VOLUNTARY REMEDIATION PROGRAM APPLICATION AND COMPLIANCE STATUS REPORT

CORONET WAY PROPERTY ASSEMBLAGE

Coronet Way, Bolton Road, Marietta Boulevard
Atlanta, Georgia

Prepared for Submission to:

Georgia Environmental Protection Division
Hazardous Waste Management Branch
Suite 1066, East Tower
2 Martin Luther King Jr. Drive
Atlanta, Georgia 30334

Prepared by:

Amec Foster Wheeler Environment & Infrastructure, Inc.
2677 Buford Highway
Atlanta, Georgia 30324
(404) 873-4761

December 3, 2015

Amec Foster Wheeler Project No. 6121-15-0064

December 3, 2015

Mr. Jason Metzger
Department of Natural Resources
Environmental Protection Division
Hazardous Sites Response Program
Suite 1462 East Tower
205 Butler Street, S.E.
Atlanta, Georgia 30334

Subject: **Voluntary Remediation Program**
VRP Application and Compliance Status Report
Coronet Way Property Assemblage
Coronet Way
Atlanta, Fulton County, Georgia
HSI Site No. 10861

Dear Mr. Metzger:

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) respectfully submits this VRP Application and Compliance Status Report (CSR) for the subject site on behalf of the property owner and Applicant, Coronet Way (E&A), LLC (herein referred to as EDENS).

This VRP Application and CSR is submitted under the Voluntary Remediation Program and demonstrates that: the subject site is currently in compliance with Type 1 risk reduction criteria for all constituents in soil and the site is in compliance with Type 5 risk reduction criteria for all constituents in groundwater. On this basis, EDENS requests that the site be delisted from the Hazardous Site Inventory.

Please contact us if further information or clarification is necessary.

Sincerely,

Amec Foster Wheeler Environment & Infrastructure, Inc.

Stephen R. Foley, P.G.
Senior Geologist

Charles T. Ferry, P.E.
Senior Principal Engineer

cc. Mr. James McKenney – EDENS
Mr. Gerald Pouncey – Morris, Manning & Martin, LLP

Amec Foster Wheeler Environment & Infrastructure, Inc.
2677 Buford Highway, Atlanta, Georgia 30324
Tel: (404) 873 4761
Fax: (404) 817 0183
www.amecfw.com

CERTIFICATION STATEMENT

I certify under penalty of law that this report and all attachments were prepared under my direction 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.

Based on my review of the findings of this report with respect to the Rules for Hazardous Site Response, Rule 391-3-19-.07, I have determined that: the site is currently in compliance with Type 1 risk reduction criteria for all constituents in soil and with Type 5 risk reduction criteria for all constituents in groundwater.

Coronet Way (E&A), LLC

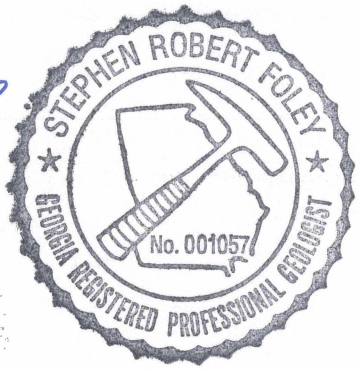
Herbert Ames
Vice President
Edens Limited Partnership
Authorized Signatory for: Coronet Way (E&A), LLC

12/3/15
Date

GROUNDWATER SCIENTIST STATEMENT

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

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



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1.0 INTRODUCTION

The subject site (site) consists of an assemblage of 15 tax parcels located between Coronet Way, Bolton Road and Marietta Boulevard in Atlanta, Fulton County, Georgia (see Figure 2). All of the parcels which make up the subject site are owned by Coronet Way (E&A), LLC, with the exception of the 2555A Bolton Road parcel which is owned by 2555 Bolton Road (E&A), LLC. Coronet Way (E&A), LLC is the Applicant and 2555 Bolton Road (E&A), LLC has expressly consented the property it owns to be included in the Application. Current plans are to redevelop the site as a mixed-use property. A tax map of the site is included in Appendix A.

One of the 15 parcels, formerly a strip shopping center located on the site addressed at 2611-2619 Bolton Road, was listed on the Hazardous Site Inventory (HSI, Site No. 10861) in 2007 due to a release to soil from a dry cleaner previously located in one of the tenant spaces. A second parcel at 2555A Bolton Road was sub-listed in 2008. The 2611-2619 Bolton Road parcel (now a vacant lot) and the 2555A Bolton Road parcel (a CVS Pharmacy) entered the Georgia Brownfields Program and, following soil remediation, Brownfield Compliance Status Reports (CSR) have been submitted and approved by EPD for both properties.

As discussed in subsequent sections of this report, a number of assessments were performed from 2005 to 2009 by various consultants to characterize soil and groundwater conditions. In 2014 and 2015, Amec Foster Wheeler completed the assessments required to prepare this VRP Application and CSR, including delineation of the on-site extent of impacted groundwater, modeling of the future migration of the groundwater plume and evaluation of vapor risk for future structures proposed for site redevelopment.

1.1 PROPERTY DESCRIPTION

The 15 parcels comprise a total of approximately 14.2 acres. According to the Fulton County Tax Assessor records, the tax parcel ID numbers, addresses and acreages for the 15 parcels are as follow (see Figure 2):

Parcel ID No.	Address	Acreage	HSI	Brownfield
17-0230-000010278	2390 Coronet Way	0.3099		
17-0230-000010286	2380 Coronet Way	0.3099		
17-0230-000010294	2372 Coronet Way	0.3099		
17-0230-000010302	2358 Coronet Way	0.3085		
17-0230-000010310	2346 Coronet Way	0.3099		
17-0230-000010328	2338 Coronet Way	0.3099		
17-0230-000010542	Marietta Blvd.	0.1696		
17-0230-000010583	2611 Bolton Road	0.9513	X	X

17-0230-000010690	2265 Marietta Blvd.	0.6812		
17-0230-000010708	2275 Marietta Blvd.	0.499		
17-0230-000010716	2400 Coronet Way	0.95		
17-0230-000010724	2406 Coronet Way	0.4145		X
17-0230-000040671	2555A Bolton Road	2.2317	X	X
17-0230-LL1385	2275 Marietta Blvd.	4.36		
17-0230-LL1310	2555B Bolton Road	2.0815		

The bulk of the site was previously occupied by retail shopping centers while a number of smaller parcels located on Coronet Way consisted of residential properties. Parcels 17-0230-000040671, 17-0230-000010583 and 17-0230-000010724 were enrolled in the Georgia Brownfields Program and Coronet Way (E&A), LLC has received limitations of liability for groundwater impacts related to a release from the former dry cleaner located on site. Two larger parcels are located in the western and central portions of the site, respectively addressed at 2555B Bolton Road (17-0230-LL1310) and 2275 Marietta Boulevard (17-0230-LL1385), appear to have also been affected by the impacted groundwater emanating from the former dry cleaner; however, neither of these parcels has been sub-listed by the Environmental Protection Division (EPD).

Several other smaller parcels are located along Coronet Way and Marietta Boulevard in the eastern portion of the site. These properties were predominantly residential in nature or commercial properties without significant environmental concerns associated with them.

As discussed in subsequent sections of this report, Amec Foster Wheeler has delineated the on-site extent of impacted groundwater and confirmed that regulated constituents are no longer present in soil at concentrations above Type 1 risk reduction standards (RRS).

1.2 PREVIOUS ASSESSMENTS

Numerous previous environmental assessments have been conducted at the subject site and in the immediately surrounding area between 2005 and 2009. The following lists the previous reports on which Amec Foster Wheeler is at least partly basing this report.

- Phase II Environmental Assessment, Moores Mill Center, prepared by ECS Southeast, LLC for Edens & Avant, dated November 2, 2005;
- Phase I Environmental Site Assessment, Parcel 72, prepared by ECS Southeast, LLC for Edens & Avant, dated January 6, 2006;
- Phase II Environmental Site Assessment, Parcel 72, prepared by ECS Southeast, LLC for Edens & Avant, dated February 3, 2006;

- Letter by Georgia EPD to Infinity Property Management Corporation, "No Listing" of Moores Mill Shopping Center on Hazardous Site Inventory, dated February 15, 2006;

- HSRP Initial Release Notification, Coronet Way Lot 72, prepared by United Consulting for Coronet Way, LLC, dated March 6, 2006;

- Brownfields Program Application and Prospective Purchaser Corrective Action Plan (Parcels 58 and 72), prepared by United Consulting for Coronet Way, LLC, dated March 15, 2006;

- Letter by Georgia EPD to Mr. John M. Ford, "No Listing" of Parcel 72 on Hazardous Site Inventory, dated March 24, 2006;

- Letter by Georgia EPD to Coronet Way, LLC, accepting Parcels 58 and 72 into the Voluntary Brownfield Program, dated March 27, 2006;

- Report of Phase I Environmental Site Assessment on the Rosebriar Court Apartment Tract (Parcel 58), prepared by United Consulting for Coronet Way (E&A), LLC, dated November 22, 2006;

- Report of Phase II Environmental Site Assessment on the Rosebriar Court Apartment Tract (Parcel 58), prepared by United Consulting for Coronet Way (E&A), LLC, dated November 22, 2006;

- Letter by Georgia EPD to Rosebriar Court Apartments, Listing of Parcel 58 on Hazardous Site Inventory, dated March 7, 2007; and

- Report of Environmental Consulting Services, prepared by MACTEC Engineering and Consulting, Inc., prepared for Coronet Way (E&A), LLC, dated March 7, 2008.

- Brownfield Compliance Status Report – 2406 Coronet Way and 2611-2619 Bolton Road, prepared by MACTEC Engineering and Consulting, Inc., prepared for Coronet Way (E&A), LLC, dated April 9, 2008.

- Brownfield Compliance Status Report – 2555 Bolton Road, prepared by MACTEC Engineering and Consulting, Inc., prepared for Coronet Way (E&A), LLC, dated February 23, 2009.

- Letter Report of Groundwater Testing, Coronet Way Property Assemblage, prepared by Amec Foster Wheeler, prepared for EDENS Limited Partnership, dated March 11, 2015.

Subsequently in 2015, Amec Foster Wheeler performed an additional program of soil, groundwater and soil gas sampling and analysis which is formally reported herein for the first time.

1.3 REGULATORY BACKGROUND

Refer to Figures 4 and 5 along with the following discussion.

