	110	88	61-129
98-82-8	Isopropylbenzene	25	26.2	105	83-132
99-87-6	p-Isopropyltoluene	25	25.2	101	79-130
74-83-9	Methyl Bromide	25	25.1	100	59-143
74-87-3	Methyl Chloride	25	23.1	92	50-159
74-95-3	Methylene Bromide	25	25.1	100	78-119
75-09-2	Methylene Chloride	25	28.3	113	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	117	94	66-122
1634-04-4	Methyl Tert Butyl Ether	25	23.6	94	72-117
91-20-3	Naphthalene	25	23.9	96	63-132
103-65-1	n-Propylbenzene	25	25.3	101	82-133
100-42-5	Styrene	25	24.6	98	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	24.9	100	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	26.2	105	72-120
127-18-4	Tetrachloroethylene	25	24.4	98	76-135
108-88-3	Toluene	25	24.1	96	80-120
87-61-6	1,2,3-Trichlorobenzene	25	23.4	94	68-131
120-82-1	1,2,4-Trichlorobenzene	25	21.8	87	73-129
71-55-6	1,1,1-Trichloroethane	25	24.8	99	75-130
79-00-5	1,1,2-Trichloroethane	25	24.1	96	76-119
79-01-6	Trichloroethylene	25	25.1	100	81-126
75-69-4	Trichlorofluoromethane	25	27.6	110	71-156
96-18-4	1,2,3-Trichloropropane	25	22.9	92	77-120
95-63-6	1,2,4-Trimethylbenzene	25	24.7	99	79-120
108-67-8	1,3,5-Trimethylbenzene	25	23.9	96	79-120
108-05-4	Vinyl Acetate	125	121	97	43-154
75-01-4	Vinyl Chloride	25	27.5	110	69-159
	m,p-Xylene	50	49.7	99	79-126
95-47-6	o-Xylene	25	25.1	100	80-127

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	79-125%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA32993
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4248-BS	N0093878.D	1	04/13/16	RB	n/a	n/a	VN4248

The QC reported here applies to the following samples: Method: SW846 8260B

FA32993-4, FA32993-5, FA32993-6, FA32993-7, FA32993-8, FA32993-9, FA32993-10

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	100%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA32993**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4249-BS	N0093903.D	1	04/14/16	RB	n/a	n/a	VN4249

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA32993-11, FA32993-12, FA32993-13, FA32993-14, FA32993-15, FA32993-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	102	82	50-147
71-43-2	Benzene	25	25.2	101	81-122
108-86-1	Bromobenzene	25	24.1	96	80-121
74-97-5	Bromochloromethane	25	24.9	100	76-123
75-27-4	Bromodichloromethane	25	26.2	105	79-123
75-25-2	Bromoform	25	26.5	106	66-123
78-93-3	2-Butanone (MEK)	125	101	81	56-143
104-51-8	n-Butylbenzene	25	25.5	102	79-126
135-98-8	sec-Butylbenzene	25	25.7	103	83-133
98-06-6	tert-Butylbenzene	25	24.9	100	80-133
75-15-0	Carbon Disulfide	25	25.2	101	66-148
56-23-5	Carbon Tetrachloride	25	25.8	103	76-136
108-90-7	Chlorobenzene	25	24.8	99	82-124
75-00-3	Chloroethane	25	26.1	104	62-144
67-66-3	Chloroform	25	25.3	101	80-124
95-49-8	o-Chlorotoluene	25	23.8	95	81-127
106-43-4	p-Chlorotoluene	25	23.8	95	83-130
124-48-1	Dibromochloromethane	25	27.4	110	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	23.0	92	64-123
106-93-4	1,2-Dibromoethane	25	24.8	99	75-120
75-71-8	Dichlorodifluoromethane	25	29.1	116	42-167
95-50-1	1,2-Dichlorobenzene	25	24.1	96	82-124
541-73-1	1,3-Dichlorobenzene	25	24.7	99	84-125
106-46-7	1,4-Dichlorobenzene	25	23.0	92	78-120
75-34-3	1,1-Dichloroethane	25	26.1	104	81-122
107-06-2	1,2-Dichloroethane	25	25.4	102	75-125
75-35-4	1,1-Dichloroethylene	25	27.4	110	78-137
156-59-2	cis-1,2-Dichloroethylene	25	25.0	100	78-120
156-60-5	trans-1,2-Dichloroethylene	25	27.3	109	76-127
78-87-5	1,2-Dichloropropane	25	24.5	98	76-124
142-28-9	1,3-Dichloropropane	25	23.6	94	80-118
594-20-7	2,2-Dichloropropane	25	27.7	111	74-139
563-58-6	1,1-Dichloropropene	25	27.1	108	79-131
10061-01-5	cis-1,3-Dichloropropene	25	26.1	104	75-118
10061-02-6	trans-1,3-Dichloropropene	25	28.4	114	80-120
100-41-4	Ethylbenzene	25	24.9	100	81-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA32993**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4249-BS	N0093903.D	1	04/14/16	RB	n/a	n/a	VN4249

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA32993-11, FA32993-12, FA32993-13, FA32993-14, FA32993-15, FA32993-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
87-68-3	Hexachlorobutadiene	25	24.9	100	75-142
591-78-6	2-Hexanone	125	102	82	61-129
98-82-8	Isopropylbenzene	25	27.4	110	83-132
99-87-6	p-Isopropyltoluene	25	25.8	103	79-130
74-83-9	Methyl Bromide	25	23.6	94	59-143
74-87-3	Methyl Chloride	25	21.7	87	50-159
74-95-3	Methylene Bromide	25	26.0	104	78-119
75-09-2	Methylene Chloride	25	26.4	106	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	112	90	66-122
1634-04-4	Methyl Tert Butyl Ether	25	24.1	96	72-117
91-20-3	Naphthalene	25	25.7	103	63-132
103-65-1	n-Propylbenzene	25	25.3	101	82-133
100-42-5	Styrene	25	26.1	104	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	26.8	107	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	24.5	98	72-120
127-18-4	Tetrachloroethylene	25	26.8	107	76-135
108-88-3	Toluene	25	24.9	100	80-120
87-61-6	1,2,3-Trichlorobenzene	25	24.6	98	68-131
120-82-1	1,2,4-Trichlorobenzene	25	23.6	94	73-129
71-55-6	1,1,1-Trichloroethane	25	26.3	105	75-130
79-00-5	1,1,2-Trichloroethane	25	24.3	97	76-119
79-01-6	Trichloroethylene	25	26.1	104	81-126
75-69-4	Trichlorofluoromethane	25	25.8	103	71-156
96-18-4	1,2,3-Trichloropropane	25	22.9	92	77-120
95-63-6	1,2,4-Trimethylbenzene	25	25.1	100	79-120
108-67-8	1,3,5-Trimethylbenzene	25	24.7	99	79-120
108-05-4	Vinyl Acetate	125	116	93	43-154
75-01-4	Vinyl Chloride	25	26.7	107	69-159
	m,p-Xylene	50	51.4	103	79-126
95-47-6	o-Xylene	25	26.3	105	80-127

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	79-125%

* = Outside of Control Limits.

Blank Spike Summary

Page 3 of 3

Job Number: FA32993

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4249-BS	N0093903.D	1	04/14/16	RB	n/a	n/a	VN4249

The QC reported here applies to the following samples:

Method: SW846 8260B

FA32993-11, FA32993-12, FA32993-13, FA32993-14, FA32993-15, FA32993-16

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	100%	85-112%
460-00-4	4-Bromofluorobenzene	97%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 1

Job Number: FA32993

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4252-BS	N0093930.D	1	04/14/16	RB	n/a	n/a	VN4252

The QC reported here applies to the following samples:

Method: SW846 8260B

FA32993-11, FA32993-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	25.7	103	81-122
100-41-4	Ethylbenzene	25	25.1	100	81-121
108-88-3	Toluene	25	25.3	101	80-120
	m,p-Xylene	50	51.8	104	79-126
95-47-6	o-Xylene	25	26.5	106	80-127

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	96%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	99%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA32993

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA32927-18MS	N0093880.D	50	04/13/16	RB	n/a	n/a	VN4246
FA32927-18MSD	N0093881.D	50	04/13/16	RB	n/a	n/a	VN4246
FA32927-18	N0093859.D	20	04/12/16	RB	n/a	n/a	VN4246
FA32927-18	N0093865.D	50	04/13/16	RB	n/a	n/a	VN4246

The QC reported here applies to the following samples:

Method: SW846 8260B

FA32993-1, FA32993-2, FA32993-3

CAS No.	Compound	FA32927-18 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	500 U		6250	87	6250	5140	82	5	50-147/21
71-43-2	Benzene	20 U		1250	107	1250	1220	98	9	81-122/14
108-86-1	Bromobenzene	20 U		1250	96	1250	1150	92	4	80-121/14
74-97-5	Bromochloromethane	20 U		1250	98	1250	1170	94	5	76-123/14
75-27-4	Bromodichloromethane	20 U		1250	110	1250	1300	104	6	79-123/19
75-25-2	Bromoform	20 U		1250	98	1250	1200	96	2	66-123/21
78-93-3	2-Butanone (MEK)	100 U		6250	82	6250	5080	81	1	56-143/18
104-51-8	n-Butylbenzene	20 U		1250	114	1250	1280	102	10	79-126/16
135-98-8	sec-Butylbenzene	20 U		1250	112	1250	1270	102	10	83-133/16
98-06-6	tert-Butylbenzene	20 U		1250	104	1250	1200	96	8	80-133/16
75-15-0	Carbon Disulfide	40 U		1250	110	1250	1230	98	11	66-148/23
56-23-5	Carbon Tetrachloride	20 U		1250	113	1250	1250	100	12	76-136/23
108-90-7	Chlorobenzene	20 U		1250	102	1250	1180	94	7	82-124/14
75-00-3	Chloroethane	40 U		1250	111	1250	1220	98	13	62-144/20
67-66-3	Chloroform	20 U		1250	106	1250	1250	100	6	80-124/15
95-49-8	o-Chlorotoluene	20 U		1250	102	1250	1180	94	8	81-127/15
106-43-4	p-Chlorotoluene	20 U		1250	103	1250	1180	94	9	83-130/15
124-48-1	Dibromochloromethane	20 U		1250	105	1250	1260	101	4	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	100 U		1250	110	1250	1270	102	8	64-123/18
106-93-4	1,2-Dibromoethane	40 U		1250	100	1250	1220	98	2	75-120/13
75-71-8	Dichlorodifluoromethane	40 U		1250	114	1250	1360	109	4	42-167/19
95-50-1	1,2-Dichlorobenzene	20 U		1250	100	1250	1160	93	7	82-124/14
541-73-1	1,3-Dichlorobenzene	20 U		1250	103	1250	1190	95	8	84-125/14
106-46-7	1,4-Dichlorobenzene	20 U		1250	96	1250	1130	90	6	78-120/15
75-34-3	1,1-Dichloroethane	20 U		1250	110	1250	1270	102	8	81-122/15
107-06-2	1,2-Dichloroethane	20 U		1250	110	1250	1310	105	5	75-125/14
75-35-4	1,1-Dichloroethylene	20 U		1250	120	1250	1340	107	11	78-137/18
156-59-2	cis-1,2-Dichloroethylene	1930 *		1250	89	1250	2830	72*	7	78-120/15
156-60-5	trans-1,2-Dichloroethylene	12.6 I		1250	116	1250	1320	105	10	76-127/17
78-87-5	1,2-Dichloropropane	20 U		1250	105	1250	1240	99	5	76-124/14
142-28-9	1,3-Dichloropropane	20 U		1250	99	1250	1180	94	5	80-118/13
594-20-7	2,2-Dichloropropane	20 U		1250	116	1250	1330	106	9	74-139/17
563-58-6	1,1-Dichloropropene	20 U		1250	114	1250	1300	104	9	79-131/16
10061-01-5	cis-1,3-Dichloropropene	20 U		1250	109	1250	1270	102	7	75-118/23
10061-02-6	trans-1,3-Dichloropropene	20 U		1250	116	1250	1390	111	4	80-120/22
100-41-4	Ethylbenzene	20 U		1250	105	1250	1190	95	10	81-121/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA32993

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA32927-18MS	N0093880.D	50	04/13/16	RB	n/a	n/a	VN4246
FA32927-18MSD	N0093881.D	50	04/13/16	RB	n/a	n/a	VN4246
FA32927-18	N0093859.D	20	04/12/16	RB	n/a	n/a	VN4246
FA32927-18	N0093865.D	50	04/13/16	RB	n/a	n/a	VN4246

The QC reported here applies to the following samples:

Method: SW846 8260B

FA32993-1, FA32993-2, FA32993-3

CAS No.	Compound	FA32927-18 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	40 U	1250	1160	93	1250	1070	86	8	75-142/19
591-78-6	2-Hexanone	200 U	6250	4900	78	6250	4910	79	0	61-129/18
98-82-8	Isopropylbenzene	20 U	1250	1420	114	1250	1290	103	10	83-132/15
99-87-6	p-Isopropyltoluene	20 U	1250	1360	109	1250	1230	98	10	79-130/16
74-83-9	Methyl Bromide	40 U	1250	1240	99	1250	1160	93	7	59-143/19
74-87-3	Methyl Chloride	40 U	1250	1150	92	1250	1070	86	7	50-159/19
74-95-3	Methylene Bromide	40 U	1250	1330	106	1250	1260	101	5	78-119/14
75-09-2	Methylene Chloride	100 U	1250	1610	129	1250	1500	120	7	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	100 U	6250	5590	89	6250	5500	88	2	66-122/16
1634-04-4	Methyl Tert Butyl Ether	20 U	1250	1220	98	1250	1200	96	2	72-117/14
91-20-3	Naphthalene	100 U	1250	1230	98	1250	1200	96	2	63-132/25
103-65-1	n-Propylbenzene	20 U	1250	1370	110	1250	1250	100	9	82-133/15
100-42-5	Styrene	20 U	1250	1330	106	1250	1240	99	7	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	20 U	1250	1350	108	1250	1250	100	8	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	20 U	1250	1400	112	1250	1350	108	4	72-120/14
127-18-4	Tetrachloroethylene	20 U	1250	1300	104	1250	1200	96	8	76-135/16
108-88-3	Toluene	20 U	1250	1300	104	1250	1210	97	7	80-120/14
87-61-6	1,2,3-Trichlorobenzene	40 U	1250	1190	95	1250	1110	89	7	68-131/25
120-82-1	1,2,4-Trichlorobenzene	40 U	1250	1150	92	1250	1070	86	7	73-129/20
71-55-6	1,1,1-Trichloroethane	20 U	1250	1320	106	1250	1230	98	7	75-130/16
79-00-5	1,1,2-Trichloroethane	20 U	1250	1300	104	1250	1250	100	4	76-119/14
79-01-6	Trichloroethylene	42.7	1250	1410	109	1250	1270	98	10	81-126/15
75-69-4	Trichlorofluoromethane	40 U	1250	1440	115	1250	1300	104	10	71-156/21
96-18-4	1,2,3-Trichloropropane	40 U	1250	1220	98	1250	1230	98	1	77-120/16
95-63-6	1,2,4-Trimethylbenzene	20 U	1250	1340	107	1250	1240	99	8	79-120/18
108-67-8	1,3,5-Trimethylbenzene	20 U	1250	1300	104	1250	1200	96	8	79-120/19
108-05-4	Vinyl Acetate	200 U	6250	6440	103	6250	6290	101	2	43-154/14
75-01-4	Vinyl Chloride	288	1250	1520	99	1250	1400	89	8	69-159/18
	m,p-Xylene	40 U	2500	2690	108	2500	2440	98	10	79-126/15
95-47-6	o-Xylene	20 U	1250	1350	108	1250	1240	99	8	80-127/14

CAS No.	Surrogate Recoveries	MS	MSD	FA32927-18	FA32927-18	Limits
1868-53-7	Dibromofluoromethane	100%	101%	101%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	101%	108%	111%	79-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA32993

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA32927-18MS	N0093880.D	50	04/13/16	RB	n/a	n/a	VN4246
FA32927-18MSD	N0093881.D	50	04/13/16	RB	n/a	n/a	VN4246
FA32927-18	N0093859.D	20	04/12/16	RB	n/a	n/a	VN4246
FA32927-18	N0093865.D	50	04/13/16	RB	n/a	n/a	VN4246

The QC reported here applies to the following samples:

Method: SW846 8260B

FA32993-1, FA32993-2, FA32993-3

CAS No.	Surrogate Recoveries	MS	MSD	FA32927-18	FA32927-18	Limits
2037-26-5	Toluene-D8	102%	100%	105%	110%	85-112%
460-00-4	4-Bromofluorobenzene	98%	96%	107%	108%	83-118%

(a) Result is from Run #2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA32993

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA32993-5MS	N0093897.D	1	04/14/16	RB	n/a	n/a	VN4248
FA32993-5MSD	N0093898.D	1	04/14/16	RB	n/a	n/a	VN4248
FA32993-5	N0093891.D	1	04/13/16	RB	n/a	n/a	VN4248

The QC reported here applies to the following samples:

Method: SW846 8260B

FA32993-4, FA32993-5, FA32993-6, FA32993-7, FA32993-8, FA32993-9, FA32993-10

CAS No.	Compound	FA32993-5 ug/l	Spike Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	104	83	125	105	84	1	50-147/21
71-43-2	Benzene	ND		25	25.8	103	25	24.6	98	5	81-122/14
108-86-1	Bromobenzene	ND		25	23.7	95	25	23.7	95	0	80-121/14
74-97-5	Bromochloromethane	ND		25	24.4	98	25	24.0	96	2	76-123/14
75-27-4	Bromodichloromethane	ND		25	25.4	102	25	24.4	98	4	79-123/19
75-25-2	Bromoform	ND		25	20.4	82	25	20.0	80	2	66-123/21
78-93-3	2-Butanone (MEK)	ND		125	104	83	125	102	82	2	56-143/18
104-51-8	n-Butylbenzene	ND		25	27.0	108	25	25.5	102	6	79-126/16
135-98-8	sec-Butylbenzene	ND		25	26.7	107	25	25.9	104	3	83-133/16
98-06-6	tert-Butylbenzene	ND		25	25.4	102	25	24.6	98	3	80-133/16
75-15-0	Carbon Disulfide	ND		25	26.0	104	25	23.2	93	11	66-148/23
56-23-5	Carbon Tetrachloride	ND		25	27.9	112	25	25.6	102	9	76-136/23
108-90-7	Chlorobenzene	ND		25	25.1	100	25	24.6	98	2	82-124/14
75-00-3	Chloroethane	ND		25	27.1	108	25	24.7	99	9	62-144/20
67-66-3	Chloroform	ND		25	26.6	106	25	25.4	102	5	80-124/15
95-49-8	o-Chlorotoluene	ND		25	24.6	98	25	23.7	95	4	81-127/15
106-43-4	p-Chlorotoluene	ND		25	24.9	100	25	23.8	95	5	83-130/15
124-48-1	Dibromochloromethane	ND		25	23.0	92	25	23.6	94	3	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	ND		25	23.7	95	25	25.1	100	6	64-123/18
106-93-4	1,2-Dibromoethane	ND		25	24.4	98	25	25.7	103	5	75-120/13
75-71-8	Dichlorodifluoromethane	ND		25	23.7	95	25	22.1	88	7	42-167/19
95-50-1	1,2-Dichlorobenzene	ND		25	24.5	98	25	24.0	96	2	82-124/14
541-73-1	1,3-Dichlorobenzene	ND		25	25.1	100	25	24.4	98	3	84-125/14
106-46-7	1,4-Dichlorobenzene	ND		25	23.9	96	25	23.1	92	3	78-120/15
75-34-3	1,1-Dichloroethane	ND		25	26.9	108	25	25.5	102	5	81-122/15
107-06-2	1,2-Dichloroethane	ND		25	25.7	103	25	25.3	101	2	75-125/14
75-35-4	1,1-Dichloroethylene	ND		25	29.2	117	25	27.4	110	6	78-137/18
156-59-2	cis-1,2-Dichloroethylene	0.37	J	25	26.1	103	25	24.9	98	5	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		25	28.4	114	25	26.6	106	7	76-127/17
78-87-5	1,2-Dichloropropane	ND		25	24.8	99	25	24.4	98	2	76-124/14
142-28-9	1,3-Dichloropropane	ND		25	23.2	93	25	23.8	95	3	80-118/13
594-20-7	2,2-Dichloropropane	ND		25	29.7	119	25	27.5	110	8	74-139/17
563-58-6	1,1-Dichloropropene	ND		25	28.1	112	25	26.0	104	8	79-131/16
10061-01-5	cis-1,3-Dichloropropene	ND		25	25.8	103	25	23.4	94	10	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		25	27.4	110	25	27.4	110	0	80-120/22
100-41-4	Ethylbenzene	ND		25	25.4	102	25	24.7	99	3	81-121/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA32993

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA32993-5MS	N0093897.D	1	04/14/16	RB	n/a	n/a	VN4248
FA32993-5MSD	N0093898.D	1	04/14/16	RB	n/a	n/a	VN4248
FA32993-5	N0093891.D	1	04/13/16	RB	n/a	n/a	VN4248

The QC reported here applies to the following samples:

Method: SW846 8260B

FA32993-4, FA32993-5, FA32993-6, FA32993-7, FA32993-8, FA32993-9, FA32993-10

CAS No.	Compound	FA32993-5 ug/l	Spike Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	ND		25	24.7	99	25	23.5	94	5	75-142/19
591-78-6	2-Hexanone	ND		125	107	86	125	113	90	5	61-129/18
98-82-8	Isopropylbenzene	ND		25	28.1	112	25	27.0	108	4	83-132/15
99-87-6	p-Isopropyltoluene	ND		25	26.5	106	25	25.2	101	5	79-130/16
74-83-9	Methyl Bromide	ND		25	25.4	102	25	23.1	92	9	59-143/19
74-87-3	Methyl Chloride	ND		25	20.6	82	25	19.1	76	8	50-159/19
74-95-3	Methylene Bromide	ND		25	25.1	100	25	25.2	101	0	78-119/14
75-09-2	Methylene Chloride	ND		25	26.9	108	25	26.5	106	1	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		125	116	93	125	120	96	3	66-122/16
1634-04-4	Methyl Tert Butyl Ether	ND		25	23.3	93	25	23.9	96	3	72-117/14
91-20-3	Naphthalene	ND		25	25.0	100	25	26.2	105	5	63-132/25
103-65-1	n-Propylbenzene	ND		25	26.2	105	25	25.1	100	4	82-133/15
100-42-5	Styrene	ND		25	23.2	93	25	21.6	86	7	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		25	26.6	106	25	26.5	106	0	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	24.7	99	25	25.2	101	2	72-120/14
127-18-4	Tetrachloroethylene	2.3		25	29.1	107	25	27.9	102	4	76-135/16
108-88-3	Toluene	ND		25	25.3	101	25	24.8	99	2	80-120/14
87-61-6	1,2,3-Trichlorobenzene	ND		25	22.7	91	25	24.0	96	6	68-131/25
120-82-1	1,2,4-Trichlorobenzene	ND		25	22.7	91	25	23.0	92	1	73-129/20
71-55-6	1,1,1-Trichloroethane	ND		25	26.9	108	25	24.7	99	9	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		25	24.5	98	25	24.9	100	2	76-119/14
79-01-6	Trichloroethylene	0.33	J	25	26.6	105	25	25.0	99	6	81-126/15
75-69-4	Trichlorofluoromethane	ND		25	27.1	108	25	25.0	100	8	71-156/21
96-18-4	1,2,3-Trichloropropane	ND		25	22.1	88	25	22.9	92	4	77-120/16
95-63-6	1,2,4-Trimethylbenzene	ND		25	25.1	100	25	24.0	96	4	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND		25	24.5	98	25	23.2	93	5	79-120/19
108-05-4	Vinyl Acetate	ND		125	106	85	125	106	85	0	43-154/14
75-01-4	Vinyl Chloride	ND		25	26.3	105	25	23.8	95	10	69-159/18
	m,p-Xylene	ND		50	51.9	104	50	50.0	100	4	79-126/15
95-47-6	o-Xylene	ND		25	26.6	106	25	25.9	104	3	80-127/14

CAS No.	Surrogate Recoveries	MS	MSD	FA32993-5	Limits
1868-53-7	Dibromofluoromethane	103%	100%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	96%	98%	100%	79-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA32993
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA32993-5MS	N0093897.D	1	04/14/16	RB	n/a	n/a	VN4248
FA32993-5MSD	N0093898.D	1	04/14/16	RB	n/a	n/a	VN4248
FA32993-5	N0093891.D	1	04/13/16	RB	n/a	n/a	VN4248

The QC reported here applies to the following samples: Method: SW846 8260B

FA32993-4, FA32993-5, FA32993-6, FA32993-7, FA32993-8, FA32993-9, FA32993-10

CAS No.	Surrogate Recoveries	MS	MSD	FA32993-5	Limits
2037-26-5	Toluene-D8	99%	99%	100%	85-112%
460-00-4	4-Bromofluorobenzene	98%	98%	107%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA32993

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA32993-13MS	N0093925.D	1	04/14/16	RB	n/a	n/a	VN4249
FA32993-13MSD	N0093926.D	1	04/14/16	RB	n/a	n/a	VN4249
FA32993-13	N0093907.D	1	04/14/16	RB	n/a	n/a	VN4249

The QC reported here applies to the following samples:

Method: SW846 8260B

FA32993-11, FA32993-12, FA32993-13, FA32993-14, FA32993-15, FA32993-16

CAS No.	Compound	FA32993-13 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	125	91.6	73	125	95.1	76	4	50-147/21
71-43-2	Benzene	ND	25	26.3	105	25	24.3	97	8	81-122/14
108-86-1	Bromobenzene	ND	25	24.7	99	25	22.5	90	9	80-121/14
74-97-5	Bromochloromethane	ND	25	24.2	97	25	23.5	94	3	76-123/14
75-27-4	Bromodichloromethane	ND	25	26.7	107	25	25.0	100	7	79-123/19
75-25-2	Bromoform	ND	25	23.3	93	25	23.0	92	1	66-123/21
78-93-3	2-Butanone (MEK)	ND	125	95.6	76	125	98.7	79	3	56-143/18
104-51-8	n-Butylbenzene	ND	25	27.4	110	25	25.4	102	8	79-126/16
135-98-8	sec-Butylbenzene	ND	25	27.3	109	25	25.3	101	8	83-133/16
98-06-6	tert-Butylbenzene	ND	25	25.5	102	25	23.9	96	6	80-133/16
75-15-0	Carbon Disulfide	ND	25	24.3	97	25	20.9	84	15	66-148/23
56-23-5	Carbon Tetrachloride	ND	25	27.2	109	25	24.3	97	11	76-136/23
108-90-7	Chlorobenzene	ND	25	25.3	101	25	23.7	95	7	82-124/14
75-00-3	Chloroethane	ND	25	28.0	112	25	25.5	102	9	62-144/20
67-66-3	Chloroform	ND	25	26.6	106	25	24.4	98	9	80-124/15
95-49-8	o-Chlorotoluene	ND	25	25.2	101	25	23.2	93	8	81-127/15
106-43-4	p-Chlorotoluene	ND	25	25.1	100	25	23.5	94	7	83-130/15
124-48-1	Dibromochloromethane	ND	25	25.3	101	25	25.0	100	1	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	ND	25	26.1	104	25	25.6	102	2	64-123/18
106-93-4	1,2-Dibromoethane	ND	25	24.9	100	25	25.0	100	0	75-120/13
75-71-8	Dichlorodifluoromethane	ND	25	30.0	120	25	28.0	112	7	42-167/19
95-50-1	1,2-Dichlorobenzene	ND	25	24.2	97	25	23.6	94	3	82-124/14
541-73-1	1,3-Dichlorobenzene	ND	25	25.0	100	25	23.7	95	5	84-125/14
106-46-7	1,4-Dichlorobenzene	ND	25	23.6	94	25	22.5	90	5	78-120/15
75-34-3	1,1-Dichloroethane	ND	25	27.4	110	25	25.3	101	8	81-122/15
107-06-2	1,2-Dichloroethane	ND	25	26.4	106	25	25.4	102	4	75-125/14
75-35-4	1,1-Dichloroethylene	ND	25	29.8	119	25	26.8	107	11	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND	25	25.2	101	25	23.7	95	6	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND	25	28.5	114	25	26.3	105	8	76-127/17
78-87-5	1,2-Dichloropropane	ND	25	25.7	103	25	24.4	98	5	76-124/14
142-28-9	1,3-Dichloropropane	ND	25	24.1	96	25	23.5	94	3	80-118/13
594-20-7	2,2-Dichloropropane	ND	25	29.0	116	25	26.2	105	10	74-139/17
563-58-6	1,1-Dichloropropene	ND	25	27.8	111	25	25.7	103	8	79-131/16
10061-01-5	cis-1,3-Dichloropropene	ND	25	23.9	96	25	22.7	91	5	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND	25	27.3	109	25	26.4	106	3	80-120/22
100-41-4	Ethylbenzene	ND	25	25.7	103	25	24.1	96	6	81-121/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA32993

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA32993-13MS	N0093925.D	1	04/14/16	RB	n/a	n/a	VN4249
FA32993-13MSD	N0093926.D	1	04/14/16	RB	n/a	n/a	VN4249
FA32993-13	N0093907.D	1	04/14/16	RB	n/a	n/a	VN4249

The QC reported here applies to the following samples:

Method: SW846 8260B

FA32993-11, FA32993-12, FA32993-13, FA32993-14, FA32993-15, FA32993-16

CAS No.	Compound	FA32993-13 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	ND	25	24.0	96	25	22.3	89	7	75-142/19
591-78-6	2-Hexanone	ND	125	98.5	79	125	101	81	3	61-129/18
98-82-8	Isopropylbenzene	ND	25	28.3	113	25	26.2	105	8	83-132/15
99-87-6	p-Isopropyltoluene	ND	25	26.6	106	25	24.5	98	8	79-130/16
74-83-9	Methyl Bromide	ND	25	24.9	100	25	23.1	92	7	59-143/19
74-87-3	Methyl Chloride	ND	25	24.0	96	25	21.7	87	10	50-159/19
74-95-3	Methylene Bromide	ND	25	26.0	104	25	26.1	104	0	78-119/14
75-09-2	Methylene Chloride	ND	25	27.7	111	25	25.8	103	7	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	125	108	86	125	111	89	3	66-122/16
1634-04-4	Methyl Tert Butyl Ether	1.1	25	25.7	98	25	25.3	97	2	72-117/14
91-20-3	Naphthalene	ND	25	26.5	106	25	27.5	110	4	63-132/25
103-65-1	n-Propylbenzene	ND	25	26.9	108	25	24.6	98	9	82-133/15
100-42-5	Styrene	ND	25	26.2	105	25	24.2	97	8	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND	25	25.9	104	25	24.6	98	5	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	26.7	107	25	27.2	109	2	72-120/14
127-18-4	Tetrachloroethylene	ND	25	25.5	102	25	24.2	97	5	76-135/16
108-88-3	Toluene	ND	25	25.1	100	25	23.5	94	7	80-120/14
87-61-6	1,2,3-Trichlorobenzene	ND	25	24.3	97	25	24.1	96	1	68-131/25
120-82-1	1,2,4-Trichlorobenzene	ND	25	23.3	93	25	22.7	91	3	73-129/20
71-55-6	1,1,1-Trichloroethane	ND	25	26.5	106	25	24.2	97	9	75-130/16
79-00-5	1,1,2-Trichloroethane	ND	25	25.2	101	25	24.9	100	1	76-119/14
79-01-6	Trichloroethylene	ND	25	26.8	107	25	24.5	98	9	81-126/15
75-69-4	Trichlorofluoromethane	ND	25	29.0	116	25	25.3	101	14	71-156/21
96-18-4	1,2,3-Trichloropropane	ND	25	23.9	96	25	23.9	96	0	77-120/16
95-63-6	1,2,4-Trimethylbenzene	ND	25	26.4	106	25	24.4	98	8	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND	25	25.6	102	25	23.9	96	7	79-120/19
108-05-4	Vinyl Acetate	ND	125	120	96	125	119	95	1	43-154/14
75-01-4	Vinyl Chloride	ND	25	28.4	114	25	25.8	103	10	69-159/18
	m,p-Xylene	ND	50	53.0	106	50	49.6	99	7	79-126/15
95-47-6	o-Xylene	ND	25	26.8	107	25	25.2	101	6	80-127/14

CAS No.	Surrogate Recoveries	MS	MSD	FA32993-13	Limits
1868-53-7	Dibromofluoromethane	100%	101%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	103%	101%	79-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA32993
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA32993-13MS	N0093925.D	1	04/14/16	RB	n/a	n/a	VN4249
FA32993-13MSD	N0093926.D	1	04/14/16	RB	n/a	n/a	VN4249
FA32993-13	N0093907.D	1	04/14/16	RB	n/a	n/a	VN4249

The QC reported here applies to the following samples: Method: SW846 8260B

FA32993-11, FA32993-12, FA32993-13, FA32993-14, FA32993-15, FA32993-16

CAS No.	Surrogate Recoveries	MS	MSD	FA32993-13	Limits
2037-26-5	Toluene-D8	97%	98%	105%	85-112%
460-00-4	4-Bromofluorobenzene	97%	99%	109%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: FA32993

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA32993-11MS	N0093949.D	50	04/15/16	RB	n/a	n/a	VN4252
FA32993-11MSD	N0093950.D	50	04/15/16	RB	n/a	n/a	VN4252
FA32993-11	N0093935.D	50	04/14/16	RB	n/a	n/a	VN4252

The QC reported here applies to the following samples:

Method: SW846 8260B

FA32993-11, FA32993-12

CAS No.	Compound	FA32993-11 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	1600	1250	2650	84	1250	2590	79*	2	81-122/14
100-41-4	Ethylbenzene	132	1250	1310	94	1250	1280	92	2	81-121/14
108-88-3	Toluene	3830	1250	4410	46* a	1250	4320	39* a	2	80-120/14
	m,p-Xylene	536	2500	2990	98	2500	2900	95	3	79-126/15
95-47-6	o-Xylene	283	1250	1550	101	1250	1510	98	3	80-127/14

CAS No.	Surrogate Recoveries	MS	MSD	FA32993-11	Limits
1868-53-7	Dibromofluoromethane	103%	105%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	100%	105%	79-125%
2037-26-5	Toluene-D8	98%	98%	105%	85-112%
460-00-4	4-Bromofluorobenzene	99%	98%	113%	83-118%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA32993
Account: GFLEMLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30224
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 04/11/16 04/11/16

Metal	RL	IDL	MDL	MB raw	final	MB raw	final
Aluminum	200	14	14				
Antimony	6.0	1	1				
Arsenic	10	1.3	1.3	-0.80	<10	-0.60	<10
Barium	200	1	1				
Beryllium	4.0	.2	.2				
Cadmium	5.0	.2	.2				
Calcium	1000	50	50				
Chromium	10	1	1				
Cobalt	50	.2	.2				
Copper	25	1	1				
Iron	300	17	17				
Lead	5.0	1	1.1				
Magnesium	5000	35	35				
Manganese	15	.5	1				
Molybdenum	50	.3	.3				
Nickel	40	.4	.4				
Potassium	10000	200	200				
Selenium	10	2.4	2.9				
Silver	10	.7	.7				
Sodium	10000	500	500				
Strontium	10	.5	.5				
Thallium	10	1.1	1.4				
Tin	50	.9	1				
Titanium	10	.5	1				
Vanadium	50	.5	.6				
Zinc	20	3	4.4				

Associated samples MP30224: FA32993-1, FA32993-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA32993
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30224
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/11/16 04/11/16

Metal	FA32912-1 Original DUP	RPD	QC Limits	FA32912-1 Original MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	anr						
Antimony							
Arsenic	0.0 0.0	NC	0-20	0.0 2060	2000	103.0	80-120
Barium							
Beryllium							
Cadmium	anr						
Calcium							
Chromium							
Cobalt							
Copper	anr						
Iron	anr						
Lead	anr						
Magnesium							
Manganese							
Molybdenum							
Nickel							
Potassium							
Selenium							
Silver							
Sodium							
Strontium							
Thallium							
Tin							
Titanium							
Vanadium							
Zinc	anr						

Associated samples MP30224: FA32993-1, FA32993-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA32993
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30224
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/11/16

Metal	FA32912-1 Original MSD	Spike lot MPFLICP2 % Rec	MSD RPD	QC Limit
Aluminum	anr			
Antimony				
Arsenic	0.0	2030	2000	101.5
Barium				
Beryllium				
Cadmium	anr			
Calcium				
Chromium				
Cobalt				
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP30224: FA32993-1, FA32993-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA32993
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30224
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/11/16

Metal	BSP Result	Spike lot MPFLICP2	% Rec	QC Limits
Aluminum	anr			
Antimony				
Arsenic	2070	2000	103.5	80-120
Barium				
Beryllium				
Cadmium	anr			
Calcium				
Chromium				
Cobalt				
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP30224: FA32993-1, FA32993-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

6.1.3

6

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA32993
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30224
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/11/16

Metal	FA32912-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony				
Arsenic	0.00	0.00	NC	0-10
Barium				
Beryllium				
Cadmium	anr			
Calcium				
Chromium				
Cobalt				
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP30224: FA32993-1, FA32993-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA32993
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30224
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

04/11/16

Metal	Sample ml	Final ml	FA32912-1 Raw	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic	9.8	10		109.6	0.2	5	100	109.6	80-120
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP30224: FA32993-1, FA32993-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA32993
Account: GFLEMLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30231
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 04/12/16

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14		
Antimony	6.0	1	1		
Arsenic	10	1.3	1.3	-0.30	<10
Barium	200	1	1		
Beryllium	4.0	.2	.2		
Cadmium	5.0	.2	.2		
Calcium	1000	50	50		
Chromium	10	1	1		
Cobalt	50	.2	.2		
Copper	25	1	1		
Iron	300	17	17		
Lead	5.0	1	1.1		
Magnesium	5000	35	35		
Manganese	15	.5	1		
Molybdenum	50	.3	.3		
Nickel	40	.4	.4		
Potassium	10000	200	200		
Selenium	10	2.4	2.9		
Silver	10	.7	.7		
Sodium	10000	500	500		
Strontium	10	.5	.5		
Thallium	10	1.1	1.4		
Tin	50	.9	1		
Titanium	10	.5	1		
Vanadium	50	.5	.6		
Zinc	20	3	4.4		

Associated samples MP30231: FA32993-3, FA32993-4, FA32993-5, FA32993-6, FA32993-7, FA32993-8, FA32993-9, FA32993-10

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA32993
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30231
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/12/16 04/12/16

Metal	FA32924-3 Original	DUP	RPD	QC Limits	FA32924-3 Original MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	anr							
Antimony	anr							
Arsenic	0.0	0.0	NC	0-20	0.0	2010	2000	100.5
Barium	anr							
Beryllium	anr							
Cadmium	anr							
Calcium	anr							
Chromium	anr							
Cobalt	anr							
Copper	anr							
Iron	anr							
Lead	anr							
Magnesium	anr							
Manganese	anr							
Molybdenum								
Nickel	anr							
Potassium	anr							
Selenium	anr							
Silver	anr							
Sodium	anr							
Strontium								
Thallium	anr							
Tin								
Titanium								
Vanadium	anr							
Zinc	anr							

Associated samples MP30231: FA32993-3, FA32993-4, FA32993-5, FA32993-6, FA32993-7, FA32993-8, FA32993-9, FA32993-10

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA32993
 Account: GFLEMLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30231
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/12/16

Metal	FA32924-3 Original MSD	Spike lot MPFLICP2 % Rec	MSD RPD	QC Limit
Aluminum	anr			
Antimony	anr			
Arsenic	0.0	2010	2000	100.5
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP30231: FA32993-3, FA32993-4, FA32993-5, FA32993-6, FA32993-7, FA32993-8, FA32993-9, FA32993-10

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA32993
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30231
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/12/16

Metal	BSP Result	Spike lot MPFLICP2 % Rec	QC Limits
Aluminum	anr		
Antimony	anr		
Arsenic	2010	2000 100.5	80-120
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	anr		
Magnesium	anr		
Manganese	anr		
Molybdenum			
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	anr		

Associated samples MP30231: FA32993-3, FA32993-4, FA32993-5, FA32993-6, FA32993-7, FA32993-8, FA32993-9, FA32993-10

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA32993
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30231
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 04/12/16

Metal	FA32924-3 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	0.00	0.00	NC	0-10
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP30231: FA32993-3, FA32993-4, FA32993-5, FA32993-6, FA32993-7, FA32993-8, FA32993-9, FA32993-10

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA32993
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30231
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

04/12/16

Metal	Sample ml	Final ml	FA32924-3 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic	9.8	10			105.8	0.2	5	100	105.8	80-120
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP30231: FA32993-3, FA32993-4, FA32993-5, FA32993-6, FA32993-7, FA32993-8, FA32993-9, FA32993-10

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested

APPENDIX B



ACCUTEST
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08/05/16

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VERIFICATION, TESTING AND CERTIFICATION COMPANY.



e-Hardcopy 2.0
Automated Report

Technical Report for

Gannett Fleming

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

57524

SGS Accutest Job Number: FA35726

Sampling Date: 07/26/16

Report to:

Gannett Fleming
West Lake Corporate Center 9119 Corporate Lake Dr, Suite 150
Tampa, FL 33634-6323
agetchell@gfnet.com; tfalkner@gfnet.com

ATTN: Aaron Getchell

Total number of pages in report: **78**



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001)
DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177),
AK, AR, GA, KY, MA, NV, OK, UT, WA

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Test results relate only to samples analyzed.

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Sample Summary

Gannett Fleming

Job No: FA35726

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA35726-1	07/26/16	13:00	DDTF 07/28/16	SO	Soil	SB-1 4-6
FA35726-2	07/26/16	13:15	DDTF 07/28/16	SO	Soil	SB-2 0-2
FA35726-3	07/26/16	13:35	DDTF 07/28/16	SO	Soil	SB-3 0-2
FA35726-4	07/26/16	13:55	DDTF 07/28/16	SO	Soil	SB-4 2-4
FA35726-5	07/26/16	14:20	DDTF 07/28/16	SO	Soil	SB-5 2-4
FA35726-6	07/26/16	14:45	DDTF 07/28/16	SO	Soil	SB-6 0-2
FA35726-7	07/26/16	15:10	DDTF 07/28/16	SO	Soil	SB-7 0-2
FA35726-8	07/26/16	15:35	DDTF 07/28/16	SO	Soil	SB-8 2-4
FA35726-9	07/26/16	15:50	DDTF 07/28/16	SO	Soil	SB-9 2-4
FA35726-10	07/26/16	16:10	DDTF 07/28/16	SO	Soil	SB-10 0-2
FA35726-11	07/26/16	16:25	DDTF 07/28/16	SO	Soil	PREBURN

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: FA35726**Account:** Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA**Collected:** 07/26/16

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

FA35726-1 SB-1 4-6

Acetone	0.0175 J	0.035	0.0072	mg/kg	SW846 8260B
Benzene	0.0098	0.0035	0.00089	mg/kg	SW846 8260B
Ethylbenzene	0.0034 J	0.0035	0.00077	mg/kg	SW846 8260B
Toluene	0.0460	0.0035	0.00080	mg/kg	SW846 8260B
1,2,4-Trimethylbenzene	0.0017 J	0.0035	0.00071	mg/kg	SW846 8260B
m,p-Xylene	0.0178	0.0071	0.0012	mg/kg	SW846 8260B
o-Xylene	0.0136	0.0035	0.00078	mg/kg	SW846 8260B

FA35726-2 SB-2 0-2

No hits reported in this sample.

FA35726-3 SB-3 0-2

Acetone	0.180	0.063	0.013	mg/kg	SW846 8260B
2-Butanone (MEK)	0.0267 J	0.032	0.012	mg/kg	SW846 8260B
Carbon Disulfide	0.0227	0.0063	0.0013	mg/kg	SW846 8260B
Ethylbenzene	0.0169	0.0063	0.0014	mg/kg	SW846 8260B
Isopropylbenzene	0.0058 J	0.0063	0.0018	mg/kg	SW846 8260B
p-Isopropyltoluene	0.0194	0.0063	0.0013	mg/kg	SW846 8260B
Methylene Chloride ^a	0.0197 B	0.013	0.0051	mg/kg	SW846 8260B
Naphthalene	0.0065	0.0063	0.0025	mg/kg	SW846 8260B
n-Propylbenzene	0.0026 J	0.0063	0.0016	mg/kg	SW846 8260B
Styrene	0.0106	0.0063	0.0013	mg/kg	SW846 8260B
Toluene	0.0053 J	0.0063	0.0014	mg/kg	SW846 8260B
1,2,4-Trimethylbenzene	0.0176	0.0063	0.0013	mg/kg	SW846 8260B
1,3,5-Trimethylbenzene	0.0062 J	0.0063	0.0013	mg/kg	SW846 8260B
m,p-Xylene	0.0099 J	0.013	0.0022	mg/kg	SW846 8260B
o-Xylene	0.0078	0.0063	0.0014	mg/kg	SW846 8260B

FA35726-4 SB-4 2-4

Acetone	0.119	0.045	0.0093	mg/kg	SW846 8260B
2-Butanone (MEK)	0.0141 J	0.023	0.0082	mg/kg	SW846 8260B
Carbon Disulfide	0.0013 J	0.0045	0.00091	mg/kg	SW846 8260B
Ethylbenzene	0.0023 J	0.0045	0.00099	mg/kg	SW846 8260B
Methylene Chloride ^a	0.0054 JB	0.0091	0.0036	mg/kg	SW846 8260B
Naphthalene	0.0026 J	0.0045	0.0018	mg/kg	SW846 8260B
Toluene	0.0011 J	0.0045	0.0010	mg/kg	SW846 8260B
1,2,4-Trimethylbenzene	0.0043 J	0.0045	0.00091	mg/kg	SW846 8260B
1,3,5-Trimethylbenzene	0.0012 J	0.0045	0.00091	mg/kg	SW846 8260B
m,p-Xylene	0.0019 J	0.0091	0.0016	mg/kg	SW846 8260B
o-Xylene	0.0015 J	0.0045	0.0010	mg/kg	SW846 8260B

Summary of Hits

Job Number: FA35726
Account: Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Collected: 07/26/16

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

FA35726-5 SB-5 2-4

Benzene	0.0102	0.0040	0.0010	mg/kg	SW846 8260B
Ethylbenzene	0.133 J	0.24	0.053	mg/kg	SW846 8260B
Toluene	0.0049	0.0040	0.00091	mg/kg	SW846 8260B
1,3,5-Trimethylbenzene	0.0014 J	0.0040	0.00080	mg/kg	SW846 8260B
m,p-Xylene	0.699	0.48	0.085	mg/kg	SW846 8260B
o-Xylene	0.425	0.24	0.053	mg/kg	SW846 8260B

FA35726-6 SB-6 0-2

No hits reported in this sample.

FA35726-7 SB-7 0-2

No hits reported in this sample.

FA35726-8 SB-8 2-4

No hits reported in this sample.

FA35726-9 SB-9 2-4

No hits reported in this sample.

FA35726-10 SB-10 0-2

No hits reported in this sample.

FA35726-11 PREBURN

Aroclor 1242 ^b	0.0926 J	0.040	0.016	mg/kg	SW846 8082A
Aroclor 1254 ^b	0.245 J	0.040	0.019	mg/kg	SW846 8082A
Aroclor 1260 ^b	0.165 J	0.040	0.016	mg/kg	SW846 8082A
Lead	0.20	0.050		mg/l	SW846 6010C

(a) Suspected laboratory contaminant.

(b) All hits confirmed by dual column analysis. Estimated value due to the presence of multiple overlapping Aroclor patterns.



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SB-1 4-6	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-1	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	89.1
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0078864.D	1	07/28/16	EP	n/a	n/a	VF2709
Run #2							

	Initial Weight	Final Volume
Run #1	7.93 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	0.0175	0.035	0.0072	mg/kg	J
71-43-2	Benzene	0.0098	0.0035	0.00089	mg/kg	
108-86-1	Bromobenzene	ND	0.0035	0.00086	mg/kg	
74-97-5	Bromochloromethane	ND	0.0035	0.00079	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0035	0.00071	mg/kg	
75-25-2	Bromoform	ND	0.0035	0.00071	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.018	0.0064	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0035	0.00071	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0035	0.00071	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0035	0.00071	mg/kg	
75-15-0	Carbon Disulfide	ND	0.0035	0.00071	mg/kg	
56-23-5	Carbon Tetrachloride	ND	0.0035	0.0013	mg/kg	
108-90-7	Chlorobenzene	ND	0.0035	0.00071	mg/kg	
75-00-3	Chloroethane	ND	0.0035	0.0014	mg/kg	
67-66-3	Chloroform	ND	0.0035	0.00086	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0035	0.00071	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0035	0.00071	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0035	0.00071	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0035	0.0016	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0035	0.00071	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0035	0.0018	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0035	0.00071	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0035	0.00071	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0035	0.00072	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0035	0.0012	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0035	0.00071	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0035	0.00071	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0035	0.00085	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0035	0.0011	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0035	0.0011	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0035	0.00071	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0035	0.00071	mg/kg	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 4-6	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-1	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	89.1
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	0.0035	0.00091	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0035	0.0013	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0035	0.00071	mg/kg	
100-41-4	Ethylbenzene	0.0034	0.0035	0.00077	mg/kg	J
87-68-3	Hexachlorobutadiene	ND	0.0035	0.0015	mg/kg	
591-78-6	2-Hexanone	ND	0.018	0.0062	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0035	0.0010	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0035	0.00071	mg/kg	
74-83-9	Methyl Bromide	ND	0.0035	0.0018	mg/kg	
74-87-3	Methyl Chloride	ND	0.0035	0.0017	mg/kg	
74-95-3	Methylene Bromide	ND	0.0035	0.0013	mg/kg	
75-09-2	Methylene Chloride	ND	0.0071	0.0028	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.018	0.0076	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0035	0.00079	mg/kg	
91-20-3	Naphthalene	ND	0.0035	0.0014	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0035	0.00088	mg/kg	
100-42-5	Styrene	ND	0.0035	0.00071	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0035	0.00079	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0035	0.0016	mg/kg	
127-18-4	Tetrachloroethylene	ND	0.0035	0.00093	mg/kg	
108-88-3	Toluene	0.0460	0.0035	0.00080	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0035	0.0014	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0035	0.0010	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0035	0.00071	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0035	0.0013	mg/kg	
79-01-6	Trichloroethylene	ND	0.0035	0.00083	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0035	0.0013	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0035	0.0012	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	0.0017	0.0035	0.00071	mg/kg	J
108-67-8	1,3,5-Trimethylbenzene	ND	0.0035	0.00071	mg/kg	
108-05-4	Vinyl Acetate	ND	0.018	0.0066	mg/kg	
75-01-4	Vinyl Chloride	ND	0.0035	0.0012	mg/kg	
	m,p-Xylene	0.0178	0.0071	0.0012	mg/kg	
95-47-6	o-Xylene	0.0136	0.0035	0.00078	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		75-124%
17060-07-0	1,2-Dichloroethane-D4	104%		72-135%
2037-26-5	Toluene-D8	100%		75-126%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 4-6	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-1	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	89.1
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		71-133%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 0-2	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-2	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	89.3
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0117104.D	1	07/28/16	EP	n/a	n/a	VC4650
Run #2							

	Initial Weight	Final Volume
Run #1	7.04 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.040	0.0081	mg/kg	
71-43-2	Benzene	ND	0.0040	0.0010	mg/kg	
108-86-1	Bromobenzene	ND	0.0040	0.00097	mg/kg	
74-97-5	Bromochloromethane	ND	0.0040	0.00088	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0040	0.00080	mg/kg	
75-25-2	Bromoform	ND	0.0040	0.00080	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.020	0.0072	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0040	0.00080	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0040	0.00080	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0040	0.00080	mg/kg	
75-15-0	Carbon Disulfide	ND	0.0040	0.00080	mg/kg	
56-23-5	Carbon Tetrachloride	ND	0.0040	0.0014	mg/kg	
108-90-7	Chlorobenzene	ND	0.0040	0.00080	mg/kg	
75-00-3	Chloroethane	ND	0.0040	0.0016	mg/kg	
67-66-3	Chloroform	ND	0.0040	0.00097	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0040	0.00080	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0040	0.00080	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0040	0.00080	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0040	0.0018	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0040	0.00080	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0040	0.0020	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0040	0.00080	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0040	0.00080	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0040	0.00081	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0040	0.0013	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0040	0.00080	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0040	0.00080	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0040	0.00095	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0040	0.0012	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0040	0.0013	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0040	0.00080	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0040	0.00080	mg/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 0-2	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-2	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	89.3
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	0.0040	0.0010	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0040	0.0015	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0040	0.00080	mg/kg	
100-41-4	Ethylbenzene	ND	0.0040	0.00087	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.0040	0.0017	mg/kg	
591-78-6	2-Hexanone	ND	0.020	0.0069	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0040	0.0011	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0040	0.00080	mg/kg	
74-83-9	Methyl Bromide	ND	0.0040	0.0021	mg/kg	
74-87-3	Methyl Chloride	ND	0.0040	0.0019	mg/kg	
74-95-3	Methylene Bromide	ND	0.0040	0.0014	mg/kg	
75-09-2	Methylene Chloride	ND	0.0080	0.0032	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.020	0.0085	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0040	0.00088	mg/kg	
91-20-3	Naphthalene	ND	0.0040	0.0016	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0040	0.00099	mg/kg	
100-42-5	Styrene	ND	0.0040	0.00080	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0040	0.00089	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0040	0.0018	mg/kg	
127-18-4	Tetrachloroethylene	ND	0.0040	0.0010	mg/kg	
108-88-3	Toluene	ND	0.0040	0.00090	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0040	0.0016	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0040	0.0012	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0040	0.00080	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0040	0.0014	mg/kg	
79-01-6	Trichloroethylene	ND	0.0040	0.00093	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0040	0.0015	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0040	0.0013	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0040	0.00080	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.0040	0.00080	mg/kg	
108-05-4	Vinyl Acetate	ND	0.020	0.0074	mg/kg	
75-01-4	Vinyl Chloride	ND	0.0040	0.0013	mg/kg	
	m,p-Xylene	ND	0.0080	0.0014	mg/kg	
95-47-6	o-Xylene	ND	0.0040	0.00087	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	116%		75-124%
17060-07-0	1,2-Dichloroethane-D4	117%		72-135%
2037-26-5	Toluene-D8	92%		75-126%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 0-2	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-2	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	89.3
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		71-133%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 0-2	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-3	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	77.1
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0117105.D	1	07/28/16	EP	n/a	n/a	VC4650
Run #2							

	Initial Weight	Final Volume
Run #1	5.12 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	0.180	0.063	0.013	mg/kg	
71-43-2	Benzene	ND	0.0063	0.0016	mg/kg	
108-86-1	Bromobenzene	ND	0.0063	0.0015	mg/kg	
74-97-5	Bromochloromethane	ND	0.0063	0.0014	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0063	0.0013	mg/kg	
75-25-2	Bromoform	ND	0.0063	0.0013	mg/kg	
78-93-3	2-Butanone (MEK)	0.0267	0.032	0.012	mg/kg	J
104-51-8	n-Butylbenzene	ND	0.0063	0.0013	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0063	0.0013	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0063	0.0013	mg/kg	
75-15-0	Carbon Disulfide	0.0227	0.0063	0.0013	mg/kg	
56-23-5	Carbon Tetrachloride	ND	0.0063	0.0023	mg/kg	
108-90-7	Chlorobenzene	ND	0.0063	0.0013	mg/kg	
75-00-3	Chloroethane	ND	0.0063	0.0025	mg/kg	
67-66-3	Chloroform	ND	0.0063	0.0015	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0063	0.0013	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0063	0.0013	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0063	0.0013	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0063	0.0028	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0063	0.0013	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0063	0.0031	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0063	0.0013	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0063	0.0013	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0063	0.0013	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0063	0.0021	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0063	0.0013	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0063	0.0013	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0063	0.0015	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0063	0.0019	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0063	0.0020	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0063	0.0013	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0063	0.0013	mg/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 0-2	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-3	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	77.1
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	0.0063	0.0016	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0063	0.0024	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0063	0.0013	mg/kg	
100-41-4	Ethylbenzene	0.0169	0.0063	0.0014	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.0063	0.0028	mg/kg	
591-78-6	2-Hexanone	ND	0.032	0.011	mg/kg	
98-82-8	Isopropylbenzene	0.0058	0.0063	0.0018	mg/kg	J
99-87-6	p-Isopropyltoluene	0.0194	0.0063	0.0013	mg/kg	
74-83-9	Methyl Bromide	ND	0.0063	0.0033	mg/kg	
74-87-3	Methyl Chloride	ND	0.0063	0.0030	mg/kg	
74-95-3	Methylene Bromide	ND	0.0063	0.0023	mg/kg	
75-09-2	Methylene Chloride ^a	0.0197	0.013	0.0051	mg/kg	B
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.032	0.014	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0063	0.0014	mg/kg	
91-20-3	Naphthalene	0.0065	0.0063	0.0025	mg/kg	
103-65-1	n-Propylbenzene	0.0026	0.0063	0.0016	mg/kg	J
100-42-5	Styrene	0.0106	0.0063	0.0013	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0063	0.0014	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0063	0.0028	mg/kg	
127-18-4	Tetrachloroethylene	ND	0.0063	0.0017	mg/kg	
108-88-3	Toluene	0.0053	0.0063	0.0014	mg/kg	J
87-61-6	1,2,3-Trichlorobenzene	ND	0.0063	0.0025	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0063	0.0019	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0063	0.0013	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0063	0.0023	mg/kg	
79-01-6	Trichloroethylene	ND	0.0063	0.0015	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0063	0.0024	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0063	0.0021	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	0.0176	0.0063	0.0013	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	0.0062	0.0063	0.0013	mg/kg	J
108-05-4	Vinyl Acetate	ND	0.032	0.012	mg/kg	
75-01-4	Vinyl Chloride	ND	0.0063	0.0021	mg/kg	
	m,p-Xylene	0.0099	0.013	0.0022	mg/kg	J
95-47-6	o-Xylene	0.0078	0.0063	0.0014	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		75-124%
17060-07-0	1,2-Dichloroethane-D4	117%		72-135%
2037-26-5	Toluene-D8	95%		75-126%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-3 0-2	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-3	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	77.1
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	105%		71-133%

(a) Suspected laboratory contaminant.