Previous historical research indicated one of the tenant spaces within the strip shopping center addressed at 2611-2619 Bolton Road was occupied by three different dry cleaners from approximately the mid-1960s until the 1980s. U.S. Traffic Technologies operated a warehouse on a parcel located east of the former dry cleaner at 2400 Coronet Way. Historical suspect businesses were not identified on the other properties which make up the subject site.

In September 2004 Sailors Engineers & Associates (SEA) installed five temporary monitoring wells (SEA-1 through SEA-5) on the 2555B Bolton Road and 2275 Marietta Boulevard parcels. Chlorinated volatile organic compounds (CVOCs) were detected in two of the wells located immediately downgradient of the former dry cleaner. No soil testing was conducted.

Subsurface testing conducted by ECS Southeast, LLC (ECS) in October 2005 identified low concentrations of tetrachloroethene (PCE), trichloroethene (TCE) and cis-1,2-dichloroethene (cis-DCE) in groundwater from three wells (MW-1 through MW-3) installed on the 2275 Marietta Boulevard property, downgradient of the former dry cleaner. No soil testing was conducted at that time. A HSRA release notification was submitted to the EPD's Hazardous Site Response Program (HSRP) on December 28, 2005. EPD issued a no-listing letter for the release on February 15, 2006.

Additional testing conducted by ECS Southeast, LLC (ECS) in January 2006 identified low concentrations of toluene in groundwater from temporary Geoprobe borings (SB-A, SB-B and SB-C) on the 2406 Coronet Way property. No impacts to soil were detected and an obvious source of the toluene was not identified. Note that subsequent testing conducted by MACTEC in 2007 did not confirm the presence of toluene in the groundwater in this area of the site and the ECS results are considered to be the result of a field or laboratory artifact. Following the January 2006 Phase II assessment conducted by ECS, United Consulting (United) prepared a HSRA release notification, dated March 6, 2006 for submittal to EPD. The notification form was signed by the property owner at that time, Mr. Tim Ford, and submitted on behalf of Coronet Way, LLC, who was in the process of acquiring the property. In March 2006, the HSRP determined that a release exceeding reportable quantities had not occurred and issued a no listing letter dated March 24, 2006.

On March 15, 2006, United Consulting submitted a Brownfield Application and Corrective Action Plan (CAP) for the 2611-2619 Bolton Road and 2406 Coronet Way parcels to the EPD prior to acquisition by Coronet Way (E&A) LLC. These two parcels were accepted into the Brownfield

Program. As a result, Coronet Way (E&A) LLC was required to remediate soil on these parcels to applicable cleanup standards in order to obtain a limitation of liability from the state for pre-existing environmental impacts.

The March 2006 Brownfields CAP stipulated that additional assessments would be conducted to characterize soil and groundwater conditions on site, particularly the 2611-2619 Bolton Road Property which had not been assessed at that time. To assess the soil and groundwater at the former dry cleaners, United Consulting performed a Phase II assessment in October 2006 which identified CVOCs in both soil and groundwater in the vicinity of the former dry cleaners. PCE was identified in soil at concentrations in excess of the HSRA notification concentrations. PCE and chloroform were identified in groundwater.

The EPD HSRP was notified of the release to the soil and groundwater in January 2007. On March 7, 2007, the HSRP determined that the release to soil exceeded reportable quantities and listed 2611-2619 Bolton Road on the HSI (HSI Site No. 10861). This listing did not include the 2406 Coronet Way parcel. Following the listing of the parcel on the HSI, Amec Foster Wheeler (and its predecessors by merger) conducted additional assessments to delineate the soil and groundwater contamination at the listed parcel, as well as the parcels downgradient to the west. Soil and groundwater sampling and testing and soil remediation were performed by Amec Foster Wheeler between 2007 and 2015.

Additional assessment of the 2555A Bolton Road parcel, in the western portion of the site, was conducted in 2008 by Amec Foster Wheeler, prior to the redevelopment of this parcel with a CVS Pharmacy. This parcel was the subject of an Application for Limitation of Liability/CAP, dated January 10, 2008, which was prepared by MACTEC Engineering and Consulting, Inc. (predecessor by merger to Amec Foster Wheeler) and submitted to the EPD Brownfield Program on behalf of 2555 Bolton Road (E&A), LLC. The Brownfield listing related to the detection of chlorinated solvents in groundwater on this parcel which were also attributed to a release from the former dry cleaner located in the eastern portion of the subject site. This parcel was accepted into the Brownfield program on January 29, 2008. A Brownfield CSR was prepared by MACTEC and submitted to EPD on February 23, 2009 and a Limitation of Liability for groundwater was issued on September 18, 2009.

In June 2008, the 2555A Bolton Road parcel was sub-listed as part of HSI Site No. 10861. The two other parcels affected by groundwater impacts at 2275 Marietta Boulevard have not been sub-listed.

1.4 CAP IMPLEMENTATION

A Corrective Action Plan (CAP) was submitted in January 2008 which included provisions for the excavation and off-site disposal of VOC-impacted soil. As discussed in more detail in Section 7.0, the soil removal was conducted in February and March 2008. The details regarding the soil removal were included in the Brownfield CSR, dated February 23, 2009 which was prepared for the 2406 Coronet Way and 2611-2619 Bolton Road parcels by MACTEC and submitted to EPD. The CSR was approved and a limitation of liability for groundwater was issued by EPD on May 20, 2008.

This Final CSR summarizes assessment activities conducted at the subject site and documents compliance with regulatory standards under the VRP appropriate for removal of the listed property from the HSI.

2.0 PURPOSE

This VRP Application/CSR has been prepared on behalf of Coronet Way (E&A), LLC (EDENS) for the Coronet Way Assemblage in Atlanta, Fulton County, Georgia. EDENS is submitting this VRP Application/CSR to document compliance with the provisions, purposes, standards, and policies of the VRP and to certify compliance with applicable cleanup standards for soil based on previous soil remediation activities for the purpose of delisting the site from the HSI.

3.0 CONCEPTUAL SITE MODEL

The geology and hydrogeology of the site discussed below are based on the information obtained during investigative activities at the site, from numerous previous reports on the site, and from reviews of published literature. Refer to Figures 3 and 6 through 9 along with the following discussion.

3.1 REGIONAL GEOLOGY

The property is located in the Piedmont Geologic Region of the Appalachian Province. The Piedmont parallels the eastern edge of the North American continent south of New England and east of the Blue Ridge Geologic Region. The Piedmont is the non-mountainous part of the Appalachians, and slopes generally from the mountains toward the Coastal Plain. In general, the northwest boundary of the Piedmont is at the foot of the mountains. The southeastern boundary is located where the crystalline rocks of the Piedmont are overlain by the younger marine sediments of the Coastal Plain. The Piedmont landscape typically consists of rolling terrain of gentle slope, cut or bounded by valleys of steeper slope and greater depth.

3.2 SITE SPECIFIC GEOLOGY

The subject site is mapped by the Georgia Geologic Survey as being underlain by late Precambrian to early Paleozoic bedrock consisting of the Brevard Zone mylonite (McConnell and Abrams, 1984). The residual soils present in this geologic area have been formed by the in-place chemical and physical weathering of the parent rock types. Weathering is facilitated by fractures, joints, and by the presence of less resistant rock types. The typical residual soil profile consists of clayey soils near the ground surface, where soil weathering is more advanced, transitioning to sandy silts and silty sands that generally become harder with depth to the top of parent rock.

During the installation of various soil borings, a layer of fill soil ranging in thickness from about 1.5 to 15 feet was encountered over the majority of the property. Residual soils beneath the fill consisted generally of silty sands and sandy silts with some clay. Bedrock was encountered in several on-site wells at depths ranging from approximately 38 to 69 feet below grade. Refer to Figures 6 through 9 for typical cross-sections.

3.3 GROUNDWATER FLOW

In the Piedmont Geologic Region, groundwater generally occurs under water table conditions and is stored in the overlying mantle of residuum and in the structural features (i.e., joints, fractures, faults) present in the underlying rock. Recharge to the water table occurs primarily through precipitation infiltrating the upper soils and percolating downward, under the influence of gravity, to the groundwater table. Typically, the water table is not a level surface, but a subdued reflection of the land surface. Depth to the water table is variable, being dependent on many factors which include: the amount of rainfall, the permeability of the soil, the extent of fracturing in the underlying rock, and the amount of groundwater being pumped from the underlying aquifer.

Groundwater generally flows in directions subparallel to the ground surface slopes and under the influence of gravity toward points of discharge such as creeks, swamps, drainage swales or pumped groundwater wells.

Following well installation, the monitoring wells remaining on site from previous investigations and the wells installed by Amec Foster Wheeler were surveyed relative to documented elevation points to establish the top of casing elevation for each well. Water level measurements were made in the new and existing wells using an electronic water level indicator at various times during our field activities. During the recent sampling events, several wells on site were observed to be dry. The water level data are tabulated in Table 1. Water level data for measurements taken on August 18, 2015, along with our interpretation of groundwater flow are depicted on Figure 3.

Groundwater depths measured in August 2015 ranged from approximately 33 feet in the western portion of the site to 51 feet in the northern portion of the site. Based on our interpretation of the data, the groundwater surface appears to form a plateau in the vicinity of the former dry cleaner. Groundwater flow over most of the site is in a westerly direction, generally following the path of a former drainage swale which previously crossed the property as shown on Figure 3. Groundwater flow in a small area of the northeastern portion of the site may flow to the northeast, although minor fluctuations in the groundwater depth can have a significant effect on the flow direction in this part of the site.

3.4 HYDRAULIC CONDUCTIVITY TESTING (SLUG TESTING)

Slug tests were performed in three wells at the site to evaluate hydraulic conductivity. The slug tests were performed by lowering a solid 'slug' into each well, allowing the water level to recover and stabilize. The slug was then removed and the rate at which the groundwater recovered to its static level was measured using a data logger.

The data was evaluated using AqteSolve which calculates hydraulic conductivity based on the data obtained during the slug tests and selected well construction parameters. The slug tests results indicate that hydraulic conductivities (K) vary at the site from approximately 1.827×10^{-4} centimeters per second (cm/sec) to 4.249×10^{-4} cm/sec in the residual soil aquifer. Note that different values for the hydraulic conductivity were utilized in fate and transport modeling (Section 8.0) for the different areas of the site to best match the observed plume migration.

Based on the data obtained from the August 2015 groundwater elevation measurements, the westward groundwater gradient within the shallow aquifer over much of the site was calculated to be approximately 0.009 ft/ft between wells MW-20 and MW-22. A northeastward gradient of 0.008 was calculated between MW-28 and MW-10 in the northern portion of the site. This value was utilized for the purpose of calculating the groundwater flow rate.

The effective porosity was assumed to be 20%, a value typical of Piedmont soils. The following formula was used to calculate the lateral groundwater flow rate (Applied Hydrology, C. W. Fetter, 1994):

$$\text{Velocity} = \frac{Ki}{n_e}$$

	Westward	Northeastward
where: K = hydraulic conductivity (cm per sec) =	4.3×10^{-4}	1.8×10^{-4}
i = hydraulic gradient (feet per foot) =	0.009	0.008
n_e = effective porosity (unitless) =	0.20	0.20

Based on the data input, the calculated average groundwater flow velocity is approximately 20 feet per year for the westward groundwater flow and approximately 7.4 feet per year for the northeastward flow.

4.0 DESCRIPTION OF THE RELEASE SOURCE

Results of soil and groundwater assessment activities at the site indicate a release of regulated substances to soil and groundwater has occurred at the site. This section of the CSR provides a description of the source of the release.

4.1 REGULATED SUBSTANCE RELEASED FROM THE SOURCE

The regulated substances identified in soil are: acetone, methylene chloride, tetrachloroethene (PCE) and trichloroethene (TCE). The organic compounds are believed to be related to the dry cleaners formerly located on the parcel at the intersection of Bolton Road and Coronet Way.

The regulated substances identified in groundwater are: acetone, chloroform, cis-1,2-dichloroethene (cis-DCE), PCE, TCE and toluene.

4.2 SOURCE OF RELEASE

According to the Phase I reports reviewed, the subject site consisted of residential property until approximately the mid-1960s. Much of the area in the eastern portion of the site, along Coronet Way, remained residential until the 2000s. The house located at 2406 Coronet Way was demolished and this area has remained undeveloped. Toluene was detected in groundwater on this property in a 2006 assessment at concentrations below the Type 1 RRS/MCL. A source for the toluene was not identified. Subsequent testing conducted by Amec Foster Wheeler failed to confirm the presence of toluene in groundwater in the eastern portion of the site as was originally reported by ECS and, as discussed in Section 6.5, the toluene is believed to be a laboratory artifact.

The 2611-2619 Bolton Road property was developed with a small strip shopping center in the 1960s. The central portion of the building was occupied by a dry cleaner under three different names from the mid-1960s to the 1980s. The exact periods of operation of the various dry cleaners are not known and no dry cleaner was present on site when assessment activities began in 2004. At the time Amec Foster Wheeler became involved in the project, a thrift store occupied the former dry cleaner tenant space. The impacted soils identified on site were located in the immediate vicinity of the former dry cleaners tenant space. The former dry cleaning operations are also suspected as the source of the groundwater impacts identified on site.

4.3 DESCRIPTION OF THE SOURCE

The source of the release on the 2611-2619 Bolton Road property is interpreted to be the general operation of the former dry cleaners on the subject site. Due to the length of time since the dry cleaners were last active and the lack of specific information regarding on-site operations, additional details regarding the source of the release are not available.

4.4 CHRONOLOGY OF THE RELEASE

Specific information regarding the chronology of the release is not available. According to information reportedly obtained by United Consulting, the on-site dry cleaners operated from approximately the mid-1960s until at least the mid-1980s. The release to soil and groundwater was not detected in the area of the dry cleaner until 2006 during an assessment conducted by United, although a 2004 assessment identified impacted groundwater on another parcel immediately downgradient of the former dry cleaners. The results of the 2006 assessment were reported to the EPD in November 2006 and the site was listed on the Hazardous Site Inventory in January 2007 due to the presence of PCE in soil.

5.0 DELINEATION OF SOIL CONTAMINATION

Soil sampling and testing were conducted on site by SEA, ECS, United and Amec Foster Wheeler between 2006 and 2008. Refer to Figure 4 for a summary plan of soil laboratory data and Appendix C for boring logs. Because soil laboratory reports have previously been submitted to EPD in various assessment reports and CSRs, they are not included herein.

5.1 ANALYTICAL PARAMETERS AND RATIONALE FOR SELECTION

The soil samples tested as part of ECS, United and Amec Foster Wheeler assessments were laboratory tested for volatile organic compounds (VOCs, SW-846 Test Method 8260B) based on the former presence of an on-site dry cleaner. United's 2006 and Amec Foster Wheeler's 2008 assessments included the testing of selected samples for semi-volatile organic compounds (SVOCs, SW-846 Test Method 82780C) as well. Soil verification samples collected during Amec Foster Wheeler's 2008 soil remediation were tested for VOCs.

5.2 SAMPLING AND ANALYSIS PROCEDURES

5.2.1 Sampling Equipment and Collection Techniques

Soil samples collected during the installation of the drilled soil borings were collected using a split-spoon sampling device and the standard penetration test method. Samples collected DP borings were collected in a polyethylene sleeve within the steel sampling tube. Soil samples from excavations were collected directly from excavation side-walls and bottoms. Shallow Brownfield assessment soil samples and other hand auger samples were collected with a stainless steel hand auger.

5.2.2 Soil Sample Handling and Preservation Techniques

The collected soil samples were either removed from a sampling device or collected directly and placed in clean sample containers supplied by the laboratory. Soil samples for laboratory testing of VOCs were collected using the syringe method, in accordance with SW-846 Method 5035. Clean latex gloves were worn during all sampling activities and the gloves were then discarded. Following sample collection, the samples were maintained on ice in a cooler until they were transferred to the laboratory.

5.2.3 Equipment Decontamination Procedures

Soil sampling tools and equipment, including drill rigs, augers and split spoons were decontaminated by steam cleaning prior to beginning work on the site. During drilling operations, only clean drilling tools were used in each borehole. Split spoons and hand augers were decontaminated prior to the collection of each soil sample using non-phosphate detergent and deionized water. New polyethylene sleeves were used for each sample during the DP sampling. Clean latex gloves were used during the collection of all soil samples. Gloves were changed prior to the collection of each soil sample.

5.2.4 Chain-of-Custody Procedures

All collected samples were logged on a chain-of-custody form that was signed by the ECS, United or Amec Foster Wheeler field representative and the laboratory representative upon release of the samples to the laboratory. Chain-of- custody documentation is provided with the laboratory reports.

5.2.5 Laboratory Analytical Procedures

5.2.5.1 Standard Analytical Methods

Soil samples for VOCs were analyzed using SW-846 Test Method 8260B. Soil samples for SVOCs were analyzed using SW-846 Test Method 8270C.

5.2.5.2 Quality Assurance/Quality Control Procedures

Quality control samples were prepared and analyzed during the assessment. Trip blanks were included with the samples submitted to the laboratory. The trip blanks were provided by the laboratory and consisted of 40-ml vials filled with water. Results of the trip blank analyses were included in the laboratory reports. Results of surrogate analysis were also included in the laboratory reports.

The soil samples collected by ECS and United in 2006 and by Amec Foster Wheeler in 2007 and 2008 were submitted to Analytical Environmental Services, Inc. (AES) for laboratory analysis for VOCs. AES maintains a current National Environmental Laboratory Accreditation Conference (NELAC) certification for VOC and SVOC analysis.

5.3 BACKGROUND SOIL CONCENTRATIONS

Because the VOC compounds detected in soil are not characteristic of naturally occurring conditions in Piedmont soils, naturally occurring background conditions on the affected property were assumed to be below laboratory detection limits.

5.4 SUMMARY OF PERTINENT SOIL TESTING RESULTS

The results of the soil laboratory analyses from the 2006 through 2008 assessments are summarized in Table 2 and illustrated on Figure 5.

The earliest soil testing data for the site was collected by ECS during their January 2006 assessment of the 2406 Coronet Way property. Three soil borings (SB-A, SB-B and SB-C) were installed and one sample from each boring was collected from just above the water table and tested for VOCs. VOCs were not detected in the three samples tested.

In October 2006, United conducted an assessment of the 2400 Coronet Way parcel, which was occupied by US Traffic Technologies. During a Phase I assessment, acetone odors were noted in an area used to clean traffic control equipment. United's assessment included the installation of two hand auger borings (HA-1 and HA-2) inside the building and three temporary monitoring wells (TMW-1, TMW-2 and TMW-3) outside the building. The hand auger borings were extended to a depth of 10 feet with one sample tested from each boring for VOCs. Soil samples were not collected from the temporary monitoring well borings. No VOCs were detected in the two samples tested from within the building.

In October 2006 United also conducted a Phase II assessment of the 2611-2619 Bolton Road property which included the installation of four hand augers borings, HA-3 through HA-6, inside the building, within the former dry cleaners tenant space. Soil samples obtained from the four hand auger borings were analyzed for VOCs. Samples from three of the four borings exhibited chlorinated and non-chlorinated VOCs, including PCE, TCE, cis-1,2-dichloroethene (DCE), methylene chloride and acetone. PCE was detected in excess of its HSRA notification concentration at levels of up to 1.3 milligrams per kilogram (mg/kg). The remaining VOCs were detected at significantly lower concentrations. PCE was the only constituent detected above its respective HSRA notification concentration of 0.18 mg/kg. United also installed four drilled soil borings which were later converted to temporary monitoring wells, TMW-4 through TMW-7, on this property in the area west of the building. One soil sample from each boring, collected at

depths of 10 to 15 feet, was tested for VOCs. VOCs were not detected in any of the four samples tested from the temporary monitoring well borings located in the parking lot.

In September 2007, Amec Foster Wheeler performed supplemental soil sampling and testing to further delineate the extent of VOCs in soil in the vicinity of the former dry cleaners tenant space. Five Geoprobe soil borings (B-1 through B-5) were installed within the former dry cleaner space inside the building. The borings were extended to a depth of 16 feet and samples were collected at four-foot intervals. A total of 11 soil samples were tested from the five borings. Chlorinated VOCs were detected in each of the five borings, including PCE at concentrations up to 1.4 mg/kg along with very low concentrations of TCE and DCE (less than their respective HSRA notification concentrations). No other VOCs were detected during Amec Foster Wheeler's assessment.

Between September and December 2007, Amec Foster Wheeler installed five soil borings on property surrounding the former dry cleaner building to allow for the installation of groundwater monitoring wells (MW-10, MW-16 and MW-19 through MW-21). Field screening of soil samples obtained from the five borings did not indicate environmental impact; as such, soil samples from these borings were not tested.

The collected soil testing data was used to outline those soils on site which were impacted with chlorinated VOCs above applicable Type 1 risk reduction standards. As described in more detail in Section 7.0, the building was demolished and in February 2008, Amec Foster Wheeler removed soils impacted above applicable risk reduction standards and disposed of them off-site. Following excavation, confirmation samples were collected from the sidewalls and floor of the excavation.

Immediately following the soil removal in the area of the former dry cleaners, Amec Foster Wheeler collected additional shallow soil samples (BF-1 through BF-6) from the site to provide additional coverage for Brownfield reporting purposes in areas of the property which had previously not been tested. The samples were collected from depths of 1 to 1.5 feet following demolition of the building on site and tested for VOCs and semi-volatile organic compounds (SVOCs, EPA Method 8270C). PCE and TCE were detected in one sample (BF-1, located in the parking lot) at very low concentrations (well below their respective HSRA notification concentrations). No other constituents were detected in the Brownfield samples.

On July 8, 2008, Amec Foster Wheeler installed six hand auger borings (SS-1 through SS-6) on the 2555A Bolton Road parcel in the western portion of the site to provide coverage for Brownfield reporting purposes as soils on this parcel had not previously been tested. The samples were

collected immediately following building demolition and prior to construction of a CVS Pharmacy from beneath the building slab and pavement at a depth of approximately six inches. The samples were field screened for the presence of VOCs using a photoionization detector. Although the field screening did not indicate the presence of organic vapors in the samples, each sample was tested for VOCs and SVOCs. No regulated constituents were detected in the six soil samples tested from this parcel.

The soil confirmation data and soil tests elsewhere on the property are illustrated on Figure 4 and indicate that remaining soils on site are in compliance with the residential RRS.

5.5 SOIL VAPOR TESTING RESULTS

In order to explore the potential for organic vapors in the subsurface, soil vapor sampling was conducted on August 12, 2015. Soil borings were advanced to depths of 2.5 feet at five locations and vapor implants were sealed in-place. Five sub-slab soil vapor samples (SV-1, SV-2, SV-3, SV-4, and SV-5) were collected using summa canisters and submitted for laboratory analysis for volatile organic compounds. The locations of these five soil vapor samples are shown on Figure 10. Analytical results at each location are presented in Appendix B and on Table 4.

A screening level assessment was performed to evaluate the potential for volatile organic compounds (VOCs) in subsurface soils and groundwater to intrude into indoor air in future overlying buildings. Samples SV-1, SV-2, SV-3, and SV-4 were collected from beneath the proposed footprint of a proposed grocery store and were evaluated under a commercial exposure scenario. Sample SV-5 is located underneath a planned residential structure and was evaluated under a residential exposure scenario. A total of seven volatile compounds were detected in the commercial samples (SV-1, SV-2, SV-3, and SV-4): 1,2,4-trimethylbenzene, acetone, chloromethane, m,p-xylene, o-xylene, tetrachloroethene, and toluene. Thirteen volatile compounds were detected in the residential sample (SV-5): 1,2-dichloroethane, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 4-ethyltoluene, 4-methyl-2-pentanone, acetone, benzene, carbon disulfide, ethylbenzene, m,p-xylene, o-xylene, tetrachloroethene, and toluene.

As described in Section 9.5, the results of the soil vapor sampling do not present an unacceptable vapor risk. Refer also to the Vapor Intrusion Modeling in Appendix E.

6.0 HORIZONTAL AND VERTICAL EXTENT OF GROUNDWATER CONTAMINATION

Groundwater assessment activities on site were conducted by SEA in 2004, ECS in 2006, United in 2006 and Amec Foster Wheeler between September 2007 and September 2015. Refer to Figure 4 for a plan of the monitoring well locations and a summary of the groundwater analytical data collected to date for the site.

6.1 ANALYTICAL PARAMETERS SELECTED

The wells installed on-site were intended to investigate for impacts related to the former dry cleaner on the 2611-2619 Bolton Road parcel and the U.S. Traffic Technologies warehouse property located at 2400 Coronet Way, east of the former dry cleaner. Groundwater samples were analyzed for VOCs with selected samples also analyzed for SVOCs.

6.2 GROUNDWATER MONITORING WELLS

The earliest groundwater assessment on the site was conducted by SEA in 2004. This assessment included the installation of five monitoring wells (SEA-1 through SEA-5) on the Moores Mill Shopping Center property located at 2275 Marietta Boulevard in the central portion of the site, immediately downgradient of the former dry cleaner. Specific details regarding well construction were not available and the wells were subsequently abandoned.

In January 2006, ECS conducted a limited Phase II assessment of the 2406 Coronet Way property which included the collection of three groundwater samples (SB-A, SB-B and SB-C). The samples were collected directly from three DP borings. Monitoring wells were not installed as part of the ECS assessment.

United installed a total of seven temporary monitoring wells (TMW-1 through TMW-7) on two parcels of the site in October 2006. Monitoring well construction consisted of installing a two-inch diameter PVC casing into the borehole with the lower ten feet slotted (0.01-inch slot size). Bagged quartz sand was placed around the screened section to create a filter pack which was sealed from above with a layer of bentonite clay. The remainder of the borehole annulus remained open.

In October 2006, ECS conducted a Phase II assessment of the Moores Mill Shopping Center which included the installation of three monitoring wells (MW-1 through MW-3). The wells were located in the area immediately downgradient of the former on-site dry cleaners, near the locations of SEA wells SEA-4 and SEA-5. The wells consisted of Type II two-inch diameter wells

with ten feet of screen. The borehole annulus above the sand pack was backfilled with bentonite to within approximately three feet of the surface. The remainder of the annulus was then grouted.

Between September and November 2007, Amec Foster Wheeler installed a total of 14 Type II groundwater monitoring wells (MW-10 through MW-16, MW-18 through MW-21 and EW-1 through EW-3) on the subject site. In addition, one deep Type III monitoring well (MW-17) was installed. The purpose of Amec Foster Wheeler's wells was to delineate the extent of VOC impacts to groundwater associated with the release from the former dry cleaners. The boreholes were advanced using a drill rig and hollow stem augers. In the case of the borings where bedrock was encountered before groundwater, an air hammer was utilized to extend the borings into bedrock.

The Type II wells installed by Amec Foster Wheeler were constructed using two-inch diameter PVC pipe to the surface with the bottom 15 to 20 feet consisting of 0.01-inch PVC screen. A longer than normal well screen length was used because the wells were installed during an extreme drought and several of the previous wells had gone dry. A filter pack consisting of bagged quartz sand was placed around the well screens to approximately two feet above the screen. At least two feet of hydrated bentonite chips were placed above the filter pack. The remainder of the borehole annulus of each boring was filled with cement grout. A lockable well cap and flush-mounted well cover were installed at the surface.

A deep Type III well (MW-17) was installed in rock by Amec Foster Wheeler immediately downgradient of the subject site. This well was intended to evaluate the vertical extent of chlorinated VOCs in groundwater. To construct the deep well, the auger boring was extended to the top of bedrock, which occurred below the groundwater table at this location. A 2-inch PVC well screen was then installed temporarily to obtain a sample of shallow groundwater above the bedrock. This well screen was removed and a 4-inch PVC solid casing was installed in the boring and grouted in place. Once the grout had hardened, an air hammer was used to penetrate the grout and extend the boring approximately 24 feet below the rock surface. A well was then constructed in the same manner as previously described but with a short 5-foot screen to allow collection of a groundwater sample from a deeper interval within the bedrock aquifer rather than the shallow water table aquifer.

Monitoring wells MW-22 through MW-26 were installed by Amec Foster Wheeler in August 2015 to update current groundwater conditions in preparation for entry of the site into the VRP for the

purpose of HSI delisting. Several of these wells were located in the western or southern portion of the site, in areas which had not been assessed before or near the previous location of wells which had been destroyed during construction activities associated with the CVS pharmacy.

In September 2015, Amec Foster Wheeler installed one additional well in the area of previous soil excavation (source area) and one well immediately downgradient of the former dry cleaner to further characterize groundwater conditions in the source area.

6.3 SAMPLING AND ANALYSIS PROCEDURES

6.3.1 Groundwater Elevation

Groundwater levels were measured from the top of the well casing in each of the wells on site which contained water. A level survey was conducted to measure the elevation of the top of each well casing. The groundwater flow direction affecting contaminant migration across much of the site was measured to be generally toward the west. In a small area of the northeast portion of the site, groundwater flow was measured to be in a northeasterly direction. The water table generally occurs within five to ten feet of the top of rock on the site.

6.3.2 Well Evacuation Procedures

Well development conducted by Amec Foster Wheeler and United consisted of bailing and/or pumping the wells until at least five well volumes of water had been removed and groundwater was relatively clear of fine particles. The water quality parameters of temperature, pH and specific conductivity were measured during well development. Groundwater samples were collected upon stabilization of the water quality parameters. Groundwater samples collected by ECS were collected through the Geoprobe sampling equipment and no wells were installed or developed. Well evacuation procedures employed by SEA during their 2004 assessment are unknown.

6.3.3 Groundwater Sampling, Handling and Preservation

Groundwater samples were collected by United and Amec Foster Wheeler using pre-cleaned, disposable bailers or a peristaltic pump. All bailers and tubing were discarded following use. Clean latex gloves were worn during all development and sampling activities and were changed between each well location. Sampling procedures employed by SEA in 2004 and ECS in 2006 were not reported.

Samples were collected in clean sample containers, supplied by the laboratory, which contained the preservative appropriate for each test. Following sample collection, the bottles were stored on ice in a cooler until they were transferred to the laboratory. The samples were maintained under chain-of-custody control from the time they were collected until they were relinquished to the laboratory.

6.3.4 Decontamination Procedures

Decontamination procedures employed by United and Amec Foster Wheeler consisted of the use of clean, unused disposable bailers or tubing at each sampling location. Latex gloves were also worn and changed between each sampling location. Bailers were disposed of after each use. No equipment was used to sample more than one well.

6.3.5 Laboratory Analytical Techniques

6.3.5.1 Analytical Procedures

Following delivery to the laboratory, the groundwater samples collected by SEA, ECS, United and Amec Foster Wheeler were analyzed for VOCs using SW-846 Test Method 8260B. Selected groundwater samples collected by United and Amec Foster Wheeler were also tested for SVOCs (SW-846 Test Method 8270C). Complete laboratory reports for Amec Foster Wheeler's 2015 sampling events are included in Appendix B.

6.3.5.2 Quality Control Samples

The groundwater samples were maintained under chain-of-custody control and submitted to the analytical laboratory for testing. Trip blanks prepared by the laboratory were also submitted for testing. QA/QC was conducted in accordance with the laboratory analysis selected.

6.3.5.3 Chain-of-Custody Procedures

Samples collected during the various assessments were delivered to the analytical laboratory under chain-of-custody protocol. From the time of collection until they were released to the laboratory, the samples were stored in ice-filled coolers. Chain-of-Custody records documenting the transfer of the samples to the laboratory were maintained and were included in the laboratory reports.

6.4 BACKGROUND GROUNDWATER QUALITY

Because the organic constituents in question are not typical of naturally occurring substances in the Piedmont, naturally occurring background conditions for these constituents at the subject property were assumed to be below laboratory detection limits.

6.5 SUMMARY OF GROUNDWATER TESTING RESULTS

Refer to Figure 5 for the locations of groundwater monitoring wells, along with the following discussion. The groundwater laboratory data for the on-site wells are summarized on Table 3 and 2015 laboratory reports are included in Appendix B.

In January 2006, ECS conducted a Phase II assessment on the 2406 Coronet Way property. Groundwater samples were collected from three Geoprobe borings (SB-A, SB-B and SB-C) and tested for VOCs. Low levels of toluene were identified in the groundwater in each of the three samples. No obvious source of toluene was identified and soil testing conducted by both ECS and Amec Foster Wheeler did not identify toluene or other VOCs. As discussed, based on the later information, the toluene finding is thought to be a field or laboratory artifact.

In March 2006, United Consulting installed nine Direct Push (DP) borings (GP-1 through GP-9) in the eastern portion of the site. These properties primarily consisted of residential lots. Groundwater samples were collected directly through the DP equipment and tested for VOCs and SVOCs. No VOCs or SVOCs were detected in groundwater from the nine borings.

In October 2006, United Consulting installed three temporary monitoring wells, TMW-1 through TMW-3, in the area around the building on the 2400 Coronet Way parcel, which was occupied by US Traffic Technologies. Groundwater samples from the temporary monitoring wells were analyzed for VOCs. No VOCs were detected in these three samples.

In October 2006, United Consulting installed four temporary monitoring wells, TMW-4 through TMW-7, in the parking lot of the 2611-2619 property. Groundwater samples from the temporary monitoring wells were analyzed for VOCs and Polynuclear Aromatic Hydrocarbons (PAHs). PCE and chloroform were identified in the groundwater from the three wells located closest to the building. Chloroform was detected at concentrations below the maximum contaminant level (MCL) for drinking water of 80 µg/l. Chloroform is a common constituent of drinking water in the Atlanta area and is often detected at low levels in the vicinity of leaking water or sewer lines.

Between September and December 2007, Amec Foster Wheeler installed five monitoring wells on the 2611-2619 Bolton Road parcel. MW-10 was located northwest of the building, near Bolton Road. MW-16, MW-19, MW-20 and MW-21 were located on the 2406 Coronet Way property. The purpose of these wells was to aid in the delineation of the lateral extent of VOC impacted groundwater and also to confirm the presence of toluene in groundwater on the Coronet Way property which had previously been reported by ECS. Amec Foster Wheeler also resampled the United well TMW-7 at that time. Groundwater testing identified low concentrations of PCE in groundwater in the immediate vicinity of the former dry cleaner as well as the unregulated SVOC compound caprolactam in four of the six wells tested. We note that toluene was not detected in any of the four wells tested from the 2406 Coronet Way property and that the well MW-19 was near the same location as ECS boring SB-A from 2006. Based on this data and the suspect nature of the ECS sampling procedure, the original finding of toluene in the groundwater during the 2006 ECS assessment is considered invalid and likely the result of a field or laboratory artifact.

Note that Amec Foster Wheeler's 2007 assessment also included the installation of eleven additional wells on parcels downgradient of the former dry cleaner which were intended to delineate the lateral and vertical extent of the VOC plume in this area. The results of the off-site assessment indicate that a narrow VOC plume extends westward to Marietta Boulevard. The downgradient extent of the plume has not been fully defined at this time. PCE was also detected in the deep Type III well (MW-17) located very near the western (downgradient) boundary of the site. Although not detected in on-site wells, the PCE breakdown products TCE and DCE were detected at low concentrations in several wells located downgradient of the former dry cleaners.

In February 2015, after a significant period of inactivity at the site, Amec Foster Wheeler sampled existing wells on site to update the condition of groundwater. Most wells were found except for four located on the overgrown vacant lot at 2406 Coronet Way. Additional effort was made using a metal detector during the sampling event to locate those wells which could not previously be located. A total of 14 monitoring wells were located which Amec Foster Wheeler attempted to sample, including: TMW-4, TMW-5, TMW-6, TMW-7, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-16, MW-17, MW-18 and MW-21. Monitoring wells MW-19 and MW-20 could not be located and monitoring wells TMW-4, TMW-7 and MW-16 were dry and could not be gauged or sampled. Prior to resampling, all wells on site were gauged to measure the depth to groundwater. This information was used to develop a potentiometric surface map (Figure 3).

Following gauging, the wells were purged using a submersible pump and dedicated tubing to remove stagnant water and allow representative formation water to more easily enter the well. During purging, the water quality parameters of temperature, pH and specific conductance were periodically measured and recorded. Well purging continued until these parameters stabilized and a minimum of three well volumes have been removed or the well went dry. Note that monitoring wells MW-12, MW-13 and MW-15 contained very little water and did not recharge immediately after being purged dry. Amec Foster Wheeler was able to collect samples from these wells the following day using clean polyethylene bailers.

In August 2015, Amec Foster Wheeler installed five additional wells on the subject site. Three of these wells (MW-22 through MW-24) were located near the downgradient site boundary near Marietta Boulevard and the western portion of the site to provide updated information regarding this portion of the site, as several wells previously located in the area had been destroyed during development of the CVS drug store. MW-25 and MW-26 were located in the eastern portion of the site, in the area immediately behind the former shopping center that contained the dry cleaner.

As summarized on Figure 5, tetrachloroethene (PCE) and chloroform were the only VOC constituents detected in groundwater on site during the 2015 sampling events. These results are consistent with previous findings. The PCE detected is thought to be associated with the previous dry cleaning operation in the eastern portion of the site. Chloroform was detected in four of the wells sampled. Chloroform in groundwater is typically associated with chemicals utilized in municipal water treatment systems. Its presence in groundwater is generally attributable to leakage from potable water lines or sewer lines, as is believed to be the case here. The VOC concentrations detected during the current sampling event vary somewhat from previous sampling events, in some cases higher, in other cases lower. The highest VOC concentrations were detected in TMW-5 and TMW-6, located in the immediate vicinity of the former dry cleaner and are higher than previous PCE concentrations from 2006. PCE in MW-17, located downgradient of the former dry cleaner, was lower than measured in 2007. PCE was not detected in MW-11, MW-12, MW-13, MW-14, MW-15 or MW-21.

7.0 SUMMARY OF REMEDIAL MEASURES COMPLETED TO DATE

In accordance with the EPD-approved CAP, in order to address impacted soils present on the 2611-2619 Bolton Road parcel at concentrations above applicable risk reduction standards, in February and March 2008, Amec Foster Wheeler performed the excavation of solvent-impacted soils on the subject parcel in the area of the former dry cleaners (see Figure 4 for excavation limits and confirmation test results).

The excavation was extended to depths ranging from approximately four to ten feet below grade. Completion of the excavation was confirmed through the testing of verification samples in accordance with the approved Brownfield Corrective Action Plan (CAP). Verification samples were collected from the excavation at approximate 30-foot horizontal intervals on the excavation sidewalls. Samples from two vertical depth intervals were collected at sidewall sampling locations where the excavation depth exceeded eight feet. These deeper sidewall samples also represent bottom conditions at the lateral limits of the excavation. Excavation floor samples from the interior of the excavation were also collected. The confirmation samples were collected utilizing the excavator bucket and placed in containers provided by the laboratory and then delivered by Amec Foster Wheeler personnel to the laboratory for expedited analysis. The confirmation samples were tested for the presence of VOCs.

During soil removal, laboratory results for several verification samples did not meet the designated clean up criteria for PCE. As such, the excavation was extended in these areas and additional samples were collected and submitted for analysis which confirmed compliance with the residential RRS. The results of the verification testing are summarized in Table 2. The final excavation limits were delineated by a total of 21 verification samples at locations illustrated on Figure 5. All final soil verification results were below Type 1 RRS for VOCs. As summarized below in Table 1, the highest concentrations for all VOCs remaining in soils on site are below Type 1 RRS.

Table 1 - Risk Reduction Standards for Soil

Regulated Substance	Highest Concentration Remaining on Site, mg/kg	Location	Type 1 RRS, mg/kg
Methylene chloride	0.0094	HA-6	0.50
Acetone	0.086	B-5	400
Bis(2-ethylhexyl)phthalate	0.40	BF-3	50.0
Cis-1,2-Dichloroethene	0.077	CS-NW1	7.0
Tetrachloroethene	0.160	CS-NE4-A	0.5
Trichloroethene	0.037	B-3	0.5

mg/kg - milligrams per kilogram (parts per million)

A total of approximately 1637 tons of impacted soil was excavated and transported for disposal from the site. Material was removed and direct loaded into tandem dump trucks and manifested for delivery to Eagle Point Landfill in Ball Ground, Georgia. The results of this remedial activity were reported to EPD in the Brownfield CSR for the 2406 Coronet Way and 2611-2619 Bolton Road parcels, dated April 9, 2008.

8.0 FATE AND TRANSPORT MODELING

Fate and transport modeling has been used to evaluate the extent and concentration of plume migration and the potential for impact to nearby surface water bodies. A preliminary fate and transport modeling of the CVOC plume was conducted to begin to assess the potential impact to off-site properties and Whetstone Creek. In order to evaluate the migration of regulated constituents in groundwater and the risk of impact to potential receptors downgradient of the plume, Amec Foster Wheeler utilized the BIOCHLOR software to prepare a preliminary fate and transport model for the release of CVOCs in groundwater on site.

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

The initial release of CVOCs to groundwater has been assumed to have occurred 40 years ago, after the facility began utilizing on-site dry-cleaning equipment. CVOCs are no longer utilized on site and soils impacted above applicable remediation standards in the source area have been removed.

MW-28, a monitoring well located within the soil remediation excavation area was selected to represent the source location. Two models were run, the first modeled westward groundwater migration which is observed across most of the site. The second modeled northeastward groundwater migration which is observed in a small area in the northern portion of the site.

The model was initially developed by inputting measured parameters such as hydraulic conductivity, hydraulic gradient, soil organic carbon content, and groundwater CVOC concentrations within the source area. Hydraulic conductivity was measured in four wells on site using slug tests conducted in EW-1, EW-2 and EW-3. Hydraulic gradient was calculated from the most recent potentiometric surface map. The 2015 groundwater data sampling event was utilized to provide CVOC concentrations. Other BIOCHLOR inputs were based on literature values or typical model assumptions. Because only limited evidence of PCE degradation has been observed to date on site, as a conservative measure, no degradation was taken into account in the model.

As illustrated on the attached outputs from the BIOCHLOR model (Appendix C and Figure 11), the model predicts that approximately 40 years after the initial release (i.e. now) groundwater conditions emanating from the source area match conditions currently observed in shallow downgradient wells, both west and northeast of the source area. A model run predicting conditions 30 years from now (70 years from the time of the assumed initial release) was utilized to illustrate future trends. The results of the modeling indicate that the PCE plume could just reach Whetstone Creek at detectable concentrations but below Georgia In-Stream standards. Based on the predicted concentrations at the leading edge of the plume and the limited volume of groundwater discharging into the creek at any time, the potential measurable impacts to Whetstone Creek are negligible.

Modeling of the plume migration to the northeast indicates that after 30 years, the plume will extend a short distance off site to the north. The nearest surface water receptor is Peachtree Creek, located approximately 2,800 feet northeast of the current extent of the plume. The model predicts that the plume will not impact Peachtree Creek in the foreseeable future.

9.0 EXPOSURE PATHWAYS

The risk to human health and the environmental is directly related to the potential for receptors to be exposed to contamination. Exposure pathways are the means by which regulated substances migrate from a source to a point of contact with humans and/or the environment. An examination of the following potential exposure pathways and receptors was conducted for the site.

- Potential exposure to regulated constituents in soil;
- Potential exposure to regulated constituents in groundwater;
- Potential exposure to regulated constituents in surface water;
- Potential exposure to regulated constituents due to vapor intrusion from impacted soil or groundwater.

9.1 SOIL CRITERIA

The subject site is located in Atlanta, Georgia in an area of commercial and residential properties. The properties immediately surrounding the site consist of retail stores and restaurants west and south of the site and residential properties to the east and north. The nearest residential developments are located across Coronet Way to the east. The subject site would currently be considered a “non-residential” property as defined under HSRA. However, because of potential future development plans which include residential units, residential risk reduction standards were applied for the previous soil remediation effort.

The constituents remaining in soil are summarized above in Table 1, along with the Type 1 RRS. As discussed in more detail in Section 7.1, following soil remediation activities, no HSRA regulated constituents remain in soil above their respective residential RRS. As such, the subject site satisfies residential RRS criteria calculated for potential exposure to soil.

In addition to the soil data obtained that indicates compliance with the Type 1 RRS, redevelopment of the site will be performed under an Environmental Management Plan (EMP) designed to identify and address suspect soil conditions during ground-disturbing activities, such as demolition, grading, utility installation and foundation construction.

9.2 GROUNDWATER CRITERIA

Amec Foster Wheeler compared recent groundwater testing data from the site to Type 1 RRS for the constituents detected in groundwater on site. Based on the 2015 groundwater testing data, the site does not comply with groundwater RRS for PCE. However, groundwater beneath the site is not used for drinking water and the site will comply with Type 5 RRS upon execution of an Environmental Covenant that restricts groundwater usage. For these reasons, the on-site groundwater exposure pathway is incomplete.

Previous groundwater testing results (Figure 5, Table 3) as well as groundwater fate and transport modeling results (Appendix D) indicate that migration of groundwater will primarily occur within the area located between the former dry cleaner and Whetstone Creek to the west. A small portion of the plume is expected to migrate a short distance off site to the north, however, no receptors have been identified in the area of this portion of the plume.

As part of the HSRA notification package submitted to EPD in March 2006, United completed a receptor survey of the site vicinity. The City of Atlanta provides municipal water service within its city limits. The City of Atlanta obtains its water from surface water intakes located on the Chattahoochee River. The Chattahoochee River intake for the Hemphill and Chattahoochee treatment plants, located approximately 0.67 miles northwest of the site was the nearest identified drinking water source. No active drinking water wells were identified within one mile of the site. No drinking water sources were not identified in the direction of the contaminant plume migration.

Based on the information obtained, exposure to contaminated groundwater is considered unlikely for both the residential and non-residential properties in the site vicinity due to the fact that local properties are all connected to municipal water supplies. Groundwater fate and transport modeling have demonstrated the groundwater conditions will not result in exceedances of drinking water standards within 1,000 feet downgradient of the current extent of the plume or Georgia in-stream water quality standards. As such, the site is in compliance with appropriate groundwater criteria under the VRP.

9.3 SOURCE

Concentrations of dissolved VOCs in groundwater are all well below the aqueous solubilities for the various compounds detected on site. No evidence of highly contaminated soils indicative of

a potential free product condition has been identified and impacted soils from the source area above Type 1 RRS have been removed. The concentrations of PCE and other VOCs detected in groundwater have been well below 1% of their aqueous solubilities and no indications of a dense non-aqueous phase liquid (DNAPL) condition have been observed.

9.4 SURFACE WATER

According to the 1993 United States Geologic Survey (USGS) Topographic Map of Northeast Atlanta, Georgia, the site is located on the southwestern flank of a ridgeline located just north of Coronet Way. A 1928 topographic map indicates the site straddled a swale that drained to the west.

Surface drainage over much of the site is controlled by catch basins and the stormwater sewer system. Surface drainage over the residential and undeveloped parcels along Coronet Way is generally uncontrolled. No designated wetlands or surface water bodies were identified on site or in the immediate downgradient vicinity. The nearest surface water body is Whetstone Creek, located approximately 900 feet beyond the downgradient property boundary.

Surface water flow across the site is generally in a westerly direction and on-site groundwater flows primarily to the west with the exception of a small area in the northern portion of the site where groundwater flow appears to be to the north. Groundwater is expected to discharge primarily into Whetstone Creek located approximately 900 feet from the site's southern boundary. Because the creek is expected to act as a groundwater discharge feature for shallow groundwater in the area, VOCs in groundwater are not expected to migrate beyond the creek and impact other properties.

Amec Foster Wheeler has modeled the fate and transport of VOCs in the groundwater on site and the potential impact of regulated constituents in groundwater on the surface water quality of Whetstone Creek and the area north of the site (Appendix D).

Groundwater fate and transport modelling indicates that the anticipated CVOC concentrations discharging to Whetstone Creek will remain well below the acceptable concentrations (see Appendix D for model results).

The field-observed concentrations of COCs dissolved in groundwater at the site, the results of the analytical groundwater fate and transport model for the VOCs in question and the expected mixing between the impacted water and surface water in Whetstone Creek show that in-stream water

quality standards are not predicted to be exceeded in the future. Therefore, the surface water exposure pathway is incomplete.

9.5 VAPOR INTRUSION

Risk-based soil vapor screening levels protective of indoor air were calculated using OSWER's Vapor Intrusion Screening Level (VISL) calculator (Version 3.4, June 2015 RSLs, USEPA 2015a). The VISLs were based on a target cancer risk of 10^{-5} and target hazard index of 1 per the Georgia Hazardous Site Response Act rule. A default groundwater temperature for North Georgia (19.4 degrees Celsius) was applied (USEPA 2004). In accordance with guidance issued by USEPA for the assessment and mitigation of vapor intrusion (USEPA 2015b), the soil vapor to indoor air attenuation factor was set to 0.03.

Detected sub-slab soil vapor concentrations in SV-1 through SV-4 were less than the commercial-based VISLs protective of indoor air. The detected sub-slab soil vapor concentrations in SV-5 were less than the residential-based VISLs protective of indoor air. Based on the results of this screening evaluation, subsurface conditions are not likely to contribute to unacceptable concentrations of VOCs in indoor air in current or future buildings at the site. No further evaluation of the indoor air exposure pathway is recommended at this time.

In order to evaluate a groundwater cleanup goal based on the vapor intrusion pathway, the Johnson and Ettinger model was used to calculate a risk-based acceptable groundwater concentration. For this modeling, soil was defined as sandy loam and groundwater was 50 feet below the foundation. The living space was assumed to be an apartment on the ground floor with dimensions of 25 feet by 40 feet with 8 foot ceilings. Default residential assumptions were used for the exposure duration and frequency. Using this approach, an acceptable groundwater concentration of 210 micrograms per liter was estimated, well below the predicted concentration beneath the residential structures established using the fate and transport model (which using conservative assumptions predicted the PCE concentration in groundwater beneath the nearest residence to be approximately 10 micrograms per liter.

10.0 CONCLUSIONS

Based on the findings of assessment activities and the results of corrective action, the following conclusions are presented:

- No source remains on site. All soil impact identified above Type 1 RRS has been removed and the concentrations of VOCs detected in groundwater do not indicate a DNAPL condition.

- The extent of soil impact has been horizontally and vertically delineated and impacted soils within the boundaries of the site exceeding Type 1 RRS have been removed and properly disposed. Soil conditions are certified in compliance with Type 1 RRS on the site. Future site development will be performed under an EMP.

- The extent of groundwater impact has been delineated within the boundaries of the site. Groundwater modeling indicates that potential drinking water receptors will not be impacted by future groundwater migration. An Environmental Covenant will be implemented upon agreement with EPD so that future site use will maintain an incomplete groundwater exposure pathway.

- Groundwater modeling indicates that potential surface water receptors will not be impacted at concentrations above Georgia's In-Stream standards.

- On-site soil vapor testing did not identify VOCs in soil above the respective residential or commercial screening levels based on the proposed site development. Vapor intrusion modeling related to off-site properties indicates the predicted groundwater VOC concentrations will not present an unacceptable vapor intrusion risk.

- The 2611-2619 Bolton Road and 2555 Bolton Road parcels which comprise the HSI site listed in the EPD's HSI site summary will be eligible for delisting because both parcels are in compliance with Type 1 RRS for soil and will be in compliance with Type 5 RRS groundwater upon filing of the Environmental Covenant.

REFERENCES

Cressler, C.W., C.J. Thurmond, and W.G. Hester, 1983, Groundwater in the Greater Atlanta Region, Georgia; Georgia Geologic Survey Information Circular 63

Fetter, C.W., Applied Hydrogeology, third edition, 1994; Macmillan Publishing Company, New York

McConnell, K.I., and C.E. Abrams, 1984, Geology of the Greater Atlanta Region; Georgia Geologic Survey Bulletin 96

USEPA 2004. User's Guide for Evaluating Subsurface Vapor Intrusion into Buildings, US Environmental Protection Agency, February 2004.

USEPA 2015a. Vapor Intrusion Screening Level Calculator. U.S Environmental Protection Agency, June 2015.

USEPA 2015b. OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air, Office of Solid Waste and Emergency Response, June 2015.

VRP CHECKLIST

Voluntary Investigation and Remediation Plan Application Form and Checklist

VRP APPLICANT INFORMATION

COMPANY NAME	Coronet Way (E&A), LLC				
CONTACT PERSON/TITLE	Herbert Ames				
ADDRESS	1221 Main Street, Suite 1000, Columbia, SC 29201				
PHONE	(678) 527-0418	**FAX**	(770) 569-4614	**E-MAIL**	HAmes@edens.com

GEORGIA CERTIFIED PROFESSIONAL GEOLOGIST OR PROFESSIONAL ENGINEER OVERSEEING CLEANUP

NAME	Stephen R. Foley	**GA PE/PG NUMBER**	1057
COMPANY	Amec Foster Wheeler Environment & Infrastructure, Inc.		
ADDRESS	2677 Buford Highway		

PHONE	404-817-0152	**FAX**	404-817-0175	**E-MAIL**	Steve.foley@amecfw.com

APPLICANT'S CERTIFICATION

In order to be considered a qualifying property for the VRP:

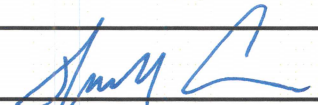
(1) The property must have a release of regulated substances into the environment;
(2) The property shall not be:
- (A) Listed on the federal National Priorities List pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Section 9601.
- (B) Currently 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			
APPLICANT'S NAME/TITLE (PRINT)	Herbert Ames, V.P. Leasing	**DATE**	12/5/15

QUALIFYING PROPERTY INFORMATION (For additional qualifying properties, please refer to the last page of application form)			
HAZARDOUS SITE INVENTORY INFORMATION (if applicable)			
HSI Number	10861	Date HSI Site listed	3/7/07, 6/12/08
HSI Facility Name	Coronet Way	NAICS CODE	
PROPERTY INFORMATION			
TAX PARCEL ID	17-0230-000010278, 17-0230-000010286 17-0230-000010294, 17-0230-000010302 17-0230-000010310, 17-0230-000010328 17-0230-000010542, 17-0230-000040671 17-0230-000010583, 17-0230-000010690 17-0230-000010708, 17-0230-000010716 17-0230-000010724, 17-0230-LL1310 17-0230-LL1385,	PROPERTY SIZE (ACRES)	14.2
PROPERTY ADDRESS			
CITY	Atlanta	COUNTY	Fulton
STATE	Georgia	ZIPCODE	3
LATITUDE (decimal format)	33.8197	LONGITUDE (decimal format)	-84.4502
PROPERTY OWNER INFORMATION			
PROPERTY OWNER(S)	EDENS Limited Partnership	PHONE #	(803) 269-8913
MAILING ADDRESS	7200 Wisconsin Avenue, Suite 400		
CITY	Bethesda	STATE/ZIPCODE	Maryland 20814

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.)	**Attached**	
2.	**WARRANTY DEED(S)** FOR QUALIFYING PROPERTY.		
3.	**TAX PLAT** OR OTHER FIGURE INCLUDING QUALIFYING PROPERTY BOUNDARIES, ABUTTING PROPERTIES, AND TAX PARCEL IDENTIFICATION NUMBER(S).	**Figure 2**	
4.	**ONE (1) PAPER COPY AND TWO (2) COMPACT DISC (CD) COPIES** OF THE VOLUNTARY REMEDIATION PLAN IN A SEARCHABLE PORTABLE DOCUMENT FORMAT (PDF).	**Included**	
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	**Section 3.0, 4.0, 5.0, 6.0 and 7.0**	

	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 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;	**Completed Section 6.0**	
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;	**Completed through modeling, Section 8.0**	
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	**Not Applicable**	
5.d.	Within 60 months after enrollment, the participant must submit the compliance status report required under the VRP, including the requisite certifications.	**Attached**	
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, et seq.). I am a professional engineer/professional geologist who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors/Georgia State Board of Registration for Professional Geologists and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances. Furthermore, to document my direct oversight of the Voluntary Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." STEPHEN R. FOLEY 1057 Printed Name and GA PE/PG Number 12/3/15 Date Signature and Stamp STEPHEN ROBERT FOLEY GEORGIA REGISTERED PROFESSIONAL GEOLOGIST No. 001057		

TABLES

Table 1
Groundwater Elevation Data
Coronet Way Assemblage
Atlanta, Georgia
(Reported in feet)

Well ID	Measurement Date	Screened Interval	Casing Elevation	Measured Depth to Groundwater	Groundwater Elevation
TMW-4	9/18/2007	30.0 - 45.0	821.71	Dry @ 776.71	Dry
	10/31/2007			Dry @ 776.71	Dry
	2/18/2015			43.93	777.78
	8/18/2015			Dry @ 776.71	Dry
TMW-5	9/18/2007	30.0 - 45.0	820.32	Dry @ 777.32	Dry
	10/31/2007			Dry @ 777.32	Dry
	2/18/2015			44.64	
	8/18/2015			Dry @ 777.32	Dry
TMW-6	9/18/2007	30.0 - 45.0	819.66	43.41	776.25
	10/31/2007			43.70	775.96
	1/10/2008			43.71	775.95
	2/18/2015			43.80	775.86
	8/18/2015			Dry @ 774.66	Dry
TMW-7	9/18/2007	36.0 - 46.0	819.39	43.55	775.84
	10/31/2007			43.95	775.44
	1/10/2008			44.85	774.54
	2/18/2015			Dry @ 773.39	Dry
	8/18/2015			Dry @ 773.39	Dry
MW-10	9/18/2007	45.0 - 70.0	825.29	49.06	776.23
	10/31/2007			50.08	775.21
	1/10/2008			51.23	774.06
	2/18/2015			52.95	772.34
	8/18/2015			51.56	773.73
MW-11	9/18/2007	25.0 - 50.0	813.58	38.04	775.54
	10/31/2007			38.12	775.46
	1/10/2008			38.41	775.17
	2/18/2015			40.80	772.78
	8/18/2015			39.49	774.09
MW-12	9/18/2007	25.0 - 40.0	809.27	33.53	775.74
	10/31/2007			33.88	775.39
	1/10/2008			34.60	774.67
	2/18/2015			36.75	772.52
	8/18/2015			35.89	773.38
MW-13	9/18/2007	23.0 - 35.0	806.27	30.31	775.96
	10/31/2007			30.73	775.54
	1/10/2008			31.57	774.70
	2/18/2015			33.91	772.36
	8/18/2015			33.31	772.96

Table 1
Groundwater Elevation Data
Coronet Way Assemblage
Atlanta, Georgia
(Reported in feet)

Well ID	Measurement Date	Screened Interval	Casing Elevation	Measured Depth to Groundwater	Groundwater Elevation
MW-14	9/18/2007	25.0 - 40.0	811.43	34.13	777.30
	10/31/2007			34.70	776.73
	1/10/2008			35.94	775.49
	2/18/2015			38.22	773.21
	8/18/2015			37.80	773.63
MW-15	9/18/2007	33.0 - 53.0	815.09	37.00	778.09
	10/31/2007			37.78	777.31
	1/10/2008			39.53	775.56
	2/18/2015			41.60	773.49
	8/18/2015			41.16	773.93
MW-16	9/18/2007	30.0 - 50.0	824.58	48.23	776.35
	10/31/2007			48.95	775.63
	1/10/2008			49.74	774.84
	2/18/2015			Dry @ 774.58	Dry
	8/18/2015			Dry @ 774.58	Dry
MW-17	10/31/2007	65.0 - 70.0	812.67	38.93	773.74
	1/10/2008			39.45	773.22
	2/18/2015			40.25	772.42
	8/18/2015			39.42	773.25
MW-18	10/31/2007	20.0 - 40.0	803.91	31.41	772.50
	1/10/2008			31.85	772.06
	2/18/2015			32.59	771.32
	8/18/2015			32.61	771.30
MW-19	10/31/2007	37.0 - 57.0	822.29	45.87	776.42
	1/10/2008			47.09	775.20
	2/18/2015	Not Found			
	8/18/2015	Not Found			
MW-20	10/31/2007	35.0 - 55.0	820.06	43.27	776.79
	1/10/2008			44.37	775.69
	2/18/2015	Not Found			
	8/18/2015	Not Found			
MW-21	12/21/2007	35.0 - 55.0	821.47	46.44	775.03
	1/10/2008			46.84	774.63
	2/18/2015			48.21	773.26
	8/18/2015			47.35	774.12

Table 1
Groundwater Elevation Data
Coronet Way Assemblage
Atlanta, Georgia
(Reported in feet)

Well ID	Measurement Date	Screened Interval	Casing Elevation	Measured Depth to Groundwater	Groundwater Elevation
MW-22	8/18/2015	25.0 - 45.0	806.65	36.14	770.51
MW-23	8/18/2015	30.0 - 50.0	807.92	36.21	771.71
MW-24	8/18/2015	25.0 - 40.0	807.54	34.59	772.95
MW-25	8/18/2015	49.0 - 69.0	822.73	48.82	773.91
MW-26	8/18/2015	45.0 - 60.0	820.24	45.82	774.42
MW-27	9/11/2015	44.0 - 59.0	821.39	48.50	772.89
MW-28	9/11/2015	35.0 - 50.0	812.48	38.79	773.69
EW-1	12/19/2007	25.0 - 45.0	805.52	36.55	768.97
	1/10/2008			36.58	768.94
	Well Abandoned				
EW-2	12/19/2007	25.0 - 45.0	804.19	36.05	768.14
	1/10/2008			36.00	768.19
	Well Abandoned				
EW-3	12/19/2007	25.0 - 45.0	814.79	38.14	776.65
	1/10/2008			38.40	776.39
	Well Abandoned				

Table 2
Soil Analytical Data
Coronet Way Assemblage
Atlanta, Georgia
Results reported in milligrams per kiligram (mg/kg)

Sample ID	Type 1 RRS	Type 2 RRS	SB-A	SB-B	SB-C	GP-1@10'	GP-2@5'	GP-3@10'	GP-4@5'	GP-5@10'	GP-6@5'	GP-7@10'	GP-8@5'	GP-9@10'	HA-1	HA-2
Date			1/26/2006	1/26/2006	1/26/2006	3/8/2006	3/8/2006	3/8/2006	3/8/2006	3/8/2006	3/9/2006	3/9/2006	3/9/2006	3/9/2006	10/30/2006	10/30/2006
Depth			25	25	25	10	5	10	5	10	5	10	5	10	4	3
VOCs																
Acetone	400	60	<0.071	<0.054	<0.061	<0.07	<0.07	<0.069	<0.061	<0.074	<0.068	<0.072	<0.062	<0.0061	<0.086	<0.077
Methylene Chloride	0.5	0.49	<0.0036	<0.0027	<0.003	<0.0035	<0.0035	<0.0035	<0.003	<0.0037	<0.0034	<0.0036	<0.0031	<0.003	<0.0043	<0.0039
Tetrachloroethene	0.5	0.34	<0.0036	<0.0027	<0.003	<0.0035	<0.0035	<0.0035	<0.003	<0.0037	<0.0034	<0.0036	<0.0031	<0.003	<0.0043	<0.0039
Trichloroethene	0.5	0.36	<0.0036	<0.0027	<0.003	<0.0035	<0.0035	<0.0035	<0.003	<0.0037	<0.0034	<0.0036	<0.0031	<0.003	<0.0043	<0.0039
SVOCs			NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT
PAHs			NT	NT	NT	NT									NT	NT

Notes

VOCs - Volatile Organic Compounds
SVOCs - Semivolatile Organic Compounds
PAHs - Polynuclear Aromatic Hydrocarbons
NT - Sample not tested for constituent
ND - Not detected above laboratory reporting limits
NC - Notification Concentration under Georgia's Hazardous Site Response Act
RRS - Residential Risk Reduction Standard under HSRA
X.XX - Bold values indicate constituent detected above laboratory reporting limits
X.XX - Orange shaded cells indicate constituent concentration exceeds both Type 1 and Type 2 RRS (Sample location excavated during 2008 soil remediation)

Table 2
Soil Analytical Data
Coronet Way Assemblage
Atlanta, Georgia
Results reported in milligrams per kiligram (mg/kg)

Sample ID	Type 1 RRS	Type 2 RRS	SB-A	HA-3	HA-4*	HA-5*	HA-6	TMW-4	TMW-5	TMW-6	TMW-7	B-1/2'	B-1/4	B-1/8'	B-2/8'*	B-2/12'
Date			1/26/2006	10/31/2006	10/31/2006	10/31/2006	10/31/2006	10/31/2006	10/31/2006	10/31/2006	10/31/2006	9/5/2007	9/5/2007	9/5/2007	9/5/2007	9/5/2007
Depth			25	1	4	4	1.5	10	15	10	10	2	4	8	8	12
VOCs																
Acetone	400	60	<0.071	<0.065	<0.069	**0.073**	<0.073	<0.086	<0.09	<0.095	<0.075	<0.13	<0.083	<0.074	<0.078	<0.11
Methylene Chloride	0.5	0.49	<0.0036	<0.0032	<0.0035	<0.0031	**0.0094**	<0.0043	<0.0045	<0.0048	<0.0037	<0.0063	<0.0041	<0.0037	<0.0039	<0.0053
Tetrachloroethene	0.5	0.34	<0.0036	<0.0032	**1.3**	**1.3**	<0.0036	<0.0043	<0.0045	<0.0048	<0.0037	<0.0063	**0.036**	**0.033**	**0.92**	<0.0053
Trichloroethene	0.5	0.36	<0.0036	<0.0032	<0.0035	**0.024**	<0.0036	<0.0043	<0.0045	<0.0048	<0.0037	<0.0063	<0.0041	<0.0037	**0.031**	<0.0053
SVOCs			NT	NT	NT	NT	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND
PAHs			NT	NT	ND	ND	NT	ND	ND	ND	ND	NT	NT	NT	NT	NT

Notes

VOCs - Volatile Organic Compounds
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Table 2
Soil Analytical Data
Coronet Way Assemblage
Atlanta, Georgia
Results reported in milligrams per kiligram (mg/kg)

Sample ID	Type 1 RRS	Type 2 RRS	SB-A	B-3/4'*	B-3/8'	B-4/2'	B-4/4'*	B-4/8'	B-5/4'	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6
Date			1/26/2006	9/5/2007	9/5/2007	9/5/2007	9/5/2007	9/5/2007	9/5/2007	7/8/2008	7/8/2008	7/8/2008	7/8/2008	7/8/2008	7/8/2008
Depth			25	4	8	2	4	8	4						
VOCs															
Acetone	400	60	<0.071	<0.071	<0.097	<0.093	<0.077	<0.099	<0.089	<0.087	<0.077	<0.054	<0.058	<0.067	<0.052
Methylene Chloride	0.5	0.49	<0.0036	<0.0035	<0.0048	<0.0047	<0.0038	<0.005	<0.0044	<0.0044	<0.0038	<0.0027	<0.0029	<0.0033	<0.0026
Tetrachloroethene	0.5	0.34	<0.0036	**1.4**	**0.0095**	<0.0047	**1.1**	<0.005	<0.0044	<0.0044	<0.0038	<0.0027	<0.0029	<0.0033	<0.0026
Trichloroethene	0.5	0.36	<0.0036	**0.037**	<0.0048	<0.0047	<0.0038	<0.005	<0.0044	<0.0044	<0.0038	<0.0027	<0.0029	<0.0033	<0.0026
SVOCs			NT	ND	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PAHs			NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Notes

VOCs - Volatile Organic Compounds
SVOCs - Semivolatile Organic Compounds
PAHs - Polynuclear Aromatic Hydrocarbons
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RRS - Residential Risk Reduction Standard under HSRA
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X.XX - Orange shaded cells indicate constituent concentration exceeds both Type 1 and Type 2 RRS (Sample location excavated during 2008 soil remediation)

Table 3
Groundwater Analytical Data
Coronet Way Assemblage
Atlanta, Georgia
Results reported in milligrams per liter (mg/L)

Well ID	MCL/Type 1 RRS	SEA-1*	SEA-2*	SEA-3*	SEA-4*	SEA-5*	SB-A	SB-B	SB-B	GP-1	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	GP-8
Date		**9/10/2004**	**9/10/2004**	**9/10/2004**	**9/13/2004**	**2004**	1/23/2006	1/23/2006	1/23/2006	3/8/2006	3/8/2006	3/8/2006	3/8/2006	3/8/2006	3/9/2006	3/9/2006	3/9/2006
Constituent																	
VOCs																	
Acetone	4000	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chloroform	NR	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
cis-1,2 Dichloroethene	0.07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Tetrachloroethene	0.005	<0.005	<0.005	<0.005	**0.91**	**0.029**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Trichloroethene	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	1000	<0.005	<0.005	<0.005	<0.005	<0.005	**0.035**	**0.027**	**0.024**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SVOCs/PAHs																	
Caprolactam	NR	NT	NT	NT	NT	NT	NT	NT	NT	<10	<10	<10	<10	<10	<10	<10	<10

Notes:

MCL - U.S. EPA Maximum Contaminant Level for Drinking Water
RRS - Risk Reduction Standard
NT - Not tested for constituent
ND - Constituent not detected above laboratory reporting limit
NR - Constituent not regulated in Georgia
X.XX - Exceeds MCL/HSRA Appendix III

Table 3
Groundwater Analytical Data
Coronet Way Assemblage
Atlanta, Georgia
Results reported in milligrams per liter (mg/L)

Well ID	MCL/Type 1 RRS	GP-9	MW-1	MW-2	MW-3	TMW-1	TMW-2	TMW-3	TMW-4		TMW-5		TMW-6		TMW-7	
Date		3/9/2006	10/13/2006	10/13/2006	10/13/2006	10/30/2006	10/30/2006	10/30/2006	10/31/2006	2/18/2015	10/31/2006	2/18/2015	10/31/2006	2/19/2015	10/31/2006	9/12/2007
Constituent																
VOCs																
Acetone	4000	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chloroform	NR	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	**0.0093**	<0.005	**0.0061**	<0.005	**0.013**	<0.005	<0.005	<0.005
cis-1,2 Dichloroethene	0.07	<0.005	<0.005	**0.031**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Tetrachloroethene	0.005	<0.005	**0.027**	**0.33**	**0.035**	<0.005	<0.005	<0.005	**0.081**	**0.17**	**0.021**	**0.17**	**0.031**	**0.25**	<0.005	<0.005
Trichloroethene	0.005	<0.005	<0.005	**0.065**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	1000	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SVOCs/PAHs																
Caprolactam	NR	<10	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**0.024**

Notes:

MCL	- U.S. EPA Maximum Cor
RRS	- Risk Reduction Standar
NT	- Not tested for constituer
ND	- Constituent not detectec
NR	- Constituent not regulate
X.XX	- Exceeds MCL/HSRA Ap

Table 3
Groundwater Analytical Data
Coronet Way Assemblage
Atlanta, Georgia
Results reported in milligrams per liter (mg/L)

Well ID	MCL/Type 1 RRS	MW-10			MW-11			MW-12			MW-13			MW-14		
Date		9/13/2007	2/19/2015	8/12/2015	9/12/2007	2/18/2015	8/11/2015	9/12/2007	2/19/2015	8/11/2015	9/13/2007	2/19/2015	8/13/2015	9/13/2007	2/19/2015	8/12/2015
Constituent																
VOCs																
Acetone	4000	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chloroform	NR	<0.005	<0.005	<0.005	<0.005	**0.045**	**0.031**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
cis-1,2 Dichloroethene	0.07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	**0.018**	<0.005	<0.005	<0.005	<0.005	<0.005
Tetrachloroethene	0.005	<0.005	**0.035**	**0.017**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	**0.084**	<0.005	<0.005	<0.005	<0.005	<0.005
Trichloroethene	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	1000	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SVOCs/PAHs																
Caprolactam	NR	<0.01	NT	NT	**0.075**	NT	NT	**0.067**	NT	NT	**160**	NT	NT	<0.01	NT	NT

Notes:

MCL	- U.S. EPA Maximum Cor
RRS	- Risk Reduction Standar
NT	- Not tested for constituer
ND	- Constituent not detectec
NR	- Constituent not regulate
X.XX	- Exceeds MCL/HSRA Ap

Table 3
Groundwater Analytical Data
Coronet Way Assemblage
Atlanta, Georgia
Results reported in milligrams per liter (mg/L)

Well ID	MCL/Type 1 RRS	MW-15			MW-16	MW-17 (Shallow)	MW-17 (Deep)			MW-18			MW-19	MW-20	MW-21		
Date		9/13/2007	2/19/2015	8/12/2015	9/14/2007	10/25/2007	11/1/2007	2/18/2015	8/12/2015	10/31/2007	2/18/2015	8/11/2015	11/1/2007	11/1/2007	12/19/2007	2/19/2015	8/13/2015
Constituent																	
VOCs																	
Acetone	4000	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**0.14**	<0.05	<0.05	<0.05	<0.05	<