ND = Not detected	MDL = Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-4- 2-4	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-4	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	80.2
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0117106.D	1	07/28/16	EP	n/a	n/a	VC4650
Run #2							

	Initial Weight	Final Volume
Run #1	6.87 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	0.119	0.045	0.0093	mg/kg	
71-43-2	Benzene	ND	0.0045	0.0011	mg/kg	
108-86-1	Bromobenzene	ND	0.0045	0.0011	mg/kg	
74-97-5	Bromochloromethane	ND	0.0045	0.0010	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0045	0.00091	mg/kg	
75-25-2	Bromoform	ND	0.0045	0.00091	mg/kg	
78-93-3	2-Butanone (MEK)	0.0141	0.023	0.0082	mg/kg	J
104-51-8	n-Butylbenzene	ND	0.0045	0.00091	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0045	0.00091	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0045	0.00091	mg/kg	
75-15-0	Carbon Disulfide	0.0013	0.0045	0.00091	mg/kg	J
56-23-5	Carbon Tetrachloride	ND	0.0045	0.0016	mg/kg	
108-90-7	Chlorobenzene	ND	0.0045	0.00091	mg/kg	
75-00-3	Chloroethane	ND	0.0045	0.0018	mg/kg	
67-66-3	Chloroform	ND	0.0045	0.0011	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0045	0.00091	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0045	0.00091	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0045	0.00091	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0045	0.0020	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0045	0.00091	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0045	0.0023	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0045	0.00091	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0045	0.00091	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0045	0.00093	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0045	0.0015	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0045	0.00091	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0045	0.00091	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0045	0.0011	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0045	0.0014	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0045	0.0014	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0045	0.00091	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0045	0.00091	mg/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-4- 2-4	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-4	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	80.2
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	0.0045	0.0012	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0045	0.0017	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0045	0.00091	mg/kg	
100-41-4	Ethylbenzene	0.0023	0.0045	0.00099	mg/kg	J
87-68-3	Hexachlorobutadiene	ND	0.0045	0.0020	mg/kg	
591-78-6	2-Hexanone	ND	0.023	0.0079	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0045	0.0013	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0045	0.00091	mg/kg	
74-83-9	Methyl Bromide	ND	0.0045	0.0023	mg/kg	
74-87-3	Methyl Chloride	ND	0.0045	0.0022	mg/kg	
74-95-3	Methylene Bromide	ND	0.0045	0.0017	mg/kg	
75-09-2	Methylene Chloride ^a	0.0054	0.0091	0.0036	mg/kg	JB
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.023	0.0097	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0045	0.0010	mg/kg	
91-20-3	Naphthalene	0.0026	0.0045	0.0018	mg/kg	J
103-65-1	n-Propylbenzene	ND	0.0045	0.0011	mg/kg	
100-42-5	Styrene	ND	0.0045	0.00091	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0045	0.0010	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0045	0.0020	mg/kg	
127-18-4	Tetrachloroethylene	ND	0.0045	0.0012	mg/kg	
108-88-3	Toluene	0.0011	0.0045	0.0010	mg/kg	J
87-61-6	1,2,3-Trichlorobenzene	ND	0.0045	0.0018	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0045	0.0013	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0045	0.00091	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0045	0.0016	mg/kg	
79-01-6	Trichloroethylene	ND	0.0045	0.0011	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0045	0.0017	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0045	0.0015	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	0.0043	0.0045	0.00091	mg/kg	J
108-67-8	1,3,5-Trimethylbenzene	0.0012	0.0045	0.00091	mg/kg	J
108-05-4	Vinyl Acetate	ND	0.023	0.0085	mg/kg	
75-01-4	Vinyl Chloride	ND	0.0045	0.0015	mg/kg	
	m,p-Xylene	0.0019	0.0091	0.0016	mg/kg	J
95-47-6	o-Xylene	0.0015	0.0045	0.0010	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	119%		75-124%
17060-07-0	1,2-Dichloroethane-D4	119%		72-135%
2037-26-5	Toluene-D8	89%		75-126%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-4- 2-4	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-4	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	80.2
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		71-133%

(a) Suspected laboratory contaminant.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-5 2-4	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-5	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0117107.D	1	07/28/16	EP	n/a	n/a	VC4650
Run #2	F0078871.D	1	07/28/16	EP	n/a	n/a	VF2709

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.40 g	5.0 ml	
Run #2	7.57 g	5.0 ml	100 ul

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.040	0.0082	mg/kg	
71-43-2	Benzene	0.0102	0.0040	0.0010	mg/kg	
108-86-1	Bromobenzene	ND	0.0040	0.00098	mg/kg	
74-97-5	Bromochloromethane	ND	0.0040	0.00089	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0040	0.00080	mg/kg	
75-25-2	Bromoform	ND	0.0040	0.00080	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.020	0.0073	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0040	0.00080	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0040	0.00080	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0040	0.00080	mg/kg	
75-15-0	Carbon Disulfide	ND	0.0040	0.00080	mg/kg	
56-23-5	Carbon Tetrachloride	ND	0.0040	0.0014	mg/kg	
108-90-7	Chlorobenzene	ND	0.0040	0.00080	mg/kg	
75-00-3	Chloroethane	ND	0.0040	0.0016	mg/kg	
67-66-3	Chloroform	ND	0.0040	0.00098	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0040	0.00080	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0040	0.00080	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0040	0.00080	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0040	0.0018	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0040	0.00080	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0040	0.0020	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0040	0.00080	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0040	0.00080	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0040	0.00082	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0040	0.0013	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0040	0.00080	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0040	0.00080	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0040	0.00096	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0040	0.0012	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0040	0.0013	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0040	0.00080	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0040	0.00080	mg/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-5 2-4	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-5	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	0.0040	0.0010	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0040	0.0015	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0040	0.00080	mg/kg	
100-41-4	Ethylbenzene	0.133 ^a	0.24	0.053	mg/kg	J
87-68-3	Hexachlorobutadiene	ND	0.0040	0.0017	mg/kg	
591-78-6	2-Hexanone	ND	0.020	0.0070	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0040	0.0011	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0040	0.00080	mg/kg	
74-83-9	Methyl Bromide	ND	0.0040	0.0021	mg/kg	
74-87-3	Methyl Chloride	ND	0.0040	0.0019	mg/kg	
74-95-3	Methylene Bromide	ND	0.0040	0.0015	mg/kg	
75-09-2	Methylene Chloride	ND	0.0080	0.0032	mg/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.020	0.0086	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0040	0.00089	mg/kg	
91-20-3	Naphthalene	ND	0.0040	0.0016	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0040	0.00099	mg/kg	
100-42-5	Styrene	ND	0.0040	0.00080	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0040	0.00090	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0040	0.0018	mg/kg	
127-18-4	Tetrachloroethylene	ND	0.0040	0.0010	mg/kg	
108-88-3	Toluene	0.0049	0.0040	0.00091	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0040	0.0016	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0040	0.0012	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0040	0.00080	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0040	0.0015	mg/kg	
79-01-6	Trichloroethylene	ND	0.0040	0.00094	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0040	0.0015	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0040	0.0013	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0040	0.00080	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	0.0014	0.0040	0.00080	mg/kg	J
108-05-4	Vinyl Acetate	ND	0.020	0.0075	mg/kg	
75-01-4	Vinyl Chloride	ND	0.0040	0.0013	mg/kg	
	m,p-Xylene	0.699 ^a	0.48	0.085	mg/kg	
95-47-6	o-Xylene	0.425 ^a	0.24	0.053	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%	102%	75-124%
17060-07-0	1,2-Dichloroethane-D4	117%	109%	72-135%
2037-26-5	Toluene-D8	88%	105%	75-126%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-5 2-4	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-5	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%	102%	71-133%

(a) Result is from Run# 2

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-6 0-2	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-6	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	83.5
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	83.5		%	1	07/30/16 13:40	KH	SM19 2540G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-7 0-2	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-7	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	88.9
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	88.9		%	1	07/30/16 13:40	KH	SM19 2540G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-8 2-4	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-8	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	84.9
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	84.9		%	1	07/30/16 13:40	KH	SM19 2540G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-9 2-4	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-9	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	84.2
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	84.2		%	1	07/30/16 13:40	KH	SM19 2540G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB-10 0-2	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-10	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	80.2
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Solids, Percent	80.2		%	1	07/30/16 13:40	KH	SM19 2540G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	PREBURN	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-11	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	83.7
Method:	SW846 8260B SW846 1311		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M88944.D	10	08/03/16	KM	08/02/16	OP61298	VM3781
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	0.0020	mg/l	
78-93-3	2-Butanone (MEK)	ND	D035	200	0.050	0.026	mg/l	
56-23-5	Carbon Tetrachloride	ND	D019	0.50	0.010	0.0030	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.010	0.0020	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.010	0.0030	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.010	0.0039	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.010	0.0028	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.010	0.0022	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.010	0.0030	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.010	0.0027	mg/l	
75-01-4	Vinyl Chloride	ND	D043	0.20	0.010	0.0031	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		83-118%
17060-07-0	1,2-Dichloroethane-D4	110%		79-125%
2037-26-5	Toluene-D8	93%		85-112%
460-00-4	4-Bromofluorobenzene	105%		83-118%

ND = Not detected MDL = Method Detection Limit
MCL = Maximum Contamination Level (40 CFR 261.6(g))
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PREBURN	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-11	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	83.7
Method:	SW846 8270D SW846 3510C		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X048096.D	1	08/04/16	MV	08/04/16	OP61329	SX2095
Run #2							

	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP List

TCLP Leachate method SW846 1311

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	0.0058	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	0.011	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	0.050	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.010	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.0086	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	0.0050	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	0.0063	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	0.0055	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	0.0051	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.0051	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	0.0066	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.10	0.020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	51%		14-67%
4165-62-2	Phenol-d5	39%		10-50%
118-79-6	2,4,6-Tribromophenol	82%		33-118%
4165-60-0	Nitrobenzene-d5	81%		42-108%
321-60-8	2-Fluorobiphenyl	81%		40-106%
1718-51-0	Terphenyl-d14	85%		39-121%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261.6/96) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PREBURN	Date Sampled:	07/26/16
Lab Sample ID:	FA35726-11	Date Received:	07/28/16
Matrix:	SO - Soil	Percent Solids:	83.7
Method:	SW846 8082A SW846 3546		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	MM33451.D	2	08/01/16	NJ	07/30/16	OP61284	GMM644
Run #2							

	Initial Weight	Final Volume
Run #1	15.0 g	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.040	0.016	mg/kg	
11104-28-2	Aroclor 1221	ND	0.040	0.020	mg/kg	
11141-16-5	Aroclor 1232	ND	0.040	0.020	mg/kg	
53469-21-9	Aroclor 1242 ^b	0.0926	0.040	0.016	mg/kg	J
12672-29-6	Aroclor 1248	ND	0.040	0.016	mg/kg	
11097-69-1	Aroclor 1254 ^b	0.245	0.040	0.019	mg/kg	J
11096-82-5	Aroclor 1260 ^b	0.165	0.040	0.016	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		44-126%
2051-24-3	Decachlorobiphenyl	77%		41-145%

(a) All hits confirmed by dual column analysis.

(b) Estimated value due to the presence of multiple overlapping Aroclor patterns.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: PREBURN
Lab Sample ID: FA35726-11
Matrix: SO - Soil

Date Sampled: 07/26/16
Date Received: 07/28/16
Percent Solids: 83.7

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 0.10	D004	5.0	0.10	mg/l	1	08/02/16	08/02/16 LM	SW846 6010C ²	SW846 3010A ⁴
Barium	< 2.0	D005	100	2.0	mg/l	1	08/02/16	08/02/16 LM	SW846 6010C ²	SW846 3010A ⁴
Cadmium	< 0.050	D006	1.0	0.050	mg/l	1	08/02/16	08/02/16 LM	SW846 6010C ²	SW846 3010A ⁴
Chromium	< 0.10	D007	5.0	0.10	mg/l	1	08/02/16	08/02/16 LM	SW846 6010C ²	SW846 3010A ⁴
Lead	0.20	D008	5.0	0.050	mg/l	1	08/02/16	08/02/16 LM	SW846 6010C ²	SW846 3010A ⁴
Mercury	< 0.0050	D009	0.20	0.0050	mg/l	1	08/02/16	08/02/16 JL	SW846 7470A ¹	SW846 7470A ³
Selenium	< 0.10	D010	1.0	0.10	mg/l	1	08/02/16	08/02/16 LM	SW846 6010C ²	SW846 3010A ⁴
Silver	< 0.10	D011	5.0	0.10	mg/l	1	08/02/16	08/02/16 LM	SW846 6010C ²	SW846 3010A ⁴

(1) Instrument QC Batch: MA13318

(2) Instrument QC Batch: MA13319

(3) Prep QC Batch: MP30668

(4) Prep QC Batch: MP30669

RL = Reporting Limit

MCL = Maximum Contamination Level (40 CFR 261.6/96)



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Client / Reporting Information		Project Information		Analytical Information		Matrix Codes										
Company Name: <u>Gannett Fleming</u>		Project Name: <u>DMR Valdosta</u>														
Address: <u>9119 Corporate Lake Drive</u>		Street: <u>2200 West Savannah Ave</u>														
City: <u>Tampa</u> State: <u>FL</u> Zip: <u>33634</u>		City: <u>Valdosta</u> State: <u>FL</u>														
Project Contact: <u>Arnon Gettel</u> Email: <u>agettel@gfnet.com</u>		Project #														
Phone: <u>813 882 4366</u>		Fax: <u>813 884 4609</u>														
Sampler(s) Name(s) (Printed): <u>Don Dennis, Todd Fajina</u>		Client Purchase Order #														
		CONTAINER INFORMATION														
Accutest Sample #	Field ID / Point of Collection	DATE	TIME	SAMPLED BY	MATRIX	TOTAL # OF BOTTLES	OTHER	ZONE	ACI	NACH	SAFCS	SSBOM	WASH-2-WASH	DI WATER	MECH	LAB USE ONLY
1	SB-1 4-6	7/24/16	1300	DRD	SO	4										
2	SB-2 0-2		1315													
3	SB-3 0-2		1335													
4	SB-4 2-4		1355													
5	SB-5 2-4		1420													
6	SB-6 0-2		1445													
7	SB-7 0-2		1515													
8	SB-8 2-4		1535													
9	SB-9 2-4		1550													
10	SB-10 0-2		1610													
11	preburn		1625			3		3								
TURNAROUND TIME (Business Days)		Data Deliverable Information														
☒ 10 Days Standard ☐ 7 Day RUSH ☐ 5 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY ☐ OTHER		Approved By: / Rush Code ☐ COMMERCIAL "A" (RESULTS ONLY) ☒ COMMERCIAL "B" (RESULTS PLUS QC) ☐ REDT1 (EPA LEVEL 3) ☐ FULT1 (EPA LEVEL 4) ☐ EDD'S		Comments / Remarks please hold samples SB-6 thru SB-10 until notified by Arnon Gettel copy agettel@gfnet.com												
Sample Custody must be documented below each time samples change possession, including courier delivery.																
Relinquished by Sample:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:											
1 <u>R. Fajina</u>	7/27/16	<u>FX</u>	3 <u>FX</u>	7/28/16	4 <u>J. Corral (ALR)</u>	09:15										
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:											
5		6	7		8											
Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: 1 Cooler Temperature (s) Celsius: 3.4																

FA35726: Chain of Custody

Page 1 of 4

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA 35726 CLIENT: GANNETT FLEMING PROJECT: TMR VALDOSIA
 DATE/TIME RECEIVED: 7-28-16 0915 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEx UPS ACCUTEST COURIER DELIVERY OTHER: _____
 AIRBILL NUMBERS: 8101 2860 6470

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
- ☒ TRIP BLANK NOT PROVIDED
- ☒ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES? 25-GRAM _____ 5-GRAM _____
 NUMBER OF 5035 FIELD KITS? 10
 NUMBER OF LAB FILTERED METALS? _____

TEST STRIP LOT#s pH 0-3 230315

pH 10-12 219813A

OTHER (specify) _____

SUMMARY OF COMMENTS: _____

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR 0.0
- ☐ OBSERVED TEMPS: 3.4
- ☐ CORRECTED TEMPS: 3.4 (USED FOR LIMS)

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
- ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
- ☐ INSUFFICIENT VOLUME FOR ANALYSIS
- ☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ☐ ID'S ON COC DO NOT MATCH LABEL
- ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- ☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- ☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
- ☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- ☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- ☐ % SOLIDS JAR NOT RECEIVED
- ☐ RESIDUAL CHLORINE PRESENT LOT# _____

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

TECHNICIAN SIGNATURE/DATE 7-28-16

NF 11/15

REVIEWER SIGNATURE/DATE 7/28/16

RECEIPTLOG040416.xls

FA35726: Chain of Custody

Page 2 of 4

FedEx Package
Express **US Airbill**

FedEx Tracking Number **8101 2860 6470**

0200

Recipient's Copy

1 From
Date **7/27/16**

Sender's Name **Don Woods** Phone **913 582-4561**

Company **Corbett Planning**

Address **9119 Corporate Ln. Dr. #150**

City **Tampa** State **FL** ZIP **33634**

2 Your Internal Billing Reference **TMR Valdosta**

3 To Recipient's Name **Sample Receiving** Phone **407 425-6700**

Company **Accutest S**

Address **4405 Vineland Rd.**

City **Orlando** State **FL** ZIP **32814**



8101 2860 6470

4 Express Package Service

Next Business Day

☐ FedEx First Overnight
Next business morning delivery to select locations. Friday shipments will be delivered on Saturday unless Saturday Delivery is selected.

☒ FedEx Priority Overnight
Next business morning delivery to select locations. Saturday Delivery NOT available.

☐ FedEx Standard Overnight
Next business morning delivery to select locations. Saturday Delivery NOT available.

5 Packaging

☐ FedEx Envelope*

6 Special Handling

☐ Saturday Delivery
NOT available for FedEx Standard

☐ No Signature Required
Package may be left without obtaining a signature for delivery.

Does this shipment contain:

☒ No ☐ Yes

Use this space to describe the contents of the shipment.

Restrictions apply for dangerous goods.

Payment \$11.00

Enter FedEx Acct. No. or Credit Card No. below.

☒ Sender's Account ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

Total Packages **1** Total Weight **4.5**

Credit Card Auth.

*Our liability is limited to \$5000 unless you declare a higher value. See the current FedEx Services Guide for details.

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FedEx
0200 8101 2860 6470

33 TIXA



FTD 91110 27JUL16 VLDA 639C1/6C8D/8902

THU - 28 JUL
PRIORITY OV

FA35726: Chain of Custody

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SGS

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ACCUTEST
FA35726

Job Change

FA35726

Requested Date:	7/29/2016	Received Date:	7/28/2016
Account Name:	Gannett Fleming	Due Date:	8/4/2016
Project	Trademark Metals Recycling; 2000 W Savannah,	Deliverable:	COMMB
CSR:	andreac	TAT (Days):	6

=====
Sample #: FA35726-all

Change:
Please change 8260 list to V8260STD.

Above Changes Per: Aaron Getchell

Date/Time: 7/29/2016 3:01:06 PM

FA35726: Chain of Custody

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

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Page 1 of 1



GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 3

Job Number: FA35726**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC4650-MB	C0117092.D	1	07/28/16	EP	n/a	n/a	VC4650

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA35726-2, FA35726-3, FA35726-4, FA35726-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	10	ug/kg	
71-43-2	Benzene	ND	5.0	1.3	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.2	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	9.1	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.0	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.0	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.0	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.8	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.2	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	2.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	2.5	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.0	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.0	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.6	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	1.0	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.3	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.9	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/kg	

Method Blank Summary

Page 2 of 3

Job Number: FA35726**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC4650-MB	C0117092.D	1	07/28/16	EP	n/a	n/a	VC4650

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA35726-2, FA35726-3, FA35726-4, FA35726-5

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	5.0	2.2	ug/kg	
591-78-6	2-Hexanone	ND	25	8.7	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.4	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.0	ug/kg	
74-83-9	Methyl Bromide	ND	5.0	2.6	ug/kg	
74-87-3	Methyl Chloride	ND	5.0	2.4	ug/kg	
74-95-3	Methylene Bromide	ND	5.0	1.8	ug/kg	
75-09-2	Methylene Chloride	5.7	10	4.0	ug/kg	J
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	11	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.1	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.2	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	2.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	5.0	1.1	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.8	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.2	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.9	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.6	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	9.4	ug/kg	
75-01-4	Vinyl Chloride	ND	5.0	1.7	ug/kg	
	m,p-Xylene	ND	10	1.8	ug/kg	
95-47-6	o-Xylene	ND	5.0	1.1	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	107%
17060-07-0	1,2-Dichloroethane-D4	75-124%
		107%
		72-135%

Method Blank Summary

Job Number: FA35726
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC4650-MB	C0117092.D	1	07/28/16	EP	n/a	n/a	VC4650

The QC reported here applies to the following samples:

Method: SW846 8260B

FA35726-2, FA35726-3, FA35726-4, FA35726-5

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	91% 75-126%
460-00-4	4-Bromofluorobenzene	91% 71-133%

Method Blank Summary

Page 1 of 3

Job Number: FA35726**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2709-MB	F0078858.D	1	07/28/16	EP	n/a	n/a	VF2709

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA35726-1, FA35726-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	10	ug/kg	
71-43-2	Benzene	ND	5.0	1.3	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.2	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	9.1	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.0	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.0	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.0	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.8	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.2	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	2.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	2.5	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.0	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.0	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.2	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.6	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	1.0	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.3	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.9	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.1	ug/kg	

Method Blank Summary

Page 2 of 3

Job Number: FA35726**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2709-MB	F0078858.D	1	07/28/16	EP	n/a	n/a	VF2709

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA35726-1, FA35726-5

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	5.0	2.2	ug/kg	
591-78-6	2-Hexanone	ND	25	8.7	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.4	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.0	ug/kg	
74-83-9	Methyl Bromide	ND	5.0	2.6	ug/kg	
74-87-3	Methyl Chloride	ND	5.0	2.4	ug/kg	
74-95-3	Methylene Bromide	ND	5.0	1.8	ug/kg	
75-09-2	Methylene Chloride	6.2	10	4.0	ug/kg	J
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	11	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.1	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.2	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	2.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	5.0	1.1	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	2.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.5	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.8	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.2	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.9	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.6	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	9.4	ug/kg	
75-01-4	Vinyl Chloride	ND	5.0	1.7	ug/kg	
	m,p-Xylene	ND	10	1.8	ug/kg	
95-47-6	o-Xylene	ND	5.0	1.1	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	99%	75-124%
17060-07-0	1,2-Dichloroethane-D4	94%	72-135%

Method Blank Summary

Job Number: FA35726
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2709-MB	F0078858.D	1	07/28/16	EP	n/a	n/a	VF2709

The QC reported here applies to the following samples:

Method: SW846 8260B

FA35726-1, FA35726-5

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	101% 75-126%
460-00-4	4-Bromofluorobenzene	110% 71-133%

Leachate Blank Summary

Page 1 of 1

Job Number: FA35726

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP61298-LB	M88942.D	10	08/03/16	KM	08/02/16	OP61298	VM3781

The QC reported here applies to the following samples:

Method: SW846 8260B

FA35726-11

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	10	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	26	ug/l	
56-23-5	Carbon Tetrachloride	ND	10	3.0	ug/l	
108-90-7	Chlorobenzene	ND	10	2.0	ug/l	
67-66-3	Chloroform	ND	10	3.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	3.9	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	2.8	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	2.2	ug/l	
127-18-4	Tetrachloroethylene	ND	10	3.0	ug/l	
79-01-6	Trichloroethylene	ND	10	2.7	ug/l	
75-01-4	Vinyl Chloride	ND	10	3.1	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 83-118%
17060-07-0	1,2-Dichloroethane-D4	96% 79-125%
2037-26-5	Toluene-D8	92% 85-112%
460-00-4	4-Bromofluorobenzene	105% 83-118%

Blank Spike Summary

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Job Number: FA35726**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC4650-BS	C0117091.D	1	07/28/16	EP	n/a	n/a	VC4650

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA35726-2, FA35726-3, FA35726-4, FA35726-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	273	109	61-152
71-43-2	Benzene	50	52.3	105	76-126
108-86-1	Bromobenzene	50	53.3	107	76-122
74-97-5	Bromochloromethane	50	53.6	107	77-120
75-27-4	Bromodichloromethane	50	53.7	107	74-130
75-25-2	Bromoform	50	50.9	102	76-127
78-93-3	2-Butanone (MEK)	250	239	96	75-137
104-51-8	n-Butylbenzene	50	49.4	99	71-128
135-98-8	sec-Butylbenzene	50	49.1	98	79-135
98-06-6	tert-Butylbenzene	50	51.1	102	77-133
75-15-0	Carbon Disulfide	50	48.4	97	72-122
56-23-5	Carbon Tetrachloride	50	49.7	99	78-133
108-90-7	Chlorobenzene	50	53.5	107	81-129
75-00-3	Chloroethane	50	51.3	103	68-133
67-66-3	Chloroform	50	52.7	105	72-123
95-49-8	o-Chlorotoluene	50	51.2	102	77-129
106-43-4	p-Chlorotoluene	50	51.7	103	80-134
124-48-1	Dibromochloromethane	50	55.2	110	76-127
96-12-8	1,2-Dibromo-3-chloropropane	50	51.8	104	70-137
106-93-4	1,2-Dibromoethane	50	56.5	113	77-126
75-71-8	Dichlorodifluoromethane	50	46.2	92	68-168
95-50-1	1,2-Dichlorobenzene	50	52.2	104	80-129
541-73-1	1,3-Dichlorobenzene	50	53.0	106	81-129
106-46-7	1,4-Dichlorobenzene	50	52.9	106	76-130
75-34-3	1,1-Dichloroethane	50	57.2	114	73-125
107-06-2	1,2-Dichloroethane	50	53.8	108	74-128
75-35-4	1,1-Dichloroethylene	50	53.9	108	81-136
156-59-2	cis-1,2-Dichloroethylene	50	50.8	102	74-126
156-60-5	trans-1,2-Dichloroethylene	50	50.2	100	70-127
78-87-5	1,2-Dichloropropane	50	54.6	109	74-125
142-28-9	1,3-Dichloropropane	50	55.0	110	76-122
594-20-7	2,2-Dichloropropane	50	50.7	101	77-133
563-58-6	1,1-Dichloropropene	50	49.0	98	75-130
10061-01-5	cis-1,3-Dichloropropene	50	58.0	116	80-123
10061-02-6	trans-1,3-Dichloropropene	50	61.4	123	75-131
100-41-4	Ethylbenzene	50	50.5	101	77-123

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA35726**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC4650-BS	C0117091.D	1	07/28/16	EP	n/a	n/a	VC4650

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA35726-2, FA35726-3, FA35726-4, FA35726-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
87-68-3	Hexachlorobutadiene	50	51.0	102	74-136
591-78-6	2-Hexanone	250	261	104	72-133
98-82-8	Isopropylbenzene	50	50.5	101	80-136
99-87-6	p-Isopropyltoluene	50	50.2	100	77-131
74-83-9	Methyl Bromide	50	51.8	104	65-139
74-87-3	Methyl Chloride	50	52.3	105	71-144
74-95-3	Methylene Bromide	50	56.7	113	74-124
75-09-2	Methylene Chloride	50	55.8	112	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	250	253	101	76-132
1634-04-4	Methyl Tert Butyl Ether	50	52.2	104	77-120
91-20-3	Naphthalene	50	56.0	112	79-129
103-65-1	n-Propylbenzene	50	50.0	100	80-135
100-42-5	Styrene	50	52.2	104	78-125
630-20-6	1,1,1,2-Tetrachloroethane	50	50.5	101	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	53.9	108	71-126
127-18-4	Tetrachloroethylene	50	49.5	99	79-130
108-88-3	Toluene	50	51.1	102	76-124
87-61-6	1,2,3-Trichlorobenzene	50	51.7	103	77-128
120-82-1	1,2,4-Trichlorobenzene	50	50.4	101	78-130
71-55-6	1,1,1-Trichloroethane	50	48.6	97	70-129
79-00-5	1,1,2-Trichloroethane	50	57.1	114	74-124
79-01-6	Trichloroethylene	50	51.8	104	75-128
75-69-4	Trichlorofluoromethane	50	45.9	92	73-145
96-18-4	1,2,3-Trichloropropane	50	54.0	108	74-127
95-63-6	1,2,4-Trimethylbenzene	50	50.2	100	74-123
108-67-8	1,3,5-Trimethylbenzene	50	49.0	98	73-122
108-05-4	Vinyl Acetate	250	244	98	48-164
75-01-4	Vinyl Chloride	50	49.5	99	76-141
	m,p-Xylene	100	94.1	94	80-128
95-47-6	o-Xylene	50	50.8	102	80-132

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	95%	75-124%
17060-07-0	1,2-Dichloroethane-D4	96%	72-135%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA35726
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC4650-BS	C0117091.D	1	07/28/16	EP	n/a	n/a	VC4650

The QC reported here applies to the following samples: Method: SW846 8260B
FA35726-2, FA35726-3, FA35726-4, FA35726-5

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	96%	75-126%
460-00-4	4-Bromofluorobenzene	100%	71-133%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 3

Job Number: FA35726**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2709-BS	F0078857.D	1	07/28/16	EP	n/a	n/a	VF2709

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA35726-1, FA35726-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	168	67	61-152
71-43-2	Benzene	50	50.8	102	76-126
108-86-1	Bromobenzene	50	55.1	110	76-122
74-97-5	Bromochloromethane	50	51.5	103	77-120
75-27-4	Bromodichloromethane	50	52.1	104	74-130
75-25-2	Bromoform	50	62.0	124	76-127
78-93-3	2-Butanone (MEK)	250	196	78	75-137
104-51-8	n-Butylbenzene	50	48.2	96	71-128
135-98-8	sec-Butylbenzene	50	47.1	94	79-135
98-06-6	tert-Butylbenzene	50	49.5	99	77-133
75-15-0	Carbon Disulfide	50	44.6	89	72-122
56-23-5	Carbon Tetrachloride	50	51.7	103	78-133
108-90-7	Chlorobenzene	50	53.5	107	81-129
75-00-3	Chloroethane	50	42.8	86	68-133
67-66-3	Chloroform	50	51.5	103	72-123
95-49-8	o-Chlorotoluene	50	51.0	102	77-129
106-43-4	p-Chlorotoluene	50	50.1	100	80-134
124-48-1	Dibromochloromethane	50	59.5	119	76-127
96-12-8	1,2-Dibromo-3-chloropropane	50	44.5	89	70-137
106-93-4	1,2-Dibromoethane	50	54.0	108	77-126
75-71-8	Dichlorodifluoromethane	50	42.9	86	68-168
95-50-1	1,2-Dichlorobenzene	50	53.2	106	80-129
541-73-1	1,3-Dichlorobenzene	50	53.8	108	81-129
106-46-7	1,4-Dichlorobenzene	50	52.5	105	76-130
75-34-3	1,1-Dichloroethane	50	52.2	104	73-125
107-06-2	1,2-Dichloroethane	50	48.8	98	74-128
75-35-4	1,1-Dichloroethylene	50	48.8	98	81-136
156-59-2	cis-1,2-Dichloroethylene	50	50.4	101	74-126
156-60-5	trans-1,2-Dichloroethylene	50	53.3	107	70-127
78-87-5	1,2-Dichloropropane	50	50.5	101	74-125
142-28-9	1,3-Dichloropropane	50	51.5	103	76-122
594-20-7	2,2-Dichloropropane	50	47.3	95	77-133
563-58-6	1,1-Dichloropropene	50	48.4	97	75-130
10061-01-5	cis-1,3-Dichloropropene	50	53.3	107	80-123
10061-02-6	trans-1,3-Dichloropropene	50	56.6	113	75-131
100-41-4	Ethylbenzene	50	52.0	104	77-123

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA35726**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2709-BS	F0078857.D	1	07/28/16	EP	n/a	n/a	VF2709

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA35726-1, FA35726-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
87-68-3	Hexachlorobutadiene	50	46.7	93	74-136
591-78-6	2-Hexanone	250	216	86	72-133
98-82-8	Isopropylbenzene	50	55.4	111	80-136
99-87-6	p-Isopropyltoluene	50	51.3	103	77-131
74-83-9	Methyl Bromide	50	49.4	99	65-139
74-87-3	Methyl Chloride	50	40.8	82	71-144
74-95-3	Methylene Bromide	50	53.5	107	74-124
75-09-2	Methylene Chloride	50	52.9	106	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	250	230	92	76-132
1634-04-4	Methyl Tert Butyl Ether	50	50.3	101	77-120
91-20-3	Naphthalene	50	52.8	106	79-129
103-65-1	n-Propylbenzene	50	46.9	94	80-135
100-42-5	Styrene	50	55.3	111	78-125
630-20-6	1,1,1,2-Tetrachloroethane	50	58.6	117	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	49.8	100	71-126
127-18-4	Tetrachloroethylene	50	55.8	112	79-130
108-88-3	Toluene	50	53.4	107	76-124
87-61-6	1,2,3-Trichlorobenzene	50	52.5	105	77-128
120-82-1	1,2,4-Trichlorobenzene	50	48.4	97	78-130
71-55-6	1,1,1-Trichloroethane	50	46.4	93	70-129
79-00-5	1,1,2-Trichloroethane	50	54.0	108	74-124
79-01-6	Trichloroethylene	50	52.5	105	75-128
75-69-4	Trichlorofluoromethane	50	47.8	96	73-145
96-18-4	1,2,3-Trichloropropane	50	52.5	105	74-127
95-63-6	1,2,4-Trimethylbenzene	50	51.2	102	74-123
108-67-8	1,3,5-Trimethylbenzene	50	51.2	102	73-122
108-05-4	Vinyl Acetate	250	250	100	48-164
75-01-4	Vinyl Chloride	50	41.3	83	76-141
	m,p-Xylene	100	97.0	97	80-128
95-47-6	o-Xylene	50	54.7	109	80-132

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	75-124%
17060-07-0	1,2-Dichloroethane-D4	90%	72-135%

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA35726

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF2709-BS	F0078857.D	1	07/28/16	EP	n/a	n/a	VF2709

The QC reported here applies to the following samples:

Method: SW846 8260B

FA35726-1, FA35726-5

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	100%	75-126%
460-00-4	4-Bromofluorobenzene	108%	71-133%

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA35726

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM3781-BS	M88940.D	10	08/03/16	KM	n/a	n/a	VM3781

The QC reported here applies to the following samples:

Method: SW846 8260B

FA35726-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	250	231	92	81-122
78-93-3	2-Butanone (MEK)	1250	1170	94	56-143
56-23-5	Carbon Tetrachloride	250	247	99	76-136
108-90-7	Chlorobenzene	250	255	102	82-124
67-66-3	Chloroform	250	240	96	80-124
106-46-7	1,4-Dichlorobenzene	250	274	110	78-120
107-06-2	1,2-Dichloroethane	250	225	90	75-125
75-35-4	1,1-Dichloroethylene	250	254	102	78-137
127-18-4	Tetrachloroethylene	250	280	112	76-135
79-01-6	Trichloroethylene	250	232	93	81-126
75-01-4	Vinyl Chloride	250	242	97	69-159

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	79-125%
2037-26-5	Toluene-D8	104%	85-112%
460-00-4	4-Bromofluorobenzene	107%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA35726

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA35720-2MS	F0078862.D	1	07/28/16	EP	n/a	n/a	VF2709
FA35720-2MSD	F0078863.D	1	07/28/16	EP	n/a	n/a	VF2709
FA35720-2	F0078860.D	1	07/28/16	EP	n/a	n/a	VF2709

The QC reported here applies to the following samples:

Method: SW846 8260B

FA35726-1, FA35726-5

CAS No.	Compound	FA35720-2 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	294	276	94	286	269	94	3	61-152/27
71-43-2	Benzene	ND	58.8	45.6	78	57.2	51.6	90	12	76-126/26
108-86-1	Bromobenzene	ND	58.8	47.6	81	57.2	56.0	98	16	76-122/32
74-97-5	Bromochloromethane	ND	58.8	48.9	83	57.2	57.1	100	15	77-120/24
75-27-4	Bromodichloromethane	ND	58.8	50.1	85	57.2	56.0	98	11	74-130/25
75-25-2	Bromoform	ND	58.8	64.0	109	57.2	69.0	121	8	76-127/26
78-93-3	2-Butanone (MEK)	ND	294	314	107	286	312	109	1	75-137/25
104-51-8	n-Butylbenzene	ND	58.8	47.7	81	57.2	56.8	99	17	71-128/35
135-98-8	sec-Butylbenzene	ND	58.8	41.1	70*	57.2	50.0	87	20	79-135/34
98-06-6	tert-Butylbenzene	ND	58.8	43.4	74*	57.2	51.0	89	16	77-133/34
75-15-0	Carbon Disulfide	ND	58.8	39.7	67*	57.2	44.2	77	11	72-122/29
56-23-5	Carbon Tetrachloride	ND	58.8	41.3	70*	57.2	47.8	84	15	78-133/29
108-90-7	Chlorobenzene	ND	58.8	49.7	84	57.2	54.9	96	10	81-129/29
75-00-3	Chloroethane	ND	58.8	37.0	63*	57.2	46.2	81	22	68-133/29
67-66-3	Chloroform	ND	58.8	46.0	78	57.2	52.2	91	13	72-123/26
95-49-8	o-Chlorotoluene	ND	58.8	48.2	82	57.2	53.8	94	11	77-129/33
106-43-4	p-Chlorotoluene	ND	58.8	50.6	86	57.2	57.3	100	12	80-134/33
124-48-1	Dibromochloromethane	ND	58.8	54.1	92	57.2	62.4	109	14	76-127/27
96-12-8	1,2-Dibromo-3-chloropropane	ND	58.8	66.3	113	57.2	70.9	124	7	70-137/29
106-93-4	1,2-Dibromoethane	ND	58.8	57.8	98	57.2	64.0	112	10	77-126/26
75-71-8	Dichlorodifluoromethane	ND	58.8	36.4	62*	57.2	42.2	74	15	68-168/29
95-50-1	1,2-Dichlorobenzene	ND	58.8	50.5	86	57.2	58.8	103	15	80-129/32
541-73-1	1,3-Dichlorobenzene	ND	58.8	50.9	87	57.2	57.7	101	13	81-129/33
106-46-7	1,4-Dichlorobenzene	ND	58.8	53.1	90	57.2	60.4	106	13	76-130/32
75-34-3	1,1-Dichloroethane	ND	58.8	45.0	77	57.2	52.8	92	16	73-125/27
107-06-2	1,2-Dichloroethane	ND	58.8	54.4	92	57.2	61.6	108	12	74-128/23
75-35-4	1,1-Dichloroethylene	ND	58.8	41.5	71*	57.2	46.3	81	11	81-136/28
156-59-2	cis-1,2-Dichloroethylene	ND	58.8	43.8	74	57.2	51.4	90	16	74-126/26
156-60-5	trans-1,2-Dichloroethylene	ND	58.8	46.4	79	57.2	52.9	92	13	70-127/27
78-87-5	1,2-Dichloropropane	ND	58.8	46.4	79	57.2	53.3	93	14	74-125/25
142-28-9	1,3-Dichloropropane	ND	58.8	56.5	96	57.2	61.7	108	9	76-122/26
594-20-7	2,2-Dichloropropane	ND	58.8	42.6	72*	57.2	45.7	80	7	77-133/28
563-58-6	1,1-Dichloropropene	ND	58.8	43.3	74*	57.2	49.5	87	13	75-130/28
10061-01-5	cis-1,3-Dichloropropene	ND	58.8	50.0	85	57.2	56.0	98	11	80-123/26
10061-02-6	trans-1,3-Dichloropropene	ND	58.8	57.6	98	57.2	66.1	116	14	75-131/28
100-41-4	Ethylbenzene	ND	58.8	48.3	82	57.2	54.1	95	11	77-123/31

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA35726

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA35720-2MS	F0078862.D	1	07/28/16	EP	n/a	n/a	VF2709
FA35720-2MSD	F0078863.D	1	07/28/16	EP	n/a	n/a	VF2709
FA35720-2	F0078860.D	1	07/28/16	EP	n/a	n/a	VF2709

The QC reported here applies to the following samples:

Method: SW846 8260B

FA35726-1, FA35726-5

CAS No.	Compound	FA35720-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	ND		58.8	35.7	61*	57.2	49.6	87	33	74-136/38
591-78-6	2-Hexanone	ND		294	355	121	286	368	129	4	72-133/26
98-82-8	Isopropylbenzene	ND		58.8	49.1	83	57.2	56.9	99	15	80-136/32
99-87-6	p-Isopropyltoluene	ND		58.8	47.3	80	57.2	54.7	96	15	77-131/34
74-83-9	Methyl Bromide	ND		58.8	42.6	72	57.2	48.4	85	13	65-139/31
74-87-3	Methyl Chloride	ND		58.8	40.8	69*	57.2	47.9	84	16	71-144/27
74-95-3	Methylene Bromide	ND		58.8	55.7	95	57.2	63.4	111	13	74-124/24
75-09-2	Methylene Chloride	7.5	JB	58.8	51.1	74	57.2	57.5	87	12	74-137/28
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		294	365	124	286	389	136*	6	76-132/26
1634-04-4	Methyl Tert Butyl Ether	ND		58.8	54.2	92	57.2	63.0	110	15	77-120/24
91-20-3	Naphthalene	ND		58.8	63.9	109	57.2	69.7	122	9	79-129/33
103-65-1	n-Propylbenzene	ND		58.8	42.4	72*	57.2	50.6	88	18	80-135/33
100-42-5	Styrene	ND		58.8	51.1	87	57.2	53.7	94	5	78-125/30
630-20-6	1,1,1,2-Tetrachloroethane	ND		58.8	48.9	83	57.2	55.5	97	13	78-126/27
79-34-5	1,1,2,2-Tetrachloroethane	ND		58.8	60.4	103	57.2	64.7	113	7	71-126/30
127-18-4	Tetrachloroethylene	ND		58.8	45.2	77*	57.2	51.7	90	13	79-130/31
108-88-3	Toluene	ND		58.8	48.1	82	57.2	53.9	94	11	76-124/30
87-61-6	1,2,3-Trichlorobenzene	ND		58.8	53.6	91	57.2	60.7	106	12	77-128/35
120-82-1	1,2,4-Trichlorobenzene	ND		58.8	51.2	87	57.2	63.0	110	21	78-130/34
71-55-6	1,1,1-Trichloroethane	ND		58.8	40.6	69*	57.2	47.6	83	16	70-129/27
79-00-5	1,1,2-Trichloroethane	ND		58.8	57.8	98	57.2	64.1	112	10	74-124/28
79-01-6	Trichloroethylene	3.8	J	58.8	48.8	77	57.2	57.4	94	16	75-128/27
75-69-4	Trichlorofluoromethane	ND		58.8	38.8	66*	57.2	43.0	75	10	73-145/31
96-18-4	1,2,3-Trichloropropane	ND		58.8	61.6	105	57.2	65.5	114	6	74-127/27
95-63-6	1,2,4-Trimethylbenzene	ND		58.8	48.6	83	57.2	57.2	100	16	74-123/34
108-67-8	1,3,5-Trimethylbenzene	ND		58.8	47.5	81	57.2	53.9	94	13	73-122/33
108-05-4	Vinyl Acetate	ND		294	288	98	286	306	107	6	48-164/37
75-01-4	Vinyl Chloride	ND		58.8	37.1	63*	57.2	45.4	79	20	76-141/27
	m,p-Xylene	ND		118	95.9	82	114	109	95	13	80-128/30
95-47-6	o-Xylene	ND		58.8	50.9	87	57.2	56.6	99	11	80-132/30

CAS No.	Surrogate Recoveries	MS	MSD	FA35720-2	Limits
1868-53-7	Dibromofluoromethane	102%	104%	111%	75-124%
17060-07-0	1,2-Dichloroethane-D4	111%	107%	106%	72-135%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA35726
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA35720-2MS	F0078862.D	1	07/28/16	EP	n/a	n/a	VF2709
FA35720-2MSD	F0078863.D	1	07/28/16	EP	n/a	n/a	VF2709
FA35720-2	F0078860.D	1	07/28/16	EP	n/a	n/a	VF2709

The QC reported here applies to the following samples: Method: SW846 8260B

FA35726-1, FA35726-5

CAS No.	Surrogate Recoveries	MS	MSD	FA35720-2	Limits
2037-26-5	Toluene-D8	99%	98%	100%	75-126%
460-00-4	4-Bromofluorobenzene	98%	97%	102%	71-133%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA35726

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA35723-1MS	C0117102.D	1	07/28/16	EP	n/a	n/a	VC4650
FA35723-1MSD	C0117103.D	1	07/28/16	EP	n/a	n/a	VC4650
FA35723-1	C0117093.D	1	07/28/16	EP	n/a	n/a	VC4650

The QC reported here applies to the following samples:

Method: SW846 8260B

FA35726-2, FA35726-3, FA35726-4, FA35726-5

CAS No.	Compound	FA35723-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	61 U	310	345	111	293	285	97	19	61-152/27
71-43-2	Benzene	6.1 U	62.1	56.1	90	58.6	50.2	86	11	76-126/26
108-86-1	Bromobenzene	6.1 U	62.1	58.7	95	58.6	52.9	90	10	76-122/32
74-97-5	Bromochloromethane	6.1 U	62.1	65.3	105	58.6	57.6	98	13	77-120/24
75-27-4	Bromodichloromethane	6.1 U	62.1	59.3	95	58.6	53.0	90	11	74-130/25
75-25-2	Bromoform	6.1 U	62.1	53.9	87	58.6	47.4	81	13	76-127/26
78-93-3	2-Butanone (MEK)	30 U	310	265	85	293	230	78	14	75-137/25
104-51-8	n-Butylbenzene	6.1 U	62.1	60.2	97	58.6	53.0	90	13	71-128/35
135-98-8	sec-Butylbenzene	6.1 U	62.1	58.1	94	58.6	50.1	85	15	79-135/34
98-06-6	tert-Butylbenzene	6.1 U	62.1	60.7	98	58.6	52.8	90	14	77-133/34
75-15-0	Carbon Disulfide	6.1 U	62.1	53.0	85	58.6	48.7	83	8	72-122/29
56-23-5	Carbon Tetrachloride	6.1 U	62.1	55.2	89	58.6	48.6	83	13	78-133/29
108-90-7	Chlorobenzene	6.1 U	62.1	57.9	93	58.6	52.7	90	9	81-129/29
75-00-3	Chloroethane	6.1 U	62.1	59.1	95	58.6	55.3	94	7	68-133/29
67-66-3	Chloroform	6.1 U	62.1	63.0	101	58.6	55.2	94	13	72-123/26
95-49-8	o-Chlorotoluene	6.1 U	62.1	61.6	99	58.6	54.1	92	13	77-129/33
106-43-4	p-Chlorotoluene	6.1 U	62.1	58.7	95	58.6	53.5	91	9	80-134/33
124-48-1	Dibromochloromethane	6.1 U	62.1	60.4	97	58.6	54.8	93	10	76-127/27
96-12-8	1,2-Dibromo-3-chloropropane	6.1 U	62.1	61.0	98	58.6	53.1	91	14	70-137/29
106-93-4	1,2-Dibromoethane	6.1 U	62.1	58.4	94	58.6	53.6	91	9	77-126/26
75-71-8	Dichlorodifluoromethane	6.1 U	62.1	46.7	75	58.6	39.6	68	16	68-168/29
95-50-1	1,2-Dichlorobenzene	6.1 U	62.1	62.6	101	58.6	55.5	95	12	80-129/32
541-73-1	1,3-Dichlorobenzene	6.1 U	62.1	61.7	99	58.6	54.8	93	12	81-129/33
106-46-7	1,4-Dichlorobenzene	6.1 U	62.1	61.2	99	58.6	55.9	95	9	76-130/32
75-34-3	1,1-Dichloroethane	6.1 U	62.1	62.7	101	58.6	56.0	95	11	73-125/27
107-06-2	1,2-Dichloroethane	6.1 U	62.1	63.0	101	58.6	55.3	94	13	74-128/23
75-35-4	1,1-Dichloroethylene	6.1 U	62.1	58.0	93	58.6	52.0	89	11	81-136/28
156-59-2	cis-1,2-Dichloroethylene	6.1 U	62.1	58.4	94	58.6	51.5	88	13	74-126/26
156-60-5	trans-1,2-Dichloroethylene	6.1 U	62.1	54.8	88	58.6	48.9	83	11	70-127/27
78-87-5	1,2-Dichloropropane	6.1 U	62.1	58.8	95	58.6	53.2	91	10	74-125/25
142-28-9	1,3-Dichloropropane	6.1 U	62.1	59.0	95	58.6	52.3	89	12	76-122/26
594-20-7	2,2-Dichloropropane	6.1 U	62.1	54.3	87	58.6	49.0	84	10	77-133/28
563-58-6	1,1-Dichloropropene	6.1 U	62.1	53.4	86	58.6	48.3	82	10	75-130/28
10061-01-5	cis-1,3-Dichloropropene	6.1 U	62.1	57.2	92	58.6	52.4	89	9	80-123/26
10061-02-6	trans-1,3-Dichloropropene	6.1 U	62.1	57.8	93	58.6	52.1	89	10	75-131/28
100-41-4	Ethylbenzene	6.1 U	62.1	57.4	92	58.6	51.1	87	12	77-123/31

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA35726

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA35723-1MS	C0117102.D	1	07/28/16	EP	n/a	n/a	VC4650
FA35723-1MSD	C0117103.D	1	07/28/16	EP	n/a	n/a	VC4650
FA35723-1	C0117093.D	1	07/28/16	EP	n/a	n/a	VC4650

The QC reported here applies to the following samples:

Method: SW846 8260B

FA35726-2, FA35726-3, FA35726-4, FA35726-5

CAS No.	Compound	FA35723-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	6.1 U		62.1	55.5	89	58.6	47.3	16	74-136/38
591-78-6	2-Hexanone	30 U		310	276	89	293	239	14	72-133/26
98-82-8	Isopropylbenzene	6.1 U		62.1	60.3	97	58.6	52.5	14	80-136/32
99-87-6	p-Isopropyltoluene	6.1 U		62.1	61.8	100	58.6	53.0	15	77-131/34
74-83-9	Methyl Bromide	6.1 U		62.1	61.0	98	58.6	55.6	9	65-139/31
74-87-3	Methyl Chloride	6.1 U		62.1	56.6	91	58.6	52.6	7	71-144/27
74-95-3	Methylene Bromide	6.1 U		62.1	63.9	103	58.6	55.5	14	74-124/24
75-09-2	Methylene Chloride	9.2	VI	62.1	62.0	85	58.6	51.5	19	74-137/28
108-10-1	4-Methyl-2-pentanone (MIBK)	30 U		310	303	98	293	257	16	76-132/26
1634-04-4	Methyl Tert Butyl Ether	6.1 U		62.1	66.1	106	58.6	56.9	15	77-120/24
91-20-3	Naphthalene	6.1 U		62.1	66.4	107	58.6	59.7	11	79-129/33
103-65-1	n-Propylbenzene	6.1 U		62.1	59.6	96	58.6	52.4	13	80-135/33
100-42-5	Styrene	6.1 U		62.1	55.9	90	58.6	50.5	10	78-125/30
630-20-6	1,1,1,2-Tetrachloroethane	6.1 U		62.1	61.5	99	58.6	54.9	11	78-126/27
79-34-5	1,1,2,2-Tetrachloroethane	6.1 U		62.1	61.3	99	58.6	52.6	15	71-126/30
127-18-4	Tetrachloroethylene	6.1 U		62.1	70.0	113	58.6	63.6	10	79-130/31
108-88-3	Toluene	6.1 U		62.1	56.1	90	58.6	50.2	11	76-124/30
87-61-6	1,2,3-Trichlorobenzene	6.1 U		62.1	65.3	105	58.6	56.7	14	77-128/35
120-82-1	1,2,4-Trichlorobenzene	6.1 U		62.1	65.3	105	58.6	57.9	12	78-130/34
71-55-6	1,1,1-Trichloroethane	6.1 U		62.1	56.4	91	58.6	50.9	10	70-129/27
79-00-5	1,1,2-Trichloroethane	6.1 U		62.1	59.7	96	58.6	54.3	9	74-124/28
79-01-6	Trichloroethylene	6.1 U		62.1	57.1	92	58.6	51.4	11	75-128/27
75-69-4	Trichlorofluoromethane	6.1 U		62.1	48.0	77	58.6	44.3	8	73-145/31
96-18-4	1,2,3-Trichloropropane	6.1 U		62.1	61.8	100	58.6	52.7	16	74-127/27
95-63-6	1,2,4-Trimethylbenzene	6.1 U		62.1	63.5	102	58.6	54.8	15	74-123/34
108-67-8	1,3,5-Trimethylbenzene	6.1 U		62.1	61.4	99	58.6	52.8	15	73-122/33
108-05-4	Vinyl Acetate	30 U		310	81.7	26*	293	86.9	6	48-164/37
75-01-4	Vinyl Chloride	6.1 U		62.1	51.6	83	58.6	47.4	8	76-141/27
	m,p-Xylene	12 U		124	112	90	117	99.6	12	80-128/30
95-47-6	o-Xylene	6.1 U		62.1	61.9	100	58.6	54.2	13	80-132/30

CAS No.	Surrogate Recoveries	MS	MSD	FA35723-1	Limits
1868-53-7	Dibromofluoromethane	105%	104%	117%	75-124%
17060-07-0	1,2-Dichloroethane-D4	101%	100%	115%	72-135%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA35726
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA35723-1MS	C0117102.D	1	07/28/16	EP	n/a	n/a	VC4650
FA35723-1MSD	C0117103.D	1	07/28/16	EP	n/a	n/a	VC4650
FA35723-1	C0117093.D	1	07/28/16	EP	n/a	n/a	VC4650

The QC reported here applies to the following samples: Method: SW846 8260B

FA35726-2, FA35726-3, FA35726-4, FA35726-5

CAS No.	Surrogate Recoveries	MS	MSD	FA35723-1	Limits
2037-26-5	Toluene-D8	98%	96%	89%	75-126%
460-00-4	4-Bromofluorobenzene	94%	96%	92%	71-133%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: FA35726

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA35652-1MS	M88945.D	10	08/03/16	KM	n/a	n/a	VM3781
FA35652-1MSD	M88946.D	10	08/03/16	KM	n/a	n/a	VM3781
FA35652-1	M88943.D	10	08/03/16	KM	07/26/16	OP61227	VM3781

The QC reported here applies to the following samples:

Method: SW846 8260B

FA35726-11

CAS No.	Compound	FA35652-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	250	247	99	250	232	93	6	81-122/14
78-93-3	2-Butanone (MEK)	ND	1250	1360	109	1250	997	80	31*	56-143/18
56-23-5	Carbon Tetrachloride	ND	250	276	110	250	281	112	2	76-136/23
108-90-7	Chlorobenzene	ND	250	254	102	250	283	113	11	82-124/14
67-66-3	Chloroform	ND	250	263	105	250	250	100	5	80-124/15
106-46-7	1,4-Dichlorobenzene	ND	250	305	122*	250	270	108	12	78-120/15
107-06-2	1,2-Dichloroethane	ND	250	270	108	250	266	106	1	75-125/14
75-35-4	1,1-Dichloroethylene	ND	250	293	117	250	283	113	3	78-137/18
127-18-4	Tetrachloroethylene	ND	250	300	120	250	285	114	5	76-135/16
79-01-6	Trichloroethylene	ND	250	281	112	250	274	110	3	81-126/15
75-01-4	Vinyl Chloride	ND	250	247	99	250	278	111	12	69-159/18

CAS No.	Surrogate Recoveries	MS	MSD	FA35652-1	Limits
1868-53-7	Dibromofluoromethane	100%	97%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	104%	102%	79-125%
2037-26-5	Toluene-D8	101%	95%	96%	85-112%
460-00-4	4-Bromofluorobenzene	108%	104%	104%	83-118%

* = Outside of Control Limits.



GC/MS Semi-volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Leachate Blank Summary

Page 1 of 1

Job Number: FA35726

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP61329-LB	X048089.D	1	08/04/16	MV	08/04/16	OP61329	SX2095

The QC reported here applies to the following samples:

Method: SW846 8270D

FA35726-11

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	50	5.8	ug/l	
	3&4-Methylphenol	ND	50	11	ug/l	
87-86-5	Pentachlorophenol	ND	250	50	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	10	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	8.6	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	50	5.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	50	6.3	ug/l	
118-74-1	Hexachlorobenzene	ND	50	5.5	ug/l	
87-68-3	Hexachlorobutadiene	ND	50	5.1	ug/l	
67-72-1	Hexachloroethane	ND	50	5.1	ug/l	
98-95-3	Nitrobenzene	ND	50	6.6	ug/l	
110-86-1	Pyridine	ND	100	20	ug/l	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	51% 14-67%
4165-62-2	Phenol-d5	36% 10-50%
118-79-6	2,4,6-Tribromophenol	80% 33-118%
4165-60-0	Nitrobenzene-d5	80% 42-108%
321-60-8	2-Fluorobiphenyl	80% 40-106%
1718-51-0	Terphenyl-d14	85% 39-121%

Blank Spike Summary

Page 1 of 1

Job Number: FA35726

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP61329-LBS	X048088.D	1	08/04/16	MV	08/04/16	OP61329	SX2095

The QC reported here applies to the following samples:

Method: SW846 8270D

FA35726-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-48-7	2-Methylphenol	500	384	77	43-90
	3&4-Methylphenol	1000	718	72	36-88
87-86-5	Pentachlorophenol	1000	905	91	61-115
95-95-4	2,4,5-Trichlorophenol	500	458	92	62-109
88-06-2	2,4,6-Trichlorophenol	500	449	90	59-107
106-46-7	1,4-Dichlorobenzene	500	408	82	45-98
121-14-2	2,4-Dinitrotoluene	500	439	88	61-110
118-74-1	Hexachlorobenzene	500	444	89	63-108
87-68-3	Hexachlorobutadiene	500	437	87	42-102
67-72-1	Hexachloroethane	500	410	82	42-100
98-95-3	Nitrobenzene	500	448	90	50-104
110-86-1	Pyridine	500	247	49	23-74

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	46%	14-67%
4165-62-2	Phenol-d5	41%	10-50%
118-79-6	2,4,6-Tribromophenol	85%	33-118%
4165-60-0	Nitrobenzene-d5	86%	42-108%
321-60-8	2-Fluorobiphenyl	84%	40-106%
1718-51-0	Terphenyl-d14	85%	39-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: FA35726

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP61329-MS	X048097.D	1	08/04/16	MV	08/04/16	OP61329	SX2095
OP61329-MSD	X048098.D	1	08/04/16	MV	08/04/16	OP61329	SX2095
FA35726-11	X048096.D	1	08/04/16	MV	08/04/16	OP61329	SX2095

The QC reported here applies to the following samples:

Method: SW846 8270D

FA35726-11

CAS No.	Compound	FA35726-11 ug/l	Spike Q	ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-48-7	2-Methylphenol	ND	500	342	68	500	305	61	11	43-90/28	
	3&4-Methylphenol	ND	1000	625	63	1000	537	54	15	36-88/28	
87-86-5	Pentachlorophenol	ND	1000	874	87	1000	911	91	4	61-115/26	
95-95-4	2,4,5-Trichlorophenol	ND	500	448	90	500	454	91	1	62-109/22	
88-06-2	2,4,6-Trichlorophenol	ND	500	435	87	500	443	89	2	59-107/23	
106-46-7	1,4-Dichlorobenzene	ND	500	404	81	500	387	77	4	45-98/25	
121-14-2	2,4-Dinitrotoluene	ND	500	437	87	500	436	87	0	61-110/21	
118-74-1	Hexachlorobenzene	ND	500	417	83	500	441	88	6	63-108/22	
87-68-3	Hexachlorobutadiene	ND	500	427	85	500	418	84	2	42-102/28	
67-72-1	Hexachloroethane	ND	500	412	82	500	390	78	5	42-100/29	
98-95-3	Nitrobenzene	ND	500	420	84	500	437	87	4	50-104/28	
110-86-1	Pyridine	ND	500	237	47	500	220	44	7	23-74/34	

CAS No.	Surrogate Recoveries	MS	MSD	FA35726-11	Limits
367-12-4	2-Fluorophenol	53%	41%	51%	14-67%
4165-62-2	Phenol-d5	38%	26%	39%	10-50%
118-79-6	2,4,6-Tribromophenol	80%	82%	82%	33-118%
4165-60-0	Nitrobenzene-d5	81%	82%	81%	42-108%
321-60-8	2-Fluorobiphenyl	82%	83%	81%	40-106%
1718-51-0	Terphenyl-d14	82%	83%	85%	39-121%

* = Outside of Control Limits.



GC Semi-volatiles

QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 1

Job Number: FA35726

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP61284-MB	MM33446.D	1	08/01/16	NJ	07/30/16	OP61284	GMM644

The QC reported here applies to the following samples:

Method: SW846 8082A

FA35726-11

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	17	6.7	ug/kg	
11104-28-2	Aroclor 1221	ND	17	8.5	ug/kg	
11141-16-5	Aroclor 1232	ND	17	8.3	ug/kg	
53469-21-9	Aroclor 1242	ND	17	6.7	ug/kg	
12672-29-6	Aroclor 1248	ND	17	6.7	ug/kg	
11097-69-1	Aroclor 1254	ND	17	8.0	ug/kg	
11096-82-5	Aroclor 1260	ND	17	6.7	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	90%	44-126%
2051-24-3	Decachlorobiphenyl	86%	41-145%

Blank Spike Summary

Job Number: FA35726
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP61284-BS	MM33445.D	1	08/01/16	NJ	07/30/16	OP61284	GMM644

The QC reported here applies to the following samples: Method: SW846 8082A

FA35726-11

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	133	120	90	58-126
11096-82-5	Aroclor 1260	133	128	96	59-133

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	92%	44-126%
2051-24-3	Decachlorobiphenyl	89%	41-145%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: FA35726

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP61284-MS	MM33567.D	5	08/02/16	NJ	07/30/16	OP61284	GMM644
OP61284-MSD	MM33568.D	5	08/02/16	NJ	07/30/16	OP61284	GMM644
FA35715-10 ^a	MM33566.D	5	08/02/16	NJ	07/30/16	OP61284	GMM644

The QC reported here applies to the following samples:

Method: SW846 8082A

FA35726-11

CAS No.	Compound	FA35715-10 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	148	135	91	148	135	91	0	58-126/25
11097-69-1	Aroclor 1254	667		768			770		0 ^b	60-130/30
11096-82-5	Aroclor 1260	ND	148	212	144*	148	214	145*	1	59-133/31

CAS No.	Surrogate Recoveries	MS	MSD	FA35715-10	Limits
877-09-8	Tetrachloro-m-xylene	86%	84%	78%	44-126%
2051-24-3	Decachlorobiphenyl	95%	93%	87%	41-145%

(a) All hits confirmed by dual column analysis.

(b) Reported for replicate purposes only.

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries



Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA35726
Account: GFLEMFLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30668
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 08/02/16 08/02/16 08/02/16

Metal	RL	IDL	MDL	MB raw	final	MB raw	final	MB raw	final
Mercury	0.00050	.00003	.00005	0.000013	<0.00050	0.00014	<0.0050	0.000031	<0.0050

Associated samples MP30668: FA35726-11

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA35726
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30668
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 08/02/16

Metal	C46693-2T Original MS	Spike lot HGFLWS1	% Rec	QC Limits
Mercury	0.0	0.032	0.030	106.7
				80-120

Associated samples MP30668: FA35726-11

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

8.1.2

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MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA35726
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30668
 Matrix Type: LEACHATE
 Methods: SW846 7470A
 Units: mg/l

Prep Date: 08/02/16 08/02/16

Metal	C46693-2T Original MSD		Spikelot HGFLWS1	% Rec	MSD RPD	QC Limit	FA35726-11 Original DUP		RPD	QC Limits
Mercury	0.0	0.033	0.030	110.0	3.1	20	0.0	0.0	NC	0-20

Associated samples MP30668: FA35726-11

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

8.1.2

8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA35726
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30668
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 08/02/16 08/02/16

Metal	BSP Result	SpikeLot HGFLWS1	% Rec	QC Limits	BSP Result	SpikeLot HGFLWS1	% Rec	QC Limits
Mercury	0.0032	0.0030	106.7	80-120	0.032	0.030	106.7	80-120

Associated samples MP30668: FA35726-11

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA35726
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30668
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 08/02/16

Metal	BSP Result	Spike lot HGFLWS1	% Rec	QC Limits
Mercury	0.032	0.030	106.7	80-120

Associated samples MP30668: FA35726-11

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA35726
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30668
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: ug/l

Prep Date: 08/02/16

Metal	C46693-2T		%DIF	QC Limits
	Original	SDL 1:5		
Mercury	0.00	0.00	NC	0-10

Associated samples MP30668: FA35726-11

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

8.1.4

8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA35726
Account: GFLEMLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30669
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 08/02/16 08/02/16 08/02/16

Metal	RL	IDL	MDL	MB raw	final	MB raw	final	MB raw	final
Aluminum	0.20	.014	.014						
Antimony	0.0060	.001	.001						
Arsenic	0.010	.0013	.0013	-0.0010	<0.010	-0.0020	<0.10	-0.012	<0.10
Barium	0.20	.001	.005	-0.00020	<0.20	0.013	<2.0	0.0	<2.0
Beryllium	0.0040	.0002	.0002						
Cadmium	0.0050	.0002	.0002	-0.00010	<0.0050	-0.0010	<0.050	-0.0010	<0.050
Calcium	1.0	.05	.05						
Chromium	0.010	.001	.001	0.0	<0.010	0.0040	<0.10	0.0	<0.10
Cobalt	0.050	.0002	.0002						
Copper	0.025	.001	.001						
Iron	0.30	.017	.017						
Lead	0.0050	.001	.0011	-0.00060	<0.0050	0.0050	<0.050	-0.0070	<0.050
Magnesium	5.0	.035	.035						
Manganese	0.015	.0005	.001						
Molybdenum	0.050	.0003	.0003						
Nickel	0.040	.0004	.0004						
Potassium	10	.2	.2						
Selenium	0.010	.0024	.0029	-0.0017	<0.010	-0.013	<0.10	0.0	<0.10
Silver	0.010	.0007	.0007	0.00040	<0.010	0.0050	<0.10	0.0030	<0.10
Sodium	10	.5	.5						
Strontium	0.010	.0005	.0005						
Thallium	0.010	.0011	.0014						
Tin	0.050	.0009	.001						
Titanium	0.010	.0005	.001						
Vanadium	0.050	.0005	.0006						
Zinc	0.020	.003	.01						

Associated samples MP30669: FA35726-11

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA35726
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30669
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 08/02/16

Metal	C46693-2T Original MS		Spike lot MPFLICP2 % Rec	QC Limits	
Aluminum					
Antimony	anr				
Arsenic	0.0	20.8	20.0	104.0	80-120
Barium	0.44	21.8	20.0	106.8	80-120
Beryllium	anr				
Cadmium	0.0030	0.52	0.50	103.4	80-120
Calcium					
Chromium	0.0	2.1	2.0	105.0	80-120
Cobalt					
Copper					
Iron					
Lead	6.7	12.0	5.00	106.0	80-120
Magnesium					
Manganese					
Molybdenum					
Nickel	anr				
Potassium					
Selenium	0.0	21.1	20.0	105.5	80-120
Silver	0.0	0.50	0.50	100.0	80-120
Sodium					
Strontium					
Thallium	anr				
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP30669: FA35726-11

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA35726
 Account: GFLEMLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30669
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 08/02/16 08/02/16

Metal	C46693-2T Original MSD		Spike lot MPFLICP2 % Rec		MSD RPD	QC Limit	FA35726-11 Original DUP		RPD	QC Limits
Aluminum										
Antimony	anr									
Arsenic	0.0	21.7	20.0	108.5	4.2	20	0.0	0.0	NC	0-20
Barium	0.44	22.5	20.0	110.3	3.2	20	0.39	0.37	5.3	0-20
Beryllium	anr									
Cadmium	0.0030	0.54	0.50	107.4	3.8	20	0.0050	0.0050	0.0	0-20
Calcium										
Chromium	0.0	2.2	2.0	110.0	4.7	20	0.0	0.0	NC	0-20
Cobalt										
Copper										
Iron										
Lead	6.7	12.4	5.00	114.0	3.3	20	0.20	0.20	0.0	0-20
Magnesium										
Manganese										
Molybdenum										
Nickel	anr									
Potassium										
Selenium	0.0	22.0	20.0	110.0	4.2	20	0.0	0.0	NC	0-20
Silver	0.0	0.52	0.50	104.0	3.9	20	0.0	0.0	NC	0-20
Sodium										
Strontium										
Thallium	anr									
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP30669: FA35726-11

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA35726
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30669
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 08/02/16 08/02/16

Metal	BSP Result	SpikeLot MPFLICP2	% Rec	QC Limits	BSP Result	SpikeLot MPFLICP2	% Rec	QC Limits
Aluminum								
Antimony	anr							
Arsenic	2.1	2.0	105.0	80-120	20.7	20.0	103.5	80-120
Barium	2.2	2.0	110.0	80-120	21.6	20.0	108.0	80-120
Beryllium	anr							
Cadmium	0.053	0.050	106.0	80-120	0.52	0.50	104.0	80-120
Calcium								
Chromium	0.21	0.20	105.0	80-120	2.1	2.0	105.0	80-120
Cobalt								
Copper								
Iron								
Lead	0.50	0.50	100.0	80-120	5.0	5.0	100.0	80-120
Magnesium								
Manganese								
Molybdenum								
Nickel	anr							
Potassium								
Selenium	2.1	2.0	105.0	80-120	21.0	20.0	105.0	80-120
Silver	0.051	0.050	102.0	80-120	0.50	0.50	100.0	80-120
Sodium								
Strontium								
Thallium	anr							
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP30669: FA35726-11

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

8.2.3
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA35726
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30669
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 08/02/16

Metal	BSP Result	Spike lot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	20.1	20.0	100.5	80-120
Barium	21.3	20.0	106.5	80-120
Beryllium	anr			
Cadmium	0.51	0.50	102.0	80-120
Calcium				
Chromium	2.1	2.0	105.0	80-120
Cobalt				
Copper				
Iron				
Lead	4.9	5.0	98.0	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Potassium				
Selenium	20.2	20.0	101.0	80-120
Silver	0.49	0.50	98.0	80-120
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP30669: FA35726-11

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

8.2.3
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA35726
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30669
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: ug/l

Prep Date: 08/02/16

Metal	C46693-2T Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	0.00	0.00	NC	0-10
Barium	43.6	42.0	3.7	0-10
Beryllium	anr			
Cadmium	0.300	0.00	100.0(a)	0-10
Calcium				
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper				
Iron				
Lead	672	651	3.2	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Potassium				
Selenium	0.00	0.00	NC	0-10
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP30669: FA35726-11

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).



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08/03/16

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Automated Report

Technical Report for

Gannett Fleming

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

57524

SGS Accutest Job Number: FA35755

Sampling Date: 07/27/16

Report to:

Gannett Fleming
West Lake Corporate Center 9119 Corporate Lake Dr, Suite 150
Tampa, FL 33634-6323
agetchell@gfnet.com; tfalkner@gfnet.com

ATTN: Aaron Getchell

Total number of pages in report: **36**



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

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Test results relate only to samples analyzed.

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Sample Summary

Gannett Fleming

Job No: FA35755

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524

Sample Number	Collected			Matrix			Client Sample ID
	Date	Time	By	Received	Code	Type	
FA35755-1	07/27/16	08:22	DDTF	07/29/16	AQ	Ground Water	MW-1R
FA35755-2	07/27/16	08:58	DDTF	07/29/16	AQ	Ground Water	MW-8
FA35755-3	07/27/16	09:52	DDTF	07/29/16	AQ	Ground Water	MW-16

Summary of Hits

Page 1 of 1

Job Number: FA35755**Account:** Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA**Collected:** 07/27/16

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method	
FA35755-1	MW-1R						
		1,1-Dichloroethylene	10.5 J	20	4.3	ug/l	SW846 8260B
		cis-1,2-Dichloroethylene	472	20	6.2	ug/l	SW846 8260B
		trans-1,2-Dichloroethylene	7.4 J	20	6.6	ug/l	SW846 8260B
		Ethylbenzene	6.7 J	20	5.0	ug/l	SW846 8260B
		Tetrachloroethylene	392	20	6.1	ug/l	SW846 8260B
		Trichloroethylene	1730	20	5.4	ug/l	SW846 8260B
		o-Xylene	5.7 J	20	5.3	ug/l	SW846 8260B
		Arsenic	348	10		ug/l	SW846 6010C
FA35755-2	MW-8						
		Benzene	1230	50	10	ug/l	SW846 8260B
		Ethylbenzene	205	50	13	ug/l	SW846 8260B
		Toluene	2690	50	10	ug/l	SW846 8260B
		1,2,4-Trimethylbenzene	13.1 J	50	10	ug/l	SW846 8260B
		m,p-Xylene	780	100	15	ug/l	SW846 8260B
		o-Xylene	486	50	13	ug/l	SW846 8260B
FA35755-3	MW-16						
		Tetrachloroethylene	3.7	1.0	0.30	ug/l	SW846 8260B



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	07/27/16
Lab Sample ID:	FA35755-1	Date Received:	07/29/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0096268.D	20	08/01/16	KM	n/a	n/a	VN4374
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	500	200	ug/l	
71-43-2	Benzene	ND	20	4.1	ug/l	
108-86-1	Bromobenzene	ND	20	8.4	ug/l	
74-97-5	Bromochloromethane	ND	20	8.5	ug/l	
75-27-4	Bromodichloromethane	ND	20	4.8	ug/l	
75-25-2	Bromoform	ND	20	9.3	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	51	ug/l	
104-51-8	n-Butylbenzene	ND	20	8.7	ug/l	
135-98-8	sec-Butylbenzene	ND	20	5.1	ug/l	
98-06-6	tert-Butylbenzene	ND	20	8.0	ug/l	
75-15-0	Carbon Disulfide	ND	40	4.6	ug/l	
56-23-5	Carbon Tetrachloride	ND	20	6.0	ug/l	
108-90-7	Chlorobenzene	ND	20	4.0	ug/l	
75-00-3	Chloroethane	ND	40	13	ug/l	
67-66-3	Chloroform	ND	20	6.0	ug/l	
95-49-8	o-Chlorotoluene	ND	20	4.9	ug/l	
106-43-4	p-Chlorotoluene	ND	20	7.1	ug/l	
124-48-1	Dibromochloromethane	ND	20	5.2	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	16	ug/l	
106-93-4	1,2-Dibromoethane	ND	40	6.6	ug/l	
75-71-8	Dichlorodifluoromethane	ND	40	10	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	20	5.3	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	20	4.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	7.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	20	5.1	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	5.7	ug/l	
75-35-4	1,1-Dichloroethylene	10.5	20	4.3	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	472	20	6.2	ug/l	
156-60-5	trans-1,2-Dichloroethylene	7.4	20	6.6	ug/l	J
78-87-5	1,2-Dichloropropane	ND	20	6.9	ug/l	
142-28-9	1,3-Dichloropropane	ND	20	6.3	ug/l	
594-20-7	2,2-Dichloropropane	ND	20	5.5	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	07/27/16
Lab Sample ID:	FA35755-1	Date Received:	07/29/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	20	5.8	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	5.3	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	4.9	ug/l	
100-41-4	Ethylbenzene	6.7	20	5.0	ug/l	J
87-68-3	Hexachlorobutadiene	ND	40	11	ug/l	
591-78-6	2-Hexanone	ND	200	40	ug/l	
98-82-8	Isopropylbenzene	ND	20	6.6	ug/l	
99-87-6	p-Isopropyltoluene	ND	20	5.6	ug/l	
74-83-9	Methyl Bromide	ND	40	10	ug/l	
74-87-3	Methyl Chloride	ND	40	10	ug/l	
74-95-3	Methylene Bromide	ND	40	7.1	ug/l	
75-09-2	Methylene Chloride	ND	100	40	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	100	28	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	20	4.0	ug/l	
91-20-3	Naphthalene	ND	100	20	ug/l	
103-65-1	n-Propylbenzene	ND	20	4.0	ug/l	
100-42-5	Styrene	ND	20	4.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	20	5.7	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	6.5	ug/l	
127-18-4	Tetrachloroethylene	392	20	6.1	ug/l	
108-88-3	Toluene	ND	20	4.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	40	10	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	40	10	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	20	4.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	20	7.3	ug/l	
79-01-6	Trichloroethylene	1730	20	5.4	ug/l	
75-69-4	Trichlorofluoromethane	ND	40	10	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	40	13	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	20	4.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	20	4.0	ug/l	
108-05-4	Vinyl Acetate	ND	200	40	ug/l	
75-01-4	Vinyl Chloride	ND	20	6.3	ug/l	
	m,p-Xylene	ND	40	6.0	ug/l	
95-47-6	o-Xylene	5.7	20	5.3	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	101%		85-112%

ND = Not detected MDL = Method Detection Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	07/27/16
Lab Sample ID:	FA35755-1	Date Received:	07/29/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	106%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	07/27/16
Lab Sample ID:	FA35755-1	Date Received:	07/29/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	348	10	ug/l	1	08/01/16	08/01/16 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13316
(2) Prep QC Batch: MP30664

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	07/27/16
Lab Sample ID:	FA35755-2	Date Received:	07/29/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0096269.D	50	08/01/16	KM	n/a	n/a	VN4374
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1300	500	ug/l	
71-43-2	Benzene	1230	50	10	ug/l	
108-86-1	Bromobenzene	ND	50	21	ug/l	
74-97-5	Bromochloromethane	ND	50	21	ug/l	
75-27-4	Bromodichloromethane	ND	50	12	ug/l	
75-25-2	Bromoform	ND	50	23	ug/l	
78-93-3	2-Butanone (MEK)	ND	250	130	ug/l	
104-51-8	n-Butylbenzene	ND	50	22	ug/l	
135-98-8	sec-Butylbenzene	ND	50	13	ug/l	
98-06-6	tert-Butylbenzene	ND	50	20	ug/l	
75-15-0	Carbon Disulfide	ND	100	12	ug/l	
56-23-5	Carbon Tetrachloride	ND	50	15	ug/l	
108-90-7	Chlorobenzene	ND	50	10	ug/l	
75-00-3	Chloroethane	ND	100	31	ug/l	
67-66-3	Chloroform	ND	50	15	ug/l	
95-49-8	o-Chlorotoluene	ND	50	12	ug/l	
106-43-4	p-Chlorotoluene	ND	50	18	ug/l	
124-48-1	Dibromochloromethane	ND	50	13	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	41	ug/l	
106-93-4	1,2-Dibromoethane	ND	100	17	ug/l	
75-71-8	Dichlorodifluoromethane	ND	100	25	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	50	13	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	50	12	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	50	20	ug/l	
75-34-3	1,1-Dichloroethane	ND	50	13	ug/l	
107-06-2	1,2-Dichloroethane	ND	50	14	ug/l	
75-35-4	1,1-Dichloroethylene	ND	50	11	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	50	16	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	50	17	ug/l	
78-87-5	1,2-Dichloropropane	ND	50	17	ug/l	
142-28-9	1,3-Dichloropropane	ND	50	16	ug/l	
594-20-7	2,2-Dichloropropane	ND	50	14	ug/l	

ND = Not detected MDL = Method Detection Limit

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J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	07/27/16
Lab Sample ID:	FA35755-2	Date Received:	07/29/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	50	15	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	13	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	12	ug/l	
100-41-4	Ethylbenzene	205	50	13	ug/l	
87-68-3	Hexachlorobutadiene	ND	100	29	ug/l	
591-78-6	2-Hexanone	ND	500	100	ug/l	
98-82-8	Isopropylbenzene	ND	50	16	ug/l	
99-87-6	p-Isopropyltoluene	ND	50	14	ug/l	
74-83-9	Methyl Bromide	ND	100	25	ug/l	
74-87-3	Methyl Chloride	ND	100	25	ug/l	
74-95-3	Methylene Bromide	ND	100	18	ug/l	
75-09-2	Methylene Chloride	ND	250	100	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	70	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	50	10	ug/l	
91-20-3	Naphthalene	ND	250	50	ug/l	
103-65-1	n-Propylbenzene	ND	50	10	ug/l	
100-42-5	Styrene	ND	50	12	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	14	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	16	ug/l	
127-18-4	Tetrachloroethylene	ND	50	15	ug/l	
108-88-3	Toluene	2690	50	10	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	100	26	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	100	25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	10	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	50	18	ug/l	
79-01-6	Trichloroethylene	ND	50	14	ug/l	
75-69-4	Trichlorofluoromethane	ND	100	25	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	100	33	ug/l	
95-63-6	1,2,4-Trimethylbenzene	13.1	50	10	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	ND	50	10	ug/l	
108-05-4	Vinyl Acetate	ND	500	100	ug/l	
75-01-4	Vinyl Chloride	ND	50	16	ug/l	
	m,p-Xylene	780	100	15	ug/l	
95-47-6	o-Xylene	486	50	13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	102%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	07/27/16
Lab Sample ID:	FA35755-2	Date Received:	07/29/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	106%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16	Date Sampled:	07/27/16
Lab Sample ID:	FA35755-3	Date Received:	07/29/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0096270.D	1	08/01/16	KM	n/a	n/a	VN4374
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16	Date Sampled:	07/27/16
Lab Sample ID:	FA35755-3	Date Received:	07/29/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	3.7	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	102%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16	Date Sampled:	07/27/16
Lab Sample ID:	FA35755-3	Date Received:	07/29/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%		83-118%

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, FL 32811
TEL. 407-425-6700 • FAX: 407-425-0707

Accutest JOB # **F435755** PAGE 1 OF 1

Accutest Quote #	SKIFF#
------------------	--------

Client / Reporting Information				Project Information				Analytical Information										Matrix Codes																		
Company Name: Gannett Fleming				Project Name: TMR Valdosta																																
Address: 9119 Corporate Lake Drive				Street: 2002 West Savannah Ave																																
City: Tampa		State: FL		Zip: 33634		City: Tampa		State: FL																												
Project Contact: Aaron Gehlert E-mail: a.gehlert@gfnet.com				Project #:																																
Phone: 813 882 4366				Fax: 813 882 4669																																
Sampler(s) Name(s) (Printed): R. Davis / R. Todd Fiskum				Client Purchase Order #:																																
				CONTAINER INFORMATION																																
Account Sample #				Field ID / Point of Collection				DATE		TIME		SAMPLED BY:		MATRIX		TOTAL # OF BOTTLES		OTHER		POLY		HCl		NH₄OH		PHOS		AS/SCA		NH₄/ZINC		D WATER		MEQ/L		LAB USE ONLY DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe
1				mm-1R				7/19/10		15:20		JDF		GLO		4																		X		
2				mm-8						0853						3																				
3				mm-11b						↓ 0752 ↓		↓ ↓				3																X				

TURNAROUND TIME (Business Days)		Data Deliverable Information		Comments / Remarks	
☒ 10 Days Standard ☐ 7 Day RUSH ☐ 5 Day RUSH ☐ 3 Day EMERGENCY ☐ 2 Day EMERGENCY ☐ 1 Day EMERGENCY ☐ OTHER _____		☐ COMMERCIAL "A" (RESULTS ONLY) ☒ COMMERCIAL "B" (RESULTS PLUS QC) ☐ REDT1 (EPA LEVEL 3) ☐ FULT1 (EPA LEVEL 4) ☐ EDD'S			
Approved By: / Rush Code _____					
Emergency or Rush T/A Data Available VIA Email or Lablink _____					

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished To Sampler:		Date Time:		Received By:		Date Time:		Relinquished by:		Date Time:		Received By:		Date Time:	
1 R. Davis		7/25/10		2 [Signature]		15:00		3 [Signature]		7/28/10		4 [Signature]		7/29/10	
Relinquished by:		Date Time:		Received By:		Date Time:		Relinquished by:		Date Time:		Received By:		Date Time:	
5				6				7				8			

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 3.2

FA35755: Chain of Custody

Page 1 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA35755 CLIENT: Coannett Fleming PROJECT: Tru Valdosta
 DATE/TIME RECEIVED: 7/29/16 800 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: _____
 AIRBILL NUMBERS: _____

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
- ☒ TRIP BLANK NOT PROVIDED
- ☒ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____
 NUMBER OF 5035 FIELD KITS ? _____
 NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR to.0
- ☐ OBSERVED TEMPS: 3.2
- ☐ CORRECTED TEMPS: 3.2 (USED FOR LIMS)

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
- ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
- ☐ INSUFFICIENT VOLUME FOR ANALYSIS
- ☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ☒ ID'S ON COC DO NOT MATCH LABEL
- ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- ☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- ☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
- ☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- ☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- ☐ % SOLIDS JAR NOT RECEIVED
- ☐ RESIDUAL CHLORINE PRESENT LOT# _____

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TEST STRIP LOT#s pH 0-3 230315 pH 10-12 219813A OTHER (specify) _____
 SUMMARY OF COMMENTS: Bottle labels read "MW-1D on 7/27/16 @ 0822". COC reads
"MW-1R on 7/27/16 @ 0822." for sample #1.

TECHNICIAN SIGNATURE/DATE [Signature] 7/29/16 REVIEWER SIGNATURE/DATE [Signature] 7-29-16
 NF 11/15 RECEIPTLOG040416.xls

FA35755: Chain of Custody

Page 2 of 3

Job Change

FA35755

Requested Date:	7/29/2016	Received Date:	7/29/2016
Account Name:	Gannett Fleming	Due Date:	8/5/2016
Project	Trademark Metals Recycling; 2000 W Savannah,	Deliverable:	COMMB
CSR:	andrea	TAT (Days):	7

=====

Sample #: FA35755-all

Change:
Please change 8260 list to V8260STD.

=====

Above Changes Per: Aaron Getchell

Date/Time: 7/29/2016 4:23:52 PM

FA35755: Chain of Custody

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

Page 3 of 3

Page 1 of 1



GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 3

Job Number: FA35755**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4374-MB	N0096263.D	1	08/01/16	KM	n/a	n/a	VN4374

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA35755-1, FA35755-2, FA35755-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: FA35755**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4374-MB	N0096263.D	1	08/01/16	KM	n/a	n/a	VN4374

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA35755-1, FA35755-2, FA35755-3

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	98% 83-118%
17060-07-0	1,2-Dichloroethane-D4	100% 79-125%

Method Blank Summary

Job Number: FA35755
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4374-MB	N0096263.D	1	08/01/16	KM	n/a	n/a	VN4374

The QC reported here applies to the following samples:

Method: SW846 8260B

FA35755-1, FA35755-2, FA35755-3

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	101% 85-112%
460-00-4	4-Bromofluorobenzene	103% 83-118%

5.1.1
5

Blank Spike Summary

Page 1 of 3

Job Number: FA35755**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4374-BS	N0096262.D	1	08/01/16	KM	n/a	n/a	VN4374

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA35755-1, FA35755-2, FA35755-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	110	88	50-147
71-43-2	Benzene	25	27.6	110	81-122
108-86-1	Bromobenzene	25	26.6	106	80-121
74-97-5	Bromochloromethane	25	24.3	97	76-123
75-27-4	Bromodichloromethane	25	27.3	109	79-123
75-25-2	Bromoform	25	25.0	100	66-123
78-93-3	2-Butanone (MEK)	125	111	89	56-143
104-51-8	n-Butylbenzene	25	28.6	114	79-126
135-98-8	sec-Butylbenzene	25	28.8	115	83-133
98-06-6	tert-Butylbenzene	25	27.1	108	80-133
75-15-0	Carbon Disulfide	25	23.2	93	66-148
56-23-5	Carbon Tetrachloride	25	27.7	111	76-136
108-90-7	Chlorobenzene	25	27.7	111	82-124
75-00-3	Chloroethane	25	28.1	112	62-144
67-66-3	Chloroform	25	26.8	107	80-124
95-49-8	o-Chlorotoluene	25	28.1	112	81-127
106-43-4	p-Chlorotoluene	25	27.8	111	83-130
124-48-1	Dibromochloromethane	25	28.4	114	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	25.0	100	64-123
106-93-4	1,2-Dibromoethane	25	27.4	110	75-120
75-71-8	Dichlorodifluoromethane	25	21.9	88	42-167
95-50-1	1,2-Dichlorobenzene	25	26.8	107	82-124
541-73-1	1,3-Dichlorobenzene	25	27.3	109	84-125
106-46-7	1,4-Dichlorobenzene	25	26.8	107	78-120
75-34-3	1,1-Dichloroethane	25	27.9	112	81-122
107-06-2	1,2-Dichloroethane	25	25.4	102	75-125
75-35-4	1,1-Dichloroethylene	25	28.1	112	78-137
156-59-2	cis-1,2-Dichloroethylene	25	25.8	103	78-120
156-60-5	trans-1,2-Dichloroethylene	25	29.6	118	76-127
78-87-5	1,2-Dichloropropane	25	26.7	107	76-124
142-28-9	1,3-Dichloropropane	25	26.4	106	80-118
594-20-7	2,2-Dichloropropane	25	27.4	110	74-139
563-58-6	1,1-Dichloropropene	25	27.2	109	79-131
10061-01-5	cis-1,3-Dichloropropene	25	27.5	110	75-118
10061-02-6	trans-1,3-Dichloropropene	25	28.4	114	80-120
100-41-4	Ethylbenzene	25	27.4	110	81-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA35755**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4374-BS	N0096262.D	1	08/01/16	KM	n/a	n/a	VN4374

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA35755-1, FA35755-2, FA35755-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
87-68-3	Hexachlorobutadiene	25	26.3	105	75-142
591-78-6	2-Hexanone	125	105	84	61-129
98-82-8	Isopropylbenzene	25	28.1	112	83-132
99-87-6	p-Isopropyltoluene	25	28.2	113	79-130
74-83-9	Methyl Bromide	25	25.3	101	59-143
74-87-3	Methyl Chloride	25	23.5	94	50-159
74-95-3	Methylene Bromide	25	26.6	106	78-119
75-09-2	Methylene Chloride	25	25.7	103	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	110	88	66-122
1634-04-4	Methyl Tert Butyl Ether	25	23.0	92	72-117
91-20-3	Naphthalene	25	28.1	112	63-132
103-65-1	n-Propylbenzene	25	29.2	117	82-133
100-42-5	Styrene	25	27.4	110	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	28.3	113	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	27.5	110	72-120
127-18-4	Tetrachloroethylene	25	26.1	104	76-135
108-88-3	Toluene	25	27.5	110	80-120
87-61-6	1,2,3-Trichlorobenzene	25	26.6	106	68-131
120-82-1	1,2,4-Trichlorobenzene	25	26.5	106	73-129
71-55-6	1,1,1-Trichloroethane	25	25.6	102	75-130
79-00-5	1,1,2-Trichloroethane	25	27.8	111	76-119
79-01-6	Trichloroethylene	25	27.0	108	81-126
75-69-4	Trichlorofluoromethane	25	26.0	104	71-156
96-18-4	1,2,3-Trichloropropane	25	26.3	105	77-120
95-63-6	1,2,4-Trimethylbenzene	25	27.4	110	79-120
108-67-8	1,3,5-Trimethylbenzene	25	27.6	110	79-120
108-05-4	Vinyl Acetate	125	114	91	43-154
75-01-4	Vinyl Chloride	25	22.0	88	69-159
	m,p-Xylene	50	55.8	112	79-126
95-47-6	o-Xylene	25	27.2	109	80-127

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	97%	79-125%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA35755
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4374-BS	N0096262.D	1	08/01/16	KM	n/a	n/a	VN4374

The QC reported here applies to the following samples: Method: SW846 8260B
FA35755-1, FA35755-2, FA35755-3

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	102%	85-112%
460-00-4	4-Bromofluorobenzene	99%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA35755

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA35755-1MS	N0096282.D	20	08/01/16	KM	n/a	n/a	VN4374
FA35755-1MSD	N0096283.D	20	08/01/16	KM	n/a	n/a	VN4374
FA35755-1	N0096268.D	20	08/01/16	KM	n/a	n/a	VN4374

The QC reported here applies to the following samples:

Method: SW846 8260B

FA35755-1, FA35755-2, FA35755-3

CAS No.	Compound	FA35755-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		2500	2370	95	2500	2610	104	10	50-147/21
71-43-2	Benzene	ND		500	508	102	500	510	102	0	81-122/14
108-86-1	Bromobenzene	ND		500	480	96	500	497	99	3	80-121/14
74-97-5	Bromochloromethane	ND		500	462	92	500	463	93	0	76-123/14
75-27-4	Bromodichloromethane	ND		500	490	98	500	497	99	1	79-123/19
75-25-2	Bromoform	ND		500	392	78	500	387	77	1	66-123/21
78-93-3	2-Butanone (MEK)	ND		2500	2660	106	2500	2810	112	5	56-143/18
104-51-8	n-Butylbenzene	ND		500	513	103	500	516	103	1	79-126/16
135-98-8	sec-Butylbenzene	ND		500	527	105	500	538	108	2	83-133/16
98-06-6	tert-Butylbenzene	ND		500	493	99	500	506	101	3	80-133/16
75-15-0	Carbon Disulfide	ND		500	394	79	500	402	80	2	66-148/23
56-23-5	Carbon Tetrachloride	ND		500	483	97	500	484	97	0	76-136/23
108-90-7	Chlorobenzene	ND		500	510	102	500	511	102	0	82-124/14
75-00-3	Chloroethane	ND		500	666	133	500	570	114	16	62-144/20
67-66-3	Chloroform	ND		500	504	101	500	508	102	1	80-124/15
95-49-8	o-Chlorotoluene	ND		500	532	106	500	536	107	1	81-127/15
106-43-4	p-Chlorotoluene	ND		500	505	101	500	516	103	2	83-130/15
124-48-1	Dibromochloromethane	ND		500	461	92	500	477	95	3	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	ND		500	456	91	500	468	94	3	64-123/18
106-93-4	1,2-Dibromoethane	ND		500	484	97	500	501	100	3	75-120/13
75-71-8	Dichlorodifluoromethane	ND		500	450	90	500	441	88	2	42-167/19
95-50-1	1,2-Dichlorobenzene	ND		500	488	98	500	499	100	2	82-124/14
541-73-1	1,3-Dichlorobenzene	ND		500	488	98	500	500	100	2	84-125/14
106-46-7	1,4-Dichlorobenzene	ND		500	484	97	500	492	98	2	78-120/15
75-34-3	1,1-Dichloroethane	ND		500	516	103	500	522	104	1	81-122/15
107-06-2	1,2-Dichloroethane	ND		500	495	99	500	491	98	1	75-125/14
75-35-4	1,1-Dichloroethylene	10.5	J	500	520	102	500	533	105	2	78-137/18
156-59-2	cis-1,2-Dichloroethylene	472		500	965	99	500	979	101	1	78-120/15
156-60-5	trans-1,2-Dichloroethylene	7.4	J	500	548	108	500	553	109	1	76-127/17
78-87-5	1,2-Dichloropropane	ND		500	501	100	500	498	100	1	76-124/14
142-28-9	1,3-Dichloropropane	ND		500	481	96	500	496	99	3	80-118/13
594-20-7	2,2-Dichloropropane	ND		500	407	81	500	410	82	1	74-139/17
563-58-6	1,1-Dichloropropene	ND		500	486	97	500	501	100	3	79-131/16
10061-01-5	cis-1,3-Dichloropropene	ND		500	454	91	500	465	93	2	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		500	487	97	500	499	100	2	80-120/22
100-41-4	Ethylbenzene	6.7	J	500	518	102	500	519	102	0	81-121/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA35755

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA35755-1MS	N0096282.D	20	08/01/16	KM	n/a	n/a	VN4374
FA35755-1MSD	N0096283.D	20	08/01/16	KM	n/a	n/a	VN4374
FA35755-1	N0096268.D	20	08/01/16	KM	n/a	n/a	VN4374

The QC reported here applies to the following samples:

Method: SW846 8260B

FA35755-1, FA35755-2, FA35755-3

CAS No.	Compound	FA35755-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	ND		500	427	85	500	449	90	5	75-142/19
591-78-6	2-Hexanone	ND		2500	2400	96	2500	2630	105	9	61-129/18
98-82-8	Isopropylbenzene	ND		500	508	102	500	508	102	0	83-132/15
99-87-6	p-Isopropyltoluene	ND		500	510	102	500	513	103	1	79-130/16
74-83-9	Methyl Bromide	ND		500	572	114	500	508	102	12	59-143/19
74-87-3	Methyl Chloride	ND		500	528	106	500	492	98	7	50-159/19
74-95-3	Methylene Bromide	ND		500	513	103	500	510	102	1	78-119/14
75-09-2	Methylene Chloride	ND		500	488	98	500	490	98	0	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		2500	2530	101	2500	2720	109	7	66-122/16
1634-04-4	Methyl Tert Butyl Ether	ND		500	416	83	500	428	86	3	72-117/14
91-20-3	Naphthalene	ND		500	517	103	500	527	105	2	63-132/25
103-65-1	n-Propylbenzene	ND		500	539	108	500	552	110	2	82-133/15
100-42-5	Styrene	ND		500	484	97	500	487	97	1	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		500	497	99	500	501	100	1	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	ND		500	540	108	500	551	110	2	72-120/14
127-18-4	Tetrachloroethylene	392		500	813	84	500	833	88	2	76-135/16
108-88-3	Toluene	ND		500	484	97	500	500	100	3	80-120/14
87-61-6	1,2,3-Trichlorobenzene	ND		500	468	94	500	479	96	2	68-131/25
120-82-1	1,2,4-Trichlorobenzene	ND		500	459	92	500	468	94	2	73-129/20
71-55-6	1,1,1-Trichloroethane	ND		500	454	91	500	463	93	2	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		500	516	103	500	537	107	4	76-119/14
79-01-6	Trichloroethylene	1730		500	2260	106	500	2220	98	2	81-126/15
75-69-4	Trichlorofluoromethane	ND		500	613	123	500	549	110	11	71-156/21
96-18-4	1,2,3-Trichloropropane	ND		500	514	103	500	532	106	3	77-120/16
95-63-6	1,2,4-Trimethylbenzene	ND		500	500	100	500	511	102	2	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND		500	508	102	500	520	104	2	79-120/19
108-05-4	Vinyl Acetate	ND		2500	2410	96	2500	2400	96	0	43-154/14
75-01-4	Vinyl Chloride	ND		500	502	100	500	461	92	9	69-159/18
	m,p-Xylene	ND		1000	1030	103	1000	1040	104	1	79-126/15
95-47-6	o-Xylene	5.7	J	500	493	97	500	506	100	3	80-127/14

CAS No.	Surrogate Recoveries	MS	MSD	FA35755-1	Limits
1868-53-7	Dibromofluoromethane	102%	102%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	102%	102%	79-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA35755
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA35755-1MS	N0096282.D	20	08/01/16	KM	n/a	n/a	VN4374
FA35755-1MSD	N0096283.D	20	08/01/16	KM	n/a	n/a	VN4374
FA35755-1	N0096268.D	20	08/01/16	KM	n/a	n/a	VN4374

The QC reported here applies to the following samples: Method: SW846 8260B

FA35755-1, FA35755-2, FA35755-3

CAS No.	Surrogate Recoveries	MS	MSD	FA35755-1	Limits
2037-26-5	Toluene-D8	98%	99%	101%	85-112%
460-00-4	4-Bromofluorobenzene	98%	101%	106%	83-118%

* = Outside of Control Limits.



Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA35755
Account: GFLEMLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30664
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 08/01/16

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14		
Antimony	6.0	1	1		
Arsenic	10	1.3	1.3	-0.80	<10
Barium	200	1	1		
Beryllium	4.0	.2	.2		
Cadmium	5.0	.2	.2		
Calcium	1000	50	50		
Chromium	10	1	1		
Cobalt	50	.2	.2		
Copper	25	1	1		
Iron	300	17	17		
Lead	5.0	1	1.1		
Magnesium	5000	35	35		
Manganese	15	.5	1		
Molybdenum	50	.3	.3		
Nickel	40	.4	.4		
Potassium	10000	200	200		
Selenium	10	2.4	2.9		
Silver	10	.7	.7		
Sodium	10000	500	500		
Strontium	10	.5	.5		
Thallium	10	1.1	1.4		
Tin	50	.9	1		
Titanium	10	.5	1		
Vanadium	50	.5	.6		
Zinc	20	3	4.4		

Associated samples MP30664: FA35755-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA35755
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30664
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 08/01/16 08/01/16

Metal	C46684-1 Original	DUP	RPD	QC Limits	C46684-1 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum									
Antimony	anr								
Arsenic	0.0	0.0	NC	0-20	0.0	1880	2000	94.0	80-120
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium									
Manganese									
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

Associated samples MP30664: FA35755-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA35755
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30664
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 08/01/16

Metal	C46684-1 Original	MSD	SpikeLot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	anr					
Arsenic	0.0	1880	2000	94.0	0.0	20
Barium	anr					
Beryllium	anr					
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	anr					
Magnesium						
Manganese						
Molybdenum	anr					
Nickel	anr					
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	anr					

Associated samples MP30664: FA35755-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA35755
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30664
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 08/01/16

Metal	BSP Result	Spike lot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	1900	2000	95.0	80-120
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP30664: FA35755-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

6.1.3

6

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA35755
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30664
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 08/01/16

Metal	C46684-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	0.00	0.00	NC	0-10
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP30664: FA35755-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA35755
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP30664
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

08/01/16

Metal	Sample ml	Final ml	C46684-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic	9.8	10			96.9	0.2	5	100	96.9	80-120
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP30664: FA35755-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested

Technical Report for

Gannett Fleming

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

57524

SGS Accutest Job Number: FA37966

Sampling Dates: 10/17/16 - 10/18/16

Report to:

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Tampa, FL 33634-6323
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ATTN: Aaron Getchell

Total number of pages in report: **84**



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.



Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001)
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Sample Summary

Gannett Fleming

Job No: FA37966

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA37966-1	10/17/16	15:37	RFDD 10/21/16	AQ	Ground Water	MW-1R
FA37966-2	10/17/16	15:52	RFDD 10/21/16	AQ	Ground Water	MW-1DD
FA37966-3	10/17/16	17:02	RFDD 10/21/16	AQ	Ground Water	MW-1D
FA37966-4	10/17/16	08:37	RFDD 10/21/16	AQ	Ground Water	MW-8
FA37966-5	10/18/16	09:00	RFDD 10/21/16	AQ	Ground Water	MW-2R
FA37966-6	10/18/16	09:07	RFDD 10/21/16	AQ	Ground Water	MW-15
FA37966-7	10/18/16	09:50	RFDD 10/21/16	AQ	Ground Water	MW-3
FA37966-8	10/18/16	10:07	RFDD 10/21/16	AQ	Ground Water	MW-14
FA37966-9	10/18/16	11:27	RFDD 10/21/16	AQ	Ground Water	MW-16
FA37966-10	10/18/16	12:29	RFDD 10/21/16	AQ	Ground Water	MW-11

Summary of Hits

Page 1 of 2

Job Number: FA37966
Account: Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Collected: 10/17/16 thru 10/18/16

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
---------------	------------------	--------------------	----	-----	-------	--------

FA37966-1 MW-1R

cis-1,2-Dichloroethylene	544	20	6.2	ug/l	SW846 8260B
Ethylbenzene	6.8 J	20	5.0	ug/l	SW846 8260B
Tetrachloroethylene	428	20	6.1	ug/l	SW846 8260B
Trichloroethylene	1830	25	6.8	ug/l	SW846 8260B
m,p-Xylene	6.3 J	40	6.0	ug/l	SW846 8260B
o-Xylene	8.7 J	20	5.3	ug/l	SW846 8260B
Arsenic	317	10		ug/l	SW846 6010C

FA37966-2 MW-1DD

1,1-Dichloroethane	5.1	1.0	0.26	ug/l	SW846 8260B
1,1-Dichloroethylene	0.72 J	1.0	0.22	ug/l	SW846 8260B
Tetrachloroethylene	7.1	1.0	0.30	ug/l	SW846 8260B
1,1,1-Trichloroethane	4.3	1.0	0.20	ug/l	SW846 8260B
Trichloroethylene	0.55 J	1.0	0.27	ug/l	SW846 8260B

FA37966-3 MW-1D

No hits reported in this sample.

FA37966-4 MW-8

Benzene	384	5.0	1.0	ug/l	SW846 8260B
Ethylbenzene	84.5	5.0	1.3	ug/l	SW846 8260B
n-Propylbenzene	2.2 J	5.0	1.0	ug/l	SW846 8260B
Toluene	11.6	5.0	1.0	ug/l	SW846 8260B
1,2,4-Trimethylbenzene	16.1	5.0	1.0	ug/l	SW846 8260B
1,3,5-Trimethylbenzene	3.4 J	5.0	1.0	ug/l	SW846 8260B
m,p-Xylene	81.3	10	1.5	ug/l	SW846 8260B
o-Xylene	73.1	5.0	1.3	ug/l	SW846 8260B

FA37966-5 MW-2R

cis-1,2-Dichloroethylene	1.1	1.0	0.31	ug/l	SW846 8260B
Tetrachloroethylene	1.3	1.0	0.30	ug/l	SW846 8260B

FA37966-6 MW-15

No hits reported in this sample.

FA37966-7 MW-3

No hits reported in this sample.

Summary of Hits

Job Number: FA37966
Account: Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Collected: 10/17/16 thru 10/18/16

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

FA37966-8 MW-14

No hits reported in this sample.

FA37966-9 MW-16

Tetrachloroethylene	3.0	1.0	0.30	ug/l	SW846 8260B
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FA37966-10 MW-11

1,1-Dichloroethane	0.77 J	1.0	0.26	ug/l	SW846 8260B
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Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	10/17/16
Lab Sample ID:	FA37966-1	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M90802.D	20	10/22/16	KM	n/a	n/a	VM3872
Run #2	M90823.D	25	10/24/16	KM	n/a	n/a	VM3873

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	500	200	ug/l	
71-43-2	Benzene	ND	20	4.1	ug/l	
108-86-1	Bromobenzene	ND	20	8.4	ug/l	
74-97-5	Bromochloromethane	ND	20	8.5	ug/l	
75-27-4	Bromodichloromethane	ND	20	4.8	ug/l	
75-25-2	Bromoform	ND	20	9.3	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	51	ug/l	
104-51-8	n-Butylbenzene	ND	20	8.7	ug/l	
135-98-8	sec-Butylbenzene	ND	20	5.1	ug/l	
98-06-6	tert-Butylbenzene	ND	20	8.0	ug/l	
75-15-0	Carbon Disulfide	ND	40	4.6	ug/l	
56-23-5	Carbon Tetrachloride	ND	20	6.0	ug/l	
108-90-7	Chlorobenzene	ND	20	4.0	ug/l	
75-00-3	Chloroethane	ND	40	13	ug/l	
67-66-3	Chloroform	ND	20	6.0	ug/l	
95-49-8	o-Chlorotoluene	ND	20	4.9	ug/l	
106-43-4	p-Chlorotoluene	ND	20	7.1	ug/l	
124-48-1	Dibromochloromethane	ND	20	5.2	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	16	ug/l	
106-93-4	1,2-Dibromoethane	ND	40	6.6	ug/l	
75-71-8	Dichlorodifluoromethane	ND	40	10	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	20	5.3	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	20	4.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	7.8	ug/l	
75-34-3	1,1-Dichloroethane	ND	20	5.1	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	5.7	ug/l	
75-35-4	1,1-Dichloroethylene	ND	20	4.3	ug/l	
156-59-2	cis-1,2-Dichloroethylene	544	20	6.2	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	20	6.6	ug/l	
78-87-5	1,2-Dichloropropane	ND	20	6.9	ug/l	
142-28-9	1,3-Dichloropropane	ND	20	6.3	ug/l	
594-20-7	2,2-Dichloropropane	ND	20	5.5	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	10/17/16
Lab Sample ID:	FA37966-1	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	20	5.8	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	5.3	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	4.9	ug/l	
100-41-4	Ethylbenzene	6.8	20	5.0	ug/l	J
87-68-3	Hexachlorobutadiene	ND	40	11	ug/l	
591-78-6	2-Hexanone	ND	200	40	ug/l	
98-82-8	Isopropylbenzene	ND	20	6.6	ug/l	
99-87-6	p-Isopropyltoluene	ND	20	5.6	ug/l	
74-83-9	Methyl Bromide	ND	40	10	ug/l	
74-87-3	Methyl Chloride	ND	40	10	ug/l	
74-95-3	Methylene Bromide	ND	40	7.1	ug/l	
75-09-2	Methylene Chloride	ND	100	40	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	100	28	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	20	4.0	ug/l	
91-20-3	Naphthalene	ND	100	20	ug/l	
103-65-1	n-Propylbenzene	ND	20	4.0	ug/l	
100-42-5	Styrene	ND	20	4.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	20	5.7	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	6.5	ug/l	
127-18-4	Tetrachloroethylene	428	20	6.1	ug/l	
108-88-3	Toluene	ND	20	4.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	40	10	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	40	10	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	20	4.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	20	7.3	ug/l	
79-01-6	Trichloroethylene	1830 ^a	25	6.8	ug/l	
75-69-4	Trichlorofluoromethane	ND	40	10	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	40	13	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	20	4.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	20	4.0	ug/l	
108-05-4	Vinyl Acetate	ND	200	40	ug/l	
75-01-4	Vinyl Chloride	ND	20	6.3	ug/l	
	m,p-Xylene	6.3	40	6.0	ug/l	J
95-47-6	o-Xylene	8.7	20	5.3	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%	107%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	104%	79-125%
2037-26-5	Toluene-D8	94%	89%	85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	10/17/16
Lab Sample ID:	FA37966-1	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	87%	90%	83-118%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	10/17/16
Lab Sample ID:	FA37966-1	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	317	10	ug/l	1	10/21/16	10/24/16 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13507
(2) Prep QC Batch: MP31025

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	10/17/16
Lab Sample ID:	FA37966-2	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J0980445.D	1	10/26/16	DP	n/a	n/a	VJ5470
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	5.1	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	0.72	1.0	0.22	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	10/17/16
Lab Sample ID:	FA37966-2	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	7.1	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	4.3	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	0.55	1.0	0.27	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	104%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	10/17/16
Lab Sample ID:	FA37966-2	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		83-118%

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	10/17/16
Lab Sample ID:	FA37966-2	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	10/21/16	10/24/16 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13507
(2) Prep QC Batch: MP31025

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	10/17/16
Lab Sample ID:	FA37966-3	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M90804.D	1	10/22/16	KM	n/a	n/a	VM3872
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	10/17/16
Lab Sample ID:	FA37966-3	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	96%		79-125%
2037-26-5	Toluene-D8	88%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	10/17/16
Lab Sample ID:	FA37966-3	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		83-118%

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	10/17/16
Lab Sample ID:	FA37966-3	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	10/21/16	10/24/16 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13507
(2) Prep QC Batch: MP31025

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	10/17/16
Lab Sample ID:	FA37966-4	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J0980446.D	5	10/26/16	DP	n/a	n/a	VJ5470
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	130	50	ug/l	
71-43-2	Benzene	384	5.0	1.0	ug/l	
108-86-1	Bromobenzene	ND	5.0	2.1	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.1	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.2	ug/l	
75-25-2	Bromoform	ND	5.0	2.3	ug/l	
78-93-3	2-Butanone (MEK)	ND	25	13	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	2.2	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	1.3	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	10	1.2	ug/l	
56-23-5	Carbon Tetrachloride	ND	5.0	1.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/l	
75-00-3	Chloroethane	ND	10	3.1	ug/l	
67-66-3	Chloroform	ND	5.0	1.5	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	1.2	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	1.8	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.3	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	25	4.1	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	1.7	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	2.5	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.3	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.3	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.4	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.1	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.6	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.7	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	1.7	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	1.6	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.4	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	10/17/16
Lab Sample ID:	FA37966-4	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	5.0	1.5	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.3	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.2	ug/l	
100-41-4	Ethylbenzene	84.5	5.0	1.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	2.9	ug/l	
591-78-6	2-Hexanone	ND	50	10	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	1.6	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	1.4	ug/l	
74-83-9	Methyl Bromide	ND	10	2.5	ug/l	
74-87-3	Methyl Chloride	ND	10	2.5	ug/l	
74-95-3	Methylene Bromide	ND	10	1.8	ug/l	
75-09-2	Methylene Chloride	ND	25	10	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	7.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/l	
91-20-3	Naphthalene	ND	25	5.0	ug/l	
103-65-1	n-Propylbenzene	2.2	5.0	1.0	ug/l	J
100-42-5	Styrene	ND	5.0	1.2	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.4	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.6	ug/l	
127-18-4	Tetrachloroethylene	ND	5.0	1.5	ug/l	
108-88-3	Toluene	11.6	5.0	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	10	2.6	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10	2.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.8	ug/l	
79-01-6	Trichloroethylene	ND	5.0	1.4	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	2.5	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	3.3	ug/l	
95-63-6	1,2,4-Trimethylbenzene	16.1	5.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	3.4	5.0	1.0	ug/l	J
108-05-4	Vinyl Acetate	ND	50	10	ug/l	
75-01-4	Vinyl Chloride	ND	5.0	1.6	ug/l	
	m,p-Xylene	81.3	10	1.5	ug/l	
95-47-6	o-Xylene	73.1	5.0	1.3	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	103%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	10/17/16
Lab Sample ID:	FA37966-4	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-5	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M90806.D	1	10/22/16	KM	n/a	n/a	VM3872
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	1.1	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-5	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	1.3	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		83-118%
17060-07-0	1,2-Dichloroethane-D4	100%		79-125%
2037-26-5	Toluene-D8	93%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-5	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-5	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	10/21/16	10/24/16 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13507
(2) Prep QC Batch: MP31025

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-6	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B117436.D	1	10/24/16	WV	n/a	n/a	VB4728
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-6	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	98%		79-125%
2037-26-5	Toluene-D8	97%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-6	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-6	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	10/21/16	10/24/16 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13507
(2) Prep QC Batch: MP31025

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-7	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B117437.D	1	10/24/16	WV	n/a	n/a	VB4728
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-7	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	98%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-7	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-7	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	10/21/16	10/24/16 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13507
(2) Prep QC Batch: MP31025

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-8	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B117438.D	1	10/24/16	WV	n/a	n/a	VB4728
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-8	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	99%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-8	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		83-118%

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-8	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	10/21/16	10/24/16 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13507
(2) Prep QC Batch: MP31025

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-16	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-9	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B117439.D	1	10/24/16	WV	n/a	n/a	VB4728
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-9	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	3.0	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	107%		79-125%
2037-26-5	Toluene-D8	98%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-9	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-10	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B117440.D	1	10/24/16	WV	n/a	n/a	VB4728
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	0.77	1.0	0.26	ug/l	J
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-10	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	110%		79-125%
2037-26-5	Toluene-D8	98%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	10/18/16
Lab Sample ID:	FA37966-10	Date Received:	10/21/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



ACCUTEST

SGS Accutest Southeast
Chain of Custody4405 Vineland Road, Suite C-15 Orlando, FL 32811
TEL: 407-425-6700 FAX: 407-425-9707
www.sgstest.com

SGS ACCUTEST JOB #:

PAGE 1 OF 1

Client / Reporting Information		Project Information		Analytical Information		Matrix Codes	
Company Name: <u>Gannett Fleming</u>	Project Name: <u>TMR Valdosta</u>						
Address: <u>9119 Corporate Lake Dr Suite 150</u>	Street: <u>2000 West Savannah Ave</u>						
City: <u>Tampa</u> State: <u>FL</u> Zip: <u>33634</u>	City: <u>Valdosta</u> State: <u>GA</u>						
Project Contact: <u>Adam Gratchell</u> Email: <u>agratchell@gannett.com</u>	Project # <u>57524.029</u>						
Phone #: <u>813 882 4366</u>	Fax # <u>813 884 4609</u>						
Sampler(s) Name(s) (Printed): Sampler 1: <u>R. T. Miller</u> Sampler 2: <u>Don Dennis</u>	Client Purchase Order #						
SGS Accutest Sample #	Field ID / Point of Collection	DATE	TIME	SAMPLED BY	MATRIX	TOTAL # OF BOTTLES	LAB USE ONLY
1	MW-1R	11/17/14	0537	575	GW	4	
2	MW-1DD		1552			4	
3	MW-1D		1702			4	
4	MW-8		0837			3	
5	MW-2R	11/18/14	0900			4	
6	MW-15		0907			4	
7	MW-3		0950			4	
8	MW-14		1007			4	
9	MW-16		1127			3	
10	MW-11		1229			3	
Turnaround Time (Business days)		Data Deliverable Information		Comments / Remarks			
☒ 10 Day (Business) ☐ 7 Day ☐ 5 Day ☐ 3 Day RUSH ☐ 2 Day RUSH ☐ 1 Day RUSH ☐ Other		Approved By: / Date:		☐ COMMERCIAL "A" (RESULTS ONLY) ☒ COMMERCIAL "B" (RESULTS PLUS QC) ☐ REDT1 (EPA LEVEL 3) ☐ FULLT1 (EPA LEVEL 4) ☐ EDD'S			
Rush T/A Data Available VIA Email or Lablink							
Relinquished by Sampler/Affiliation		Date Time:		Received By/Affiliation		Date Time:	
1 R. T. Miller (GF)		11/20/16 12:28		3 [Signature]		4 [Signature] 10-21-16 8:00	
Relinquished By/Affiliation		Date Time:		Received By/Affiliation		Date Time:	
5		6		7		8	
Lab Use Only: Cooler Temperature (s) Celsius:							3.5

FA37966: Chain of Custody

Page 1 of 2



SGS ACCUTEST - ORLANDO SAMPLE RECEIPT CONFIRMATION

SGS ACCUTEST'S JOB NUMBER: FA37966 CLIENT: Gannett Fleming PROJECT: TMR Valdosta
 DATE/TIME RECEIVED: 10-21-16 8:00 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER:
 AIRBILL NUMBERS:

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
- ☒ TRIP BLANK NOT PROVIDED
- ☒ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES? 25-GRAM 5-GRAM

NUMBER OF 5035 FIELD KITS?

NUMBER OF LAB FILTERED METALS?

TEST STRIP LOT#s pH 0-3 236315

SUMMARY OF COMMENTS:

TEMPERATURE INFORMATION

IR THERM ID 1 CORR. FACTOR -0.4
 OBSERVED TEMPS: 3.9
 CORRECTED TEMPS: 3.5 (USED FOR LIMS)

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
- ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
- ☐ INSUFFICIENT VOLUME FOR ANALYSIS
- ☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ☐ ID'S ON COC DO NOT MATCH LABEL
- ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- ☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- ☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
- ☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- ☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- ☐ % SOLIDS JAR NOT RECEIVED
- ☐ RESIDUAL CHLORINE PRESENT LOT#

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

pH 10-12 219813A

OTHER (specify)

TECHNICIAN SIGNATURE/DATE [Signature] 10-21-16 REVIEWER SIGNATURE/DATE [Signature] 10-21-16

NF 02/16

receipt confirmation 020116.xls

FA37966: Chain of Custody

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GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 3

Job Number: FA37966**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM3872-MB	M90788.D	1	10/22/16	KM	n/a	n/a	VM3872

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA37966-1, FA37966-3, FA37966-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: FA37966

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM3872-MB	M90788.D	1	10/22/16	KM	n/a	n/a	VM3872

The QC reported here applies to the following samples:

Method: SW846 8260B

FA37966-1, FA37966-3, FA37966-5

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	1.4	2.0	0.57	ug/l	J
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	7.0	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.5	2.0	0.51	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	105%
17060-07-0	1,2-Dichloroethane-D4	83-118%
		95%
		79-125%

Method Blank Summary

Job Number: FA37966
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM3872-MB	M90788.D	1	10/22/16	KM	n/a	n/a	VM3872

The QC reported here applies to the following samples: Method: SW846 8260B

FA37966-1, FA37966-3, FA37966-5

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	92% 85-112%
460-00-4	4-Bromofluorobenzene	96% 83-118%

Method Blank Summary

Job Number: FA37966
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM3873-MB	M90817.D	1	10/24/16	KM	n/a	n/a	VM3873

The QC reported here applies to the following samples: Method: SW846 8260B

FA37966-1

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	106% 83-118%
17060-07-0	1,2-Dichloroethane-D4	95% 79-125%
2037-26-5	Toluene-D8	90% 85-112%
460-00-4	4-Bromofluorobenzene	92% 83-118%

Method Blank Summary

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Job Number: FA37966**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4728-MB	B117420.D	1	10/24/16	WV	n/a	n/a	VB4728

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA37966-6, FA37966-7, FA37966-8, FA37966-9, FA37966-10

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	

Method Blank Summary

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Job Number: FA37966**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4728-MB	B117420.D	1	10/24/16	WV	n/a	n/a	VB4728

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA37966-6, FA37966-7, FA37966-8, FA37966-9, FA37966-10

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	92%	79-125%

Method Blank Summary

Job Number: FA37966
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4728-MB	B117420.D	1	10/24/16	WV	n/a	n/a	VB4728

The QC reported here applies to the following samples:

Method: SW846 8260B

FA37966-6, FA37966-7, FA37966-8, FA37966-9, FA37966-10

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	100% 85-112%
460-00-4	4-Bromofluorobenzene	100% 83-118%

Method Blank Summary

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Job Number: FA37966**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5470-MB	J0980437.D	1	10/26/16	DP	n/a	n/a	VJ5470

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA37966-2, FA37966-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	

Method Blank Summary

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Job Number: FA37966**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5470-MB	J0980437.D	1	10/26/16	DP	n/a	n/a	VJ5470

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA37966-2, FA37966-4

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
	m,p-Xylene	ND	2.0	0.30	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	98%
17060-07-0	1,2-Dichloroethane-D4	101%

Method Blank Summary

Job Number: FA37966
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5470-MB	J0980437.D	1	10/26/16	DP	n/a	n/a	VJ5470

The QC reported here applies to the following samples: Method: SW846 8260B
FA37966-2, FA37966-4

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	108% 85-112%
460-00-4	4-Bromofluorobenzene	104% 83-118%

5.1.4
5

Blank Spike Summary

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Job Number: FA37966**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM3872-BS	M90787.D	1	10/22/16	KM	n/a	n/a	VM3872

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA37966-1, FA37966-3, FA37966-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	157	126	50-147
71-43-2	Benzene	25	26.4	106	81-122
108-86-1	Bromobenzene	25	26.0	104	80-121
74-97-5	Bromochloromethane	25	28.2	113	76-123
75-27-4	Bromodichloromethane	25	26.7	107	79-123
75-25-2	Bromoform	25	21.8	87	66-123
78-93-3	2-Butanone (MEK)	125	117	94	56-143
104-51-8	n-Butylbenzene	25	25.7	103	79-126
135-98-8	sec-Butylbenzene	25	27.7	111	83-133
98-06-6	tert-Butylbenzene	25	26.0	104	80-133
75-15-0	Carbon Disulfide	25	27.9	112	66-148
56-23-5	Carbon Tetrachloride	25	29.2	117	76-136
108-90-7	Chlorobenzene	25	27.3	109	82-124
75-00-3	Chloroethane	25	23.7	95	62-144
67-66-3	Chloroform	25	24.9	100	80-124
95-49-8	o-Chlorotoluene	25	25.0	100	81-127
106-43-4	p-Chlorotoluene	25	26.9	108	83-130
124-48-1	Dibromochloromethane	25	24.5	98	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	22.3	89	64-123
106-93-4	1,2-Dibromoethane	25	26.3	105	75-120
75-71-8	Dichlorodifluoromethane	25	37.6	150	42-167
95-50-1	1,2-Dichlorobenzene	25	28.2	113	82-124
541-73-1	1,3-Dichlorobenzene	25	26.8	107	84-125
106-46-7	1,4-Dichlorobenzene	25	24.7	99	78-120
75-34-3	1,1-Dichloroethane	25	25.5	102	81-122
107-06-2	1,2-Dichloroethane	25	25.0	100	75-125
75-35-4	1,1-Dichloroethylene	25	27.4	110	78-137
156-59-2	cis-1,2-Dichloroethylene	25	24.5	98	78-120
156-60-5	trans-1,2-Dichloroethylene	25	29.1	116	76-127
78-87-5	1,2-Dichloropropane	25	23.3	93	76-124
142-28-9	1,3-Dichloropropane	25	23.4	94	80-118
594-20-7	2,2-Dichloropropane	25	26.7	107	74-139
563-58-6	1,1-Dichloropropene	25	24.3	97	79-131
10061-01-5	cis-1,3-Dichloropropene	25	25.7	103	75-118
10061-02-6	trans-1,3-Dichloropropene	25	24.6	98	80-120
100-41-4	Ethylbenzene	25	25.2	101	81-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA37966**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM3872-BS	M90787.D	1	10/22/16	KM	n/a	n/a	VM3872

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA37966-1, FA37966-3, FA37966-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
87-68-3	Hexachlorobutadiene	25	31.9	128	75-142
591-78-6	2-Hexanone	125	107	86	61-129
98-82-8	Isopropylbenzene	25	27.3	109	83-132
99-87-6	p-Isopropyltoluene	25	26.6	106	79-130
74-83-9	Methyl Bromide	25	22.4	90	59-143
74-87-3	Methyl Chloride	25	32.5	130	50-159
74-95-3	Methylene Bromide	25	26.3	105	78-119
75-09-2	Methylene Chloride	25	27.3	109	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	104	83	66-122
1634-04-4	Methyl Tert Butyl Ether	25	25.8	103	72-117
91-20-3	Naphthalene	25	29.2	117	63-132
103-65-1	n-Propylbenzene	25	25.8	103	82-133
100-42-5	Styrene	25	26.8	107	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	28.2	113	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	23.4	94	72-120
127-18-4	Tetrachloroethylene	25	30.1	120	76-135
108-88-3	Toluene	25	25.3	101	80-120
87-61-6	1,2,3-Trichlorobenzene	25	30.8	123	68-131
120-82-1	1,2,4-Trichlorobenzene	25	31.5	126	73-129
71-55-6	1,1,1-Trichloroethane	25	27.6	110	75-130
79-00-5	1,1,2-Trichloroethane	25	25.4	102	76-119
79-01-6	Trichloroethylene	25	27.7	111	81-126
75-69-4	Trichlorofluoromethane	25	29.0	116	71-156
96-18-4	1,2,3-Trichloropropane	25	24.2	97	77-120
95-63-6	1,2,4-Trimethylbenzene	25	25.3	101	79-120
108-67-8	1,3,5-Trimethylbenzene	25	24.5	98	79-120
108-05-4	Vinyl Acetate	125	118	94	43-154
75-01-4	Vinyl Chloride	25	30.5	122	69-159
	m,p-Xylene	50	52.8	106	79-126
95-47-6	o-Xylene	25	27.3	109	80-127

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	95%	79-125%

* = Outside of Control Limits.

Blank Spike Summary

Page 3 of 3

Job Number: FA37966

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM3872-BS	M90787.D	1	10/22/16	KM	n/a	n/a	VM3872

The QC reported here applies to the following samples:

Method: SW846 8260B

FA37966-1, FA37966-3, FA37966-5

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	97%	85-112%
460-00-4	4-Bromofluorobenzene	92%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 1

Job Number: FA37966

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM3873-BS	M90816.D	1	10/24/16	KM	n/a	n/a	VM3873

The QC reported here applies to the following samples:

Method: SW846 8260B

FA37966-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
79-01-6	Trichloroethylene	25	26.0	104	81-126

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	97%	79-125%
2037-26-5	Toluene-D8	99%	85-112%
460-00-4	4-Bromofluorobenzene	99%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 3

Job Number: FA37966**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4728-BS	B117419.D	1	10/24/16	WV	n/a	n/a	VB4728

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA37966-6, FA37966-7, FA37966-8, FA37966-9, FA37966-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	97.3	78	50-147
71-43-2	Benzene	25	23.9	96	81-122
108-86-1	Bromobenzene	25	22.7	91	80-121
74-97-5	Bromochloromethane	25	21.9	88	76-123
75-27-4	Bromodichloromethane	25	22.8	91	79-123
75-25-2	Bromoform	25	22.6	90	66-123
78-93-3	2-Butanone (MEK)	125	106	85	56-143
104-51-8	n-Butylbenzene	25	24.5	98	79-126
135-98-8	sec-Butylbenzene	25	25.4	102	83-133
98-06-6	tert-Butylbenzene	25	23.5	94	80-133
75-15-0	Carbon Disulfide	25	22.9	92	66-148
56-23-5	Carbon Tetrachloride	25	22.6	90	76-136
108-90-7	Chlorobenzene	25	23.6	94	82-124
75-00-3	Chloroethane	25	28.7	115	62-144
67-66-3	Chloroform	25	22.5	90	80-124
95-49-8	o-Chlorotoluene	25	24.3	97	81-127
106-43-4	p-Chlorotoluene	25	24.0	96	83-130
124-48-1	Dibromochloromethane	25	23.0	92	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	21.5	86	64-123
106-93-4	1,2-Dibromoethane	25	23.3	93	75-120
75-71-8	Dichlorodifluoromethane	25	26.9	108	42-167
95-50-1	1,2-Dichlorobenzene	25	23.2	93	82-124
541-73-1	1,3-Dichlorobenzene	25	23.9	96	84-125
106-46-7	1,4-Dichlorobenzene	25	23.6	94	78-120
75-34-3	1,1-Dichloroethane	25	24.6	98	81-122
107-06-2	1,2-Dichloroethane	25	22.5	90	75-125
75-35-4	1,1-Dichloroethylene	25	21.7	87	78-137
156-59-2	cis-1,2-Dichloroethylene	25	23.0	92	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.4	106	76-127
78-87-5	1,2-Dichloropropane	25	23.0	92	76-124
142-28-9	1,3-Dichloropropane	25	22.6	90	80-118
594-20-7	2,2-Dichloropropane	25	23.7	95	74-139
563-58-6	1,1-Dichloropropene	25	22.7	91	79-131
10061-01-5	cis-1,3-Dichloropropene	25	23.5	94	75-118
10061-02-6	trans-1,3-Dichloropropene	25	24.6	98	80-120
100-41-4	Ethylbenzene	25	24.1	96	81-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA37966**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4728-BS	B117419.D	1	10/24/16	WV	n/a	n/a	VB4728

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA37966-6, FA37966-7, FA37966-8, FA37966-9, FA37966-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
87-68-3	Hexachlorobutadiene	25	24.4	98	75-142
591-78-6	2-Hexanone	125	111	89	61-129
98-82-8	Isopropylbenzene	25	24.9	100	83-132
99-87-6	p-Isopropyltoluene	25	25.0	100	79-130
74-83-9	Methyl Bromide	25	27.1	108	59-143
74-87-3	Methyl Chloride	25	25.4	102	50-159
74-95-3	Methylene Bromide	25	22.1	88	78-119
75-09-2	Methylene Chloride	25	24.2	97	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	110	88	66-122
1634-04-4	Methyl Tert Butyl Ether	25	20.5	82	72-117
91-20-3	Naphthalene	25	25.0	100	63-132
103-65-1	n-Propylbenzene	25	25.2	101	82-133
100-42-5	Styrene	25	26.0	104	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	24.8	99	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	22.4	90	72-120
127-18-4	Tetrachloroethylene	25	22.3	89	76-135
108-88-3	Toluene	25	24.3	97	80-120
87-61-6	1,2,3-Trichlorobenzene	25	23.8	95	68-131
120-82-1	1,2,4-Trichlorobenzene	25	23.5	94	73-129
71-55-6	1,1,1-Trichloroethane	25	21.3	85	75-130
79-00-5	1,1,2-Trichloroethane	25	23.4	94	76-119
79-01-6	Trichloroethylene	25	23.7	95	81-126
75-69-4	Trichlorofluoromethane	25	24.6	98	71-156
96-18-4	1,2,3-Trichloropropane	25	22.0	88	77-120
95-63-6	1,2,4-Trimethylbenzene	25	23.9	96	79-120
108-67-8	1,3,5-Trimethylbenzene	25	24.2	97	79-120
108-05-4	Vinyl Acetate	125	116	93	43-154
75-01-4	Vinyl Chloride	25	27.7	111	69-159
	m,p-Xylene	50	48.9	98	79-126
95-47-6	o-Xylene	25	24.2	97	80-127

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	95%	83-118%
17060-07-0	1,2-Dichloroethane-D4	92%	79-125%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA37966
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4728-BS	B117419.D	1	10/24/16	WV	n/a	n/a	VB4728

The QC reported here applies to the following samples: Method: SW846 8260B
FA37966-6, FA37966-7, FA37966-8, FA37966-9, FA37966-10

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	102%	85-112%
460-00-4	4-Bromofluorobenzene	101%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 3

Job Number: FA37966**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5470-BS	J0980438.D	1	10/26/16	DP	n/a	n/a	VJ5470

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA37966-2, FA37966-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	110	88	50-147
71-43-2	Benzene	25	26.8	107	81-122
108-86-1	Bromobenzene	25	24.8	99	80-121
74-97-5	Bromochloromethane	25	21.3	85	76-123
75-27-4	Bromodichloromethane	25	22.8	91	79-123
75-25-2	Bromoform	25	23.6	94	66-123
78-93-3	2-Butanone (MEK)	125	118	94	56-143
104-51-8	n-Butylbenzene	25	27.9	112	79-126
135-98-8	sec-Butylbenzene	25	29.1	116	83-133
98-06-6	tert-Butylbenzene	25	27.3	109	80-133
75-15-0	Carbon Disulfide	25	25.4	102	66-148
56-23-5	Carbon Tetrachloride	25	25.5	102	76-136
108-90-7	Chlorobenzene	25	25.7	103	82-124
75-00-3	Chloroethane	25	25.5	102	62-144
67-66-3	Chloroform	25	23.3	93	80-124
95-49-8	o-Chlorotoluene	25	27.1	108	81-127
106-43-4	p-Chlorotoluene	25	26.0	104	83-130
124-48-1	Dibromochloromethane	25	21.7	87	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	23.7	95	64-123
106-93-4	1,2-Dibromoethane	25	23.2	93	75-120
75-71-8	Dichlorodifluoromethane	25	39.7	159	42-167
95-50-1	1,2-Dichlorobenzene	25	25.0	100	82-124
541-73-1	1,3-Dichlorobenzene	25	26.1	104	84-125
106-46-7	1,4-Dichlorobenzene	25	25.1	100	78-120
75-34-3	1,1-Dichloroethane	25	27.1	108	81-122
107-06-2	1,2-Dichloroethane	25	24.3	97	75-125
75-35-4	1,1-Dichloroethylene	25	28.3	113	78-137
156-59-2	cis-1,2-Dichloroethylene	25	23.1	92	78-120
156-60-5	trans-1,2-Dichloroethylene	25	29.2	117	76-127
78-87-5	1,2-Dichloropropane	25	23.5	94	76-124
142-28-9	1,3-Dichloropropane	25	22.3	89	80-118
594-20-7	2,2-Dichloropropane	25	25.8	103	74-139
563-58-6	1,1-Dichloropropene	25	25.7	103	79-131
10061-01-5	cis-1,3-Dichloropropene	25	23.9	96	75-118
10061-02-6	trans-1,3-Dichloropropene	25	25.0	100	80-120
100-41-4	Ethylbenzene	25	26.2	105	81-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA37966**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5470-BS	J0980438.D	1	10/26/16	DP	n/a	n/a	VJ5470

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA37966-2, FA37966-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
87-68-3	Hexachlorobutadiene	25	27.2	109	75-142
591-78-6	2-Hexanone	125	111	89	61-129
98-82-8	Isopropylbenzene	25	25.5	102	83-132
99-87-6	p-Isopropyltoluene	25	27.7	111	79-130
74-83-9	Methyl Bromide	25	27.1	108	59-143
74-87-3	Methyl Chloride	25	30.2	121	50-159
74-95-3	Methylene Bromide	25	23.5	94	78-119
75-09-2	Methylene Chloride	25	29.5	118	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	114	91	66-122
1634-04-4	Methyl Tert Butyl Ether	25	20.6	82	72-117
91-20-3	Naphthalene	25	26.8	107	63-132
103-65-1	n-Propylbenzene	25	28.6	114	82-133
100-42-5	Styrene	25	23.9	96	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	22.7	91	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	25.8	103	72-120
127-18-4	Tetrachloroethylene	25	26.9	108	76-135
108-88-3	Toluene	25	26.7	107	80-120
87-61-6	1,2,3-Trichlorobenzene	25	24.7	99	68-131
120-82-1	1,2,4-Trichlorobenzene	25	23.6	94	73-129
71-55-6	1,1,1-Trichloroethane	25	24.4	98	75-130
79-00-5	1,1,2-Trichloroethane	25	24.2	97	76-119
79-01-6	Trichloroethylene	25	25.1	100	81-126
75-69-4	Trichlorofluoromethane	25	27.8	111	71-156
96-18-4	1,2,3-Trichloropropane	25	22.7	91	77-120
95-63-6	1,2,4-Trimethylbenzene	25	26.4	106	79-120
108-67-8	1,3,5-Trimethylbenzene	25	25.9	104	79-120
108-05-4	Vinyl Acetate	125	114	91	43-154
75-01-4	Vinyl Chloride	25	30.6	122	69-159
	m,p-Xylene	50	54.3	109	79-126
95-47-6	o-Xylene	25	25.5	102	80-127

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	97%	79-125%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA37966
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5470-BS	J0980438.D	1	10/26/16	DP	n/a	n/a	VJ5470

The QC reported here applies to the following samples: Method: SW846 8260B
FA37966-2, FA37966-4

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	100%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA37966

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA37966-1MS	M90809.D	20	10/22/16	KM	n/a	n/a	VM3872
FA37966-1MSD	M90810.D	20	10/22/16	KM	n/a	n/a	VM3872
FA37966-1	M90802.D	20	10/22/16	KM	n/a	n/a	VM3872

The QC reported here applies to the following samples:

Method: SW846 8260B

FA37966-1, FA37966-3, FA37966-5

CAS No.	Compound	FA37966-1 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		2500	85	2500	2100	84	1	50-147/21
71-43-2	Benzene	ND		500	100	500	485	97	3	81-122/14
108-86-1	Bromobenzene	ND		500	102	500	506	101	1	80-121/14
74-97-5	Bromochloromethane	ND		500	113	500	535	107	5	76-123/14
75-27-4	Bromodichloromethane	ND		500	109	500	500	100	9	79-123/19
75-25-2	Bromoform	ND		500	84	500	419	84	0	66-123/21
78-93-3	2-Butanone (MEK)	ND		2500	82	2500	2100	84	3	56-143/18
104-51-8	n-Butylbenzene	ND		500	89	500	446	89	0	79-126/16
135-98-8	sec-Butylbenzene	ND		500	100	500	479	96	4	83-133/16
98-06-6	tert-Butylbenzene	ND		500	101	500	501	100	1	80-133/16
75-15-0	Carbon Disulfide	ND		500	97	500	486	97	0	66-148/23
56-23-5	Carbon Tetrachloride	ND		500	105	500	539	108	3	76-136/23
108-90-7	Chlorobenzene	ND		500	106	500	550	110	4	82-124/14
75-00-3	Chloroethane	ND		500	96	500	373	75	25*	62-144/20
67-66-3	Chloroform	ND		500	104	500	477	95	9	80-124/15
95-49-8	o-Chlorotoluene	ND		500	91	500	487	97	7	81-127/15
106-43-4	p-Chlorotoluene	ND		500	103	500	513	103	0	83-130/15
124-48-1	Dibromochloromethane	ND		500	92	500	461	92	0	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	ND		500	77	500	481	96	22*	64-123/18
106-93-4	1,2-Dibromoethane	ND		500	107	500	561	112	5	75-120/13
75-71-8	Dichlorodifluoromethane	ND		500	149	500	627	125	17	42-167/19
95-50-1	1,2-Dichlorobenzene	ND		500	111	500	592	118	7	82-124/14
541-73-1	1,3-Dichlorobenzene	ND		500	112	500	513	103	8	84-125/14
106-46-7	1,4-Dichlorobenzene	ND		500	96	500	517	103	8	78-120/15
75-34-3	1,1-Dichloroethane	ND		500	109	500	494	99	10	81-122/15
107-06-2	1,2-Dichloroethane	ND		500	105	500	462	92	13	75-125/14
75-35-4	1,1-Dichloroethylene	ND		500	102	500	505	101	1	78-137/18
156-59-2	cis-1,2-Dichloroethylene	544		500	99	500	979	87	6	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		500	118	500	517	103	13	76-127/17
78-87-5	1,2-Dichloropropane	ND		500	105	500	470	94	11	76-124/14
142-28-9	1,3-Dichloropropane	ND		500	85	500	472	94	11	80-118/13
594-20-7	2,2-Dichloropropane	ND		500	89	500	429	86	3	74-139/17
563-58-6	1,1-Dichloropropene	ND		500	103	500	503	101	2	79-131/16
10061-01-5	cis-1,3-Dichloropropene	ND		500	105	500	497	99	5	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		500	89	500	451	90	1	80-120/22
100-41-4	Ethylbenzene	6.8	J	500	92	500	513	101	10	81-121/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA37966

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA37966-1MS	M90809.D	20	10/22/16	KM	n/a	n/a	VM3872
FA37966-1MSD	M90810.D	20	10/22/16	KM	n/a	n/a	VM3872
FA37966-1	M90802.D	20	10/22/16	KM	n/a	n/a	VM3872

The QC reported here applies to the following samples:

Method: SW846 8260B

FA37966-1, FA37966-3, FA37966-5

CAS No.	Compound	FA37966-1 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD	
87-68-3	Hexachlorobutadiene	ND		500	513	103	500	542	108	5	75-142/19
591-78-6	2-Hexanone	ND		2500	1770	71	2500	1980	79	11	61-129/18
98-82-8	Isopropylbenzene	ND		500	523	105	500	532	106	2	83-132/15
99-87-6	p-Isopropyltoluene	ND		500	507	101	500	489	98	4	79-130/16
74-83-9	Methyl Bromide	ND		500	441	88	500	391	78	12	59-143/19
74-87-3	Methyl Chloride	ND		500	617	123	500	528	106	16	50-159/19
74-95-3	Methylene Bromide	ND		500	565	113	500	528	106	7	78-119/14
75-09-2	Methylene Chloride	ND		500	508	102	500	447	89	13	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		2500	2060	82	2500	2100	84	2	66-122/16
1634-04-4	Methyl Tert Butyl Ether	ND		500	497	99	500	473	95	5	72-117/14
91-20-3	Naphthalene	ND		500	541	108	500	530	106	2	63-132/25
103-65-1	n-Propylbenzene	ND		500	537	107	500	541	108	1	82-133/15
100-42-5	Styrene	ND		500	445	89	500	528	106	17	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		500	554	111	500	559	112	1	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	ND		500	421	84	500	463	93	10	72-120/14
127-18-4	Tetrachloroethylene	428		500	1010	116	500	929	100	8	76-135/16
108-88-3	Toluene	ND		500	505	101	500	528	106	4	80-120/14
87-61-6	1,2,3-Trichlorobenzene	ND		500	535	107	500	547	109	2	68-131/25
120-82-1	1,2,4-Trichlorobenzene	ND		500	597	119	500	552	110	8	73-129/20
71-55-6	1,1,1-Trichloroethane	ND		500	565	113	500	495	99	13	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		500	528	106	500	482	96	9	76-119/14
79-01-6	Trichloroethylene	2050	E	500	2480	86	500	2250	40* a	10	81-126/15
75-69-4	Trichlorofluoromethane	ND		500	569	114	500	483	97	16	71-156/21
96-18-4	1,2,3-Trichloropropane	ND		500	475	95	500	512	102	7	77-120/16
95-63-6	1,2,4-Trimethylbenzene	ND		500	487	97	500	490	98	1	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND		500	481	96	500	478	96	1	79-120/19
108-05-4	Vinyl Acetate	ND		2500	2590	104	2500	2450	98	6	43-154/14
75-01-4	Vinyl Chloride	ND		500	558	112	500	509	102	9	69-159/18
	m,p-Xylene	6.3	J	1000	1040	103	1000	1030	102	1	79-126/15
95-47-6	o-Xylene	8.7	J	500	517	102	500	545	107	5	80-127/14

CAS No.	Surrogate Recoveries	MS	MSD	FA37966-1	Limits
1868-53-7	Dibromofluoromethane	107%	98%	105%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	92%	100%	79-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA37966

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA37966-1MS	M90809.D	20	10/22/16	KM	n/a	n/a	VM3872
FA37966-1MSD	M90810.D	20	10/22/16	KM	n/a	n/a	VM3872
FA37966-1	M90802.D	20	10/22/16	KM	n/a	n/a	VM3872

The QC reported here applies to the following samples:

Method: SW846 8260B

FA37966-1, FA37966-3, FA37966-5

CAS No.	Surrogate Recoveries	MS	MSD	FA37966-1	Limits
2037-26-5	Toluene-D8	94%	100%	94%	85-112%
460-00-4	4-Bromofluorobenzene	78%* b	93%	87%	83-118%

(a) Outside control limits due to high level in sample relative to spike amount.

(b) Outside control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA37966
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA38015-4MS	M90829.D	1	10/24/16	KM	n/a	n/a	VM3873
FA38015-4MSD	M90830.D	1	10/24/16	KM	n/a	n/a	VM3873
FA38015-4	M90828.D	1	10/24/16	KM	n/a	n/a	VM3873

The QC reported here applies to the following samples: Method: SW846 8260B

FA37966-1

CAS No.	Compound	FA38015-4 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
79-01-6	Trichloroethylene	0.74	J 25	26.8	104	25	27.5	107	3	81-126/15

CAS No.	Surrogate Recoveries	MS	MSD	FA38015-4	Limits
1868-53-7	Dibromofluoromethane	103%	103%	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	96%	90%	85%	79-125%
2037-26-5	Toluene-D8	96%	100%	97%	85-112%
460-00-4	4-Bromofluorobenzene	93%	94%	95%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA37966

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA37790-14MS	B117432.D	1	10/24/16	WV	n/a	n/a	VB4728
FA37790-14MSD	B117433.D	1	10/24/16	WV	n/a	n/a	VB4728
FA37790-14	B117425.D	1	10/24/16	WV	n/a	n/a	VB4728

The QC reported here applies to the following samples:

Method: SW846 8260B

FA37966-6, FA37966-7, FA37966-8, FA37966-9, FA37966-10

CAS No.	Compound	FA37790-14 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	25 U	125	103	82	125	125	100	19	50-147/21
71-43-2	Benzene	1.0 U	25	24.2	97	25	28.8	115	17*	81-122/14
108-86-1	Bromobenzene	1.0 U	25	22.8	91	25	28.9	116	24*	80-121/14
74-97-5	Bromochloromethane	1.0 U	25	23.4	94	25	29.7	119	24*	76-123/14
75-27-4	Bromodichloromethane	1.0 U	25	25.4	102	25	27.7	111	9	79-123/19
75-25-2	Bromoform	1.0 U	25	20.9	84	25	24.9	100	17	66-123/21
78-93-3	2-Butanone (MEK)	5.0 U	125	104	83	125	131	105	23*	56-143/18
104-51-8	n-Butylbenzene	1.0 U	25	24.0	96	25	29.9	120	22*	79-126/16
135-98-8	sec-Butylbenzene	1.0 U	25	24.7	99	25	31.3	125	24*	83-133/16
98-06-6	tert-Butylbenzene	1.0 U	25	23.9	96	25	30.1	120	23*	80-133/16
75-15-0	Carbon Disulfide	2.0 U	25	18.4	74	25	20.3	81	10	66-148/23
56-23-5	Carbon Tetrachloride	1.0 U	25	26.0	104	25	29.7	119	13	76-136/23
108-90-7	Chlorobenzene	1.0 U	25	23.3	93	25	29.7	119	24*	82-124/14
75-00-3	Chloroethane	2.0 U	25	29.7	119	25	34.5	138	15	62-144/20
67-66-3	Chloroform	1.0 U	25	25.6	102	25	30.8	123	18*	80-124/15
95-49-8	o-Chlorotoluene	1.0 U	25	23.5	94	25	30.1	120	25*	81-127/15
106-43-4	p-Chlorotoluene	1.0 U	25	23.1	92	25	29.3	117	24*	83-130/15
124-48-1	Dibromochloromethane	1.0 U	25	23.6	94	25	27.3	109	15	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U	25	22.0	88	25	27.3	109	22*	64-123/18
106-93-4	1,2-Dibromoethane	2.0 U	25	23.8	95	25	30.1	120	23*	75-120/13
75-71-8	Dichlorodifluoromethane	2.0 U	25	31.3	125	25	37.2	149	17	42-167/19
95-50-1	1,2-Dichlorobenzene	1.0 U	25	23.1	92	25	29.6	118	25*	82-124/14
541-73-1	1,3-Dichlorobenzene	1.0 U	25	23.5	94	25	29.6	118	23*	84-125/14
106-46-7	1,4-Dichlorobenzene	1.0 U	25	22.8	91	25	29.1	116	24*	78-120/15
75-34-3	1,1-Dichloroethane	1.0 U	25	25.5	102	25	31.2	125*	20*	81-122/15
107-06-2	1,2-Dichloroethane	1.0 U	25	27.3	109	25	32.7	131*	18*	75-125/14
75-35-4	1,1-Dichloroethylene	1.0 U	25	26.4	106	25	31.4	126	17	78-137/18
156-59-2	cis-1,2-Dichloroethylene	1.0 U	25	23.0	92	25	28.7	115	22*	78-120/15
156-60-5	trans-1,2-Dichloroethylene	1.0 U	25	27.6	110	25	33.8	135*	20*	76-127/17
78-87-5	1,2-Dichloropropane	1.0 U	25	23.0	92	25	28.3	113	21*	76-124/14
142-28-9	1,3-Dichloropropane	1.0 U	25	21.9	88	25	28.3	113	25*	80-118/13
594-20-7	2,2-Dichloropropane	1.0 U	25	26.9	108	25	32.2	129	18*	74-139/17
563-58-6	1,1-Dichloropropene	1.0 U	25	24.6	98	25	30.1	120	20*	79-131/16
10061-01-5	cis-1,3-Dichloropropene	1.0 U	25	23.9	96	25	26.6	106	11	75-118/23
10061-02-6	trans-1,3-Dichloropropene	1.0 U	25	25.3	101	25	28.5	114	12	80-120/22
100-41-4	Ethylbenzene	1.0 U	25	24.3	97	25	31.9	128*	27*	81-121/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA37966

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA37790-14MS	B117432.D	1	10/24/16	WV	n/a	n/a	VB4728
FA37790-14MSD	B117433.D	1	10/24/16	WV	n/a	n/a	VB4728
FA37790-14	B117425.D	1	10/24/16	WV	n/a	n/a	VB4728

The QC reported here applies to the following samples:

Method: SW846 8260B

FA37966-6, FA37966-7, FA37966-8, FA37966-9, FA37966-10

CAS No.	Compound	FA37790-14 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	2.0 U	25	23.8	95	25	29.8	119	22*	75-142/19
591-78-6	2-Hexanone	10 U	125	102	82	125	137	110	29*	61-129/18
98-82-8	Isopropylbenzene	1.0 U	25	24.8	99	25	30.8	123	22*	83-132/15
99-87-6	p-Isopropyltoluene	1.0 U	25	24.3	97	25	31.1	124	25*	79-130/16
74-83-9	Methyl Bromide	2.0 U	25	30.6	122	25	36.4	146*	17	59-143/19
74-87-3	Methyl Chloride	2.0 U	25	25.1	100	25	31.6	126	23*	50-159/19
74-95-3	Methylene Bromide	2.0 U	25	24.1	96	25	29.4	118	20*	78-119/14
75-09-2	Methylene Chloride	5.0 U	25	24.9	100	25	31.4	126	23*	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	125	110	88	125	145	116	27*	66-122/16
1634-04-4	Methyl Tert Butyl Ether	1.0 U	25	21.7	87	25	27.2	109	22*	72-117/14
91-20-3	Naphthalene	5.0 U	25	24.1	96	25	32.4	130	29*	63-132/25
103-65-1	n-Propylbenzene	1.0 U	25	24.5	98	25	31.0	124	23*	82-133/15
100-42-5	Styrene	1.0 U	25	24.2	97	25	29.4	118	19	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U	25	25.8	103	25	30.6	122	17	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	25	21.4	86	25	27.5	110	25*	72-120/14
127-18-4	Tetrachloroethylene	1.0 U	25	21.8	87	25	27.2	109	22*	76-135/16
108-88-3	Toluene	1.0 U	25	23.8	95	25	30.2	121*	24*	80-120/14
87-61-6	1,2,3-Trichlorobenzene	2.0 U	25	22.6	90	25	30.2	121	29*	68-131/25
120-82-1	1,2,4-Trichlorobenzene	2.0 U	25	23.0	92	25	29.5	118	25*	73-129/20
71-55-6	1,1,1-Trichloroethane	1.0 U	25	25.1	100	25	30.3	121	19*	75-130/16
79-00-5	1,1,2-Trichloroethane	1.0 U	25	22.9	92	25	29.2	117	24*	76-119/14
79-01-6	Trichloroethylene	1.0 U	25	25.8	103	25	31.9	128*	21*	81-126/15
75-69-4	Trichlorofluoromethane	2.0 U	25	31.3	125	25	36.1	144	14	71-156/21
96-18-4	1,2,3-Trichloropropane	2.0 U	25	22.2	89	25	29.2	117	27*	77-120/16
95-63-6	1,2,4-Trimethylbenzene	1.0 U	25	23.9	96	25	29.8	119	22*	79-120/18
108-67-8	1,3,5-Trimethylbenzene	1.0 U	25	23.4	94	25	29.7	119	24*	79-120/19
108-05-4	Vinyl Acetate	10 U	125	122	98	125	154	123	23*	43-154/14
75-01-4	Vinyl Chloride	1.0 U	25	28.3	113	25	34.5	138	20*	69-159/18
	m,p-Xylene	2.0 U	50	50.4	101	50	63.4	127*	23*	79-126/15
95-47-6	o-Xylene	1.0 U	25	24.7	99	25	31.2	125	23*	80-127/14

CAS No.	Surrogate Recoveries	MS	MSD	FA37790-14	Limits
1868-53-7	Dibromofluoromethane	108%	103%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	109%	105%	103%	79-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA37966
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA37790-14MS	B117432.D	1	10/24/16	WV	n/a	n/a	VB4728
FA37790-14MSD	B117433.D	1	10/24/16	WV	n/a	n/a	VB4728
FA37790-14	B117425.D	1	10/24/16	WV	n/a	n/a	VB4728

The QC reported here applies to the following samples: Method: SW846 8260B

FA37966-6, FA37966-7, FA37966-8, FA37966-9, FA37966-10

CAS No.	Surrogate Recoveries	MS	MSD	FA37790-14	Limits
2037-26-5	Toluene-D8	100%	101%	99%	85-112%
460-00-4	4-Bromofluorobenzene	98%	98%	99%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA37966

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA37995-1MS	J0980459.D	250	10/26/16	DP	n/a	n/a	VJ5470
FA37995-1MSD	J0980460.D	250	10/26/16	DP	n/a	n/a	VJ5470
FA37995-1	J0980447.D	250	10/26/16	DP	n/a	n/a	VJ5470

The QC reported here applies to the following samples:

Method: SW846 8260B

FA37966-2, FA37966-4

CAS No.	Compound	FA37995-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	31300	27500	88	31300	28800	92	5	50-147/21
71-43-2	Benzene	ND	6250	6820	109	6250	6670	107	2	81-122/14
108-86-1	Bromobenzene	ND	6250	6380	102	6250	6340	101	1	80-121/14
74-97-5	Bromochloromethane	ND	6250	5220	84	6250	5200	83	0	76-123/14
75-27-4	Bromodichloromethane	ND	6250	6050	97	6250	5680	91	6	79-123/19
75-25-2	Bromoform	ND	6250	5810	93	6250	5690	91	2	66-123/21
78-93-3	2-Butanone (MEK)	ND	31300	29500	94	31300	30600	98	4	56-143/18
104-51-8	n-Butylbenzene	ND	6250	6900	110	6250	6710	107	3	79-126/16
135-98-8	sec-Butylbenzene	ND	6250	7340	117	6250	7200	115	2	83-133/16
98-06-6	tert-Butylbenzene	ND	6250	6980	112	6250	6930	111	1	80-133/16
75-15-0	Carbon Disulfide	ND	6250	6520	104	6250	6520	104	0	66-148/23
56-23-5	Carbon Tetrachloride	ND	6250	6420	103	6250	6480	104	1	76-136/23
108-90-7	Chlorobenzene	ND	6250	6390	102	6250	6180	99	3	82-124/14
75-00-3	Chloroethane	ND	6250	7250	116	6250	7080	113	2	62-144/20
67-66-3	Chloroform	ND	6250	6190	99	6250	6080	97	2	80-124/15
95-49-8	o-Chlorotoluene	ND	6250	7070	113	6250	6810	109	4	81-127/15
106-43-4	p-Chlorotoluene	ND	6250	6740	108	6250	6540	105	3	83-130/15
124-48-1	Dibromochloromethane	ND	6250	5630	90	6250	5690	91	1	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	ND	6250	5880	94	6250	5840	93	1	64-123/18
106-93-4	1,2-Dibromoethane	ND	6250	5660	91	6250	5730	92	1	75-120/13
75-71-8	Dichlorodifluoromethane	ND	6250	10200	163	6250	10400	166	2	42-167/19
95-50-1	1,2-Dichlorobenzene	ND	6250	6490	104	6250	6390	102	2	82-124/14
541-73-1	1,3-Dichlorobenzene	ND	6250	6540	105	6250	6600	106	1	84-125/14
106-46-7	1,4-Dichlorobenzene	ND	6250	6520	104	6250	6390	102	2	78-120/15
75-34-3	1,1-Dichloroethane	ND	6250	6870	110	6250	6760	108	2	81-122/15
107-06-2	1,2-Dichloroethane	ND	6250	6020	96	6250	6090	97	1	75-125/14
75-35-4	1,1-Dichloroethylene	ND	6250	7050	113	6250	7280	116	3	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND	6250	5820	93	6250	5950	95	2	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND	6250	7670	123	6250	7460	119	3	76-127/17
78-87-5	1,2-Dichloropropane	ND	6250	6120	98	6250	5970	96	2	76-124/14
142-28-9	1,3-Dichloropropane	ND	6250	5870	94	6250	5670	91	3	80-118/13
594-20-7	2,2-Dichloropropane	ND	6250	5720	92	6250	5680	91	1	74-139/17
563-58-6	1,1-Dichloropropene	ND	6250	6700	107	6250	6570	105	2	79-131/16
10061-01-5	cis-1,3-Dichloropropene	ND	6250	6080	97	6250	5850	94	4	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND	6250	6230	100	6250	6290	101	1	80-120/22
100-41-4	Ethylbenzene	ND	6250	6470	104	6250	6310	101	3	81-121/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA37966

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA37995-1MS	J0980459.D	250	10/26/16	DP	n/a	n/a	VJ5470
FA37995-1MSD	J0980460.D	250	10/26/16	DP	n/a	n/a	VJ5470
FA37995-1	J0980447.D	250	10/26/16	DP	n/a	n/a	VJ5470

The QC reported here applies to the following samples:

Method: SW846 8260B

FA37966-2, FA37966-4

CAS No.	Compound	FA37995-1 ug/l	Spike Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	ND		6250	6440	103	6250	6330	101	2	75-142/19
591-78-6	2-Hexanone	ND		31300	27300	87	31300	28500	91	4	61-129/18
98-82-8	Isopropylbenzene	ND		6250	6430	103	6250	6430	103	0	83-132/15
99-87-6	p-Isopropyltoluene	ND		6250	6880	110	6250	6840	109	1	79-130/16
74-83-9	Methyl Bromide	ND		6250	7270	116	6250	7210	115	1	59-143/19
74-87-3	Methyl Chloride	ND		6250	7670	123	6250	7740	124	1	50-159/19
74-95-3	Methylene Bromide	ND		6250	6070	97	6250	6110	98	1	78-119/14
75-09-2	Methylene Chloride	ND		6250	6410	103	6250	6200	99	3	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		31300	27800	89	31300	29100	93	5	66-122/16
1634-04-4	Methyl Tert Butyl Ether	ND		6250	5020	80	6250	5140	82	2	72-117/14
91-20-3	Naphthalene	ND		6250	6840	109	6250	7510	120	9	63-132/25
103-65-1	n-Propylbenzene	ND		6250	7350	118	6250	7190	115	2	82-133/15
100-42-5	Styrene	ND		6250	6040	97	6250	6020	96	0	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		6250	5850	94	6250	5720	92	2	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	ND		6250	6490	104	6250	6730	108	4	72-120/14
127-18-4	Tetrachloroethylene	ND		6250	6420	103	6250	6450	103	0	76-135/16
108-88-3	Toluene	ND		6250	6450	103	6250	6360	102	1	80-120/14
87-61-6	1,2,3-Trichlorobenzene	ND		6250	6310	101	6250	6610	106	5	68-131/25
120-82-1	1,2,4-Trichlorobenzene	ND		6250	5720	92	6250	6130	98	7	73-129/20
71-55-6	1,1,1-Trichloroethane	ND		6250	6340	101	6250	6170	99	3	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		6250	6280	100	6250	6610	106	5	76-119/14
79-01-6	Trichloroethylene	ND		6250	6620	106	6250	6410	103	3	81-126/15
75-69-4	Trichlorofluoromethane	ND		6250	7590	121	6250	7650	122	1	71-156/21
96-18-4	1,2,3-Trichloropropane	ND		6250	6710	107	6250	6580	105	2	77-120/16
95-63-6	1,2,4-Trimethylbenzene	ND		6250	6810	109	6250	6660	107	2	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND		6250	6780	108	6250	6570	105	3	79-120/19
108-05-4	Vinyl Acetate	ND		31300	29800	95	31300	30000	96	1	43-154/14
75-01-4	Vinyl Chloride	ND		6250	7570	121	6250	7790	125	3	69-159/18
	m,p-Xylene	51000	E	12500	ND	-408* ^a	12500	ND	-408* ^a	nc	79-126/15
95-47-6	o-Xylene	ND		6250	6030	96	6250	6120	98	1	80-127/14

CAS No.	Surrogate Recoveries	MS	MSD	FA37995-1	Limits
1868-53-7	Dibromofluoromethane	97%	97%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	97%	100%	79-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: FA37966

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA37995-1MS	J0980459.D	250	10/26/16	DP	n/a	n/a	VJ5470
FA37995-1MSD	J0980460.D	250	10/26/16	DP	n/a	n/a	VJ5470
FA37995-1	J0980447.D	250	10/26/16	DP	n/a	n/a	VJ5470

The QC reported here applies to the following samples:

Method: SW846 8260B

FA37966-2, FA37966-4

CAS No.	Surrogate Recoveries	MS	MSD	FA37995-1	Limits
2037-26-5	Toluene-D8	97%	98%	105%	85-112%
460-00-4	4-Bromofluorobenzene	97%	99%	103%	83-118%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA37966
Account: GFLEMLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31025
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 10/21/16

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14		
Antimony	6.0	1	1		
Arsenic	10	1.3	1.3	2.0	<10
Barium	200	1	1		
Beryllium	4.0	.2	.2		
Cadmium	5.0	.2	.2		
Calcium	1000	50	50		
Chromium	10	1	1		
Cobalt	50	.2	.2		
Copper	25	1	1		
Iron	300	17	17		
Lead	5.0	1	1.1		
Magnesium	5000	35	35		
Manganese	15	.5	1		
Molybdenum	50	.3	.3		
Nickel	40	.4	.4		
Potassium	10000	200	200		
Selenium	10	2.4	2.9		
Silver	10	.7	.7		
Sodium	10000	500	500		
Strontium	10	.5	.5		
Thallium	10	1.1	1.4		
Tin	50	.9	1		
Titanium	10	.5	1		
Vanadium	50	.5	.6		
Zinc	20	3	4.4		

Associated samples MP31025: FA37966-1, FA37966-2, FA37966-3, FA37966-5, FA37966-6, FA37966-7, FA37966-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA37966
 Account: GFLEMLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31025
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 10/21/16 10/21/16

Metal	FA37921-1 Original	DUP	RPD	QC Limits	FA37921-1 Original MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	anr							
Antimony	anr							
Arsenic	0.0	1.3	200.0(a)	0-20	0.0	1910	2000	95.5
Barium	anr							
Beryllium	anr							
Cadmium	anr							
Calcium	anr							
Chromium	anr							
Cobalt								
Copper								
Iron	anr							
Lead	anr							
Magnesium	anr							
Manganese	anr							
Molybdenum								
Nickel								
Potassium	anr							
Selenium	anr							
Silver								
Sodium	anr							
Strontium								
Thallium								
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP31025: FA37966-1, FA37966-2, FA37966-3, FA37966-5, FA37966-6, FA37966-7, FA37966-8

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA37966
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31025
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 10/21/16

Metal	FA37921-1 Original MSD	Spike lot MPFLICP2 % Rec	MSD RPD	QC Limit
Aluminum	anr			
Antimony	anr			
Arsenic	0.0	1910	2000	95.5
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt				
Copper				
Iron	anr			
Lead	anr			
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel				
Potassium	anr			
Selenium	anr			
Silver				
Sodium	anr			
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP31025: FA37966-1, FA37966-2, FA37966-3, FA37966-5, FA37966-6, FA37966-7, FA37966-8

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA37966

Account: GFLEMFLT - Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31025

Methods: SW846 6010C

Matrix Type: AQUEOUS

Units: ug/l

Prep Date: 10/21/16

Metal	BSP Result	Spike lot MPFLICP2	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	1850	2000	92.5	80-120
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt				
Copper				
Iron	anr			
Lead	anr			
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel				
Potassium	anr			
Selenium	anr			
Silver				
Sodium	anr			
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP31025: FA37966-1, FA37966-2, FA37966-3, FA37966-5, FA37966-6, FA37966-7, FA37966-8

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA37966
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31025
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 10/21/16

Metal	FA37921-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	0.00	0.00	NC	0-10
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt				
Copper				
Iron	anr			
Lead	anr			
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel				
Potassium	anr			
Selenium	anr			
Silver				
Sodium	anr			
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP31025: FA37966-1, FA37966-2, FA37966-3, FA37966-5, FA37966-6, FA37966-7, FA37966-8

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA37966
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31025
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

10/21/16

Metal	Sample ml	Final ml	FA37921-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic	9.8	10			102.8	0.2	5	100	102.8	80-120
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP31025: FA37966-1, FA37966-2, FA37966-3, FA37966-5, FA37966-6, FA37966-7, FA37966-8

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested

Technical Report for

Gannett Fleming

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

57524

SGS Accutest Job Number: FA41299

Sampling Date: 02/15/17

Report to:

Gannett Fleming
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Tampa, FL 33634-6323
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ATTN: Aaron Getchell

Total number of pages in report: 48



Test results contained within this data package meet the requirements
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and/or state specific certification programs as applicable.



Norm Farmer
Technical Director

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Sample Summary

Gannett Fleming

Job No: FA41299

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524

Sample Number	Collected		Matrix Code Type	Client		
	Date	Time By	Received	Sample ID		
FA41299-1	02/15/17	15:09 AS	02/16/17	AQ	Ground Water	MW-3
FA41299-2	02/15/17	16:27 AS	02/16/17	AQ	Ground Water	MW-14

Summary of Hits

Page 1 of 1

Job Number: FA41299

Account: Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Collected: 02/15/17

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA41299-1	MW-3					
Methane		1.7	0.50	0.16	ug/l	RSKSOP-147/175
Chloride		8.2	2.0		mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate		4.8	0.10		mg/l	EPA 300/SW846 9056A
Total Organic Carbon		2.0	1.0		mg/l	SM5310 B-11/SW9060A
FA41299-2	MW-14					
Nitrogen, Nitrate		1.1	0.10		mg/l	EPA 300/SW846 9056A
Total Organic Carbon		1.2	1.0		mg/l	SM5310 B-11/SW9060A

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	02/15/17
Lab Sample ID:	FA41299-1	Date Received:	02/16/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P48215.D	1	02/17/17	SP	n/a	n/a	VP1817
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	02/15/17
Lab Sample ID:	FA41299-1	Date Received:	02/16/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	97%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	02/15/17
Lab Sample ID:	FA41299-1	Date Received:	02/16/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		83-118%

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	
Lab Sample ID:	FA41299-1	Date Sampled: 02/15/17
Matrix:	AQ - Ground Water	Date Received: 02/16/17
Method:	RSKSOP-147/175	Percent Solids: n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF37254.D	1	02/17/17	EG	n/a	n/a	GFF1458
Run #2							

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	21 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	1.7	0.50	0.16	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	02/15/17
Lab Sample ID:	FA41299-1	Date Received:	02/16/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	02/20/17	02/20/17 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13829
(2) Prep QC Batch: MP31667

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	02/15/17
Lab Sample ID:	FA41299-1	Date Received:	02/16/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	8.2	2.0	mg/l	1	02/16/17 15:48	JK	EPA 300/SW846 9056A
Nitrogen, Nitrate	4.8	0.10	mg/l	1	02/16/17 15:48	JK	EPA 300/SW846 9056A
Total Organic Carbon	2.0	1.0	mg/l	1	02/22/17 13:26	VK	SM5310 B-11/SW9060A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	02/15/17
Lab Sample ID:	FA41299-2	Date Received:	02/16/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P48216.D	1	02/17/17	SP	n/a	n/a	VP1817
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	02/15/17
Lab Sample ID:	FA41299-2	Date Received:	02/16/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	97%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	02/15/17
Lab Sample ID:	FA41299-2	Date Received:	02/16/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		83-118%

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14	
Lab Sample ID:	FA41299-2	Date Sampled: 02/15/17
Matrix:	AQ - Ground Water	Date Received: 02/16/17
Method:	RSKSOP-147/175	Percent Solids: n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF37255.D	1	02/17/17	EG	n/a	n/a	GFF1458
Run #2							

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	21 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.50	0.16	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	02/15/17
Lab Sample ID:	FA41299-2	Date Received:	02/16/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	02/20/17	02/20/17 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13829
(2) Prep QC Batch: MP31667

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-14	Date Sampled:	02/15/17
Lab Sample ID:	FA41299-2	Date Received:	02/16/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	< 2.0	2.0	mg/l	1	02/16/17 16:04	JK	EPA 300/SW846 9056A
Nitrogen, Nitrate	1.1	0.10	mg/l	1	02/16/17 16:04	JK	EPA 300/SW846 9056A
Total Organic Carbon	1.2	1.0	mg/l	1	02/22/17 14:48	VK	SM5310 B-11/SW9060A

RL = Reporting Limit



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

4A 41244

[illegible]

2.9

4.1

FA41299: Chain of Custody

Page 1 of 4

SGS ACCUTEST - ORLANDO SAMPLE RECEIPT CONFIRMATION

SGS ACCUTEST'S JOB NUMBER: FA 41299 CLIENT: Garnett Fleming PROJECT: TMR Valdosta
DATE/TIME RECEIVED: 02/16/17 945 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: _____
AIRBILL NUMBERS: 7856 2370 1090

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
☒ TRIP BLANK NOT PROVIDED
☒ TRIP BLANK NOT ON COC
☐ TRIP BLANK INTACT
☐ TRIP BLANK NOT INTACT
☐ RECEIVED WATER TRIP BLANK
☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____
NUMBER OF 5035 FIELD KITS ? _____
NUMBER OF LAB FILTERED METALS ? _____

TEST STRIP LOT#s pH 0-3 230315

pH 10-12 219813A

OTHER (specify) _____

SUMMARY OF COMMENTS:

Rec'd Sample #2 COC Reads MW-4 ; Label Reads MWI-14

TECHNICIAN SIGNATURE/DATE Cybil B 02/16/17 REVIEWER SIGNATURE/DATE _____

NF 02/16

receipt confirmation 020116.xls

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR 10.8
☐ OBSERVED TEMPS: 2.1
☐ CORRECTED TEMPS: 2.9 (USED FOR LIMS)

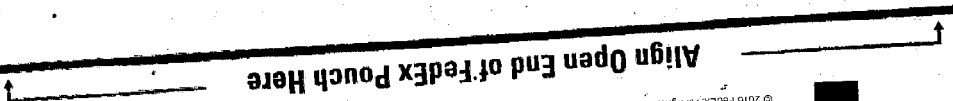
SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
☐ INSUFFICIENT VOLUME FOR ANALYSIS
☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
☒ ID'S ON COC DO NOT MATCH LABEL
☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
☐ % SOLIDS JAR NOT RECEIVED
☐ RESIDUAL CHLORINE PRESENT LOT# _____

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

FA41299: Chain of Custody

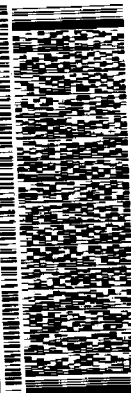
Page 2 of 4

Align Open End of FedEx Pouch Here
 

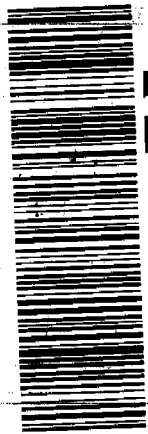
ORIGIN ID: VLDR (813) 882-4365
 GANNETT FLETING
 9119 CORPORATE LAKE DR STE 150
 TAMPA FL 33634
 UNITED STATES US

SHIP OR TEL: 18FCB17
 SHIP OR: 150 30 LB
 CPO: 006995147/88FE1722
 DIMS: 14x14x10 IN
 BILL THIRD PARTY

TO
SAMPLE RECEIVING
ACCUTEST LAB
4405 VINELAND RD-STE C45
ORLANDO FL 32811
 (407) 425-8700
 FL 32811

THU - 16 FEB 10:30A
PRIORITY OVERNIGHT
 7856 2370 1090
ORLA
 32811



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Job Change Order:

FA41299

Requested Date:	2/17/2017	Received Date:	2/16/2017
Account Name:	Gannett Fleming	Due Date:	2/23/2017
Project Description:	Trademark Metals Recycling; 2000 W Savannah, V	Deliverable:	COMMB
CSR:	andreac	TAT (Days):	6

=====

Sample #: FA41299-2

Change:

Dept:

Please change the sample ID to MW-14 per the container labels.

MW-4

=====

FA41299: Chain of Custody

Above Changes Per: Todd Falkner

Date/Time: 2/17/2017 10:12:58 AM

Page 4 of 4

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

Page 1 of 1



GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 3

Job Number: FA41299**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP1817-MB	P48214.D	1	02/17/17	SP	n/a	n/a	VP1817

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA41299-1, FA41299-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: FA41299**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP1817-MB	P48214.D	1	02/17/17	SP	n/a	n/a	VP1817

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA41299-1, FA41299-2

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	102% 83-118%
17060-07-0	1,2-Dichloroethane-D4	105% 79-125%

Method Blank Summary

Job Number: FA41299
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP1817-MB	P48214.D	1	02/17/17	SP	n/a	n/a	VP1817

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41299-1, FA41299-2

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	97% 85-112%
460-00-4	4-Bromofluorobenzene	98% 83-118%

5.1.1
5

Blank Spike Summary

Page 1 of 3

Job Number: FA41299**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP1817-BS	P48213.D	1	02/17/17	SP	n/a	n/a	VP1817

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA41299-1, FA41299-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	104	83	50-147
71-43-2	Benzene	25	29.3	117	81-122
108-86-1	Bromobenzene	25	28.0	112	80-121
74-97-5	Bromochloromethane	25	25.8	103	76-123
75-27-4	Bromodichloromethane	25	27.8	111	79-123
75-25-2	Bromoform	25	26.0	104	66-123
78-93-3	2-Butanone (MEK)	125	105	84	56-143
104-51-8	n-Butylbenzene	25	28.6	114	79-126
135-98-8	sec-Butylbenzene	25	27.4	110	83-133
98-06-6	tert-Butylbenzene	25	26.7	107	80-133
75-15-0	Carbon Disulfide	25	24.3	97	66-148
56-23-5	Carbon Tetrachloride	25	28.9	116	76-136
108-90-7	Chlorobenzene	25	26.3	105	82-124
75-00-3	Chloroethane	25	27.2	109	62-144
67-66-3	Chloroform	25	25.7	103	80-124
95-49-8	o-Chlorotoluene	25	26.7	107	81-127
106-43-4	p-Chlorotoluene	25	26.5	106	83-130
124-48-1	Dibromochloromethane	25	27.6	110	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	24.8	99	64-123
106-93-4	1,2-Dibromoethane	25	25.9	104	75-120
75-71-8	Dichlorodifluoromethane	25	27.9	112	42-167
95-50-1	1,2-Dichlorobenzene	25	25.6	102	82-124
541-73-1	1,3-Dichlorobenzene	25	27.0	108	84-125
106-46-7	1,4-Dichlorobenzene	25	25.9	104	78-120
75-34-3	1,1-Dichloroethane	25	28.2	113	81-122
107-06-2	1,2-Dichloroethane	25	26.6	106	75-125
75-35-4	1,1-Dichloroethylene	25	28.3	113	78-137
156-59-2	cis-1,2-Dichloroethylene	25	27.1	108	78-120
156-60-5	trans-1,2-Dichloroethylene	25	27.0	108	76-127
78-87-5	1,2-Dichloropropane	25	25.7	103	76-124
142-28-9	1,3-Dichloropropane	25	24.4	98	80-118
594-20-7	2,2-Dichloropropane	25	29.3	117	74-139
563-58-6	1,1-Dichloropropene	25	27.0	108	79-131
10061-01-5	cis-1,3-Dichloropropene	25	27.5	110	75-118
10061-02-6	trans-1,3-Dichloropropene	25	28.3	113	80-120
100-41-4	Ethylbenzene	25	28.6	114	81-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA41299**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP1817-BS	P48213.D	1	02/17/17	SP	n/a	n/a	VP1817

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA41299-1, FA41299-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
87-68-3	Hexachlorobutadiene	25	28.6	114	75-142
591-78-6	2-Hexanone	125	95.3	76	61-129
98-82-8	Isopropylbenzene	25	28.0	112	83-132
99-87-6	p-Isopropyltoluene	25	30.3	121	79-130
74-83-9	Methyl Bromide	25	26.3	105	59-143
74-87-3	Methyl Chloride	25	25.6	102	50-159
74-95-3	Methylene Bromide	25	26.0	104	78-119
75-09-2	Methylene Chloride	25	23.9	96	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	96.3	77	66-122
1634-04-4	Methyl Tert Butyl Ether	25	24.8	99	72-117
91-20-3	Naphthalene	25	29.6	118	63-132
103-65-1	n-Propylbenzene	25	25.8	103	82-133
100-42-5	Styrene	25	28.9	116	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	28.0	112	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	24.0	96	72-120
127-18-4	Tetrachloroethylene	25	27.3	109	76-135
108-88-3	Toluene	25	28.3	113	80-120
87-61-6	1,2,3-Trichlorobenzene	25	28.3	113	68-131
120-82-1	1,2,4-Trichlorobenzene	25	28.2	113	73-129
71-55-6	1,1,1-Trichloroethane	25	27.1	108	75-130
79-00-5	1,1,2-Trichloroethane	25	25.3	101	76-119
79-01-6	Trichloroethylene	25	27.7	111	81-126
75-69-4	Trichlorofluoromethane	25	29.0	116	71-156
96-18-4	1,2,3-Trichloropropane	25	25.1	100	77-120
95-63-6	1,2,4-Trimethylbenzene	25	29.4	118	79-120
108-67-8	1,3,5-Trimethylbenzene	25	29.2	117	79-120
108-05-4	Vinyl Acetate	125	126	101	43-154
75-01-4	Vinyl Chloride	25	26.1	104	69-159
	m,p-Xylene	50	54.5	109	79-126
95-47-6	o-Xylene	25	26.8	107	80-127

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	83-118%
17060-07-0	1,2-Dichloroethane-D4	106%	79-125%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA41299
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP1817-BS	P48213.D	1	02/17/17	SP	n/a	n/a	VP1817

The QC reported here applies to the following samples: Method: SW846 8260B
FA41299-1, FA41299-2

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	101%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA41299

Account: GFLEMLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41274-7MS	P48272.D	1	02/20/17	SP	n/a	n/a	VP1817
FA41274-7MSD	P48273.D	1	02/20/17	SP	n/a	n/a	VP1817
FA41274-7	P48226.D	1	02/17/17	SP	n/a	n/a	VP1817

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41299-1, FA41299-2

CAS No.	Compound	FA41274-7 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	25 U	125	101	81	125	108	86	7	50-147/21
71-43-2	Benzene	1.0 U	25	28.2	113	25	28.8	115	2	81-122/14
108-86-1	Bromobenzene	1.0 U	25	26.6	106	25	27.4	110	3	80-121/14
74-97-5	Bromochloromethane	1.0 U	25	22.9	92	25	23.7	95	3	76-123/14
75-27-4	Bromodichloromethane	1.0 U	25	25.1	100	25	24.7	99	2	79-123/19
75-25-2	Bromoform	1.0 U	25	21.3	85	25	20.3	81	5	66-123/21
78-93-3	2-Butanone (MEK)	5.0 U	125	104	83	125	109	87	5	56-143/18
104-51-8	n-Butylbenzene	1.0 U	25	27.7	111	25	28.1	112	1	79-126/16
135-98-8	sec-Butylbenzene	1.0 U	25	27.6	110	25	28.0	112	1	83-133/16
98-06-6	tert-Butylbenzene	1.0 U	25	27.6	110	25	27.7	111	0	80-133/16
75-15-0	Carbon Disulfide	2.0 U	25	16.4	66	25	16.1	64*	2	66-148/23
56-23-5	Carbon Tetrachloride	1.0 U	25	25.4	102	25	25.3	101	0	76-136/23
108-90-7	Chlorobenzene	1.0 U	25	25.7	103	25	25.6	102	0	82-124/14
75-00-3	Chloroethane	2.0 U	25	24.2	97	25	24.5	98	1	62-144/20
67-66-3	Chloroform	1.0 U	25	23.3	93	25	24.5	98	5	80-124/15
95-49-8	o-Chlorotoluene	1.0 U	25	27.5	110	25	27.7	111	1	81-127/15
106-43-4	p-Chlorotoluene	1.0 U	25	26.8	107	25	26.9	108	0	83-130/15
124-48-1	Dibromochloromethane	1.0 U	25	24.7	99	25	23.5	94	5	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U	25	26.4	106	25	25.3	101	4	64-123/18
106-93-4	1,2-Dibromoethane	2.0 U	25	24.7	99	25	25.9	104	5	75-120/13
75-71-8	Dichlorodifluoromethane	2.0 U	25	23.4	94	25	25.4	102	8	42-167/19
95-50-1	1,2-Dichlorobenzene	1.0 U	25	24.8	99	25	25.5	102	3	82-124/14
541-73-1	1,3-Dichlorobenzene	1.0 U	25	25.3	101	25	25.8	103	2	84-125/14
106-46-7	1,4-Dichlorobenzene	1.0 U	25	24.8	99	25	25.3	101	2	78-120/15
75-34-3	1,1-Dichloroethane	1.0 U	25	27.0	108	25	27.2	109	1	81-122/15
107-06-2	1,2-Dichloroethane	1.0 U	25	26.3	105	25	27.5	110	4	75-125/14
75-35-4	1,1-Dichloroethylene	1.0 U	25	26.0	104	25	27.2	109	5	78-137/18
156-59-2	cis-1,2-Dichloroethylene	1.0 U	25	24.9	100	25	25.3	101	2	78-120/15
156-60-5	trans-1,2-Dichloroethylene	1.0 U	25	25.9	104	25	26.1	104	1	76-127/17
78-87-5	1,2-Dichloropropane	1.0 U	25	25.3	101	25	25.5	102	1	76-124/14
142-28-9	1,3-Dichloropropane	1.0 U	25	23.9	96	25	24.7	99	3	80-118/13
594-20-7	2,2-Dichloropropane	1.0 U	25	23.3	93	25	23.7	95	2	74-139/17
563-58-6	1,1-Dichloropropene	1.0 U	25	24.8	99	25	25.2	101	2	79-131/16
10061-01-5	cis-1,3-Dichloropropene	1.0 U	25	23.3	93	25	22.6	90	3	75-118/23
10061-02-6	trans-1,3-Dichloropropene	1.0 U	25	25.1	100	25	24.5	98	2	80-120/22
100-41-4	Ethylbenzene	1.0 U	25	28.7	115	25	29.3	117	2	81-121/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA41299

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41274-7MS	P48272.D	1	02/20/17	SP	n/a	n/a	VP1817
FA41274-7MSD	P48273.D	1	02/20/17	SP	n/a	n/a	VP1817
FA41274-7	P48226.D	1	02/17/17	SP	n/a	n/a	VP1817

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41299-1, FA41299-2

CAS No.	Compound	FA41274-7 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	2.0 U	25	23.7	95	25	25.2	101	6	75-142/19
591-78-6	2-Hexanone	10 U	125	107	86	125	112	90	5	61-129/18
98-82-8	Isopropylbenzene	1.0 U	25	26.7	107	25	27.3	109	2	83-132/15
99-87-6	p-Isopropyltoluene	1.0 U	25	29.4	118	25	29.8	119	1	79-130/16
74-83-9	Methyl Bromide	2.0 U	25	20.0	80	25	22.6	90	12	59-143/19
74-87-3	Methyl Chloride	2.0 U	25	23.5	94	25	24.2	97	3	50-159/19
74-95-3	Methylene Bromide	2.0 U	25	25.0	100	25	26.0	104	4	78-119/14
75-09-2	Methylene Chloride	5.0 U	25	24.6	98	25	24.9	100	1	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	125	109	87	125	113	90	4	66-122/16
1634-04-4	Methyl Tert Butyl Ether	1.0 U	25	23.5	94	25	24.6	98	5	72-117/14
91-20-3	Naphthalene	5.0 U	25	30.0	120	25	31.4	126	5	63-132/25
103-65-1	n-Propylbenzene	1.0 U	25	26.7	107	25	26.2	105	2	82-133/15
100-42-5	Styrene	1.0 U	25	27.1	108	25	26.2	105	3	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U	25	26.5	106	25	25.6	102	3	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	25	25.6	102	25	26.4	106	3	72-120/14
127-18-4	Tetrachloroethylene	1.0 U	25	23.6	94	25	23.7	95	0	76-135/16
108-88-3	Toluene	1.0 U	25	27.6	110	25	27.9	112	1	80-120/14
87-61-6	1,2,3-Trichlorobenzene	2.0 U	25	26.4	106	25	27.4	110	4	68-131/25
120-82-1	1,2,4-Trichlorobenzene	2.0 U	25	25.4	102	25	26.8	107	5	73-129/20
71-55-6	1,1,1-Trichloroethane	1.0 U	25	24.6	98	25	25.6	102	4	75-130/16
79-00-5	1,1,2-Trichloroethane	1.0 U	25	25.5	102	25	26.1	104	2	76-119/14
79-01-6	Trichloroethylene	4.8	25	31.2	106	25	32.0	109	3	81-126/15
75-69-4	Trichlorofluoromethane	2.0 U	25	25.8	103	25	27.1	108	5	71-156/21
96-18-4	1,2,3-Trichloropropane	2.0 U	25	25.1	100	25	26.6	106	6	77-120/16
95-63-6	1,2,4-Trimethylbenzene	1.0 U	25	29.0	116	25	29.0	116	0	79-120/18
108-67-8	1,3,5-Trimethylbenzene	1.0 U	25	28.9	116	25	29.1	116	1	79-120/19
108-05-4	Vinyl Acetate	10 U	125	127	102	125	131	105	3	43-154/14
75-01-4	Vinyl Chloride	1.0 U	25	22.6	90	25	24.2	97	7	69-159/18
	m,p-Xylene	2.0 U	50	53.8	108	50	54.3	109	1	79-126/15
95-47-6	o-Xylene	1.0 U	25	26.4	106	25	26.7	107	1	80-127/14

CAS No.	Surrogate Recoveries	MS	MSD	FA41274-7	Limits
1868-53-7	Dibromofluoromethane	97%	99%	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	108%	112%	102%	79-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: FA41299

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41274-7MS	P48272.D	1	02/20/17	SP	n/a	n/a	VP1817
FA41274-7MSD	P48273.D	1	02/20/17	SP	n/a	n/a	VP1817
FA41274-7	P48226.D	1	02/17/17	SP	n/a	n/a	VP1817

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41299-1, FA41299-2

CAS No.	Surrogate Recoveries	MS	MSD	FA41274-7	Limits
2037-26-5	Toluene-D8	99%	100%	99%	85-112%
460-00-4	4-Bromofluorobenzene	96%	95%	96%	83-118%

* = Outside of Control Limits.



GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA41299
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFF1458-MB	FF37248.D	1	02/17/17	EG	n/a	n/a	GFF1458

The QC reported here applies to the following samples: Method: RSKSOP-147/175
FA41299-1, FA41299-2

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.50	0.16	ug/l	

Blank Spike/Blank Spike Duplicate Summary

Job Number: FA41299
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFF1458-BS	FF37249.D	1	02/17/17	EG	n/a	n/a	GFF1458
GFF1458-BSD	FF37250.D	1	02/17/17	EG	n/a	n/a	GFF1458

The QC reported here applies to the following samples: Method: RSKSOP-147/175

FA41299-1, FA41299-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
74-82-8	Methane	108	125	116	128	119	2	62-139/30

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FA41299
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41296-3MS	FF37266.D	1	02/17/17	EG	n/a	n/a	GFF1458
FA41296-3	FF37260.D	1	02/17/17	EG	n/a	n/a	GFF1458

The QC reported here applies to the following samples: Method: RSKSOP-147/175

FA41299-1, FA41299-2

CAS No.	Compound	FA41296-3 ug/l	Spike Q ug/l	MS ug/l	MS %	Limits
74-82-8	Methane	273	108	371	91	62-139

* = Outside of Control Limits.

Duplicate Summary

Page 1 of 1

Job Number: FA41299

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41296-3DUP	FF37264.D	1	02/17/17	EG	n/a	n/a	GFF1458
FA41296-3	FF37260.D	1	02/17/17	EG	n/a	n/a	GFF1458

The QC reported here applies to the following samples:

Method: RSKSOP-147/175

FA41299-1, FA41299-2

CAS No.	Compound	FA41296-3		Q	RPD	Limits
		ug/l	DUP ug/l			
74-82-8	Methane	273	284		4	30

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA41299
Account: GFLEMFLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31667
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 02/20/17 02/20/17

Metal	RL	IDL	MDL	MB raw	final	MB raw	final
Aluminum	200	14	14				
Antimony	6.0	1	1				
Arsenic	10	1.3	1.3	-0.60	<10	-1.2	<10
Barium	200	1	1				
Beryllium	4.0	.2	.2				
Cadmium	5.0	.2	.2				
Calcium	1000	50	50				
Chromium	10	1	1				
Cobalt	50	.2	.2				
Copper	25	1	1				
Iron	300	17	17				
Lead	5.0	1	1.1				
Magnesium	5000	35	35				
Manganese	15	.5	1				
Molybdenum	50	.3	.3				
Nickel	40	.4	.4				
Potassium	10000	200	200				
Selenium	10	2.4	2.9				
Silver	10	.7	.7				
Sodium	10000	500	500				
Strontium	10	.5	.5				
Thallium	10	1.1	1.4				
Tin	50	.9	1				
Titanium	10	.5	1				
Vanadium	50	.5	.6				
Zinc	20	3	4.4				

Associated samples MP31667: FA41299-1, FA41299-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA41299
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31667
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 02/20/17 02/20/17

Metal	FA41096-2 Original DUP	RPD	QC Limits	FA41096-2 Original MS	Spikelot MPFLICP2 % Rec	QC Limits
Aluminum	anr					
Antimony	anr					
Arsenic	9.9 10.3	4.0	0-20	9.9 2020	2000 100.5	80-120
Barium	anr					
Beryllium	anr					
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	anr					
Magnesium	anr					
Manganese	anr					
Molybdenum	anr					
Nickel	anr					
Potassium	anr					
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium	anr					
Thallium						
Tin	anr					
Titanium	anr					
Vanadium	anr					
Zinc	anr					

Associated samples MP31667: FA41299-1, FA41299-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA41299
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31667
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 02/20/17

Metal	FA41096-2 Original MSD	SpikeLot MPFLICP2 % Rec	MSD RPD	QC Limit
Aluminum	anr			
Antimony	anr			
Arsenic	9.9	2040	2000	101.5
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium	anr			
Thallium				
Tin	anr			
Titanium	anr			
Vanadium	anr			
Zinc	anr			

Associated samples MP31667: FA41299-1, FA41299-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA41299
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31667
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 02/20/17

Metal	BSP Result	Spike lot MPFLICP2 % Rec	QC Limits
Aluminum	anr		
Antimony	anr		
Arsenic	2120	2000	106.0 80-120
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	anr		
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium	anr		
Thallium			
Tin	anr		
Titanium	anr		
Vanadium	anr		
Zinc	anr		

Associated samples MP31667: FA41299-1, FA41299-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA41299
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31667
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 02/20/17

Metal	FA41096-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	9.90	9.40	5.1	0-10
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium	anr			
Thallium				
Tin	anr			
Titanium	anr			
Vanadium	anr			
Zinc	anr			

Associated samples MP31667: FA41299-1, FA41299-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA41299
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31667
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

02/20/17

Metal	Sample ml	Final ml	FA41096-2 Raw	PS Corr.** ug/l	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic	9.8	10	9.9	9.702	118.1	0.2	5	100	108.4	80-120
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP31667: FA41299-1, FA41299-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested



General Chemistry

QC Data Summaries



Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA41299
Account: GFLEMFLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP29281/GN74074	2.0	0.0	mg/l	50	49.0	98.0	90-110%
Nitrogen, Nitrate	GP29281/GN74074	0.10	0.0	mg/l	2.5	2.39	95.6	90-110%
Nitrogen, Nitrite	GP29281/GN74074	0.10	0.0	mg/l	2.5	2.57	102.8	90-110%
Sulfate	GP29281/GN74074	2.0	0.0	mg/l	50	49.6	99.2	90-110%
Total Organic Carbon	GP29309/GN74149	1.0	0.0	mg/l	15	15.0	100.0	90-110%

Associated Samples:

Batch GP29281: FA41299-1, FA41299-2

Batch GP29309: FA41299-1, FA41299-2

(*) Outside of QC limits

8.1

8

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA41299
Account: GFLEMFLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP29281/GN74074	FA41299-2	mg/l	1.5	50	52.0	101.0	90-110%
Nitrogen, Nitrate	GP29281/GN74074	FA41299-2	mg/l	1.1	2.5	3.5	96.0	90-110%
Nitrogen, Nitrite	GP29281/GN74074	FA41299-2	mg/l	0.0	2.5	2.7	108.0	90-110%
Sulfate	GP29281/GN74074	FA41299-2	mg/l	10.2	50	61.7	103.0	90-110%
Total Organic Carbon	GP29309/GN74149	FA41299-1	mg/l	2.0	15	17.1	100.7	90-110%

Associated Samples:

Batch GP29281: FA41299-1, FA41299-2

Batch GP29309: FA41299-1, FA41299-2

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

8.2

8

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA41299
Account: GFLEMFLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chloride	GP29281/GN74074	FA41299-2	mg/l	1.5	50	52.1	0.2	20%
Nitrogen, Nitrate	GP29281/GN74074	FA41299-2	mg/l	1.1	2.5	3.5	0.0	20%
Nitrogen, Nitrite	GP29281/GN74074	FA41299-2	mg/l	0.0	2.5	2.7	0.0	20%
Sulfate	GP29281/GN74074	FA41299-2	mg/l	10.2	50	61.6	0.2	20%
Total Organic Carbon	GP29309/GN74149	FA41299-1	mg/l	2.0	15	16.9	1.2	20%

Associated Samples:

Batch GP29281: FA41299-1, FA41299-2

Batch GP29309: FA41299-1, FA41299-2

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

8.3

8

Technical Report for

Gannett Fleming

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

57524

SGS Accutest Job Number: FA41343

Sampling Date: 02/16/17

Report to:

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ATTN: Aaron Getchell

Total number of pages in report: 74



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and/or state specific certification programs as applicable.



Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001)
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Test results relate only to samples analyzed.

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Sample Summary

Gannett Fleming

Job No: FA41343

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA41343-1	02/16/17	09:27	ASRF	02/17/17	AQ Ground Water	MW-15
FA41343-2	02/16/17	11:27	ASRF	02/17/17	AQ Ground Water	MW-1R
FA41343-3	02/16/17	12:44	ASRF	02/17/17	AQ Ground Water	MW-1D
FA41343-4	02/16/17	13:22	ASRF	02/17/17	AQ Ground Water	MW-1DD
FA41343-5	02/16/17	15:47	ASRF	02/17/17	AQ Ground Water	MW-2R
FA41343-6	02/16/17	16:42	ASRF	02/17/17	AQ Ground Water	MW-11

Summary of Hits

Page 1 of 1

Job Number: FA41343
Account: Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Collected: 02/16/17

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA41343-1 MW-15						
Chloride		2.2	2.0		mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate		0.29	0.10		mg/l	EPA 300/SW846 9056A
FA41343-2 MW-1R						
1,1-Dichloroethylene		9.5 J	20	6.4	ug/l	SW846 8260B
cis-1,2-Dichloroethylene		648	20	5.5	ug/l	SW846 8260B
trans-1,2-Dichloroethylene		9.5 J	20	4.4	ug/l	SW846 8260B
Tetrachloroethylene		370	20	4.3	ug/l	SW846 8260B
Trichloroethylene		1640	20	6.9	ug/l	SW846 8260B
Vinyl Chloride		11.1 J	20	8.2	ug/l	SW846 8260B
o-Xylene		6.4 J	20	5.1	ug/l	SW846 8260B
Methane		1160	5.0	1.6	ug/l	RSKSOP-147/175
Arsenic		366	10		ug/l	SW846 6010C
Chloride		29.5	2.0		mg/l	EPA 300/SW846 9056A
Total Organic Carbon		26.4	1.0		mg/l	SM5310 B-11/SW9060A
FA41343-3 MW-1D						
Methane		0.43 J	0.50	0.16	ug/l	RSKSOP-147/175
Chloride		2.6	2.0		mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate		7.3	0.10		mg/l	EPA 300/SW846 9056A
FA41343-4 MW-1DD						
Tetrachloroethylene		2.6	1.0	0.22	ug/l	SW846 8260B
Toluene		0.75 J	1.0	0.30	ug/l	SW846 8260B
Methane		2.4	0.50	0.16	ug/l	RSKSOP-147/175
Chloride		3.0	2.0		mg/l	EPA 300/SW846 9056A
FA41343-5 MW-2R						
cis-1,2-Dichloroethylene		0.65 J	1.0	0.28	ug/l	SW846 8260B
Tetrachloroethylene		1.8	1.0	0.22	ug/l	SW846 8260B
Methane		67.9	0.50	0.16	ug/l	RSKSOP-147/175
Chloride		147	10		mg/l	EPA 300/SW846 9056A
Total Organic Carbon		9.3	1.0		mg/l	SM5310 B-11/SW9060A
FA41343-6 MW-11						
Methane		4.2	0.50	0.16	ug/l	RSKSOP-147/175
Nitrogen, Nitrate		0.32	0.10		mg/l	EPA 300/SW846 9056A
Sulfate		2.8	2.0		mg/l	EPA 300/SW846 9056A

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-1	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B120138.D	1	02/20/17	WV	n/a	n/a	VB4829
Run #2	B120182.D	1	02/22/17	WV	n/a	n/a	VB4832

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-1	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND ^a	2.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	96%	79-125%
2037-26-5	Toluene-D8	98%	97%	85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-1	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%	98%	83-118%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	
Lab Sample ID:	FA41343-1	Date Sampled: 02/16/17
Matrix:	AQ - Ground Water	Date Received: 02/17/17
Method:	RSKSOP-147/175	Percent Solids: n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF37273.D	1	02/21/17	EG	n/a	n/a	GFF1459
Run #2							

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	21 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.50	0.16	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-1	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	02/21/17	02/21/17 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13835
(2) Prep QC Batch: MP31675

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-1	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	2.2	2.0	mg/l	1	02/17/17 13:55	JK	EPA 300/SW846 9056A
Nitrogen, Nitrate	0.29	0.10	mg/l	1	02/17/17 13:55	JK	EPA 300/SW846 9056A
Total Organic Carbon	< 1.0	1.0	mg/l	1	02/22/17 18:35	VK	SM5310 B-11/SW9060A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-2	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B120139.D	20	02/20/17	WV	n/a	n/a	VB4829
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	500	200	ug/l	
71-43-2	Benzene	ND	20	6.2	ug/l	
108-86-1	Bromobenzene	ND	20	7.3	ug/l	
74-97-5	Bromochloromethane	ND	20	9.0	ug/l	
75-27-4	Bromodichloromethane	ND	20	4.8	ug/l	
75-25-2	Bromoform	ND	20	8.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	40	ug/l	
104-51-8	n-Butylbenzene	ND	20	4.6	ug/l	
135-98-8	sec-Butylbenzene	ND	20	4.9	ug/l	
98-06-6	tert-Butylbenzene	ND	20	6.3	ug/l	
75-15-0	Carbon Disulfide	ND	40	11	ug/l	
56-23-5	Carbon Tetrachloride	ND	20	7.1	ug/l	
108-90-7	Chlorobenzene	ND	20	4.0	ug/l	
75-00-3	Chloroethane	ND	40	13	ug/l	
67-66-3	Chloroform	ND	20	6.0	ug/l	
95-49-8	o-Chlorotoluene	ND	20	4.4	ug/l	
106-43-4	p-Chlorotoluene	ND	20	6.1	ug/l	
124-48-1	Dibromochloromethane	ND	20	5.5	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	21	ug/l	
106-93-4	1,2-Dibromoethane	ND	40	5.5	ug/l	
75-71-8	Dichlorodifluoromethane	ND	40	10	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	20	6.5	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	20	4.3	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	5.1	ug/l	
75-34-3	1,1-Dichloroethane	ND	20	6.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	6.2	ug/l	
75-35-4	1,1-Dichloroethylene	9.5	20	6.4	ug/l	J
156-59-2	cis-1,2-Dichloroethylene	648	20	5.5	ug/l	
156-60-5	trans-1,2-Dichloroethylene	9.5	20	4.4	ug/l	J
78-87-5	1,2-Dichloropropane	ND	20	8.5	ug/l	
142-28-9	1,3-Dichloropropane	ND	20	6.2	ug/l	
594-20-7	2,2-Dichloropropane	ND	20	4.8	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-2	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	20	6.7	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	5.8	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	4.3	ug/l	
100-41-4	Ethylbenzene	ND	20	7.1	ug/l	
87-68-3	Hexachlorobutadiene	ND	40	5.9	ug/l	
591-78-6	2-Hexanone	ND	200	40	ug/l	
98-82-8	Isopropylbenzene	ND	20	4.4	ug/l	
99-87-6	p-Isopropyltoluene	ND	20	4.3	ug/l	
74-83-9	Methyl Bromide	ND	40	12	ug/l	
74-87-3	Methyl Chloride	ND	40	10	ug/l	
74-95-3	Methylene Bromide	ND	40	7.4	ug/l	
75-09-2	Methylene Chloride	ND	100	40	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	100	20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	20	4.6	ug/l	
91-20-3	Naphthalene	ND	100	20	ug/l	
103-65-1	n-Propylbenzene	ND	20	5.7	ug/l	
100-42-5	Styrene	ND	20	4.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	20	5.5	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	6.0	ug/l	
127-18-4	Tetrachloroethylene	370	20	4.3	ug/l	
108-88-3	Toluene	ND	20	6.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	40	12	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	40	10	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	20	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	20	9.3	ug/l	
79-01-6	Trichloroethylene	1640	20	6.9	ug/l	
75-69-4	Trichlorofluoromethane	ND	40	10	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	40	13	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	20	6.5	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	20	5.5	ug/l	
108-05-4	Vinyl Acetate	ND	200	40	ug/l	
75-01-4	Vinyl Chloride	11.1	20	8.2	ug/l	J
	m,p-Xylene	ND	40	9.3	ug/l	
95-47-6	o-Xylene	6.4	20	5.1	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	99%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-2	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-2	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSKSOP-147/175		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF37285.D	10	02/21/17	EG	n/a	n/a	GFF1459
Run #2							

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	21 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	1160	5.0	1.6	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-2	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	366	10	ug/l	1	02/21/17	02/21/17 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13835
(2) Prep QC Batch: MP31675

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-1R	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-2	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	29.5	2.0	mg/l	1	02/17/17 14:11	JK	EPA 300/SW846 9056A
Nitrogen, Nitrate	< 0.10	0.10	mg/l	1	02/17/17 14:11	JK	EPA 300/SW846 9056A
Total Organic Carbon	26.4	1.0	mg/l	1	02/22/17 18:58	VK	SM5310 B-11/SW9060A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-3	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B120140.D	1	02/20/17	WV	n/a	n/a	VB4829
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-3	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	100%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-3	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		83-118%

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1D	
Lab Sample ID:	FA41343-3	Date Sampled: 02/16/17
Matrix:	AQ - Ground Water	Date Received: 02/17/17
Method:	RSKSOP-147/175	Percent Solids: n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF37275.D	1	02/21/17	EG	n/a	n/a	GFF1459
Run #2							

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	21 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.43	0.50	0.16	ug/l	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-3	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	02/21/17	02/21/17 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13835
(2) Prep QC Batch: MP31675

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-1D	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-3	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	2.6	2.0	mg/l	1	02/17/17 14:27	JK	EPA 300/SW846 9056A
Nitrogen, Nitrate	7.3	0.10	mg/l	1	02/17/17 14:27	JK	EPA 300/SW846 9056A
Total Organic Carbon	< 1.0	1.0	mg/l	1	02/22/17 19:19	VK	SM5310 B-11/SW9060A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-4	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B120141.D	1	02/20/17	WV	n/a	n/a	VB4829
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-4	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	2.6	1.0	0.22	ug/l	
108-88-3	Toluene	0.75	1.0	0.30	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	106%		79-125%
2037-26-5	Toluene-D8	100%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-4	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-1DD	
Lab Sample ID:	FA41343-4	Date Sampled: 02/16/17
Matrix:	AQ - Ground Water	Date Received: 02/17/17
Method:	RSKSOP-147/175	Percent Solids: n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF37276.D	1	02/21/17	EG	n/a	n/a	GFF1459
Run #2							

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	21 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	2.4	0.50	0.16	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-4	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	02/21/17	02/21/17 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13835
(2) Prep QC Batch: MP31675

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-1DD	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-4	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	3.0	2.0	mg/l	1	02/17/17 14:43	JK	EPA 300/SW846 9056A
Nitrogen, Nitrate	< 0.10	0.10	mg/l	1	02/17/17 14:43	JK	EPA 300/SW846 9056A
Total Organic Carbon	< 1.0	1.0	mg/l	1	02/22/17 19:39	VK	SM5310 B-11/SW9060A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-5	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B120142.D	1	02/20/17	WV	n/a	n/a	VB4829
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.65	1.0	0.28	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-5	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	1.8	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	106%		79-125%
2037-26-5	Toluene-D8	98%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-5	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-5	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSKSOP-147/175		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF37277.D	1	02/21/17	EG	n/a	n/a	GFF1459
Run #2							

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	21 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	67.9	0.50	0.16	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-5	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	02/21/17	02/21/17 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13835
(2) Prep QC Batch: MP31675

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-2R	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-5	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	147	10	mg/l	5	02/17/17 21:21	JK	EPA 300/SW846 9056A
Nitrogen, Nitrate ^a	< 0.50	0.50	mg/l	5	02/17/17 21:21	JK	EPA 300/SW846 9056A
Total Organic Carbon	9.3	1.0	mg/l	1	02/22/17 19:59	VK	SM5310 B-11/SW9060A

(a) Dilution required due to matrix interference.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-6	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B120143.D	1	02/20/17	WV	n/a	n/a	VB4829
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-6	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	106%		79-125%
2037-26-5	Toluene-D8	99%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-6	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11	
Lab Sample ID:	FA41343-6	Date Sampled: 02/16/17
Matrix:	AQ - Ground Water	Date Received: 02/17/17
Method:	RSKSOP-147/175	Percent Solids: n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF37278.D	1	02/21/17	EG	n/a	n/a	GFF1459
Run #2							

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	21 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	4.2	0.50	0.16	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	02/16/17
Lab Sample ID:	FA41343-6	Date Received:	02/17/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Iron, Ferrous ^a	< 0.10	0.10	mg/l	1	02/24/17 16:05	FN	SM3500FE B-11
Nitrogen, Nitrate	0.32	0.10	mg/l	1	02/17/17 15:15	JK	EPA 300/SW846 9056A
Sulfate	2.8	2.0	mg/l	1	02/17/17 15:15	JK	EPA 300/SW846 9056A

(a) Field analysis required. Received out of hold time and analyzed by request.

RL = Reporting Limit



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Client / Reporting Information				Project Information				SGS Accutest Quote #				SKIFF #				Analytical Information				Matrix Codes													
Company Name: Gannett Fleming				Project Name: TMR Valdosta																													
Address: 9119 Corporate Lake Drive Suite 150				Street: 2000 West Sausanne Ave																													
City: Tampa State: FL Zip: 33634				City: Valdosta State: GA																													
Project Contact: Aaron Getchell Email: agetchell@gfnet.com				Project #:																													
Phone #: 813 8824366				Fax #: 813 8844609																													
Sampler(s) Name(s) (Printed)				Client Purchase Order #																													
Sampler 1: R. Volk				Sampler 2: R. Volk																													
SGS Accutest Sample #		Field ID / Point of Collection		DATE		TIME		SAMPLED BY		MATRIX		TOTAL # OF BOTTLES		OTHER		NONE		PCL		NACH		HMS		HSCA		HSCB/ZNA		DI WATER		MEDIUM		LAB USE ONLY	
1	MW-15	2-16-17	0827	AS	GW	10	1	8	1			X	X	X	X	X																	
2	MW-1R	1	1127	1	10	1	8	1			X	X	X	X	X	X																	
3	MW-1D	1	1244	1	10	1	8	1			X	X	X	X	X	X																	
4	MW-1DD	1	1322	1	10	1	8	1			X	X	X	X	X	X																	
5	MW-2R	+	1547	+	10	1	8	1			X	X	X	X	X	X																	
6	MW-1I	+	1642	+	7	1	6				X	X																					
Turnaround Time (Business days)				Data Deliverable Information				Comments / Remarks																									
10 Day (Business)				Approved By: / Date:				☐ COMMERCIAL "A" (RESULTS ONLY)																									
7 Day								☒ COMMERCIAL "B" (RESULTS PLUS QC)																									
5 Day								☐ REDT1 (EPA LEVEL 3)																									
3 Day RUSH								☐ FULLT1 (EPA LEVEL 4)																									
2 Day RUSH								☐ EDO'S																									
1 Day RUSH																																	
Other																																	
Rush T/A Data Available VIA Email or LabLink																																	
Sample Custody must be documented below each time samples change possession, including courier delivery.																																	
Relinquished By Sampler/Affiliation		Date Time:		Received By/Affiliation		Date Time:		Relinquished By/Affiliation		Date Time:		Received By/Affiliation		Date Time:		Relinquished By/Affiliation		Date Time:		Received By/Affiliation		Date Time:		Relinquished By/Affiliation		Date Time:		Received By/Affiliation		Date Time:			
1 R. Volk (GF)		2-16-17 11:00		2 R. Volk		2-16-17 11:00		3 R. Volk		2-16-17 11:00		4 R. Volk		2-16-17 11:00		5 R. Volk		2-16-17 11:00		6 R. Volk		2-16-17 11:00		7 R. Volk		2-16-17 11:00		8 R. Volk		2-16-17 11:00			
Lab Use Only : Cooler Temperature (s) Celsius:																																	

4.1

FA41343: Chain of Custody

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SGS ACCUTEST - ORLANDO SAMPLE RECEIPT CONFIRMATION

SGS ACCUTEST'S JOB NUMBER: FA 41343 CLIENT: Garnett Fleming PROJECT: TMR Valdosta
 DATE/TIME RECEIVED: 02/17/17 1000 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: _____
 AIRBILL NUMBERS: 7856 3595 1987

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
- ☒ TRIP BLANK NOT PROVIDED
- ☒ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____
 NUMBER OF 5035 FIELD KITS ? _____
 NUMBER OF LAB FILTERED METALS ? _____

TEST STRIP LOT# pH 6.5 230315 pH 10-12 219813A OTHER (specify) _____

SUMMARY OF COMMENTS _____

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR +0.8
- ☐ OBSERVED TEMPS: 2.2
- ☐ CORRECTED TEMPS: 3.0 (USED FOR LIMS)

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
- ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
- ☐ INSUFFICIENT VOLUME FOR ANALYSIS
- ☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ☐ ID'S ON COC DO NOT MATCH LABEL
- ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- ☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- ☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
- ☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- ☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- ☐ % SOLIDS JAR NOT RECEIVED
- ☐ RESIDUAL CHLORINE PRESENT LOT# _____

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

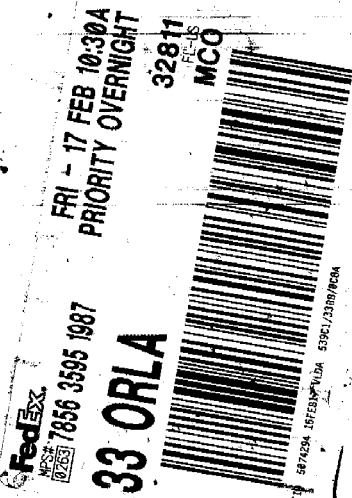
TECHNICIAN SIGNATURE/DATE Capt 13 02/17/17 REVIEWER SIGNATURE/DATE Ten 2-17-17

NF 02/16

receipt confirmation 020116.xls

FA41343: Chain of Custody

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FA41343: Chain of Custody
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GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 3

Job Number: FA41343**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4829-MB	B120120.D	1	02/20/17	WV	n/a	n/a	VB4829

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5, FA41343-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: FA41343**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4829-MB	B120120.D	1	02/20/17	WV	n/a	n/a	VB4829

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5, FA41343-6

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	79-125%

Method Blank Summary

Job Number: FA41343
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4829-MB	B120120.D	1	02/20/17	WV	n/a	n/a	VB4829

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5, FA41343-6

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	102% 85-112%
460-00-4	4-Bromofluorobenzene	98% 83-118%

Method Blank Summary

Page 1 of 1

Job Number: FA41343

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4832-MB	B120179.D	1	02/22/17	WV	n/a	n/a	VB4832

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41343-1

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	0.30	2.0	0.30	ug/l	J

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	102% 83-118%
17060-07-0	1,2-Dichloroethane-D4	95% 79-125%
2037-26-5	Toluene-D8	99% 85-112%
460-00-4	4-Bromofluorobenzene	95% 83-118%

Blank Spike Summary

Page 1 of 3

Job Number: FA41343**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4829-BS	B120119.D	1	02/20/17	WV	n/a	n/a	VB4829

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5, FA41343-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	115	92	50-147
71-43-2	Benzene	25	28.4	114	81-122
108-86-1	Bromobenzene	25	28.3	113	80-121
74-97-5	Bromochloromethane	25	24.9	100	76-123
75-27-4	Bromodichloromethane	25	26.9	108	79-123
75-25-2	Bromoform	25	24.4	98	66-123
78-93-3	2-Butanone (MEK)	125	129	103	56-143
104-51-8	n-Butylbenzene	25	30.8	123	79-126
135-98-8	sec-Butylbenzene	25	28.7	115	83-133
98-06-6	tert-Butylbenzene	25	28.2	113	80-133
75-15-0	Carbon Disulfide	25	25.3	101	66-148
56-23-5	Carbon Tetrachloride	25	27.0	108	76-136
108-90-7	Chlorobenzene	25	24.8	99	82-124
75-00-3	Chloroethane	25	23.2	93	62-144
67-66-3	Chloroform	25	24.9	100	80-124
95-49-8	o-Chlorotoluene	25	27.3	109	81-127
106-43-4	p-Chlorotoluene	25	27.0	108	83-130
124-48-1	Dibromochloromethane	25	26.4	106	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	26.5	106	64-123
106-93-4	1,2-Dibromoethane	25	25.8	103	75-120
75-71-8	Dichlorodifluoromethane	25	27.7	111	42-167
95-50-1	1,2-Dichlorobenzene	25	23.6	94	82-124
541-73-1	1,3-Dichlorobenzene	25	23.8	95	84-125
106-46-7	1,4-Dichlorobenzene	25	23.6	94	78-120
75-34-3	1,1-Dichloroethane	25	27.6	110	81-122
107-06-2	1,2-Dichloroethane	25	25.6	102	75-125
75-35-4	1,1-Dichloroethylene	25	27.5	110	78-137
156-59-2	cis-1,2-Dichloroethylene	25	26.5	106	78-120
156-60-5	trans-1,2-Dichloroethylene	25	27.1	108	76-127
78-87-5	1,2-Dichloropropane	25	25.5	102	76-124
142-28-9	1,3-Dichloropropane	25	24.5	98	80-118
594-20-7	2,2-Dichloropropane	25	28.5	114	74-139
563-58-6	1,1-Dichloropropene	25	27.4	110	79-131
10061-01-5	cis-1,3-Dichloropropene	25	27.0	108	75-118
10061-02-6	trans-1,3-Dichloropropene	25	27.9	112	80-120
100-41-4	Ethylbenzene	25	28.2	113	81-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA41343**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4829-BS	B120119.D	1	02/20/17	WV	n/a	n/a	VB4829

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5, FA41343-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
87-68-3	Hexachlorobutadiene	25	26.9	108	75-142
591-78-6	2-Hexanone	125	126	101	61-129
98-82-8	Isopropylbenzene	25	26.1	104	83-132
99-87-6	p-Isopropyltoluene	25	28.7	115	79-130
74-83-9	Methyl Bromide	25	23.9	96	59-143
74-87-3	Methyl Chloride	25	24.1	96	50-159
74-95-3	Methylene Bromide	25	25.6	102	78-119
75-09-2	Methylene Chloride	25	23.7	95	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	128	102	66-122
1634-04-4	Methyl Tert Butyl Ether	25	25.9	104	72-117
91-20-3	Naphthalene	25	29.7	119	63-132
103-65-1	n-Propylbenzene	25	28.1	112	82-133
100-42-5	Styrene	25	28.6	114	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	27.0	108	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	25.9	104	72-120
127-18-4	Tetrachloroethylene	25	24.8	99	76-135
108-88-3	Toluene	25	27.2	109	80-120
87-61-6	1,2,3-Trichlorobenzene	25	27.2	109	68-131
120-82-1	1,2,4-Trichlorobenzene	25	27.7	111	73-129
71-55-6	1,1,1-Trichloroethane	25	25.6	102	75-130
79-00-5	1,1,2-Trichloroethane	25	25.1	100	76-119
79-01-6	Trichloroethylene	25	27.2	109	81-126
75-69-4	Trichlorofluoromethane	25	27.5	110	71-156
96-18-4	1,2,3-Trichloropropane	25	26.2	105	77-120
95-63-6	1,2,4-Trimethylbenzene	25	29.2	117	79-120
108-67-8	1,3,5-Trimethylbenzene	25	29.9	120	79-120
108-05-4	Vinyl Acetate	125	125	100	43-154
75-01-4	Vinyl Chloride	25	26.1	104	69-159
	m,p-Xylene	50	55.0	110	79-126
95-47-6	o-Xylene	25	26.3	105	80-127

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	79-125%

* = Outside of Control Limits.

Blank Spike Summary

Page 3 of 3

Job Number: FA41343

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4829-BS	B120119.D	1	02/20/17	WV	n/a	n/a	VB4829

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5, FA41343-6

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	106%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 1

Job Number: FA41343

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4832-BS	B120178.D	1	02/22/17	WV	n/a	n/a	VB4832

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41343-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
87-68-3	Hexachlorobutadiene	25	24.9	100	75-142

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	99%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	101%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA41343

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41343-2MS	B120136.D	20	02/20/17	WV	n/a	n/a	VB4829
FA41343-2MSD	B120137.D	20	02/20/17	WV	n/a	n/a	VB4829
FA41343-2	B120139.D	20	02/20/17	WV	n/a	n/a	VB4829

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5, FA41343-6

CAS No.	Compound	FA41343-2 ug/l	Spike Q	ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		2500	2060	82	2500	2210	88	7	50-147/21
71-43-2	Benzene	ND		500	534	107	500	587	117	9	81-122/14
108-86-1	Bromobenzene	ND		500	511	102	500	572	114	11	80-121/14
74-97-5	Bromochloromethane	ND		500	456	91	500	525	105	14	76-123/14
75-27-4	Bromodichloromethane	ND		500	476	95	500	538	108	12	79-123/19
75-25-2	Bromoform	ND		500	340	68	500	379	76	11	66-123/21
78-93-3	2-Butanone (MEK)	ND		2500	2280	91	2500	2470	99	8	56-143/18
104-51-8	n-Butylbenzene	ND		500	577	115	500	618	124	7	79-126/16
135-98-8	sec-Butylbenzene	ND		500	523	105	500	577	115	10	83-133/16
98-06-6	tert-Butylbenzene	ND		500	537	107	500	571	114	6	80-133/16
75-15-0	Carbon Disulfide	ND		500	394	79	500	435	87	10	66-148/23
56-23-5	Carbon Tetrachloride	ND		500	500	100	500	564	113	12	76-136/23
108-90-7	Chlorobenzene	ND		500	490	98	500	526	105	7	82-124/14
75-00-3	Chloroethane	ND		500	510	102	500	491	98	4	62-144/20
67-66-3	Chloroform	ND		500	482	96	500	537	107	11	80-124/15
95-49-8	o-Chlorotoluene	ND		500	528	106	500	553	111	5	81-127/15
106-43-4	p-Chlorotoluene	ND		500	517	103	500	550	110	6	83-130/15
124-48-1	Dibromochloromethane	ND		500	425	85	500	481	96	12	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	ND		500	459	92	500	496	99	8	64-123/18
106-93-4	1,2-Dibromoethane	ND		500	494	99	500	529	106	7	75-120/13
75-71-8	Dichlorodifluoromethane	ND		500	492	98	500	503	101	2	42-167/19
95-50-1	1,2-Dichlorobenzene	ND		500	459	92	500	480	96	4	82-124/14
541-73-1	1,3-Dichlorobenzene	ND		500	454	91	500	500	100	10	84-125/14
106-46-7	1,4-Dichlorobenzene	ND		500	455	91	500	495	99	8	78-120/15
75-34-3	1,1-Dichloroethane	ND		500	525	105	500	576	115	9	81-122/15
107-06-2	1,2-Dichloroethane	ND		500	503	101	500	538	108	7	75-125/14
75-35-4	1,1-Dichloroethylene	9.5	J	500	546	107	500	588	116	7	78-137/18
156-59-2	cis-1,2-Dichloroethylene	648		500	1080	86	500	1160	102	7	78-120/15
156-60-5	trans-1,2-Dichloroethylene	9.5	J	500	535	105	500	575	113	7	76-127/17
78-87-5	1,2-Dichloropropane	ND		500	495	99	500	537	107	8	76-124/14
142-28-9	1,3-Dichloropropane	ND		500	466	93	500	501	100	7	80-118/13
594-20-7	2,2-Dichloropropane	ND		500	527	105	500	577	115	9	74-139/17
563-58-6	1,1-Dichloropropene	ND		500	521	104	500	568	114	9	79-131/16
10061-01-5	cis-1,3-Dichloropropene	ND		500	467	93	500	522	104	11	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		500	504	101	500	544	109	8	80-120/22
100-41-4	Ethylbenzene	ND		500	572	114	500	620	124*	8	81-121/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA41343

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41343-2MS	B120136.D	20	02/20/17	WV	n/a	n/a	VB4829
FA41343-2MSD	B120137.D	20	02/20/17	WV	n/a	n/a	VB4829
FA41343-2	B120139.D	20	02/20/17	WV	n/a	n/a	VB4829

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5, FA41343-6

CAS No.	Compound	FA41343-2 ug/l	Spike Q	ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	ND		500	456	91	500	516	103	12	75-142/19
591-78-6	2-Hexanone	ND		2500	2350	94	2500	2450	98	4	61-129/18
98-82-8	Isopropylbenzene	ND		500	484	97	500	522	104	8	83-132/15
99-87-6	p-Isopropyltoluene	ND		500	536	107	500	579	116	8	79-130/16
74-83-9	Methyl Bromide	ND		500	439	88	500	450	90	2	59-143/19
74-87-3	Methyl Chloride	ND		500	443	89	500	441	88	0	50-159/19
74-95-3	Methylene Bromide	ND		500	478	96	500	537	107	12	78-119/14
75-09-2	Methylene Chloride	ND		500	501	100	500	532	106	6	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		2500	2320	93	2500	2460	98	6	66-122/16
1634-04-4	Methyl Tert Butyl Ether	ND		500	457	91	500	522	104	13	72-117/14
91-20-3	Naphthalene	ND		500	509	102	500	558	112	9	63-132/25
103-65-1	n-Propylbenzene	ND		500	536	107	500	578	116	8	82-133/15
100-42-5	Styrene	ND		500	553	111	500	599	120*	8	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		500	523	105	500	572	114	9	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	ND		500	467	93	500	514	103	10	72-120/14
127-18-4	Tetrachloroethylene	370		500	770	80	500	834	93	8	76-135/16
108-88-3	Toluene	ND		500	541	108	500	581	116	7	80-120/14
87-61-6	1,2,3-Trichlorobenzene	ND		500	466	93	500	527	105	12	68-131/25
120-82-1	1,2,4-Trichlorobenzene	ND		500	476	95	500	533	107	11	73-129/20
71-55-6	1,1,1-Trichloroethane	ND		500	479	96	500	548	110	13	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		500	492	98	500	517	103	5	76-119/14
79-01-6	Trichloroethylene	1640		500	1910	54* a	500	2040	80* a	7	81-126/15
75-69-4	Trichlorofluoromethane	ND		500	502	100	500	510	102	2	71-156/21
96-18-4	1,2,3-Trichloropropane	ND		500	493	99	500	515	103	4	77-120/16
95-63-6	1,2,4-Trimethylbenzene	ND		500	569	114	500	610	122*	7	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND		500	556	111	500	601	120	8	79-120/19
108-05-4	Vinyl Acetate	ND		2500	2410	96	2500	2300	92	5	43-154/14
75-01-4	Vinyl Chloride	11.1	J	500	470	92	500	490	96	4	69-159/18
	m,p-Xylene	ND		1000	1090	109	1000	1180	118	8	79-126/15
95-47-6	o-Xylene	6.4	J	500	536	106	500	560	111	4	80-127/14

CAS No.	Surrogate Recoveries	MS	MSD	FA41343-2	Limits
1868-53-7	Dibromofluoromethane	102%	102%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	104%	104%	79-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: FA41343

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41343-2MS	B120136.D	20	02/20/17	WV	n/a	n/a	VB4829
FA41343-2MSD	B120137.D	20	02/20/17	WV	n/a	n/a	VB4829
FA41343-2	B120139.D	20	02/20/17	WV	n/a	n/a	VB4829

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5, FA41343-6

CAS No.	Surrogate Recoveries	MS	MSD	FA41343-2	Limits
2037-26-5	Toluene-D8	101%	100%	99%	85-112%
460-00-4	4-Bromofluorobenzene	102%	99%	99%	83-118%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: FA41343

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41374-22MS	B120193.D	100	02/22/17	WV	n/a	n/a	VB4832
FA41374-22MSD	B120194.D	100	02/22/17	WV	n/a	n/a	VB4832
FA41374-22 ^a	B120184.D	100	02/22/17	WV	n/a	n/a	VB4832

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41343-1

CAS No.	Compound	FA41374-22 ug/l	Spike Q	ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	ND		2500	2580	103	2500	2540	102	2	75-142/19

CAS No.	Surrogate Recoveries	MS	MSD	FA41374-22	Limits
1868-53-7	Dibromofluoromethane	101%	105%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	105%	101%	79-125%
2037-26-5	Toluene-D8	99%	99%	100%	85-112%
460-00-4	4-Bromofluorobenzene	100%	104%	99%	83-118%

(a) Sample was not preserved to a pH < 2.

* = Outside of Control Limits.



GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA41343
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFF1459-MB	FF37270.D	1	02/21/17	EG	n/a	n/a	GFF1459

The QC reported here applies to the following samples: Method: RSKSOP-147/175

FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5, FA41343-6

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.50	0.16	ug/l	

6.1.1
6

Blank Spike/Blank Spike Duplicate Summary

Job Number: FA41343
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFF1459-BS	FF37271.D	1	02/21/17	EG	n/a	n/a	GFF1459
GFF1459-BSD	FF37272.D	1	02/21/17	EG	n/a	n/a	GFF1459

The QC reported here applies to the following samples: Method: RSKSOP-147/175

FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5, FA41343-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
74-82-8	Methane	108	116	107	124	115	7	62-139/30

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FA41343
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41343-6MS	FF37281.D	1	02/21/17	EG	n/a	n/a	GFF1459
FA41343-6	FF37278.D	1	02/21/17	EG	n/a	n/a	GFF1459

The QC reported here applies to the following samples: Method: RSKSOP-147/175

FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5, FA41343-6

CAS No.	Compound	FA41343-6 ug/l	Spike Q	MS ug/l	MS %	Limits
74-82-8	Methane	4.2	108	107	95	62-139

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA41343
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41343-5DUP	FF37282.D	1	02/21/17	EG	n/a	n/a	GFF1459
FA41343-5	FF37277.D	1	02/21/17	EG	n/a	n/a	GFF1459

The QC reported here applies to the following samples: Method: RSKSOP-147/175

FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5, FA41343-6

CAS No.	Compound	FA41343-5 ug/l	DUP Q ug/l	Q	RPD	Limits
74-82-8	Methane	67.9	65.8	3		30

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA41343
Account: GFLEMFLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31675
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 02/21/17 02/21/17

Metal	RL	IDL	MDL	MB raw	final	MB raw	final
Aluminum	200	14	14				
Antimony	6.0	1	1				
Arsenic	10	1.3	1.3	-0.40	<10	-1.4	<10
Barium	200	1	1				
Beryllium	4.0	.2	.2				
Cadmium	5.0	.2	.2				
Calcium	1000	50	50				
Chromium	10	1	1				
Cobalt	50	.2	.2				
Copper	25	1	1				
Iron	300	17	17				
Lead	5.0	1	1.1				
Magnesium	5000	35	35				
Manganese	15	.5	1				
Molybdenum	50	.3	.3				
Nickel	40	.4	.4				
Potassium	10000	200	200				
Selenium	10	2.4	2.9				
Silver	10	.7	.7				
Sodium	10000	500	500				
Strontium	10	.5	.5				
Thallium	10	1.1	1.4				
Tin	50	.9	1				
Titanium	10	.5	1				
Vanadium	50	.5	.6				
Zinc	20	3	4.4				

Associated samples MP31675: FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA41343
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31675
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

02/21/17

02/21/17

Metal	FA41310-2 Original	DUP	RPD	QC Limits	FA41310-2 Original MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	anr							
Antimony	anr							
Arsenic	0.0	0.0	NC	0-20	0.0	2030	2000	101.5
Barium	anr							
Beryllium	anr							
Cadmium	anr							
Calcium								
Chromium	anr							
Cobalt	anr							
Copper	anr							
Iron	anr							
Lead	anr							
Magnesium	anr							
Manganese	anr							
Molybdenum	anr							
Nickel	anr							
Potassium	anr							
Selenium	anr							
Silver	anr							
Sodium	anr							
Strontium	anr							
Thallium								
Tin	anr							
Titanium	anr							
Vanadium	anr							
Zinc	anr							

Associated samples MP31675: FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA41343
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31675
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 02/21/17

Metal	FA41310-2 Original MSD	SpikeLot MPFLICP2 % Rec	MSD RPD	QC Limit
Aluminum	anr			
Antimony	anr			
Arsenic	0.0	2030	2000	101.5
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium	anr			
Thallium				
Tin	anr			
Titanium	anr			
Vanadium	anr			
Zinc	anr			

Associated samples MP31675: FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA41343
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31675
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 02/21/17

Metal	BSP Result	Spike lot MPFLICP2	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	2040	2000	102.0	80-120
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium	anr			
Thallium				
Tin	anr			
Titanium	anr			
Vanadium	anr			
Zinc	anr			

Associated samples MP31675: FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA41343
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31675
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 02/21/17

Metal	FA41310-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	0.00	0.00	NC	0-10
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium	anr			
Thallium				
Tin	anr			
Titanium	anr			
Vanadium	anr			
Zinc	anr			

Associated samples MP31675: FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA41343
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31675
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date:

02/21/17

Metal	Sample ml	Final ml	FA41310-2 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic	9.8	10			109.5	0.2	5	100	109.5	80-120
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP31675: FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested



General Chemistry

QC Data Summaries



Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA41343
Account: GFLEMFLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Bromide	GP29294/GN74095	0.50	0.0	mg/l	12.5	12.2	97.6	90-110%
Chloride	GP29294/GN74095	2.0	0.0	mg/l	50	49.2	98.4	90-110%
Fluoride	GP29294/GN74095	0.20	0.0	mg/l	2.5	2.41	96.4	90-110%
Iron, Ferrous	GN74177	0.10	0.0	mg/l	0.500	0.51	101.1	82-115%
Nitrogen, Nitrate	GP29294/GN74095	0.10	0.0	mg/l	2.5	2.40	96.0	90-110%
Nitrogen, Nitrite	GP29294/GN74095	0.10	0.0	mg/l	2.5	2.59	103.6	90-110%
Sulfate	GP29294/GN74095	2.0	0.0	mg/l	50	49.7	99.4	90-110%
Total Organic Carbon	GP29309/GN74149	1.0	0.0	mg/l	15	15.0	100.0	90-110%

Associated Samples:

Batch GN74177: FA41343-6

Batch GP29294: FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5, FA41343-6

Batch GP29309: FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5

(*) Outside of QC limits

8.1

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DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA41343
Account: GFLEMFLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Iron, Ferrous	GN74177	FA41343-6	mg/l	0.0	0.0	0.0	0-31%

Associated Samples:
Batch GN74177: FA41343-6
(*) Outside of QC limits

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MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA41343
Account: GFLEMFLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP29294/GN74095	FA41195-3	mg/l	0.45	12.5	12.6	97.2	90-110%
Chloride	GP29294/GN74095	FA41195-3	mg/l	54.6	50	106	102.8	90-110%
Fluoride	GP29294/GN74095	FA41195-3	mg/l	1.7	2.5	4.4	108.0	90-110%
Nitrogen, Nitrate	GP29294/GN74095	FA41195-3	mg/l	0.10 U	2.5	2.3	92.0	90-110%
Nitrogen, Nitrite	GP29294/GN74095	FA41195-3	mg/l	0.10 U	2.5	3.0	120.0N(a)	90-110%
Sulfate	GP29294/GN74095	FA41195-3	mg/l	3.0	50	55.5	105.0	90-110%
Total Organic Carbon	GP29309/GN74149	FA41299-1	mg/l	2.0	15	17.1	100.7	90-110%

Associated Samples:

Batch GP29294: FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5, FA41343-6

Batch GP29309: FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Spike recovery indicates possible matrix interference.



MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA41343
Account: GFLEMFLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Bromide	GP29294/GN74095	FA41195-3	mg/l	0.45	12.5	12.6	0.0	20%
Chloride	GP29294/GN74095	FA41195-3	mg/l	54.6	50	106	0.0	20%
Fluoride	GP29294/GN74095	FA41195-3	mg/l	1.7	2.5	4.4	0.0	20%
Nitrogen, Nitrate	GP29294/GN74095	FA41195-3	mg/l	0.10 U	2.5	2.3	0.0	20%
Nitrogen, Nitrite	GP29294/GN74095	FA41195-3	mg/l	0.10 U	2.5	3.0	0.0	20%
Sulfate	GP29294/GN74095	FA41195-3	mg/l	3.0	50	55.4	0.2	20%
Total Organic Carbon	GP29309/GN74149	FA41299-1	mg/l	2.0	15	16.9	1.2	20%

Associated Samples:

Batch GP29294: FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5, FA41343-6

Batch GP29309: FA41343-1, FA41343-2, FA41343-3, FA41343-4, FA41343-5

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

8.4

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Technical Report for

Gannett Fleming

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

57524

SGS Accutest Job Number: FA41344

Sampling Date: 02/16/17

Report to:

Gannett Fleming
West Lake Corporate Center 9119 Corporate Lake Dr, Suite 150
Tampa, FL 33634-6323
agetshell@gfnet.com; tfalkner@gfnet.com

ATTN: Aaron Getchell

Total number of pages in report: **36**



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.



Norm Farmer
Technical Director

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Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001)
DoD ELAP(L-A-B L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177),
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Test results relate only to samples analyzed.

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Sample Summary

Gannett Fleming

Job No: FA41344

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
FA41344-1	02/16/17	15:35	ASRF 02/16/17	SO Soil	B-11 6-8
FA41344-2	02/16/17	16:00	ASRF 02/16/17	SO Soil	B-10 6-8
FA41344-3	02/16/17	16:10	ASRF 02/16/17	SO Soil	B-5R 0-2
FA41344-4	02/16/17	16:20	ASRF 02/16/17	SO Soil	B-5R 6-8

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Page 1 of 1

Job Number: FA41344
Account: Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Collected: 02/16/17

Lab Sample ID	Client Sample ID	Result/ Analyte Qual	RL	MDL	Units	Method
FA41344-1	B-11 6-8					
Arsenic		0.77	0.50		mg/kg	SW846 6010C
FA41344-2	B-10 6-8					
Arsenic		1.5	0.39		mg/kg	SW846 6010C
FA41344-3	B-5R 0-2					
Methylene Chloride ^a		0.0032 J	0.0074	0.0029	mg/kg	SW846 8260B
Tetrachloroethylene		0.146	0.0037	0.00094	mg/kg	SW846 8260B
Trichloroethylene		0.0051	0.0037	0.00074	mg/kg	SW846 8260B
Arsenic		3.4	0.38		mg/kg	SW846 6010C
FA41344-4	B-5R 6-8					
Methylene Chloride ^b		0.286 J	0.48	0.19	mg/kg	SW846 8260B
Tetrachloroethylene ^c		2.11	0.24	0.062	mg/kg	SW846 8260B
Arsenic ^d		540	2.1		mg/kg	SW846 6010C

(a) Suspected laboratory contaminant.

(b) Dilution required due to matrix interference (surrogate standard failure). Suspected laboratory contaminant.

(c) Dilution required due to matrix interference (surrogate standard failure).

(d) Elevated reporting limit(s) due to matrix interference.



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	B-11 6-8	Date Sampled:	02/16/17
Lab Sample ID:	FA41344-1	Date Received:	02/16/17
Matrix:	SO - Soil	Percent Solids:	85.1
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.77	0.50	mg/kg	1	02/21/17	02/22/17 LM	SW846 6010C ¹	SW846 3050B ²

(1) Instrument QC Batch: MA13840
(2) Prep QC Batch: MP31677

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-10 6-8	Date Sampled:	02/16/17
Lab Sample ID:	FA41344-2	Date Received:	02/16/17
Matrix:	SO - Soil	Percent Solids:	84.7
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	1.5	0.39	mg/kg	1	02/21/17	02/22/17 LM	SW846 6010C ¹	SW846 3050B ²

(1) Instrument QC Batch: MA13840
(2) Prep QC Batch: MP31677

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-5R 0-2	Date Sampled:	02/16/17
Lab Sample ID:	FA41344-3	Date Received:	02/16/17
Matrix:	SO - Soil	Percent Solids:	93.3
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y33814.D	1	02/17/17	EP	n/a	n/a	VY1337
Run #2							

	Initial Weight	Final Volume
Run #1	7.28 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.037	0.0074	mg/kg	
71-43-2	Benzene	ND	0.0037	0.00090	mg/kg	
108-86-1	Bromobenzene	ND	0.0037	0.00074	mg/kg	
74-97-5	Bromochloromethane	ND	0.0037	0.0011	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0037	0.00074	mg/kg	
75-25-2	Bromoform	ND	0.0037	0.00074	mg/kg	
78-93-3	2-Butanone (MEK)	ND	0.018	0.0054	mg/kg	
104-51-8	n-Butylbenzene	ND	0.0037	0.00074	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.0037	0.00074	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.0037	0.00074	mg/kg	
75-15-0	Carbon Disulfide	ND	0.0037	0.00074	mg/kg	
56-23-5	Carbon Tetrachloride	ND	0.0037	0.00075	mg/kg	
108-90-7	Chlorobenzene	ND	0.0037	0.00074	mg/kg	
75-00-3	Chloroethane	ND	0.0037	0.0015	mg/kg	
67-66-3	Chloroform	ND	0.0037	0.00098	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.0037	0.00074	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.0037	0.00074	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0037	0.00074	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.0037	0.0014	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.0037	0.00074	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.0037	0.0015	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.0037	0.00074	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.0037	0.00074	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.0037	0.00085	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0037	0.0013	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0037	0.00074	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0037	0.00074	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0037	0.0010	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0037	0.00074	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0037	0.00074	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.0037	0.00074	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.0037	0.00074	mg/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-5R 0-2	Date Sampled:	02/16/17
Lab Sample ID:	FA41344-3	Date Received:	02/16/17
Matrix:	SO - Soil	Percent Solids:	93.3
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	0.0037	0.00075	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0037	0.00074	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0037	0.00074	mg/kg	
100-41-4	Ethylbenzene	ND	0.0037	0.00074	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.0037	0.00095	mg/kg	
591-78-6	2-Hexanone	ND	0.018	0.0055	mg/kg	
98-82-8	Isopropylbenzene	ND	0.0037	0.00074	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.0037	0.00074	mg/kg	
74-83-9	Methyl Bromide	ND	0.0037	0.0015	mg/kg	
74-87-3	Methyl Chloride	ND	0.0037	0.0015	mg/kg	
74-95-3	Methylene Bromide	ND	0.0037	0.00074	mg/kg	
75-09-2	Methylene Chloride ^a	0.0032	0.0074	0.0029	mg/kg	J
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	0.018	0.0055	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0037	0.00074	mg/kg	
91-20-3	Naphthalene	ND	0.0037	0.0015	mg/kg	
103-65-1	n-Propylbenzene	ND	0.0037	0.00074	mg/kg	
100-42-5	Styrene	ND	0.0037	0.00074	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.0037	0.00076	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0037	0.00074	mg/kg	
127-18-4	Tetrachloroethylene	0.146	0.0037	0.00094	mg/kg	
108-88-3	Toluene	ND	0.0037	0.00074	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.0037	0.0010	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0037	0.00074	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0037	0.00074	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0037	0.00074	mg/kg	
79-01-6	Trichloroethylene	0.0051	0.0037	0.00074	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.0037	0.0015	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.0037	0.00092	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.0037	0.00074	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.0037	0.00074	mg/kg	
108-05-4	Vinyl Acetate	ND	0.018	0.012	mg/kg	
75-01-4	Vinyl Chloride	ND	0.0037	0.00074	mg/kg	
	m,p-Xylene	ND	0.0074	0.00081	mg/kg	
95-47-6	o-Xylene	ND	0.0037	0.00074	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	117%		75-124%
17060-07-0	1,2-Dichloroethane-D4	118%		72-135%
2037-26-5	Toluene-D8	99%		75-126%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-5R 0-2	Date Sampled:	02/16/17
Lab Sample ID:	FA41344-3	Date Received:	02/16/17
Matrix:	SO - Soil	Percent Solids:	93.3
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		71-133%

(a) Suspected laboratory contaminant.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-5R 0-2	Date Sampled:	02/16/17
Lab Sample ID:	FA41344-3	Date Received:	02/16/17
Matrix:	SO - Soil	Percent Solids:	93.3
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	3.4	0.38	mg/kg	1	02/21/17	02/22/17 LM	SW846 6010C ¹	SW846 3050B ²

(1) Instrument QC Batch: MA13840
(2) Prep QC Batch: MP31677

RL = Reporting Limit

Report of Analysis

Client Sample ID:	B-5R 6-8	Date Sampled:	02/16/17
Lab Sample ID:	FA41344-4	Date Received:	02/16/17
Matrix:	SO - Soil	Percent Solids:	83.7
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	Y33816.D	1	02/17/17	EP	n/a	n/a	VY1337
Run #2 ^b	Y33815.D	1	02/17/17	EP	n/a	n/a	VY1337

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.77 g	5.0 ml	100 ul
Run #2	8.20 g	5.0 ml	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2.4	0.48	mg/kg	
71-43-2	Benzene	ND	0.24	0.059	mg/kg	
108-86-1	Bromobenzene	ND	0.24	0.048	mg/kg	
74-97-5	Bromochloromethane	ND	0.24	0.071	mg/kg	
75-27-4	Bromodichloromethane	ND	0.24	0.048	mg/kg	
75-25-2	Bromoform	ND	0.24	0.048	mg/kg	
78-93-3	2-Butanone (MEK)	ND	1.2	0.35	mg/kg	
104-51-8	n-Butylbenzene	ND	0.24	0.048	mg/kg	
135-98-8	sec-Butylbenzene	ND	0.24	0.048	mg/kg	
98-06-6	tert-Butylbenzene	ND	0.24	0.048	mg/kg	
75-15-0	Carbon Disulfide	ND	0.24	0.048	mg/kg	
56-23-5	Carbon Tetrachloride	ND	0.24	0.049	mg/kg	
108-90-7	Chlorobenzene	ND	0.24	0.048	mg/kg	
75-00-3	Chloroethane	ND	0.24	0.096	mg/kg	
67-66-3	Chloroform	ND	0.24	0.064	mg/kg	
95-49-8	o-Chlorotoluene	ND	0.24	0.048	mg/kg	
106-43-4	p-Chlorotoluene	ND	0.24	0.048	mg/kg	
124-48-1	Dibromochloromethane	ND	0.24	0.048	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.24	0.093	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.24	0.048	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	0.24	0.096	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.24	0.048	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.24	0.048	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.24	0.055	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.24	0.085	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.24	0.048	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.24	0.048	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.24	0.066	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.24	0.048	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.24	0.048	mg/kg	
142-28-9	1,3-Dichloropropane	ND	0.24	0.048	mg/kg	
594-20-7	2,2-Dichloropropane	ND	0.24	0.048	mg/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-5R 6-8	Date Sampled:	02/16/17
Lab Sample ID:	FA41344-4	Date Received:	02/16/17
Matrix:	SO - Soil	Percent Solids:	83.7
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	0.24	0.049	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.24	0.048	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.24	0.048	mg/kg	
100-41-4	Ethylbenzene	ND	0.24	0.048	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.24	0.062	mg/kg	
591-78-6	2-Hexanone	ND	1.2	0.36	mg/kg	
98-82-8	Isopropylbenzene	ND	0.24	0.048	mg/kg	
99-87-6	p-Isopropyltoluene	ND	0.24	0.048	mg/kg	
74-83-9	Methyl Bromide	ND	0.24	0.096	mg/kg	
74-87-3	Methyl Chloride	ND	0.24	0.096	mg/kg	
74-95-3	Methylene Bromide	ND	0.24	0.048	mg/kg	
75-09-2	Methylene Chloride ^c	0.286	0.48	0.19	mg/kg	J
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	1.2	0.36	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.24	0.048	mg/kg	
91-20-3	Naphthalene	ND	0.24	0.096	mg/kg	
103-65-1	n-Propylbenzene	ND	0.24	0.048	mg/kg	
100-42-5	Styrene	ND	0.24	0.048	mg/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.24	0.050	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.24	0.048	mg/kg	
127-18-4	Tetrachloroethylene	2.11	0.24	0.062	mg/kg	
108-88-3	Toluene	ND	0.24	0.048	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	0.24	0.067	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	0.24	0.048	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.24	0.048	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.24	0.048	mg/kg	
79-01-6	Trichloroethylene	ND	0.24	0.048	mg/kg	
75-69-4	Trichlorofluoromethane	ND	0.24	0.096	mg/kg	
96-18-4	1,2,3-Trichloropropane	ND	0.24	0.060	mg/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	0.24	0.048	mg/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	0.24	0.048	mg/kg	
108-05-4	Vinyl Acetate	ND	1.2	0.79	mg/kg	
75-01-4	Vinyl Chloride	ND	0.24	0.048	mg/kg	
	m,p-Xylene	ND	0.48	0.053	mg/kg	
95-47-6	o-Xylene	ND	0.24	0.048	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%	151% ^d	75-124%
17060-07-0	1,2-Dichloroethane-D4	111%	145% ^d	72-135%
2037-26-5	Toluene-D8	100%	97%	75-126%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-5R 6-8	Date Sampled:	02/16/17
Lab Sample ID:	FA41344-4	Date Received:	02/16/17
Matrix:	SO - Soil	Percent Solids:	83.7
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%	105%	71-133%

- (a) Dilution required due to matrix interference (surrogate standard failure).
(b) Confirmation run for surrogate recoveries.
(c) Suspected laboratory contaminant.
(d) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-5R 6-8	Date Sampled:	02/16/17
Lab Sample ID:	FA41344-4	Date Received:	02/16/17
Matrix:	SO - Soil	Percent Solids:	83.7
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic ^a	540	2.1	mg/kg	5	02/21/17	02/23/17 LM	SW846 6010C ¹	SW846 3050B ²

(1) Instrument QC Batch: MA13842
(2) Prep QC Batch: MP31677

(a) Elevated reporting limit(s) due to matrix interference.

RL = Reporting Limit



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

[illegible]

SGS ACCUTEST - ORLANDO SAMPLE RECEIPT CONFIRMATION

SGS ACCUTEST'S JOB NUMBER: FA 41344 CLIENT: Garnett Fleming PROJECT: TMR Valdosta
DATE/TIME RECEIVED: 02/17/17 1000 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: _____
AIRBILL NUMBERS: 7856 3595 1976

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
☒ TRIP BLANK NOT PROVIDED
☒ TRIP BLANK NOT ON COC
☐ TRIP BLANK INTACT
☐ TRIP BLANK NOT INTACT
☐ RECEIVED WATER TRIP BLANK
☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____
NUMBER OF 5035 FIELD KITS ? 2
NUMBER OF LAB FILTERED METALS ? _____

TEST STRIP LOT# pH 6-3 230315

pH 10-12 219813A

OTHER (specify) _____

SUMMARY OF COMMENTS: _____

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR +0.8
☐ OBSERVED TEMPS: 2.4
☐ CORRECTED TEMPS: 3.2 (USED FOR LIMS)

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
☐ INSUFFICIENT VOLUME FOR ANALYSIS
☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
☐ ID'S ON COC DO NOT MATCH LABEL
☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
☐ % SOLIDS JAR NOT RECEIVED
☐ RESIDUAL CHLORINE PRESENT LOT# _____

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TECHNICIAN SIGNATURE/DATE [Signature] 02/17/17 REVIEWER SIGNATURE/DATE [Signature] 2-17-17

NF 02/16

receipt confirmation 020116.xls

FA41344: Chain of Custody

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fedEx
FRI - 17 FEB 10:30A
PRIORITY OVERNIGHT
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33 ORLA
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FD 5874234 15FEB10 10:30A 535273359/4684

FA41344: Chain of Custody
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GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 3

Job Number: FA41344**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1337-MB	Y33807.D	1	02/17/17	EP	n/a	n/a	VY1337

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA41344-3, FA41344-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	10	ug/kg	
71-43-2	Benzene	ND	5.0	1.2	ug/kg	
108-86-1	Bromobenzene	ND	5.0	1.0	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	1.5	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.0	ug/kg	
75-25-2	Bromoform	ND	5.0	1.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	25	7.3	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	1.0	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	1.0	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	1.0	ug/kg	
75-15-0	Carbon Disulfide	ND	5.0	1.0	ug/kg	
56-23-5	Carbon Tetrachloride	ND	5.0	1.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	2.0	ug/kg	
67-66-3	Chloroform	ND	5.0	1.3	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	1.0	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	1.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.9	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	2.0	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.0	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.0	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.8	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	1.0	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	1.0	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	

Method Blank Summary

Page 2 of 3

Job Number: FA41344**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1337-MB	Y33807.D	1	02/17/17	EP	n/a	n/a	VY1337

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA41344-3, FA41344-4

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	5.0	1.3	ug/kg	
591-78-6	2-Hexanone	ND	25	7.5	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	1.0	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	1.0	ug/kg	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/kg	
74-87-3	Methyl Chloride	ND	5.0	2.0	ug/kg	
74-95-3	Methylene Bromide	ND	5.0	1.0	ug/kg	
75-09-2	Methylene Chloride	ND	10	4.0	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	25	7.5	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	2.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	1.0	ug/kg	
100-42-5	Styrene	ND	5.0	1.0	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.4	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.0	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	2.0	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.3	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-05-4	Vinyl Acetate	ND	25	16	ug/kg	
75-01-4	Vinyl Chloride	ND	5.0	1.0	ug/kg	
	m,p-Xylene	ND	10	1.1	ug/kg	
95-47-6	o-Xylene	ND	5.0	1.0	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	101% 75-124%
17060-07-0	1,2-Dichloroethane-D4	102% 72-135%

Method Blank Summary

Job Number: FA41344
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1337-MB	Y33807.D	1	02/17/17	EP	n/a	n/a	VY1337

The QC reported here applies to the following samples: Method: SW846 8260B
FA41344-3, FA41344-4

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	105% 75-126%
460-00-4	4-Bromofluorobenzene	104% 71-133%

Blank Spike Summary

Page 1 of 3

Job Number: FA41344**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1337-BS	Y33808.D	1	02/17/17	EP	n/a	n/a	VY1337

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA41344-3, FA41344-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	250	100	61-152
71-43-2	Benzene	50	49.2	98	76-126
108-86-1	Bromobenzene	50	50.2	100	76-122
74-97-5	Bromochloromethane	50	50.5	101	77-120
75-27-4	Bromodichloromethane	50	52.7	105	74-130
75-25-2	Bromoform	50	53.9	108	76-127
78-93-3	2-Butanone (MEK)	250	245	98	75-137
104-51-8	n-Butylbenzene	50	51.2	102	71-128
135-98-8	sec-Butylbenzene	50	49.9	100	79-135
98-06-6	tert-Butylbenzene	50	48.3	97	77-133
75-15-0	Carbon Disulfide	50	44.8	90	72-122
56-23-5	Carbon Tetrachloride	50	46.2	92	78-133
108-90-7	Chlorobenzene	50	49.9	100	81-129
75-00-3	Chloroethane	50	44.7	89	68-133
67-66-3	Chloroform	50	48.8	98	72-123
95-49-8	o-Chlorotoluene	50	50.5	101	77-129
106-43-4	p-Chlorotoluene	50	50.9	102	80-134
124-48-1	Dibromochloromethane	50	53.4	107	76-127
96-12-8	1,2-Dibromo-3-chloropropane	50	45.1	90	70-137
106-93-4	1,2-Dibromoethane	50	51.5	103	77-126
75-71-8	Dichlorodifluoromethane	50	50.5	101	68-168
95-50-1	1,2-Dichlorobenzene	50	51.7	103	80-129
541-73-1	1,3-Dichlorobenzene	50	52.6	105	81-129
106-46-7	1,4-Dichlorobenzene	50	52.5	105	76-130
75-34-3	1,1-Dichloroethane	50	47.3	95	73-125
107-06-2	1,2-Dichloroethane	50	49.6	99	74-128
75-35-4	1,1-Dichloroethylene	50	47.3	95	81-136
156-59-2	cis-1,2-Dichloroethylene	50	47.9	96	74-126
156-60-5	trans-1,2-Dichloroethylene	50	52.2	104	70-127
78-87-5	1,2-Dichloropropane	50	50.8	102	74-125
142-28-9	1,3-Dichloropropane	50	49.5	99	76-122
594-20-7	2,2-Dichloropropane	50	44.3	89	77-133
563-58-6	1,1-Dichloropropene	50	46.8	94	75-130
10061-01-5	cis-1,3-Dichloropropene	50	54.6	109	80-123
10061-02-6	trans-1,3-Dichloropropene	50	56.1	112	75-131
100-41-4	Ethylbenzene	50	49.1	98	77-123

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA41344**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1337-BS	Y33808.D	1	02/17/17	EP	n/a	n/a	VY1337

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA41344-3, FA41344-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
87-68-3	Hexachlorobutadiene	50	48.7	97	74-136
591-78-6	2-Hexanone	250	250	100	72-133
98-82-8	Isopropylbenzene	50	51.9	104	80-136
99-87-6	p-Isopropyltoluene	50	52.3	105	77-131
74-83-9	Methyl Bromide	50	45.3	91	65-139
74-87-3	Methyl Chloride	50	44.6	89	71-144
74-95-3	Methylene Bromide	50	52.1	104	74-124
75-09-2	Methylene Chloride	50	50.8	102	74-137
108-10-1	4-Methyl-2-pentanone (MIBK)	250	252	101	76-132
1634-04-4	Methyl Tert Butyl Ether	50	45.7	91	77-120
91-20-3	Naphthalene	50	56.3	113	79-129
103-65-1	n-Propylbenzene	50	50.9	102	80-135
100-42-5	Styrene	50	56.0	112	78-125
630-20-6	1,1,1,2-Tetrachloroethane	50	51.3	103	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	46.8	94	71-126
127-18-4	Tetrachloroethylene	50	48.7	97	79-130
108-88-3	Toluene	50	47.6	95	76-124
87-61-6	1,2,3-Trichlorobenzene	50	52.8	106	77-128
120-82-1	1,2,4-Trichlorobenzene	50	56.3	113	78-130
71-55-6	1,1,1-Trichloroethane	50	44.5	89	70-129
79-00-5	1,1,2-Trichloroethane	50	50.9	102	74-124
79-01-6	Trichloroethylene	50	48.2	96	75-128
75-69-4	Trichlorofluoromethane	50	47.3	95	73-145
96-18-4	1,2,3-Trichloropropane	50	47.7	95	74-127
95-63-6	1,2,4-Trimethylbenzene	50	51.3	103	74-123
108-67-8	1,3,5-Trimethylbenzene	50	50.0	100	73-122
108-05-4	Vinyl Acetate	250	273	109	48-164
75-01-4	Vinyl Chloride	50	46.2	92	76-141
	m,p-Xylene	100	98.0	98	80-128
95-47-6	o-Xylene	50	53.4	107	80-132

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	75-124%
17060-07-0	1,2-Dichloroethane-D4	97%	72-135%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA41344
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY1337-BS	Y33808.D	1	02/17/17	EP	n/a	n/a	VY1337

The QC reported here applies to the following samples: Method: SW846 8260B

FA41344-3, FA41344-4

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	98%	75-126%
460-00-4	4-Bromofluorobenzene	103%	71-133%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA41344

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41332-1MS	Y33812.D	1	02/17/17	EP	n/a	n/a	VY1337
FA41332-1MSD	Y33813.D	1	02/17/17	EP	n/a	n/a	VY1337
FA41332-1	Y33809.D	1	02/17/17	EP	n/a	n/a	VY1337

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41344-3, FA41344-4

CAS No.	Compound	FA41332-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	39 U	307	258	84	307	294	96	13	61-152/27
71-43-2	Benzene	3.9 U	61.5	50.5	82	61.5	52.5	85	4	76-126/26
108-86-1	Bromobenzene	3.9 U	61.5	53.1	86	61.5	53.0	86	0	76-122/32
74-97-5	Bromochloromethane	3.9 U	61.5	54.9	89	61.5	59.3	96	8	77-120/24
75-27-4	Bromodichloromethane	3.9 U	61.5	58.3	95	61.5	60.7	99	4	74-130/25
75-25-2	Bromoform	3.9 U	61.5	60.3	98	61.5	63.9	104	6	76-127/26
78-93-3	2-Butanone (MEK)	20 U	307	258	84	307	282	92	9	75-137/25
104-51-8	n-Butylbenzene	3.9 U	61.5	56.4	92	61.5	56.9	93	1	71-128/35
135-98-8	sec-Butylbenzene	3.9 U	61.5	55.2	90	61.5	55.7	91	1	79-135/34
98-06-6	tert-Butylbenzene	3.9 U	61.5	53.5	87	61.5	54.4	88	2	77-133/34
75-15-0	Carbon Disulfide	3.9 U	61.5	47.0	76	61.5	53.0	86	12	72-122/29
56-23-5	Carbon Tetrachloride	3.9 U	61.5	50.0	81	61.5	53.8	87	7	78-133/29
108-90-7	Chlorobenzene	3.9 U	61.5	56.7	92	61.5	57.2	93	1	81-129/29
75-00-3	Chloroethane	3.9 U	61.5	49.4	80	61.5	56.7	92	14	68-133/29
67-66-3	Chloroform	3.9 U	61.5	53.9	88	61.5	57.6	94	7	72-123/26
95-49-8	o-Chlorotoluene	3.9 U	61.5	55.9	91	61.5	55.7	91	0	77-129/33
106-43-4	p-Chlorotoluene	3.9 U	61.5	58.4	95	61.5	60.0	98	3	80-134/33
124-48-1	Dibromochloromethane	3.9 U	61.5	59.0	96	61.5	61.5	100	4	76-127/27
96-12-8	1,2-Dibromo-3-chloropropane	3.9 U	61.5	48.4	79	61.5	50.3	82	4	70-137/29
106-93-4	1,2-Dibromoethane	3.9 U	61.5	57.2	93	61.5	57.7	94	1	77-126/26
75-71-8	Dichlorodifluoromethane	3.9 U	61.5	43.4	71	61.5	51.3	83	17	68-168/29
95-50-1	1,2-Dichlorobenzene	3.9 U	61.5	58.6	95	61.5	59.0	96	1	80-129/32
541-73-1	1,3-Dichlorobenzene	3.9 U	61.5	59.6	97	61.5	60.1	98	1	81-129/33
106-46-7	1,4-Dichlorobenzene	3.9 U	61.5	59.8	97	61.5	60.9	99	2	76-130/32
75-34-3	1,1-Dichloroethane	3.9 U	61.5	54.0	88	61.5	55.4	90	3	73-125/27
107-06-2	1,2-Dichloroethane	3.9 U	61.5	58.1	94	61.5	60.7	99	4	74-128/23
75-35-4	1,1-Dichloroethylene	3.9 U	61.5	49.3	80*	61.5	56.8	92	14	81-136/28
156-59-2	cis-1,2-Dichloroethylene	3.9 U	61.5	49.8	81	61.5	53.9	88	8	74-126/26
156-60-5	trans-1,2-Dichloroethylene	3.9 U	61.5	55.1	90	61.5	60.8	99	10	70-127/27
78-87-5	1,2-Dichloropropane	3.9 U	61.5	55.3	90	61.5	58.0	94	5	74-125/25
142-28-9	1,3-Dichloropropane	3.9 U	61.5	56.9	93	61.5	58.0	94	2	76-122/26
594-20-7	2,2-Dichloropropane	3.9 U	61.5	45.3	74*	61.5	49.2	80	8	77-133/28
563-58-6	1,1-Dichloropropene	3.9 U	61.5	51.9	84	61.5	53.4	87	3	75-130/28
10061-01-5	cis-1,3-Dichloropropene	3.9 U	61.5	61.7	100	61.5	63.3	103	3	80-123/26
10061-02-6	trans-1,3-Dichloropropene	3.9 U	61.5	59.6	97	61.5	62.1	101	4	75-131/28
100-41-4	Ethylbenzene	3.9 U	61.5	53.1	86	61.5	54.0	88	2	77-123/31

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA41344

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41332-1MS	Y33812.D	1	02/17/17	EP	n/a	n/a	VY1337
FA41332-1MSD	Y33813.D	1	02/17/17	EP	n/a	n/a	VY1337
FA41332-1	Y33809.D	1	02/17/17	EP	n/a	n/a	VY1337

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41344-3, FA41344-4

CAS No.	Compound	FA41332-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	3.9 U	61.5	54.8	89	61.5	53.4	87	3	74-136/38
591-78-6	2-Hexanone	20 U	307	273	89	307	290	94	6	72-133/26
98-82-8	Isopropylbenzene	3.9 U	61.5	58.0	94	61.5	58.8	96	1	80-136/32
99-87-6	p-Isopropyltoluene	3.9 U	61.5	55.9	91	61.5	56.2	91	1	77-131/34
74-83-9	Methyl Bromide	3.9 U	61.5	47.2	77	61.5	55.7	91	17	65-139/31
74-87-3	Methyl Chloride	3.9 U	61.5	43.6	71	61.5	51.7	84	17	71-144/27
74-95-3	Methylene Bromide	3.9 U	61.5	58.7	95	61.5	61.5	100	5	74-124/24
75-09-2	Methylene Chloride	7.9 U	61.5	65.4	106	61.5	69.9	114	7	74-137/28
108-10-1	4-Methyl-2-pentanone (MIBK)	20 U	307	276	90	307	294	96	6	76-132/26
1634-04-4	Methyl Tert Butyl Ether	3.9 U	61.5	59.0	96	61.5	64.0	104	8	77-120/24
91-20-3	Naphthalene	3.9 U	61.5	56.4	92	61.5	58.0	94	3	79-129/33
103-65-1	n-Propylbenzene	3.9 U	61.5	56.2	91	61.5	55.9	91	1	80-135/33
100-42-5	Styrene	3.9 U	61.5	58.8	96	61.5	60.7	99	3	78-125/30
630-20-6	1,1,1,2-Tetrachloroethane	3.9 U	61.5	56.4	92	61.5	59.1	96	5	78-126/27
79-34-5	1,1,2,2-Tetrachloroethane	3.9 U	61.5	54.0	88	61.5	54.2	88	0	71-126/30
127-18-4	Tetrachloroethylene	3.9 U	61.5	53.7	87	61.5	54.3	88	1	79-130/31
108-88-3	Toluene	3.9 U	61.5	50.1	81	61.5	50.8	83	1	76-124/30
87-61-6	1,2,3-Trichlorobenzene	3.9 U	61.5	58.3	95	61.5	58.6	95	1	77-128/35
120-82-1	1,2,4-Trichlorobenzene	3.9 U	61.5	62.5	102	61.5	62.3	101	0	78-130/34
71-55-6	1,1,1-Trichloroethane	3.9 U	61.5	49.4	80	61.5	53.0	86	7	70-129/27
79-00-5	1,1,2-Trichloroethane	3.9 U	61.5	57.7	94	61.5	58.3	95	1	74-124/28
79-01-6	Trichloroethylene	3.9 U	61.5	51.8	84	61.5	54.2	88	5	75-128/27
75-69-4	Trichlorofluoromethane	3.9 U	61.5	48.0	78	61.5	52.7	86	9	73-145/31
96-18-4	1,2,3-Trichloropropane	3.9 U	61.5	52.2	85	61.5	52.8	86	1	74-127/27
95-63-6	1,2,4-Trimethylbenzene	3.9 U	61.5	55.4	90	61.5	55.6	90	0	74-123/34
108-67-8	1,3,5-Trimethylbenzene	3.9 U	61.5	54.5	89	61.5	54.2	88	1	73-122/33
108-05-4	Vinyl Acetate	20 U	307	220	72	307	206	67	7	48-164/37
75-01-4	Vinyl Chloride	3.9 U	61.5	42.7	69*	61.5	54.1	88	24	76-141/27
	m,p-Xylene	7.9 U	123	108	88	123	111	90	3	80-128/30
95-47-6	o-Xylene	3.9 U	61.5	59.9	97	61.5	60.8	99	1	80-132/30

CAS No.	Surrogate Recoveries	MS	MSD	FA41332-1	Limits
1868-53-7	Dibromofluoromethane	101%	105%	109%	75-124%
17060-07-0	1,2-Dichloroethane-D4	100%	103%	112%	72-135%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: FA41344

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41332-1MS	Y33812.D	1	02/17/17	EP	n/a	n/a	VY1337
FA41332-1MSD	Y33813.D	1	02/17/17	EP	n/a	n/a	VY1337
FA41332-1	Y33809.D	1	02/17/17	EP	n/a	n/a	VY1337

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41344-3, FA41344-4

CAS No.	Surrogate Recoveries	MS	MSD	FA41332-1	Limits
2037-26-5	Toluene-D8	98%	96%	101%	75-126%
460-00-4	4-Bromofluorobenzene	101%	98%	107%	71-133%

* = Outside of Control Limits.



Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA41344
Account: GFLEMFLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31677
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 02/21/17

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.7	1.8		
Antimony	1.0	.05	.065		
Arsenic	0.50	.065	.1	-0.060	<0.50
Barium	10	.05	.05		
Beryllium	0.25	.01	.025		
Cadmium	0.20	.01	.025		
Calcium	250	2.5	2.5		
Chromium	0.50	.05	.05		
Cobalt	2.5	.01	.025		
Copper	1.3	.05	.05		
Iron	15	.85	.85		
Lead	1.0	.05	.05		
Magnesium	250	1.8	1.8		
Manganese	0.75	.025	.025		
Molybdenum	2.5	.015	.025		
Nickel	2.0	.02	.025		
Potassium	500	10	10		
Selenium	1.0	.12	.12		
Silver	0.50	.035	.041		
Sodium	500	25	25		
Strontium	0.50	.025	.025		
Thallium	0.50	.055	.055		
Tin	2.5	.045	.045		
Titanium	0.50	.025	.025		
Vanadium	2.5	.025	.025		
Zinc	1.0	.15	.15		

Associated samples MP31677: FA41344-1, FA41344-2, FA41344-3, FA41344-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA41344
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31677
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date: 02/21/17 02/21/17

Metal	FA41332-1 Original	DUP	RPD	QC Limits	FA41332-1 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic	0.40	0.40	0.0	0-20	0.40	65.2	82.6	78.4N(a)	80-120
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP31677: FA41344-1, FA41344-2, FA41344-3, FA41344-4

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA41344
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31677
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date: 02/21/17

Metal	FA41332-1 Original MSD	Spike lot MPFLICP2 % Rec	MSD RPD	QC Limit
Aluminum				
Antimony				
Arsenic	0.40	65.8	83.3	78.5N(a) 0.9
Barium	anr			20
Beryllium				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron				
Lead	anr			
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP31677: FA41344-1, FA41344-2, FA41344-3, FA41344-4

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA41344

Account: GFLEMFLT - Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31677

Methods: SW846 6010C

Matrix Type: SOLID

Units: mg/kg

Prep Date: 02/21/17

Metal	BSP Result	Spike lot MPFLICP2 % Rec	QC Limits
Aluminum			
Antimony			
Arsenic	99.4	100	99.4 80-120
Barium	anr		
Beryllium			
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt			
Copper			
Iron			
Lead	anr		
Magnesium			
Manganese			
Molybdenum			
Nickel			
Potassium			
Selenium	anr		
Silver	anr		
Sodium			
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc			

Associated samples MP31677: FA41344-1, FA41344-2, FA41344-3, FA41344-4

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA41344
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31677
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: ug/l

Prep Date: 02/21/17

Metal	FA41332-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	11.4	12.9	13.2 (a)	0-10
Barium	anr			
Beryllium				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron				
Lead	anr			
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP31677: FA41344-1, FA41344-2, FA41344-3, FA41344-4

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: FA41344
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31677
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: ug/l

Prep Date:

02/21/17

Metal	Sample ml	Final ml	FA41332-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic	9.8	10	11.4	11.172	96	0.2	5	100	84.8	80-120
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP31677: FA41344-1, FA41344-2, FA41344-3, FA41344-4

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested

Technical Report for

Gannett Fleming

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

57524

SGS Accutest Job Number: FA41344R

Sampling Date: 02/16/17

Report to:

Gannett Fleming
West Lake Corporate Center 9119 Corporate Lake Dr, Suite 150
Tampa, FL 33634-6323
agetshell@gfnet.com; tfalkner@gfnet.com

ATTN: Aaron Getchell

Total number of pages in report: 39



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.



Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001)
DoD ELAP(L-A-B L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177),
AK, AR, GA, IA, KY, MA, NV, OK, OR, UT, WA

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Test results relate only to samples analyzed.

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Sample Summary

Gannett Fleming

Job No: FA41344R

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FA41344-1R	02/16/17	15:35	ASRF 02/16/17	SO	Soil	B-11 6-8
FA41344-2R	02/16/17	16:00	ASRF 02/16/17	SO	Soil	B-10 6-8
FA41344-3R	02/16/17	16:10	ASRF 02/16/17	SO	Soil	B-5R 0-2
FA41344-4R	02/16/17	16:20	ASRF 02/16/17	SO	Soil	B-5R 6-8

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: FA41344R
Account: Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Collected: 02/16/17

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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FA41344-1R B-11 6-8

No hits reported in this sample.

FA41344-2R B-10 6-8

No hits reported in this sample.

FA41344-3R B-5R 0-2

Acetone	0.0147 J	0.025	0.010	mg/l	SW846 8260B
n-Butylbenzene	0.0014	0.0010	0.00023	mg/l	SW846 8260B
sec-Butylbenzene	0.0014	0.0010	0.00024	mg/l	SW846 8260B
Carbon Disulfide	0.00092 J	0.0020	0.00053	mg/l	SW846 8260B
Ethylbenzene	0.0143	0.0010	0.00036	mg/l	SW846 8260B
Isopropylbenzene	0.0029	0.0010	0.00022	mg/l	SW846 8260B
p-Isopropyltoluene	0.00078 J	0.0010	0.00021	mg/l	SW846 8260B
Naphthalene	0.0412	0.0050	0.0010	mg/l	SW846 8260B
n-Propylbenzene	0.0089	0.0010	0.00029	mg/l	SW846 8260B
Tetrachloroethylene	0.0017	0.0010	0.00022	mg/l	SW846 8260B
Toluene	0.00050 J	0.0010	0.00030	mg/l	SW846 8260B
1,2,4-Trimethylbenzene ^a	0.0158	0.0010	0.00032	mg/l	SW846 8260B
1,3,5-Trimethylbenzene ^a	0.0019	0.0010	0.00027	mg/l	SW846 8260B
m,p-Xylene	0.0011 J	0.0020	0.00047	mg/l	SW846 8260B

FA41344-4R B-5R 6-8

Acetone	0.0184 J	0.025	0.010	mg/l	SW846 8260B
n-Butylbenzene	0.0020	0.0010	0.00023	mg/l	SW846 8260B
sec-Butylbenzene	0.0017	0.0010	0.00024	mg/l	SW846 8260B
Carbon Disulfide	0.0012 J	0.0020	0.00053	mg/l	SW846 8260B
Ethylbenzene	0.0153	0.0010	0.00036	mg/l	SW846 8260B
Isopropylbenzene	0.0048	0.0010	0.00022	mg/l	SW846 8260B
p-Isopropyltoluene	0.00051 J	0.0010	0.00021	mg/l	SW846 8260B
Methyl Tert Butyl Ether	0.00025 J	0.0010	0.00023	mg/l	SW846 8260B
Naphthalene	0.0506	0.0050	0.0010	mg/l	SW846 8260B
n-Propylbenzene	0.0202	0.0010	0.00029	mg/l	SW846 8260B
Tetrachloroethylene	0.0026	0.0010	0.00022	mg/l	SW846 8260B
Toluene	0.00046 J	0.0010	0.00030	mg/l	SW846 8260B
1,2,4-Trimethylbenzene ^a	0.0292	0.0010	0.00032	mg/l	SW846 8260B
1,3,5-Trimethylbenzene ^a	0.00046 J	0.0010	0.00027	mg/l	SW846 8260B
m,p-Xylene	0.0017 J	0.0020	0.00047	mg/l	SW846 8260B
Arsenic	0.20	0.010		mg/l	SW846 6010C

(a) Associated BS recovery outside control limits.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	B-11 6-8	Date Sampled:	02/16/17
Lab Sample ID:	FA41344-1R	Date Received:	02/16/17
Matrix:	SO - Soil	Percent Solids:	85.1
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 0.010		0.010	mg/l	1	03/01/17	03/01/17 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13857
(2) Prep QC Batch: MP31721

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Report of Analysis

Client Sample ID:	B-10 6-8	Date Sampled:	02/16/17
Lab Sample ID:	FA41344-2R	Date Received:	02/16/17
Matrix:	SO - Soil	Percent Solids:	84.7
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 0.010		0.010	mg/l	1	03/01/17	03/01/17 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13857
(2) Prep QC Batch: MP31721

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Report of Analysis

Client Sample ID:	B-5R 0-2		
Lab Sample ID:	FA41344-3R	Date Sampled:	02/16/17
Matrix:	SO - Soil	Date Received:	02/16/17
Method:	SW846 8260B SW846 1312	Percent Solids:	93.3
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0101209.D	1	03/02/17	MM	02/28/17	OP63987	VN4621
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

SPLP Leachate method SW846 1312

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
67-64-1	Acetone	0.0147		0.025	0.010	mg/l	J
71-43-2	Benzene	ND		0.0010	0.00031	mg/l	
108-86-1	Bromobenzene	ND		0.0010	0.00037	mg/l	
74-97-5	Bromochloromethane	ND		0.0010	0.00045	mg/l	
75-27-4	Bromodichloromethane	ND		0.0010	0.00024	mg/l	
75-25-2	Bromoform	ND		0.0010	0.00041	mg/l	
78-93-3	2-Butanone (MEK)	ND		0.0050	0.0020	mg/l	
104-51-8	n-Butylbenzene	0.0014		0.0010	0.00023	mg/l	
135-98-8	sec-Butylbenzene	0.0014		0.0010	0.00024	mg/l	
98-06-6	tert-Butylbenzene	ND		0.0010	0.00031	mg/l	
75-15-0	Carbon Disulfide	0.00092		0.0020	0.00053	mg/l	J
56-23-5	Carbon Tetrachloride	ND		0.0010	0.00036	mg/l	
108-90-7	Chlorobenzene	ND		0.0010	0.00020	mg/l	
75-00-3	Chloroethane	ND		0.0020	0.00067	mg/l	
67-66-3	Chloroform	ND		0.0010	0.00030	mg/l	
95-49-8	o-Chlorotoluene	ND		0.0010	0.00022	mg/l	
106-43-4	p-Chlorotoluene	ND		0.0010	0.00031	mg/l	
124-48-1	Dibromochloromethane	ND		0.0010	0.00028	mg/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.0050	0.0010	mg/l	
106-93-4	1,2-Dibromoethane	ND		0.0020	0.00028	mg/l	
75-71-8	Dichlorodifluoromethane	ND		0.0020	0.00050	mg/l	
95-50-1	1,2-Dichlorobenzene	ND		0.0010	0.00032	mg/l	
541-73-1	1,3-Dichlorobenzene	ND		0.0010	0.00022	mg/l	
106-46-7	1,4-Dichlorobenzene	ND		0.0010	0.00026	mg/l	
75-34-3	1,1-Dichloroethane	ND		0.0010	0.00034	mg/l	
107-06-2	1,2-Dichloroethane	ND		0.0010	0.00031	mg/l	
75-35-4	1,1-Dichloroethylene	ND		0.0010	0.00032	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND		0.0010	0.00028	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND		0.0010	0.00022	mg/l	
78-87-5	1,2-Dichloropropane	ND		0.0010	0.00043	mg/l	
142-28-9	1,3-Dichloropropane	ND		0.0010	0.00031	mg/l	
594-20-7	2,2-Dichloropropane	ND		0.0010	0.00024	mg/l	

ND = Not detected MDL = Method Detection Limit

MCL = Maximum Contamination Level (not available)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-5R 0-2	Date Sampled:	02/16/17
Lab Sample ID:	FA41344-3R	Date Received:	02/16/17
Matrix:	SO - Soil	Percent Solids:	93.3
Method:	SW846 8260B SW846 1312		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

SPLP Leachate method SW846 1312

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND		0.0010	0.00034	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND		0.0010	0.00029	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND		0.0010	0.00021	mg/l	
100-41-4	Ethylbenzene	0.0143		0.0010	0.00036	mg/l	
87-68-3	Hexachlorobutadiene	ND		0.0020	0.00030	mg/l	
591-78-6	2-Hexanone	ND		0.010	0.0020	mg/l	
98-82-8	Isopropylbenzene	0.0029		0.0010	0.00022	mg/l	
99-87-6	p-Isopropyltoluene	0.00078		0.0010	0.00021	mg/l	J
74-83-9	Methyl Bromide	ND		0.0020	0.00059	mg/l	
74-87-3	Methyl Chloride	ND		0.0020	0.00050	mg/l	
74-95-3	Methylene Bromide	ND		0.0020	0.00037	mg/l	
75-09-2	Methylene Chloride	ND		0.0050	0.0020	mg/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.0050	0.0010	mg/l	
1634-04-4	Methyl Tert Butyl Ether	ND		0.0010	0.00023	mg/l	
91-20-3	Naphthalene	0.0412		0.0050	0.0010	mg/l	
103-65-1	n-Propylbenzene	0.0089		0.0010	0.00029	mg/l	
100-42-5	Styrene	ND		0.0010	0.00022	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.0010	0.00028	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.0010	0.00030	mg/l	
127-18-4	Tetrachloroethylene	0.0017		0.0010	0.00022	mg/l	
108-88-3	Toluene	0.00050		0.0010	0.00030	mg/l	J
87-61-6	1,2,3-Trichlorobenzene	ND		0.0020	0.00061	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND		0.0020	0.00050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND		0.0010	0.00025	mg/l	
79-00-5	1,1,2-Trichloroethane	ND		0.0010	0.00047	mg/l	
79-01-6	Trichloroethylene	ND		0.0010	0.00035	mg/l	
75-69-4	Trichlorofluoromethane	ND		0.0020	0.00050	mg/l	
96-18-4	1,2,3-Trichloropropane	ND		0.0020	0.00063	mg/l	
95-63-6	1,2,4-Trimethylbenzene ^a	0.0158		0.0010	0.00032	mg/l	
108-67-8	1,3,5-Trimethylbenzene ^a	0.0019		0.0010	0.00027	mg/l	
108-05-4	Vinyl Acetate	ND		0.010	0.0020	mg/l	
75-01-4	Vinyl Chloride	ND		0.0010	0.00041	mg/l	
	m,p-Xylene	0.0011		0.0020	0.00047	mg/l	J
95-47-6	o-Xylene	ND		0.0010	0.00026	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	99%		85-112%

ND = Not detected MDL = Method Detection Limit
MCL = Maximum Contamination Level (not available)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B-5R 0-2	Date Sampled: 02/16/17
Lab Sample ID: FA41344-3R	Date Received: 02/16/17
Matrix: SO - Soil	Percent Solids: 93.3
Method: SW846 8260B SW846 1312	
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA	

VOA 8260 List

SPLP Leachate method SW846 1312

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	102%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
MCL = Maximum Contamination Level (not available)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-5R 0-2	Date Sampled:	02/16/17
Lab Sample ID:	FA41344-3R	Date Received:	02/16/17
Matrix:	SO - Soil	Percent Solids:	93.3
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 0.010		0.010	mg/l	1	03/01/17	03/01/17 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13857
(2) Prep QC Batch: MP31721

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Report of Analysis

Client Sample ID:	B-5R 6-8		
Lab Sample ID:	FA41344-4R	Date Sampled:	02/16/17
Matrix:	SO - Soil	Date Received:	02/16/17
Method:	SW846 8260B SW846 1312	Percent Solids:	83.7
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0101211.D	1	03/02/17	MM	02/28/17	OP63987	VN4621
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

SPLP Leachate method SW846 1312

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
67-64-1	Acetone	0.0184		0.025	0.010	mg/l	J
71-43-2	Benzene	ND		0.0010	0.00031	mg/l	
108-86-1	Bromobenzene	ND		0.0010	0.00037	mg/l	
74-97-5	Bromochloromethane	ND		0.0010	0.00045	mg/l	
75-27-4	Bromodichloromethane	ND		0.0010	0.00024	mg/l	
75-25-2	Bromoform	ND		0.0010	0.00041	mg/l	
78-93-3	2-Butanone (MEK)	ND		0.0050	0.0020	mg/l	
104-51-8	n-Butylbenzene	0.0020		0.0010	0.00023	mg/l	
135-98-8	sec-Butylbenzene	0.0017		0.0010	0.00024	mg/l	
98-06-6	tert-Butylbenzene	ND		0.0010	0.00031	mg/l	
75-15-0	Carbon Disulfide	0.0012		0.0020	0.00053	mg/l	J
56-23-5	Carbon Tetrachloride	ND		0.0010	0.00036	mg/l	
108-90-7	Chlorobenzene	ND		0.0010	0.00020	mg/l	
75-00-3	Chloroethane	ND		0.0020	0.00067	mg/l	
67-66-3	Chloroform	ND		0.0010	0.00030	mg/l	
95-49-8	o-Chlorotoluene	ND		0.0010	0.00022	mg/l	
106-43-4	p-Chlorotoluene	ND		0.0010	0.00031	mg/l	
124-48-1	Dibromochloromethane	ND		0.0010	0.00028	mg/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.0050	0.0010	mg/l	
106-93-4	1,2-Dibromoethane	ND		0.0020	0.00028	mg/l	
75-71-8	Dichlorodifluoromethane	ND		0.0020	0.00050	mg/l	
95-50-1	1,2-Dichlorobenzene	ND		0.0010	0.00032	mg/l	
541-73-1	1,3-Dichlorobenzene	ND		0.0010	0.00022	mg/l	
106-46-7	1,4-Dichlorobenzene	ND		0.0010	0.00026	mg/l	
75-34-3	1,1-Dichloroethane	ND		0.0010	0.00034	mg/l	
107-06-2	1,2-Dichloroethane	ND		0.0010	0.00031	mg/l	
75-35-4	1,1-Dichloroethylene	ND		0.0010	0.00032	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND		0.0010	0.00028	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND		0.0010	0.00022	mg/l	
78-87-5	1,2-Dichloropropane	ND		0.0010	0.00043	mg/l	
142-28-9	1,3-Dichloropropane	ND		0.0010	0.00031	mg/l	
594-20-7	2,2-Dichloropropane	ND		0.0010	0.00024	mg/l	

ND = Not detected MDL = Method Detection Limit

MCL = Maximum Contamination Level (not available)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-5R 6-8	Date Sampled:	02/16/17
Lab Sample ID:	FA41344-4R	Date Received:	02/16/17
Matrix:	SO - Soil	Percent Solids:	83.7
Method:	SW846 8260B SW846 1312		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

SPLP Leachate method SW846 1312

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND		0.0010	0.00034	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND		0.0010	0.00029	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND		0.0010	0.00021	mg/l	
100-41-4	Ethylbenzene	0.0153		0.0010	0.00036	mg/l	
87-68-3	Hexachlorobutadiene	ND		0.0020	0.00030	mg/l	
591-78-6	2-Hexanone	ND		0.010	0.0020	mg/l	
98-82-8	Isopropylbenzene	0.0048		0.0010	0.00022	mg/l	
99-87-6	p-Isopropyltoluene	0.00051		0.0010	0.00021	mg/l	J
74-83-9	Methyl Bromide	ND		0.0020	0.00059	mg/l	
74-87-3	Methyl Chloride	ND		0.0020	0.00050	mg/l	
74-95-3	Methylene Bromide	ND		0.0020	0.00037	mg/l	
75-09-2	Methylene Chloride	ND		0.0050	0.0020	mg/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.0050	0.0010	mg/l	
1634-04-4	Methyl Tert Butyl Ether	0.00025		0.0010	0.00023	mg/l	J
91-20-3	Naphthalene	0.0506		0.0050	0.0010	mg/l	
103-65-1	n-Propylbenzene	0.0202		0.0010	0.00029	mg/l	
100-42-5	Styrene	ND		0.0010	0.00022	mg/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.0010	0.00028	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.0010	0.00030	mg/l	
127-18-4	Tetrachloroethylene	0.0026		0.0010	0.00022	mg/l	
108-88-3	Toluene	0.00046		0.0010	0.00030	mg/l	J
87-61-6	1,2,3-Trichlorobenzene	ND		0.0020	0.00061	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND		0.0020	0.00050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND		0.0010	0.00025	mg/l	
79-00-5	1,1,2-Trichloroethane	ND		0.0010	0.00047	mg/l	
79-01-6	Trichloroethylene	ND		0.0010	0.00035	mg/l	
75-69-4	Trichlorofluoromethane	ND		0.0020	0.00050	mg/l	
96-18-4	1,2,3-Trichloropropane	ND		0.0020	0.00063	mg/l	
95-63-6	1,2,4-Trimethylbenzene ^a	0.0292		0.0010	0.00032	mg/l	
108-67-8	1,3,5-Trimethylbenzene ^a	0.00046		0.0010	0.00027	mg/l	J
108-05-4	Vinyl Acetate	ND		0.010	0.0020	mg/l	
75-01-4	Vinyl Chloride	ND		0.0010	0.00041	mg/l	
	m,p-Xylene	0.0017		0.0020	0.00047	mg/l	J
95-47-6	o-Xylene	ND		0.0010	0.00026	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	98%		85-112%

ND = Not detected MDL = Method Detection Limit
MCL = Maximum Contamination Level (not available)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-5R 6-8	Date Sampled:	02/16/17
Lab Sample ID:	FA41344-4R	Date Received:	02/16/17
Matrix:	SO - Soil	Percent Solids:	83.7
Method:	SW846 8260B SW846 1312		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

SPLP Leachate method SW846 1312

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%		83-118%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
MCL = Maximum Contamination Level (not available)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-5R 6-8	Date Sampled:	02/16/17
Lab Sample ID:	FA41344-4R	Date Received:	02/16/17
Matrix:	SO - Soil	Percent Solids:	83.7
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	0.20		0.010	mg/l	1	03/01/17	03/01/17 LM	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA13857
(2) Prep QC Batch: MP31721

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

[illegible]

4.1

FA41344R: Chain of Custody

Page 1 of 4

SGS ACCUTEST - ORLANDO SAMPLE RECEIPT CONFIRMATION

SGS ACCUTEST'S JOB NUMBER: FA 41344 CLIENT: Garnett Fleming PROJECT: TMR Valdosta
DATE/TIME RECEIVED: 02/17/17 1000 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: _____
AIRBILL NUMBERS: 7856 3595 1976

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
☒ TRIP BLANK NOT PROVIDED
☒ TRIP BLANK NOT ON COC
☐ TRIP BLANK INTACT
☐ TRIP BLANK NOT INTACT
☐ RECEIVED WATER TRIP BLANK
☐ RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____
NUMBER OF 5035 FIELD KITS ? 2
NUMBER OF LAB FILTERED METALS ? _____

TEST STRIP LOT#s pH 6-3 230315 pH 10-12 219813A OTHER (specify) _____

SUMMARY OF COMMENTS: _____

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR +0.8
☐ OBSERVED TEMPS: 2.4
☐ CORRECTED TEMPS: 3.2 (USED FOR LIMS)

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
☐ INSUFFICIENT VOLUME FOR ANALYSIS
☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
☐ ID'S ON COC DO NOT MATCH LABEL
☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
☐ % SOLIDS JAR NOT RECEIVED
☐ RESIDUAL CHLORINE PRESENT LOT# _____

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TECHNICIAN SIGNATURE/DATE [Signature] 02/17/17 REVIEWER SIGNATURE/DATE [Signature] 2-17-17

NF 02/16

receipt confirmation 020116.xls

FA41344R: Chain of Custody

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fedEx
FRI - 17 FEB 10:30A
PRIORITY OVERNIGHT
32811
33 ORLA
MCO



FID 8974234 16FEB10 10:04 535273359/4684

FA41344R: Chain of Custody
Page 3 of 4



Job Change Order:

FA41344

Requested Date:	2/24/2017	Received Date:	2/16/2017
Account Name:	Gannett Fleming	Due Date:	2/23/2017
Project Description:	Trademark Metals Recycling; 2000 W Savannah, V	Deliverable:	COMMB
CSR:	andreac	TAT (Days):	7

=====

Sample #: FA41344-1-4

Change:

Dept:

Please analyze samples for SPLP arsenic.

=====

Sample #: FA41344-3,4

Change:

Dept:

Please analyze samples for V8260SPLPSTD.

FA41344R: Chain of Custody

Above Changes Per: Aaron Getchell

Date/Time: 2/24/2017 9:03:54 AM

Page 4 of 4

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

Page 1 of 1



GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Leachate Blank Summary

Page 1 of 3

Job Number: FA41344R**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63987-LB	N0101204.D	1	03/02/17	MM	02/28/17	OP63987	VN4621

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA41344-3R, FA41344-4R

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	

Leachate Blank Summary

Page 2 of 3

Job Number: FA41344R

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63987-LB	N0101204.D	1	03/02/17	MM	02/28/17	OP63987	VN4621

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41344-3R, FA41344-4R

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	0.77	2.0	0.30	ug/l	J
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.95	2.0	0.61	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	79-125%

Leachate Blank Summary

Job Number: FA41344R
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP63987-LB	N0101204.D	1	03/02/17	MM	02/28/17	OP63987	VN4621

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41344-3R, FA41344-4R

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	99% 85-112%
460-00-4	4-Bromofluorobenzene	103% 83-118%

Blank Spike Summary

Page 1 of 3

Job Number: FA41344R**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4621-BS	N0101203.D	1	03/02/17	MM	n/a	n/a	VN4621

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA41344-3R, FA41344-4R

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	117	94	50-147
71-43-2	Benzene	25	30.1	120	81-122
108-86-1	Bromobenzene	25	28.9	116	80-121
74-97-5	Bromochloromethane	25	26.0	104	76-123
75-27-4	Bromodichloromethane	25	27.6	110	79-123
75-25-2	Bromoform	25	24.2	97	66-123
78-93-3	2-Butanone (MEK)	125	120	96	56-143
104-51-8	n-Butylbenzene	25	31.3	125	79-126
135-98-8	sec-Butylbenzene	25	29.2	117	83-133
98-06-6	tert-Butylbenzene	25	27.9	112	80-133
75-15-0	Carbon Disulfide	25	27.7	111	66-148
56-23-5	Carbon Tetrachloride	25	29.3	117	76-136
108-90-7	Chlorobenzene	25	27.0	108	82-124
75-00-3	Chloroethane	25	24.4	98	62-144
67-66-3	Chloroform	25	27.5	110	80-124
95-49-8	o-Chlorotoluene	25	28.4	114	81-127
106-43-4	p-Chlorotoluene	25	26.8	107	83-130
124-48-1	Dibromochloromethane	25	25.9	104	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	22.3	89	64-123
106-93-4	1,2-Dibromoethane	25	25.9	104	75-120
75-71-8	Dichlorodifluoromethane	25	22.5	90	42-167
95-50-1	1,2-Dichlorobenzene	25	26.2	105	82-124
541-73-1	1,3-Dichlorobenzene	25	26.5	106	84-125
106-46-7	1,4-Dichlorobenzene	25	25.3	101	78-120
75-34-3	1,1-Dichloroethane	25	28.8	115	81-122
107-06-2	1,2-Dichloroethane	25	26.2	105	75-125
75-35-4	1,1-Dichloroethylene	25	28.4	114	78-137
156-59-2	cis-1,2-Dichloroethylene	25	27.7	111	78-120
156-60-5	trans-1,2-Dichloroethylene	25	28.7	115	76-127
78-87-5	1,2-Dichloropropane	25	27.2	109	76-124
142-28-9	1,3-Dichloropropane	25	25.7	103	80-118
594-20-7	2,2-Dichloropropane	25	30.1	120	74-139
563-58-6	1,1-Dichloropropene	25	28.4	114	79-131
10061-01-5	cis-1,3-Dichloropropene	25	27.9	112	75-118
10061-02-6	trans-1,3-Dichloropropene	25	28.2	113	80-120
100-41-4	Ethylbenzene	25	30.3	121	81-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA41344R**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4621-BS	N0101203.D	1	03/02/17	MM	n/a	n/a	VN4621

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA41344-3R, FA41344-4R

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
87-68-3	Hexachlorobutadiene	25	27.6	110	75-142
591-78-6	2-Hexanone	125	109	87	61-129
98-82-8	Isopropylbenzene	25	28.6	114	83-132
99-87-6	p-Isopropyltoluene	25	31.1	124	79-130
74-83-9	Methyl Bromide	25	23.0	92	59-143
74-87-3	Methyl Chloride	25	21.6	86	50-159
74-95-3	Methylene Bromide	25	25.5	102	78-119
75-09-2	Methylene Chloride	25	25.3	101	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	120	96	66-122
1634-04-4	Methyl Tert Butyl Ether	25	24.3	97	72-117
91-20-3	Naphthalene	25	24.2	97	63-132
103-65-1	n-Propylbenzene	25	29.2	117	82-133
100-42-5	Styrene	25	28.0	112	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	28.3	113	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	24.9	100	72-120
127-18-4	Tetrachloroethylene	25	28.7	115	76-135
108-88-3	Toluene	25	29.4	118	80-120
87-61-6	1,2,3-Trichlorobenzene	25	24.1	96	68-131
120-82-1	1,2,4-Trichlorobenzene	25	26.6	106	73-129
71-55-6	1,1,1-Trichloroethane	25	26.6	106	75-130
79-00-5	1,1,2-Trichloroethane	25	27.2	109	76-119
79-01-6	Trichloroethylene	25	28.5	114	81-126
75-69-4	Trichlorofluoromethane	25	26.5	106	71-156
96-18-4	1,2,3-Trichloropropane	25	23.7	95	77-120
95-63-6	1,2,4-Trimethylbenzene	25	30.3	121*	79-120
108-67-8	1,3,5-Trimethylbenzene	25	30.2	121*	79-120
108-05-4	Vinyl Acetate	125	124	99	43-154
75-01-4	Vinyl Chloride	25	21.9	88	69-159
	m,p-Xylene	50	58.1	116	79-126
95-47-6	o-Xylene	25	27.1	108	80-127

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	98%	79-125%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA41344R
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN4621-BS	N0101203.D	1	03/02/17	MM	n/a	n/a	VN4621

The QC reported here applies to the following samples: Method: SW846 8260B
FA41344-3R, FA41344-4R

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	102%	85-112%
460-00-4	4-Bromofluorobenzene	100%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA41344R

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41344-3RMS	N0101222.D	1	03/02/17	MM	n/a	n/a	VN4621
FA41344-3RMSD	N0101223.D	1	03/02/17	MM	n/a	n/a	VN4621
FA41344-3R	N0101209.D	1	03/02/17	MM	02/28/17	OP63987	VN4621

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41344-3R, FA41344-4R

CAS No.	Compound	FA41344-3R Spike		MS	MS	Spike	MSD	MSD	RPD	Limits
		ug/l	Q	ug/l	ug/l	%	ug/l	ug/l		Rec/RPD
67-64-1	Acetone	14.7	J	125	169	100	125	160	5	50-147/21
71-43-2	Benzene	ND		25	29.9	120	25	27.1	10	81-122/14
108-86-1	Bromobenzene	ND		25	28.7	115	25	25.3	13	80-121/14
74-97-5	Bromochloromethane	ND		25	26.7	107	25	24.4	9	76-123/14
75-27-4	Bromodichloromethane	ND		25	27.1	108	25	22.5	19	79-123/19
75-25-2	Bromoform	ND		25	22.9	92	25	20.0	14	66-123/21
78-93-3	2-Butanone (MEK)	ND		125	137	110	125	126	8	56-143/18
104-51-8	n-Butylbenzene	1.4		25	31.8	125	25	29.6	7	79-126/16
135-98-8	sec-Butylbenzene	1.4		25	29.7	117	25	26.3	12	83-133/16
98-06-6	tert-Butylbenzene	ND		25	27.6	110	25	24.4	12	80-133/16
75-15-0	Carbon Disulfide	0.92	J	25	24.9	97	25	21.2	16	66-148/23
56-23-5	Carbon Tetrachloride	ND		25	27.6	110	25	24.0	14	76-136/23
108-90-7	Chlorobenzene	ND		25	26.5	106	25	24.0	10	82-124/14
75-00-3	Chloroethane	ND		25	28.0	112	25	21.9	88	24* 62-144/20
67-66-3	Chloroform	ND		25	26.5	106	25	24.6	98	7 80-124/15
95-49-8	o-Chlorotoluene	ND		25	28.9	116	25	25.0	100	14 81-127/15
106-43-4	p-Chlorotoluene	ND		25	26.4	106	25	23.2	93	13 83-130/15
124-48-1	Dibromochloromethane	ND		25	24.9	100	25	21.1	84	17 78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	ND		25	29.3	117	25	25.9	104	12 64-123/18
106-93-4	1,2-Dibromoethane	ND		25	26.9	108	25	24.9	100	8 75-120/13
75-71-8	Dichlorodifluoromethane	ND		25	20.3	81	25	17.8	71	13 42-167/19
95-50-1	1,2-Dichlorobenzene	ND		25	26.6	106	25	23.6	94	12 82-124/14
541-73-1	1,3-Dichlorobenzene	ND		25	26.6	106	25	24.1	96	10 84-125/14
106-46-7	1,4-Dichlorobenzene	ND		25	24.7	99	25	22.6	90	9 78-120/15
75-34-3	1,1-Dichloroethane	ND		25	28.3	113	25	25.8	103	9 81-122/15
107-06-2	1,2-Dichloroethane	ND		25	26.9	108	25	24.1	96	11 75-125/14
75-35-4	1,1-Dichloroethylene	ND		25	27.3	109	25	25.7	103	6 78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND		25	27.6	110	25	25.3	101	9 78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		25	27.8	111	25	25.4	102	9 76-127/17
78-87-5	1,2-Dichloropropane	ND		25	27.7	111	25	25.1	100	10 76-124/14
142-28-9	1,3-Dichloropropane	ND		25	26.1	104	25	23.5	94	10 80-118/13
594-20-7	2,2-Dichloropropane	ND		25	27.3	109	25	24.9	100	9 74-139/17
563-58-6	1,1-Dichloropropene	ND		25	28.0	112	25	25.3	101	10 79-131/16
10061-01-5	cis-1,3-Dichloropropene	ND		25	26.2	105	25	21.6	86	19 75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		25	27.3	109	25	23.0	92	17 80-120/22
100-41-4	Ethylbenzene	14.3		25	44.7	172*	25	40.1	154*	11 81-121/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA41344R

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41344-3RMS	N0101222.D	1	03/02/17	MM	n/a	n/a	VN4621
FA41344-3RMSD	N0101223.D	1	03/02/17	MM	n/a	n/a	VN4621
FA41344-3R	N0101209.D	1	03/02/17	MM	02/28/17	OP63987	VN4621

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41344-3R, FA41344-4R

CAS No.	Compound	FA41344-3R Spike ug/l	Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	ND		25	25.3	101	25	23.1	9	75-142/19
591-78-6	2-Hexanone	ND		125	122	98	125	117	4	61-129/18
98-82-8	Isopropylbenzene	2.9		25	30.9	121	25	28.4	8	83-132/15
99-87-6	p-Isopropyltoluene	0.78	J	25	31.6	126	25	28.3	11	79-130/16
74-83-9	Methyl Bromide	ND		25	23.1	92	25	21.7	6	59-143/19
74-87-3	Methyl Chloride	ND		25	21.0	84	25	19.1	9	50-159/19
74-95-3	Methylene Bromide	ND		25	26.6	106	25	23.2	14	78-119/14
75-09-2	Methylene Chloride	ND		25	25.7	103	25	23.6	9	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		125	131	105	125	125	5	66-122/16
1634-04-4	Methyl Tert Butyl Ether	ND		25	25.6	101	25	23.8	7	72-117/14
91-20-3	Naphthalene	41.2		25	69.4	179*	25	67.8	2	63-132/25
103-65-1	n-Propylbenzene	8.9		25	38.1	145*	25	33.3	13	82-133/15
100-42-5	Styrene	ND		25	26.8	107	25	23.6	13	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		25	27.2	109	25	24.2	12	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	26.6	106	25	23.8	11	72-120/14
127-18-4	Tetrachloroethylene	1.7		25	29.8	114	25	26.4	12	76-135/16
108-88-3	Toluene	0.50	J	25	29.9	118	25	27.2	9	80-120/14
87-61-6	1,2,3-Trichlorobenzene	ND		25	28.4	114	25	27.2	4	68-131/25
120-82-1	1,2,4-Trichlorobenzene	ND		25	28.9	116	25	26.4	9	73-129/20
71-55-6	1,1,1-Trichloroethane	ND		25	26.0	104	25	23.8	9	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		25	29.1	116	25	25.8	12	76-119/14
79-01-6	Trichloroethylene	ND		25	28.1	112	25	25.1	11	81-126/15
75-69-4	Trichlorofluoromethane	ND		25	25.8	103	25	23.2	11	71-156/21
96-18-4	1,2,3-Trichloropropane	ND		25	25.8	103	25	23.3	10	77-120/16
95-63-6	1,2,4-Trimethylbenzene	15.8		25	46.3	178*	25	41.0	12	79-120/18
108-67-8	1,3,5-Trimethylbenzene	1.9		25	32.0	126*	25	28.2	13	79-120/19
108-05-4	Vinyl Acetate	ND		125	131	105	125	118	10	43-154/14
75-01-4	Vinyl Chloride	ND		25	23.3	93	25	21.1	10	69-159/18
	m,p-Xylene	1.1	J	50	57.2	114	50	53.0	8	79-126/15
95-47-6	o-Xylene	ND		25	26.8	107	25	24.6	9	80-127/14

CAS No.	Surrogate Recoveries	MS	MSD	FA41344-3R Limits	
1868-53-7	Dibromofluoromethane	101%	99%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	98%	103%	79-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: FA41344R

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41344-3RMS	N0101222.D	1	03/02/17	MM	n/a	n/a	VN4621
FA41344-3RMSD	N0101223.D	1	03/02/17	MM	n/a	n/a	VN4621
FA41344-3R	N0101209.D	1	03/02/17	MM	02/28/17	OP63987	VN4621

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41344-3R, FA41344-4R

CAS No.	Surrogate Recoveries	MS	MSD	FA41344-3R Limits	
2037-26-5	Toluene-D8	102%	102%	99%	85-112%
460-00-4	4-Bromofluorobenzene	103%	102%	102%	83-118%

* = Outside of Control Limits.

Duplicate Summary

Page 1 of 3

Job Number: FA41344R

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41344-3RDUP	N0101210.D	1	03/02/17	MM	n/a	n/a	VN4621
FA41344-3R	N0101209.D	1	03/02/17	MM	02/28/17	OP63987	VN4621

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41344-3R, FA41344-4R

CAS No.	Compound	FA41344-3R DUP		Q	RPD	Limits
		ug/l	Q ug/l			
67-64-1	Acetone	14.7	J 44.4		101*	21
71-43-2	Benzene	ND	ND		nc	14
108-86-1	Bromobenzene	ND	ND		nc	14
74-97-5	Bromochloromethane	ND	ND		nc	14
75-27-4	Bromodichloromethane	ND	ND		nc	19
75-25-2	Bromoform	ND	ND		nc	21
78-93-3	2-Butanone (MEK)	ND	ND		nc	18
104-51-8	n-Butylbenzene	1.4	0.51	J	93*	16
135-98-8	sec-Butylbenzene	1.4	0.41	J	109*	16
98-06-6	tert-Butylbenzene	ND	ND		nc	16
75-15-0	Carbon Disulfide	0.92	J 0.73	J	23	23
56-23-5	Carbon Tetrachloride	ND	ND		nc	23
108-90-7	Chlorobenzene	ND	ND		nc	14
75-00-3	Chloroethane	ND	ND		nc	20
67-66-3	Chloroform	ND	ND		nc	15
95-49-8	o-Chlorotoluene	ND	ND		nc	15
106-43-4	p-Chlorotoluene	ND	ND		nc	15
124-48-1	Dibromochloromethane	ND	ND		nc	19
96-12-8	1,2-Dibromo-3-chloropropane	ND	ND		nc	18
106-93-4	1,2-Dibromoethane	ND	ND		nc	13
75-71-8	Dichlorodifluoromethane	ND	ND		nc	19
95-50-1	1,2-Dichlorobenzene	ND	ND		nc	14
541-73-1	1,3-Dichlorobenzene	ND	ND		nc	14
106-46-7	1,4-Dichlorobenzene	ND	ND		nc	15
75-34-3	1,1-Dichloroethane	ND	ND		nc	15
107-06-2	1,2-Dichloroethane	ND	ND		nc	14
75-35-4	1,1-Dichloroethylene	ND	ND		nc	18
156-59-2	cis-1,2-Dichloroethylene	ND	ND		nc	15
156-60-5	trans-1,2-Dichloroethylene	ND	ND		nc	17
78-87-5	1,2-Dichloropropane	ND	ND		nc	14
142-28-9	1,3-Dichloropropane	ND	ND		nc	13
594-20-7	2,2-Dichloropropane	ND	ND		nc	17
563-58-6	1,1-Dichloropropene	ND	ND		nc	16
10061-01-5	cis-1,3-Dichloropropene	ND	ND		nc	23
10061-02-6	trans-1,3-Dichloropropene	ND	ND		nc	22
100-41-4	Ethylbenzene	14.3	1.6		160*	14

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA41344R

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41344-3RDUP	N0101210.D	1	03/02/17	MM	n/a	n/a	VN4621
FA41344-3R	N0101209.D	1	03/02/17	MM	02/28/17	OP63987	VN4621

The QC reported here applies to the following samples:
Method: SW846 8260B

FA41344-3R, FA41344-4R

CAS No.	Compound	FA41344-3R DUP		Q	RPD	Limits
		ug/l	Q ug/l			
87-68-3	Hexachlorobutadiene	ND	ND		nc	19
591-78-6	2-Hexanone	ND	ND		nc	18
98-82-8	Isopropylbenzene	2.9	0.53	J	138*	15
99-87-6	p-Isopropyltoluene	0.78	J ND		200*	16
74-83-9	Methyl Bromide	ND	ND		nc	19
74-87-3	Methyl Chloride	ND	ND		nc	19
74-95-3	Methylene Bromide	ND	ND		nc	14
75-09-2	Methylene Chloride	ND	ND		nc	16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	ND		nc	16
1634-04-4	Methyl Tert Butyl Ether	ND	0.31	J	200*	14
91-20-3	Naphthalene	41.2	24.6		50*	25
103-65-1	n-Propylbenzene	8.9	1.9		130*	15
100-42-5	Styrene	ND	ND		nc	23
630-20-6	1,1,1,2-Tetrachloroethane	ND	ND		nc	19
79-34-5	1,1,2,2-Tetrachloroethane	ND	ND		nc	14
127-18-4	Tetrachloroethylene	1.7	1.4		19*	16
108-88-3	Toluene	0.50	J 0.47	J	6	14
87-61-6	1,2,3-Trichlorobenzene	ND	ND		nc	25
120-82-1	1,2,4-Trichlorobenzene	ND	ND		nc	20
71-55-6	1,1,1-Trichloroethane	ND	ND		nc	16
79-00-5	1,1,2-Trichloroethane	ND	ND		nc	14
79-01-6	Trichloroethylene	ND	ND		nc	15
75-69-4	Trichlorofluoromethane	ND	ND		nc	21
96-18-4	1,2,3-Trichloropropane	ND	ND		nc	16
95-63-6	1,2,4-Trimethylbenzene	15.8	1.8		159*	18
108-67-8	1,3,5-Trimethylbenzene	1.9	ND		200*	19
108-05-4	Vinyl Acetate	ND	ND		nc	14
75-01-4	Vinyl Chloride	ND	ND		nc	18
	m,p-Xylene	1.1	J ND		200*	15
95-47-6	o-Xylene	ND	ND		nc	14

CAS No.	Surrogate Recoveries	DUP	FA41344-3R Limits
1868-53-7	Dibromofluoromethane	102%	100% 83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	103% 79-125%

* = Outside of Control Limits.

Duplicate Summary

Page 3 of 3

Job Number: FA41344R

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41344-3RDUP	N0101210.D	1	03/02/17	MM	n/a	n/a	VN4621
FA41344-3R	N0101209.D	1	03/02/17	MM	02/28/17	OP63987	VN4621

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41344-3R, FA41344-4R

CAS No.	Surrogate Recoveries	DUP	FA41344-3R Limits	
2037-26-5	Toluene-D8	99%	99%	85-112%
460-00-4	4-Bromofluorobenzene	101%	102%	83-118%

* = Outside of Control Limits.



Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA41344R
Account: GFLEMFLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31721
Matrix Type: LEACHATE

Methods: SW846 6010C
Units: mg/l

Prep Date: 03/01/17 03/01/17

Metal	RL	IDL	MDL	MB raw	final	MB raw	final
Aluminum	0.20	.014	.014				
Antimony	0.0060	.001	.001				
Arsenic	0.010	.0013	.0013	0.00060	<0.010	0.00070	<0.010
Barium	0.20	.001	.005				
Beryllium	0.0040	.0002	.0002				
Cadmium	0.0050	.0002	.0002				
Calcium	1.0	.05	.05				
Chromium	0.010	.001	.001				
Cobalt	0.050	.0002	.0002				
Copper	0.025	.001	.001				
Iron	0.30	.017	.017				
Lead	0.0050	.001	.0011				
Magnesium	5.0	.035	.035				
Manganese	0.015	.0005	.001				
Molybdenum	0.050	.0003	.0003				
Nickel	0.040	.0004	.0004				
Potassium	10	.2	.2				
Selenium	0.010	.0024	.0029				
Silver	0.010	.0007	.0007				
Sodium	10	.5	.5				
Strontium	0.010	.0005	.0005				
Thallium	0.010	.0011	.0014				
Tin	0.050	.0009	.001				
Titanium	0.010	.0005	.001				
Vanadium	0.050	.0005	.0006				
Zinc	0.020	.003	.01				

Associated samples MP31721: FA41344-1R, FA41344-2R, FA41344-3R, FA41344-4R

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA41344R
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31721
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 03/01/17 03/01/17

Metal	FA41344-1R Original	DUP	RPD	QC Limits	FA41344-1R Original MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum								
Antimony								
Arsenic	0.0015	0.0	200.0(a)	0-20	0.0015	2.0	2.0	99.9
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP31721: FA41344-1R, FA41344-2R, FA41344-3R, FA41344-4R

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA41344R
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31721
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 03/01/17

Metal	FA41344-1R Original	MSD	Spike lot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	0.0015	2.0	2.0	99.9	0.0	20
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP31721: FA41344-1R, FA41344-2R, FA41344-3R, FA41344-4R

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA41344R
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31721
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: mg/l

Prep Date: 03/01/17 03/01/17

Metal	BSP Result	Spike lot MPFLICP2	% Rec	QC Limits	BSP Result	Spike lot MPFLICP2	% Rec	QC Limits
Aluminum								
Antimony								
Arsenic	2.0	2.0	100.0	80-120	1.9	2.0	95.0	80-120
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP31721: FA41344-1R, FA41344-2R, FA41344-3R, FA41344-4R

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA41344R
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP31721
 Matrix Type: LEACHATE

Methods: SW846 6010C
 Units: ug/l

Prep Date: 03/01/17

Metal	FA41344-1R Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	1.50	0.00	100.0(a)	0-10
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP31721: FA41344-1R, FA41344-2R, FA41344-3R, FA41344-4R

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).



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Automated Report

Technical Report for

Gannett Fleming

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

57524

SGS Accutest Job Number: FA41388

Sampling Date: 02/17/17

Report to:

Gannett Fleming
West Lake Corporate Center 9119 Corporate Lake Dr, Suite 150
Tampa, FL 33634-6323
agetshell@gfnet.com; tfalkner@gfnet.com

ATTN: Aaron Getchell

Total number of pages in report: **39**



Test results contained within this data package meet the requirements
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Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

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Sample Summary

Gannett Fleming

Job No: FA41388

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524

Sample Number	Collected		Matrix Code	Type	Client	
	Date	Time By	Received		Sample ID	
FA41388-1	02/17/17	09:02 ASRF	02/18/17	AQ	Ground Water	
					MW-16	
FA41388-2	02/17/17	09:30 ASRF	02/18/17	AQ	Ground Water	
					MW-8R	

Summary of Hits

Page 1 of 1

Job Number: FA41388

Account: Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Collected: 02/17/17

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA41388-1	MW-16					
Tetrachloroethylene		3.3	1.0	0.22	ug/l	SW846 8260B
Methane		0.80	0.50	0.16	ug/l	RSKSOP-147/175
Iron, Ferrous ^a		0.15	0.10		mg/l	SM3500FE B-11
Nitrogen, Nitrate		2.0	0.10		mg/l	EPA 300/SW846 9056A
Sulfate		149	2.0		mg/l	EPA 300/SW846 9056A
FA41388-2	MW-8R					
Benzene		0.54 J	1.0	0.31	ug/l	SW846 8260B
Methane		6.6	0.50	0.16	ug/l	RSKSOP-147/175
Sulfate		301	10		mg/l	EPA 300/SW846 9056A

(a) Field analysis required. Received out of hold time and analyzed by request.



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-16	Date Sampled:	02/17/17
Lab Sample ID:	FA41388-1	Date Received:	02/18/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A03304.D	1	02/21/17	AJ	n/a	n/a	V1A126
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16	Date Sampled:	02/17/17
Lab Sample ID:	FA41388-1	Date Received:	02/18/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	3.3	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	101%		79-125%
2037-26-5	Toluene-D8	99%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16	Date Sampled:	02/17/17
Lab Sample ID:	FA41388-1	Date Received:	02/18/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		83-118%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16	
Lab Sample ID:	FA41388-1	Date Sampled: 02/17/17
Matrix:	AQ - Ground Water	Date Received: 02/18/17
Method:	RSKSOP-147/175	Percent Solids: n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF37283.D	1	02/21/17	EG	n/a	n/a	GFF1459
Run #2							

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	21 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.80	0.50	0.16	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16	Date Sampled:	02/17/17
Lab Sample ID:	FA41388-1	Date Received:	02/18/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Iron, Ferrous ^a	0.15	0.10	mg/l	1	02/24/17 16:05	FN	SM3500FE B-11
Nitrogen, Nitrate	2.0	0.10	mg/l	1	02/18/17 11:00	JK	EPA 300/SW846 9056A
Sulfate	149	2.0	mg/l	1	02/18/17 11:00	JK	EPA 300/SW846 9056A

(a) Field analysis required. Received out of hold time and analyzed by request.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-8R	Date Sampled:	02/17/17
Lab Sample ID:	FA41388-2	Date Received:	02/18/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A03305.D	1	02/21/17	AJ	n/a	n/a	V1A126
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	J
71-43-2	Benzene	0.54	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8R	Date Sampled:	02/17/17
Lab Sample ID:	FA41388-2	Date Received:	02/18/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	97%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8R	Date Sampled:	02/17/17
Lab Sample ID:	FA41388-2	Date Received:	02/18/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		83-118%

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8R	
Lab Sample ID:	FA41388-2	Date Sampled: 02/17/17
Matrix:	AQ - Ground Water	Date Received: 02/18/17
Method:	RSKSOP-147/175	Percent Solids: n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FF37284.D	1	02/21/17	EG	n/a	n/a	GFF1459
Run #2							

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	21 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	6.6	0.50	0.16	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8R	Date Sampled:	02/17/17
Lab Sample ID:	FA41388-2	Date Received:	02/18/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Iron, Ferrous ^a	< 0.10	0.10	mg/l	1	02/24/17 16:05	FN	SM3500FE B-11
Nitrogen, Nitrate ^b	< 0.50	0.50	mg/l	5	02/18/17 11:16	JK	EPA 300/SW846 9056A
Sulfate	301	10	mg/l	5	02/18/17 11:16	JK	EPA 300/SW846 9056A

(a) Field analysis required. Received out of hold time and analyzed by request.
(b) Dilution required due to matrix interference.

RL = Reporting Limit



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

[illegible]

FA41388: Chain of Custody

Page 1 of 3

SGS ACCUTEST - ORLANDO SAMPLE RECEIPT CONFIRMATION

SGS ACCUTEST'S JOB NUMBER: FA41388 CLIENT: Gannett Fleming PROJECT: TMA Valdosta
 DATE/TIME RECEIVED: 02/18/17 930 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: _____
 AIRBILL NUMBERS: 7856 4095 2971

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
- ☒ TRIP BLANK NOT PROVIDED
- ☒ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL-TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____
 NUMBER OF 5035 FIELD KITS ? _____
 NUMBER OF LAB FILTERED METALS ? _____

TEST STRIP LOT# pH 0-3 230315 pH 10-12 219813A OTHER (specify) _____

SUMMARY OF COMMENTS: _____

TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR 10.8
- ☐ OBSERVED TEMPS: 1.6
- ☐ CORRECTED TEMPS: 2.4 (USED FOR LIMS)

SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
- ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
- ☐ INSUFFICIENT VOLUME FOR ANALYSIS
- ☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ☐ ID'S ON COC DO NOT MATCH LABEL
- ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- ☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- ☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
- ☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- ☐ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- ☐ % SOLIDS JAR NOT RECEIVED
- ☐ RESIDUAL CHLORINE PRESENT LOT# _____

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TECHNICIAN SIGNATURE/DATE [Signature] 02/18/17 REVIEWER SIGNATURE/DATE KD 02-18-17

NF 02/16

receipt confirmation 020116.xls

FA41388: Chain of Custody

Page 2 of 3

TRK 7856 4095 2971
0201SATURDAY 9:30A
FIRST OVERNIGHT**XO ORLA**32811
FL-US MCO

FA41388: Chain of Custody
Page 3 of 3



GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 3

Job Number: FA41388**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A126-MB	1A03295.D	1	02/21/17	AJ	n/a	n/a	V1A126

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA41388-1, FA41388-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: FA41388**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A126-MB	1A03295.D	1	02/21/17	AJ	n/a	n/a	V1A126

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA41388-1, FA41388-2

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	79-125%

Method Blank Summary

Job Number: FA41388
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A126-MB	1A03295.D	1	02/21/17	AJ	n/a	n/a	V1A126

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41388-1, FA41388-2

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	97% 85-112%
460-00-4	4-Bromofluorobenzene	102% 83-118%

Blank Spike Summary

Page 1 of 3

Job Number: FA41388**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A126-BS	1A03294.D	1	02/21/17	AJ	n/a	n/a	V1A126

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA41388-1, FA41388-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	113	90	50-147
71-43-2	Benzene	25	27.5	110	81-122
108-86-1	Bromobenzene	25	27.7	111	80-121
74-97-5	Bromochloromethane	25	24.3	97	76-123
75-27-4	Bromodichloromethane	25	24.3	97	79-123
75-25-2	Bromoform	25	26.0	104	66-123
78-93-3	2-Butanone (MEK)	125	102	82	56-143
104-51-8	n-Butylbenzene	25	29.6	118	79-126
135-98-8	sec-Butylbenzene	25	27.5	110	83-133
98-06-6	tert-Butylbenzene	25	26.5	106	80-133
75-15-0	Carbon Disulfide	25	24.6	98	66-148
56-23-5	Carbon Tetrachloride	25	30.1	120	76-136
108-90-7	Chlorobenzene	25	24.2	97	82-124
75-00-3	Chloroethane	25	29.3	117	62-144
67-66-3	Chloroform	25	24.6	98	80-124
95-49-8	o-Chlorotoluene	25	24.7	99	81-127
106-43-4	p-Chlorotoluene	25	24.9	100	83-130
124-48-1	Dibromochloromethane	25	25.2	101	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	23.6	94	64-123
106-93-4	1,2-Dibromoethane	25	22.0	88	75-120
75-71-8	Dichlorodifluoromethane	25	31.8	127	42-167
95-50-1	1,2-Dichlorobenzene	25	24.2	97	82-124
541-73-1	1,3-Dichlorobenzene	25	25.2	101	84-125
106-46-7	1,4-Dichlorobenzene	25	25.2	101	78-120
75-34-3	1,1-Dichloroethane	25	26.6	106	81-122
107-06-2	1,2-Dichloroethane	25	25.2	101	75-125
75-35-4	1,1-Dichloroethylene	25	25.7	103	78-137
156-59-2	cis-1,2-Dichloroethylene	25	25.4	102	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.7	107	76-127
78-87-5	1,2-Dichloropropane	25	23.9	96	76-124
142-28-9	1,3-Dichloropropane	25	21.4	86	80-118
594-20-7	2,2-Dichloropropane	25	30.1	120	74-139
563-58-6	1,1-Dichloropropene	25	25.2	101	79-131
10061-01-5	cis-1,3-Dichloropropene	25	23.9	96	75-118
10061-02-6	trans-1,3-Dichloropropene	25	23.2	93	80-120
100-41-4	Ethylbenzene	25	25.9	104	81-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA41388**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A126-BS	1A03294.D	1	02/21/17	AJ	n/a	n/a	V1A126

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA41388-1, FA41388-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
87-68-3	Hexachlorobutadiene	25	26.9	108	75-142
591-78-6	2-Hexanone	125	94.7	76	61-129
98-82-8	Isopropylbenzene	25	25.3	101	83-132
99-87-6	p-Isopropyltoluene	25	27.8	111	79-130
74-83-9	Methyl Bromide	25	27.5	110	59-143
74-87-3	Methyl Chloride	25	25.1	100	50-159
74-95-3	Methylene Bromide	25	24.7	99	78-119
75-09-2	Methylene Chloride	25	24.8	99	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	111	89	66-122
1634-04-4	Methyl Tert Butyl Ether	25	24.3	97	72-117
91-20-3	Naphthalene	25	30.0	120	63-132
103-65-1	n-Propylbenzene	25	25.4	102	82-133
100-42-5	Styrene	25	24.7	99	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	26.0	104	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	24.9	100	72-120
127-18-4	Tetrachloroethylene	25	25.0	100	76-135
108-88-3	Toluene	25	25.8	103	80-120
87-61-6	1,2,3-Trichlorobenzene	25	28.0	112	68-131
120-82-1	1,2,4-Trichlorobenzene	25	28.2	113	73-129
71-55-6	1,1,1-Trichloroethane	25	25.0	100	75-130
79-00-5	1,1,2-Trichloroethane	25	22.7	91	76-119
79-01-6	Trichloroethylene	25	26.9	108	81-126
75-69-4	Trichlorofluoromethane	25	28.4	114	71-156
96-18-4	1,2,3-Trichloropropane	25	24.9	100	77-120
95-63-6	1,2,4-Trimethylbenzene	25	28.1	112	79-120
108-67-8	1,3,5-Trimethylbenzene	25	28.8	115	79-120
108-05-4	Vinyl Acetate	125	114	91	43-154
75-01-4	Vinyl Chloride	25	25.2	101	69-159
	m,p-Xylene	50	53.4	107	79-126
95-47-6	o-Xylene	25	24.5	98	80-127

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	79-125%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA41388
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A126-BS	1A03294.D	1	02/21/17	AJ	n/a	n/a	V1A126

The QC reported here applies to the following samples: Method: SW846 8260B
FA41388-1, FA41388-2

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	100%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: FA41388

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41287-5MS	1A03316.D	1	02/21/17	AJ	n/a	n/a	V1A126
FA41287-5MSD	1A03317.D	1	02/21/17	AJ	n/a	n/a	V1A126
FA41287-5	1A03300.D	1	02/21/17	AJ	n/a	n/a	V1A126

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41388-1, FA41388-2

CAS No.	Compound	FA41287-5 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	125	106	85	125	110	88	4	50-147/21
71-43-2	Benzene	ND	25	28.2	113	25	28.1	112	0	81-122/14
108-86-1	Bromobenzene	ND	25	28.5	114	25	28.4	114	0	80-121/14
74-97-5	Bromochloromethane	ND	25	23.9	96	25	24.2	97	1	76-123/14
75-27-4	Bromodichloromethane	ND	25	23.4	94	25	23.7	95	1	79-123/19
75-25-2	Bromoform	ND	25	22.2	89	25	22.6	90	2	66-123/21
78-93-3	2-Butanone (MEK)	ND	125	112	90	125	116	93	4	56-143/18
104-51-8	n-Butylbenzene	ND	25	28.5	114	25	28.6	114	0	79-126/16
135-98-8	sec-Butylbenzene	ND	25	27.6	110	25	27.4	110	1	83-133/16
98-06-6	tert-Butylbenzene	ND	25	27.2	109	25	27.1	108	0	80-133/16
75-15-0	Carbon Disulfide	ND	25	18.8	75	25	18.9	76	1	66-148/23
56-23-5	Carbon Tetrachloride	ND	25	31.4	126	25	31.9	128	2	76-136/23
108-90-7	Chlorobenzene	ND	25	25.6	102	25	25.4	102	1	82-124/14
75-00-3	Chloroethane	ND	25	26.8	107	25	27.6	110	3	62-144/20
67-66-3	Chloroform	ND	25	26.1	104	25	25.9	104	1	80-124/15
95-49-8	o-Chlorotoluene	ND	25	25.8	103	25	25.6	102	1	81-127/15
106-43-4	p-Chlorotoluene	ND	25	26.1	104	25	26.1	104	0	83-130/15
124-48-1	Dibromochloromethane	ND	25	24.0	96	25	23.8	95	1	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	ND	25	21.5	86	25	22.5	90	5	64-123/18
106-93-4	1,2-Dibromoethane	ND	25	23.6	94	25	23.0	92	3	75-120/13
75-71-8	Dichlorodifluoromethane	ND	25	33.3	133	25	33.7	135	1	42-167/19
95-50-1	1,2-Dichlorobenzene	ND	25	23.9	96	25	24.0	96	0	82-124/14
541-73-1	1,3-Dichlorobenzene	ND	25	25.5	102	25	25.4	102	0	84-125/14
106-46-7	1,4-Dichlorobenzene	ND	25	25.3	101	25	25.4	102	0	78-120/15
75-34-3	1,1-Dichloroethane	ND	25	27.4	110	25	27.3	109	0	81-122/15
107-06-2	1,2-Dichloroethane	ND	25	27.6	110	25	27.2	109	1	75-125/14
75-35-4	1,1-Dichloroethylene	ND	25	24.6	98	25	24.4	98	1	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND	25	25.6	102	25	25.7	103	0	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND	25	26.2	105	25	26.1	104	0	76-127/17
78-87-5	1,2-Dichloropropane	ND	25	24.3	97	25	24.3	97	0	76-124/14
142-28-9	1,3-Dichloropropane	ND	25	23.7	95	25	23.4	94	1	80-118/13
594-20-7	2,2-Dichloropropane	ND	25	27.6	110	25	27.6	110	0	74-139/17
563-58-6	1,1-Dichloropropene	ND	25	26.7	107	25	26.8	107	0	79-131/16
10061-01-5	cis-1,3-Dichloropropene	ND	25	20.4	82	25	20.7	83	1	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND	25	23.6	94	25	23.3	93	1	80-120/22
100-41-4	Ethylbenzene	ND	25	27.6	110	25	27.2	109	1	81-121/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: FA41388

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41287-5MS	1A03316.D	1	02/21/17	AJ	n/a	n/a	V1A126
FA41287-5MSD	1A03317.D	1	02/21/17	AJ	n/a	n/a	V1A126
FA41287-5	1A03300.D	1	02/21/17	AJ	n/a	n/a	V1A126

The QC reported here applies to the following samples:

Method: SW846 8260B

FA41388-1, FA41388-2

CAS No.	Compound	FA41287-5 ug/l	Spike Q	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	ND	25	23.4	94	25	23.7	95	1	75-142/19
591-78-6	2-Hexanone	ND	125	107	86	125	110	88	3	61-129/18
98-82-8	Isopropylbenzene	ND	25	25.7	103	25	25.5	102	1	83-132/15
99-87-6	p-Isopropyltoluene	ND	25	27.4	110	25	27.4	110	0	79-130/16
74-83-9	Methyl Bromide	ND	25	24.7	99	25	27.3	109	10	59-143/19
74-87-3	Methyl Chloride	ND	25	25.3	101	25	26.3	105	4	50-159/19
74-95-3	Methylene Bromide	ND	25	25.2	101	25	25.3	101	0	78-119/14
75-09-2	Methylene Chloride	ND	25	24.3	97	25	24.2	97	0	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	125	119	95	125	121	97	2	66-122/16
1634-04-4	Methyl Tert Butyl Ether	ND	25	25.2	101	25	25.4	102	1	72-117/14
91-20-3	Naphthalene	ND	25	24.3	97	25	25.3	101	4	63-132/25
103-65-1	n-Propylbenzene	ND	25	26.1	104	25	25.9	104	1	82-133/15
100-42-5	Styrene	ND	25	25.8	103	25	25.3	101	2	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND	25	26.9	108	25	26.5	106	1	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	26.5	106	25	26.8	107	1	72-120/14
127-18-4	Tetrachloroethylene	ND	25	26.2	105	25	25.6	102	2	76-135/16
108-88-3	Toluene	ND	25	26.1	104	25	25.8	103	1	80-120/14
87-61-6	1,2,3-Trichlorobenzene	ND	25	23.8	95	25	24.1	96	1	68-131/25
120-82-1	1,2,4-Trichlorobenzene	ND	25	23.7	95	25	24.1	96	2	73-129/20
71-55-6	1,1,1-Trichloroethane	ND	25	26.6	106	25	26.5	106	0	75-130/16
79-00-5	1,1,2-Trichloroethane	ND	25	24.8	99	25	24.8	99	0	76-119/14
79-01-6	Trichloroethylene	ND	25	28.3	113	25	28.2	113	0	81-126/15
75-69-4	Trichlorofluoromethane	ND	25	26.2	105	25	27.5	110	5	71-156/21
96-18-4	1,2,3-Trichloropropane	ND	25	26.4	106	25	26.7	107	1	77-120/16
95-63-6	1,2,4-Trimethylbenzene	ND	25	28.2	113	25	28.2	113	0	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND	25	29.4	118	25	29.1	116	1	79-120/19
108-05-4	Vinyl Acetate	ND	125	119	95	125	121	97	2	43-154/14
75-01-4	Vinyl Chloride	ND	25	26.7	107	25	27.2	109	2	69-159/18
	m,p-Xylene	ND	50	56.3	113	50	55.6	111	1	79-126/15
95-47-6	o-Xylene	ND	25	25.0	100	25	24.8	99	1	80-127/14

CAS No.	Surrogate Recoveries	MS	MSD	FA41287-5	Limits
1868-53-7	Dibromofluoromethane	105%	106%	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	106%	106%	99%	79-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA41388
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41287-5MS	1A03316.D	1	02/21/17	AJ	n/a	n/a	V1A126
FA41287-5MSD	1A03317.D	1	02/21/17	AJ	n/a	n/a	V1A126
FA41287-5	1A03300.D	1	02/21/17	AJ	n/a	n/a	V1A126

The QC reported here applies to the following samples: Method: SW846 8260B

FA41388-1, FA41388-2

CAS No.	Surrogate Recoveries	MS	MSD	FA41287-5	Limits
2037-26-5	Toluene-D8	92%	91%	98%	85-112%
460-00-4	4-Bromofluorobenzene	103%	102%	104%	83-118%

* = Outside of Control Limits.



GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA41388
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFF1459-MB	FF37270.D	1	02/21/17	EG	n/a	n/a	GFF1459

The QC reported here applies to the following samples: Method: RSKSOP-147/175
FA41388-1, FA41388-2

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.50	0.16	ug/l	

Blank Spike/Blank Spike Duplicate Summary

Job Number: FA41388
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GFF1459-BS	FF37271.D	1	02/21/17	EG	n/a	n/a	GFF1459
GFF1459-BSD	FF37272.D	1	02/21/17	EG	n/a	n/a	GFF1459

The QC reported here applies to the following samples: Method: RSKSOP-147/175

FA41388-1, FA41388-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
74-82-8	Methane	108	116	107	124	115	7	62-139/30

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FA41388
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41343-6MS	FF37281.D	1	02/21/17	EG	n/a	n/a	GFF1459
FA41343-6	FF37278.D	1	02/21/17	EG	n/a	n/a	GFF1459

The QC reported here applies to the following samples: Method: RSKSOP-147/175

FA41388-1, FA41388-2

CAS No.	Compound	FA41343-6 ug/l	Spike Q ug/l	MS ug/l	MS %	Limits
74-82-8	Methane	4.2	108	107	95	62-139

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA41388
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA41343-5DUP	FF37282.D	1	02/21/17	EG	n/a	n/a	GFF1459
FA41343-5	FF37277.D	1	02/21/17	EG	n/a	n/a	GFF1459

The QC reported here applies to the following samples: Method: RSKSOP-147/175

FA41388-1, FA41388-2

CAS No.	Compound	FA41343-5 ug/l	DUP Q ug/l	Q	RPD	Limits
74-82-8	Methane	67.9	65.8	3		30

* = Outside of Control Limits.

General Chemistry

QC Data Summaries

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Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA41388
Account: GFLEMFLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP29299/GN74119	2.0	0.0	mg/l	50	49.1	98.2	90-110%
Iron, Ferrous	GN74177	0.10	0.0	mg/l	0.500	0.51	101.1	82-115%
Nitrogen, Nitrate	GP29299/GN74119	0.10	0.0	mg/l	2.5	2.38	95.2	90-110%
Nitrogen, Nitrite	GP29299/GN74119	0.10	0.0	mg/l	2.5	2.58	103.2	90-110%
Sulfate	GP29299/GN74119	2.0	0.0	mg/l	50	49.6	99.2	90-110%

Associated Samples:
Batch GN74177: FA41388-1, FA41388-2
Batch GP29299: FA41388-1, FA41388-2
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA41388
Account: GFLEMFLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Iron, Ferrous	GN74177	FA41343-6	mg/l	0.0	0.0	0.0	0-31%

Associated Samples:
Batch GN74177: FA41388-1, FA41388-2
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA41388
Account: GFLEMFLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP29299/GN74119	FA41388-2	mg/l	25.0	50	80.7	111.4N(a)	90-110%
Nitrogen, Nitrate	GP29299/GN74119	FA41388-2	mg/l	0.0	2.5	3.5	140.0N(a)	90-110%
Nitrogen, Nitrite	GP29299/GN74119	FA41388-2	mg/l	0.0	2.5	2.7	108.0	90-110%
Sulfate	GP29299/GN74119	FA41388-2	mg/l	301	50	357	112.0(b)	90-110%

Associated Samples:

Batch GP29299: FA41388-1, FA41388-2

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Spike recovery indicates possible matrix interference.

(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

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MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA41388
Account: GFLEMFLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chloride	GP29299/GN74119	FA41388-2	mg/l	25.0	50	75.8	6.3	20%
Nitrogen, Nitrate	GP29299/GN74119	FA41388-2	mg/l	0.0	2.5	3.1	12.1	20%
Nitrogen, Nitrite	GP29299/GN74119	FA41388-2	mg/l	0.0	2.5	2.5	7.7	20%
Sulfate	GP29299/GN74119	FA41388-2	mg/l	301	50	354	0.8	20%

Associated Samples:
Batch GP29299: FA41388-1, FA41388-2
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

7.4
7

Technical Report for

Gannett Fleming

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

57524.037

SGS Accutest Job Number: FA46276

Sampling Dates: 07/27/17 - 07/28/17

Report to:

Gannett Fleming
West Lake Corporate Center 9119 Corporate Lake Dr, Suite 150
Tampa, FL 33634-6323
agetchell@gfnet.com; tfalkner@gfnet.com

ATTN: Aaron Getchell

Total number of pages in report: **40**



Test results contained within this data package meet the requirements
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and/or state specific certification programs as applicable.



Caitlin Brice, M.S.
General Manager

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Test results relate only to samples analyzed.

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Sample Summary

Gannett Fleming

Job No: FA46276

Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Project No: 57524.037

Sample Number	Collected			Received	Matrix		Client Sample ID
	Date	Time	By		Code	Type	
FA46276-1	07/28/17	07:25	RF	08/01/17	SO	Soil	SBFP-1
FA46276-2	07/28/17	07:40	RF	08/01/17	SO	Soil	SBFP-2
FA46276-3	07/28/17	07:55	RF	08/01/17	SO	Soil	SBFP-3
FA46276-4	07/27/17	14:20	RF	08/01/17	AQ	Ground Water	MW-11
FA46276-5	07/27/17	16:17	RF	08/01/17	AQ	Ground Water	MW-8R
FA46276-6	07/28/17	08:37	RF	08/01/17	AQ	Ground Water	MW-16

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: FA46276
Account: Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA
Collected: 07/27/17 thru 07/28/17

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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FA46276-1 SBFP-1

No hits reported in this sample.

FA46276-2 SBFP-2

Lead	3.1	0.71		mg/kg	SW846 6010C
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FA46276-3 SBFP-3

Lead	1.3	0.67		mg/kg	SW846 6010C
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FA46276-4 MW-11

1,1-Dichloroethane	0.84 J	1.0	0.34	ug/l	SW846 8260B
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FA46276-5 MW-8R

No hits reported in this sample.

FA46276-6 MW-16

Tetrachloroethylene	2.8	1.0	0.22	ug/l	SW846 8260B
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Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SBFP-1	Date Sampled:	07/28/17
Lab Sample ID:	FA46276-1	Date Received:	08/01/17
Matrix:	SO - Soil	Percent Solids:	93.5
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	< 1.0	1.0	mg/kg	1	08/02/17	08/02/17 LM	SW846 6010C ¹	SW846 3050B ²

(1) Instrument QC Batch: MA14267
(2) Prep QC Batch: MP32527

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SBFP-2	Date Sampled:	07/28/17
Lab Sample ID:	FA46276-2	Date Received:	08/01/17
Matrix:	SO - Soil	Percent Solids:	94.2
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	3.1	0.71	mg/kg	1	08/02/17	08/02/17 LM	SW846 6010C ¹	SW846 3050B ²

(1) Instrument QC Batch: MA14267
(2) Prep QC Batch: MP32527

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SBFP-3	Date Sampled:	07/28/17
Lab Sample ID:	FA46276-3	Date Received:	08/01/17
Matrix:	SO - Soil	Percent Solids:	94.1
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	1.3	0.67	mg/kg	1	08/02/17	08/02/17 LM	SW846 6010C ¹	SW846 3050B ²

(1) Instrument QC Batch: MA14267
(2) Prep QC Batch: MP32527

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	07/27/17
Lab Sample ID:	FA46276-4	Date Received:	08/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5E2149.D	1	08/02/17 05:39	SP	n/a	n/a	V5E89
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane ^a	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	0.84	1.0	0.34	ug/l	J
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	07/27/17
Lab Sample ID:	FA46276-4	Date Received:	08/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone ^a	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene ^b	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	111%		79-125%
2037-26-5	Toluene-D8	102%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-11	Date Sampled:	07/27/17
Lab Sample ID:	FA46276-4	Date Received:	08/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	102%		83-118%

- (a) Associated CCV outside of control limits high, sample was ND.
(b) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8R	Date Sampled:	07/27/17
Lab Sample ID:	FA46276-5	Date Received:	08/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5E2150.D	1	08/02/17 06:03	SP	n/a	n/a	V5E89
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane ^a	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8R	Date Sampled:	07/27/17
Lab Sample ID:	FA46276-5	Date Received:	08/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone ^a	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene ^b	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	110%		79-125%
2037-26-5	Toluene-D8	101%		85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8R	Date Sampled:	07/27/17
Lab Sample ID:	FA46276-5	Date Received:	08/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%		83-118%

- (a) Associated CCV outside of control limits high, sample was ND.
(b) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16	Date Sampled:	07/28/17
Lab Sample ID:	FA46276-6	Date Received:	08/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5E2151.D	1	08/02/17 06:27	SP	n/a	n/a	V5E89
Run #2	B123884.D	1	08/04/17 18:56	AJ	n/a	n/a	VB4981

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane ^a	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16	Date Sampled:	07/28/17
Lab Sample ID:	FA46276-6	Date Received:	08/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone ^a	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	2.8 ^b	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	104%	83-118%
17060-07-0	1,2-Dichloroethane-D4	112%	109%	79-125%
2037-26-5	Toluene-D8	102%	99%	85-112%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16	Date Sampled:	07/28/17
Lab Sample ID:	FA46276-6	Date Received:	08/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%	101%	83-118%

- (a) Associated CCV outside of control limits high, sample was ND.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



ACCUTEST

SGS Accutest Southeast

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, FL 32811
TEL: 407-425-6700 FAX: 407-425-0707
www.accutest.com

FA46276

SGS ACCUTEST JOB #:

PAGE 1 OF 1

Client / Reporting Information		Project Information		Analytical Information										Matrix Codes			
Company Name: <u>Gannett Fleming</u>		Project Name: <u>TMR Valdosta</u>												DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge OL - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid			
Address: <u>9119 Corporate Lake Drive Suite 150</u>		Street: <u>2000 West Savannah Ave</u>															
City: <u>Tampa</u> State: <u>FL</u> Zip: <u>33634</u>		City: <u>Valdosta</u> State: <u>GA</u>															
Project Contact: <u>Asen Gatchell</u> Email: <u>agatchell@gannett.com</u>		Project # <u>57524.037</u>															
Phone # <u>813 882 4366</u>		Fax # <u>813 882 4366</u>															
Sampler(s) Name(s) (Printed): Sampler 1: <u>R. T. Falkner</u> Sampler 2:		Client Purchase Order #															
SGS Accutest Sample #	Field ID / Point of Collection	DATE	TIME	SAMPLED BY	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NaOH-Zn	DI WATER	MICH		
1	SBFP-1	7/28/17	0725	RTF	SO	1		1									
2	SBFP-2		0740			1		1									
3	SBFP-3		0755			1		1									
4	MW-11	7/27/17	1420	RTF	GW	3			3								
5	MW-8R	7/27/17	1617			3			3								
6	MW-16	7/28/17	0837			3			3								
Turnaround Time (Business days)		Data Deliverable Information										Comments / Remarks					
☒ 10 Day (Business) ☐ 7 Day ☐ 5 Day ☐ 3 Day RUSH ☐ 2 Day RUSH ☐ 1 Day RUSH ☐ Other		Approved By: / Date:		☐ COMMERCIAL "A" (RESULTS ONLY) ☒ COMMERCIAL "B" (RESULTS PLUS QC) ☐ REDT1 (EPA LEVEL 3) ☐ FULLT1 (EPA LEVEL 4) ☐ EDD'S													
Rush T/A Data Available VIA Email or Lablink		Sample Custody must be documented below each time samples change possession, including courier delivery.															
Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 <u>R. T. Falkner (GF)</u>	7/28/17	<u>R. T. Falkner</u>	3 <u>R. T. Falkner</u>	7/28/17	<u>R. T. Falkner</u>	4 <u>R. T. Falkner</u>	7/28/17	<u>R. T. Falkner</u>	5 <u>R. T. Falkner</u>	7/28/17	<u>R. T. Falkner</u>	6 <u>R. T. Falkner</u>	7/28/17	<u>R. T. Falkner</u>	7 <u>R. T. Falkner</u>	7/28/17	<u>R. T. Falkner</u>
8 <u>R. T. Falkner</u>	7/28/17	<u>R. T. Falkner</u>	9 <u>R. T. Falkner</u>	7/28/17	<u>R. T. Falkner</u>	10 <u>R. T. Falkner</u>	7/28/17	<u>R. T. Falkner</u>	11 <u>R. T. Falkner</u>	7/28/17	<u>R. T. Falkner</u>	12 <u>R. T. Falkner</u>	7/28/17	<u>R. T. Falkner</u>	13 <u>R. T. Falkner</u>	7/28/17	<u>R. T. Falkner</u>
Lab Use Only: Cooler Temperature (s) Celsius (corrected): <u>3.6</u>																	

SGS COC Florida new art 5 2 17 rev 042417 SI

Effective Date 04/24/2017

FA46276: Chain of Custody

Page 1 of 2



SGS Accutest Sample Receipt Summary

Job Number: FA46276

Client: GANNET FLEMING

Project: TMR VALDOSTA

Date / Time Received: 8/1/2017 8:00:00 AM

Delivery Method: ALSE

Airbill #s:
Therm ID: IR 1;

Therm CF: 0.4;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (3.2);

Cooler Temps (Corrected) °C: Cooler 1: (3.6);

Cooler Information
Y or N

- | | | |
|-----------------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present | ☒ | ☐ |
| 2. Custody Seals Intact | ☒ | ☐ |
| 3. Temp criteria achieved | ☒ | ☐ |
| 4. Cooler temp verification | <u>IR Gun</u> | |
| 5. Cooler media | <u>Ice (Bag)</u> | |

Trip Blank Information
Y or N N/A

- | | | | |
|--------------------------------|--------------------------|-------------------------------------|-------------------------------------|
| 1. Trip Blank present / cooler | ☐ | ☒ | ☐ |
| 2. Trip Blank listed on COC | ☐ | ☒ | ☐ |
| | W or S | N/A | |
| 3. Type Of TB Received | ☐ | ☐ | ☒ |

Sample Information
Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Sample labels present on bottles | ☒ | ☐ | |
| 2. Samples preserved properly | ☒ | ☐ | |
| 3. Sufficient volume/containers recvd for analysis: | ☒ | ☐ | |
| 4. Condition of sample | <u>Intact</u> | | |
| 5. Sample recvd within HT | ☒ | ☐ | |
| 6. Dates/Times/IDs on COC match Sample Label | ☒ | ☐ | |
| 7. VOCs have headspace | ☐ | ☐ | ☒ |
| 8. Bottles received for unspecified tests | ☐ | ☒ | |
| 9. Compositing instructions clear | ☐ | ☐ | ☒ |
| 10. Voa Soil Kits/Jars received past 48hrs? | ☐ | ☐ | ☒ |
| 11. % Solids Jar received? | ☐ | ☐ | ☒ |
| 12. Residual Chlorine Present? | ☐ | ☐ | ☒ |

Misc. Information

Number of Encores: 25-Gram _____	5-Gram _____	Number of 5035 Field Kits: _____	Number of Lab Filtered Metals: _____
Test Strip Lot #s: pH 0-3 _____	230315 _____	pH 10-12 _____	219813A _____
Residual Chlorine Test Strip Lot #: _____			

Comments

SM001
Rev. Date 05/24/17

Technician: JORGE C

Date: 8/1/2017 8:00:00 AM

Reviewer: SP

Date: 8/1/2017

FA46276: Chain of Custody

Page 2 of 2



GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 3

Job Number: FA46276**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E89-MB	5E2131.D	1	08/01/17	SP	n/a	n/a	V5E89

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA46276-4, FA46276-5, FA46276-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	

Method Blank Summary

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Job Number: FA46276**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E89-MB	5E2131.D	1	08/01/17	SP	n/a	n/a	V5E89

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA46276-4, FA46276-5, FA46276-6

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	0.47	2.0	0.30	ug/l	J
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100%
17060-07-0	1,2-Dichloroethane-D4	83-118%
		106%
		79-125%

Method Blank Summary

Job Number: FA46276
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E89-MB	5E2131.D	1	08/01/17	SP	n/a	n/a	V5E89

The QC reported here applies to the following samples:

Method: SW846 8260B

FA46276-4, FA46276-5, FA46276-6

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	101% 85-112%
460-00-4	4-Bromofluorobenzene	101% 83-118%

Method Blank Summary

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Job Number: FA46276

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4981-MB	B123868.D	1	08/04/17	AJ	n/a	n/a	VB4981

The QC reported here applies to the following samples:

Method: SW846 8260B

FA46276-6

CAS No.	Compound	Result	RL	MDL	Units	Q
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 83-118%
17060-07-0	1,2-Dichloroethane-D4	105% 79-125%
2037-26-5	Toluene-D8	100% 85-112%
460-00-4	4-Bromofluorobenzene	103% 83-118%

Blank Spike Summary

Job Number: FA46276**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E89-BS	5E2129.D	1	08/01/17	SP	n/a	n/a	V5E89

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA46276-4, FA46276-5, FA46276-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	146	117	50-147
71-43-2	Benzene	25	24.4	98	81-122
108-86-1	Bromobenzene	25	23.2	93	80-121
74-97-5	Bromochloromethane	25	23.5	94	76-123
75-27-4	Bromodichloromethane	25	25.4	102	79-123
75-25-2	Bromoform	25	22.1	88	66-123
78-93-3	2-Butanone (MEK)	125	150	120	56-143
104-51-8	n-Butylbenzene	25	25.9	104	79-126
135-98-8	sec-Butylbenzene	25	26.2	105	83-133
98-06-6	tert-Butylbenzene	25	25.1	100	80-133
75-15-0	Carbon Disulfide	25	23.6	94	66-148
56-23-5	Carbon Tetrachloride	25	26.0	104	76-136
108-90-7	Chlorobenzene	25	23.8	95	82-124
75-00-3	Chloroethane	25	30.0	120	62-144
67-66-3	Chloroform	25	24.4	98	80-124
95-49-8	o-Chlorotoluene	25	25.2	101	81-127
106-43-4	p-Chlorotoluene	25	24.9	100	83-130
124-48-1	Dibromochloromethane	25	22.4	90	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	23.4	94	64-123
106-93-4	1,2-Dibromoethane	25	23.0	92	75-120
75-71-8	Dichlorodifluoromethane	25	27.9	112	42-167
95-50-1	1,2-Dichlorobenzene	25	23.1	92	82-124
541-73-1	1,3-Dichlorobenzene	25	23.9	96	84-125
106-46-7	1,4-Dichlorobenzene	25	23.2	93	78-120
75-34-3	1,1-Dichloroethane	25	26.6	106	81-122
107-06-2	1,2-Dichloroethane	25	24.6	98	75-125
75-35-4	1,1-Dichloroethylene	25	26.4	106	78-137
156-59-2	cis-1,2-Dichloroethylene	25	23.9	96	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.3	105	76-127
78-87-5	1,2-Dichloropropane	25	24.3	97	76-124
142-28-9	1,3-Dichloropropane	25	22.0	88	80-118
594-20-7	2,2-Dichloropropane	25	24.3	97	74-139
563-58-6	1,1-Dichloropropene	25	25.2	101	79-131
10061-01-5	cis-1,3-Dichloropropene	25	22.8	91	75-118
10061-02-6	trans-1,3-Dichloropropene	25	24.7	99	80-120
100-41-4	Ethylbenzene	25	24.8	99	81-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA46276**Account:** GFLEMFLT Gannett Fleming**Project:** Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E89-BS	5E2129.D	1	08/01/17	SP	n/a	n/a	V5E89

The QC reported here applies to the following samples:**Method:** SW846 8260B

FA46276-4, FA46276-5, FA46276-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
87-68-3	Hexachlorobutadiene	25	26.0	104	75-142
591-78-6	2-Hexanone	125	148	118	61-129
98-82-8	Isopropylbenzene	25	26.5	106	83-132
99-87-6	p-Isopropyltoluene	25	26.1	104	79-130
74-83-9	Methyl Bromide	25	28.5	114	59-143
74-87-3	Methyl Chloride	25	31.3	125	50-159
74-95-3	Methylene Bromide	25	23.6	94	78-119
75-09-2	Methylene Chloride	25	24.8	99	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	137	110	66-122
1634-04-4	Methyl Tert Butyl Ether	25	23.6	94	72-117
91-20-3	Naphthalene	25	23.3	93	63-132
103-65-1	n-Propylbenzene	25	25.3	101	82-133
100-42-5	Styrene	25	22.4	90	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	25.2	101	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	22.8	91	72-120
127-18-4	Tetrachloroethylene	25	34.5	138*	76-135
108-88-3	Toluene	25	24.0	96	80-120
87-61-6	1,2,3-Trichlorobenzene	25	24.7	99	68-131
120-82-1	1,2,4-Trichlorobenzene	25	23.8	95	73-129
71-55-6	1,1,1-Trichloroethane	25	24.4	98	75-130
79-00-5	1,1,2-Trichloroethane	25	23.8	95	76-119
79-01-6	Trichloroethylene	25	25.7	103	81-126
75-69-4	Trichlorofluoromethane	25	33.3	133	71-156
96-18-4	1,2,3-Trichloropropane	25	22.7	91	77-120
95-63-6	1,2,4-Trimethylbenzene	25	24.7	99	79-120
108-67-8	1,3,5-Trimethylbenzene	25	25.8	103	79-120
108-05-4	Vinyl Acetate	125	64.3	51	43-154
75-01-4	Vinyl Chloride	25	28.4	114	69-159
	m,p-Xylene	50	50.6	101	79-126
95-47-6	o-Xylene	25	24.3	97	80-127

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	106%	79-125%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA46276
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E89-BS	5E2129.D	1	08/01/17	SP	n/a	n/a	V5E89

The QC reported here applies to the following samples: Method: SW846 8260B
FA46276-4, FA46276-5, FA46276-6

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	100%	85-112%
460-00-4	4-Bromofluorobenzene	101%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

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Job Number: FA46276

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB4981-BS	B123867.D	1	08/04/17	AJ	n/a	n/a	VB4981

The QC reported here applies to the following samples:

Method: SW846 8260B

FA46276-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
127-18-4	Tetrachloroethylene	25	28.1	112	76-135

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	79-125%
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	102%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA46276

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA46106-3MS	5E2152.D	1	08/02/17	SP	n/a	n/a	V5E89
FA46106-3MSD	5E2153.D	1	08/02/17	SP	n/a	n/a	V5E89
FA46106-3	5E2134.D	1	08/01/17	SP	n/a	n/a	V5E89

The QC reported here applies to the following samples:

Method: SW846 8260B

FA46276-4, FA46276-5, FA46276-6

CAS No.	Compound	FA46106-3 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	125	115	92	125	114	91	1	50-147/21
71-43-2	Benzene	ND	25	26.4	106	25	26.3	105	0	81-122/14
108-86-1	Bromobenzene	ND	25	24.9	100	25	25.1	100	1	80-121/14
74-97-5	Bromochloromethane	ND	25	25.4	102	25	25.7	103	1	76-123/14
75-27-4	Bromodichloromethane	ND	25	27.4	110	25	27.6	110	1	79-123/19
75-25-2	Bromoform	ND	25	21.9	88	25	21.8	87	0	66-123/21
78-93-3	2-Butanone (MEK)	ND	125	134	107	125	130	104	3	56-143/18
104-51-8	n-Butylbenzene	ND	25	26.4	106	25	27.6	110	4	79-126/16
135-98-8	sec-Butylbenzene	ND	25	27.6	110	25	28.4	114	3	83-133/16
98-06-6	tert-Butylbenzene	ND	25	26.9	108	25	27.3	109	1	80-133/16
75-15-0	Carbon Disulfide	ND	25	23.2	93	25	23.8	95	3	66-148/23
56-23-5	Carbon Tetrachloride	ND	25	28.4	114	25	28.8	115	1	76-136/23
108-90-7	Chlorobenzene	ND	25	25.7	103	25	25.6	102	0	82-124/14
75-00-3	Chloroethane	ND	25	34.1	136	25	33.3	133	2	62-144/20
67-66-3	Chloroform	ND	25	26.8	107	25	26.6	106	1	80-124/15
95-49-8	o-Chlorotoluene	ND	25	27.1	108	25	27.2	109	0	81-127/15
106-43-4	p-Chlorotoluene	ND	25	26.2	105	25	26.9	108	3	83-130/15
124-48-1	Dibromochloromethane	ND	25	22.8	91	25	22.9	92	0	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	ND	25	26.5	106	25	25.8	103	3	64-123/18
106-93-4	1,2-Dibromoethane	ND	25	24.4	98	25	24.8	99	2	75-120/13
75-71-8	Dichlorodifluoromethane	ND	25	26.5	106	25	27.8	111	5	42-167/19
95-50-1	1,2-Dichlorobenzene	ND	25	24.5	98	25	24.7	99	1	82-124/14
541-73-1	1,3-Dichlorobenzene	ND	25	25.2	101	25	25.8	103	2	84-125/14
106-46-7	1,4-Dichlorobenzene	ND	25	24.6	98	25	24.8	99	1	78-120/15
75-34-3	1,1-Dichloroethane	ND	25	29.2	117	25	29.2	117	0	81-122/15
107-06-2	1,2-Dichloroethane	ND	25	27.6	110	25	27.2	109	1	75-125/14
75-35-4	1,1-Dichloroethylene	ND	25	28.0	112	25	28.7	115	2	78-137/18
156-59-2	cis-1,2-Dichloroethylene	8.6	25	34.6	104	25	35.6	108	3	78-120/15
156-60-5	trans-1,2-Dichloroethylene	1.2	25	29.6	114	25	30.0	115	1	76-127/17
78-87-5	1,2-Dichloropropane	ND	25	26.1	104	25	26.5	106	2	76-124/14
142-28-9	1,3-Dichloropropane	ND	25	23.7	95	25	23.8	95	0	80-118/13
594-20-7	2,2-Dichloropropane	ND	25	21.9	88	25	21.5	86	2	74-139/17
563-58-6	1,1-Dichloropropene	ND	25	26.9	108	25	27.3	109	1	79-131/16
10061-01-5	cis-1,3-Dichloropropene	ND	25	21.5	86	25	22.0	88	2	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND	25	24.5	98	25	24.6	98	0	80-120/22
100-41-4	Ethylbenzene	ND	25	26.7	107	25	26.7	107	0	81-121/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

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Job Number: FA46276

Account: GFLEMFLT Gannett Fleming

Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA46106-3MS	5E2152.D	1	08/02/17	SP	n/a	n/a	V5E89
FA46106-3MSD	5E2153.D	1	08/02/17	SP	n/a	n/a	V5E89
FA46106-3	5E2134.D	1	08/01/17	SP	n/a	n/a	V5E89

The QC reported here applies to the following samples:

Method: SW846 8260B

FA46276-4, FA46276-5, FA46276-6

CAS No.	Compound	FA46106-3 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	ND	25	25.7	103	25	27.1	108	5	75-142/19
591-78-6	2-Hexanone	ND	125	141	113	125	131	105	7	61-129/18
98-82-8	Isopropylbenzene	ND	25	28.1	112	25	28.3	113	1	83-132/15
99-87-6	p-Isopropyltoluene	ND	25	27.1	108	25	28.2	113	4	79-130/16
74-83-9	Methyl Bromide	ND	25	29.3	117	25	29.2	117	0	59-143/19
74-87-3	Methyl Chloride	ND	25	28.9	116	25	29.9	120	3	50-159/19
74-95-3	Methylene Bromide	ND	25	25.9	104	25	25.9	104	0	78-119/14
75-09-2	Methylene Chloride	ND	25	27.1	108	25	27.3	109	1	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	125	139	111	125	132	106	5	66-122/16
1634-04-4	Methyl Tert Butyl Ether	ND	25	25.0	100	25	25.3	101	1	72-117/14
91-20-3	Naphthalene	ND	25	25.1	100	25	25.0	100	0	63-132/25
103-65-1	n-Propylbenzene	ND	25	26.9	108	25	27.5	110	2	82-133/15
100-42-5	Styrene	ND	25	21.1	84	25	20.9	84	1	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND	25	27.4	110	25	27.4	110	0	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	26.7	107	25	26.5	106	1	72-120/14
127-18-4	Tetrachloroethylene	ND	25	21.1	84	25	21.3	85	1	76-135/16
108-88-3	Toluene	ND	25	25.7	103	25	25.6	102	0	80-120/14
87-61-6	1,2,3-Trichlorobenzene	ND	25	25.2	101	25	25.9	104	3	68-131/25
120-82-1	1,2,4-Trichlorobenzene	ND	25	24.1	96	25	25.1	100	4	73-129/20
71-55-6	1,1,1-Trichloroethane	ND	25	27.7	111	25	27.7	111	0	75-130/16
79-00-5	1,1,2-Trichloroethane	ND	25	25.7	103	25	25.5	102	1	76-119/14
79-01-6	Trichloroethylene	2.8	25	30.4	110	25	30.2	110	1	81-126/15
75-69-4	Trichlorofluoromethane	ND	25	35.6	142	25	35.9	144	1	71-156/21
96-18-4	1,2,3-Trichloropropane	ND	25	24.7	99	25	24.2	97	2	77-120/16
95-63-6	1,2,4-Trimethylbenzene	ND	25	25.3	101	25	25.7	103	2	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND	25	26.5	106	25	27.1	108	2	79-120/19
108-05-4	Vinyl Acetate	ND	125	125	100	125	113	90	10	43-154/14
75-01-4	Vinyl Chloride	ND	25	28.2	113	25	29.6	118	5	69-159/18
	m,p-Xylene	ND	50	53.8	108	50	54.1	108	1	79-126/15
95-47-6	o-Xylene	ND	25	25.4	102	25	25.7	103	1	80-127/14

CAS No.	Surrogate Recoveries	MS	MSD	FA46106-3	Limits
1868-53-7	Dibromofluoromethane	101%	102%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	109%	108%	111%	79-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA46276
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA46106-3MS	5E2152.D	1	08/02/17	SP	n/a	n/a	V5E89
FA46106-3MSD	5E2153.D	1	08/02/17	SP	n/a	n/a	V5E89
FA46106-3	5E2134.D	1	08/01/17	SP	n/a	n/a	V5E89

The QC reported here applies to the following samples: Method: SW846 8260B

FA46276-4, FA46276-5, FA46276-6

CAS No.	Surrogate Recoveries	MS	MSD	FA46106-3	Limits
2037-26-5	Toluene-D8	98%	98%	99%	85-112%
460-00-4	4-Bromofluorobenzene	99%	101%	102%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA46276
Account: GFLEMFLT Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC47714-14MS	B123887.D	50	08/04/17	AJ	n/a	n/a	VB4981
JC47714-14MSD	B123888.D	50	08/04/17	AJ	n/a	n/a	VB4981
JC47714-14	B123883.D	50	08/04/17	AJ	n/a	n/a	VB4981

The QC reported here applies to the following samples: Method: SW846 8260B

FA46276-6

CAS No.	Compound	JC47714-14 ug/l	Spike Q	ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
127-18-4	Tetrachloroethylene	ND		1250	1270	102	1250	1360	109	7	76-135/16

CAS No.	Surrogate Recoveries	MS	MSD	JC47714-14	Limits
1868-53-7	Dibromofluoromethane	103%	100%	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	115%	107%	109%	79-125%
2037-26-5	Toluene-D8	98%	100%	97%	85-112%
460-00-4	4-Bromofluorobenzene	103%	100%	99%	83-118%

* = Outside of Control Limits.



Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA46276
Account: GFLEMFLT - Gannett Fleming
Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP32527
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 08/02/17

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.7	1.8		
Antimony	1.0	.05	.065		
Arsenic	0.50	.065	.1		
Barium	10	.05	.05		
Beryllium	0.25	.01	.025		
Cadmium	0.20	.01	.025		
Calcium	250	2.5	2.5		
Chromium	0.50	.05	.05		
Cobalt	2.5	.01	.025		
Copper	1.3	.05	.05		
Iron	15	.85	.85		
Lead	1.0	.05	.05	0.0	<1.0
Magnesium	250	1.8	1.8		
Manganese	0.75	.025	.025		
Molybdenum	2.5	.015	.025		
Nickel	2.0	.02	.025		
Potassium	500	10	10		
Selenium	1.0	.12	.12		
Silver	0.50	.035	.041		
Sodium	500	25	25		
Strontium	0.50	.025	.025		
Thallium	0.50	.055	.055		
Tin	2.5	.045	.045		
Titanium	0.50	.025	.025		
Vanadium	2.5	.025	.025		
Zinc	1.0	.15	.15		

Associated samples MP32527: FA46276-1, FA46276-2, FA46276-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA46276
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP32527
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date: 08/02/17 08/02/17

Metal	FA46276-1 Original	DUP	RPD	QC Limits	FA46276-1 Original MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum								
Antimony								
Arsenic	anr							
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper	anr							
Iron	anr							
Lead	0.94	0.97	3.1	0-20	0.94	23.9	21.4	107.3
Magnesium								80-120
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Vanadium								
Zinc	anr							

Associated samples MP32527: FA46276-1, FA46276-2, FA46276-3

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA46276
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP32527
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date: 08/02/17

Metal	FA46276-1 Original MSD	Spike lot MPFLICP2 % Rec	MSD RPD	QC Limit
Aluminum				
Antimony				
Arsenic	anr			
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper	anr			
Iron	anr			
Lead	0.94	20.5	19.5	100.2
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP32527: FA46276-1, FA46276-2, FA46276-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA46276
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP32527
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: mg/kg

Prep Date: 08/02/17

Metal	BSP Result	Spike lot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper	anr			
Iron	anr			
Lead	25.9	25	103.6	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP32527: FA46276-1, FA46276-2, FA46276-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA46276
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP32527
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: ug/l

Prep Date: 08/02/17

Metal	FA46276-1	Original	SDL 1:5	%DIF	QC Limits
Aluminum					
Antimony					
Arsenic	anr				
Barium					
Beryllium					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper	anr				
Iron	anr				
Lead	18.8	19.0	1.1	0-10	
Magnesium					
Manganese					
Molybdenum					
Nickel					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc	anr				

Associated samples MP32527: FA46276-1, FA46276-2, FA46276-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FA46276
 Account: GFLEMFLT - Gannett Fleming
 Project: Trademark Metals Recycling; 2000 W Savannah, Valdosta, GA

QC Batch ID: MP32527
 Matrix Type: SOLID

Methods: SW846 6010C
 Units: ug/l

Prep Date:

08/02/17

Metal	Sample ml	Final ml	FA46276-1 Raw	PS Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead	9.8	10	18.8	18.424	70.1	0.2	2.5	50	103.4	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP32527: FA46276-1, FA46276-2, FA46276-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested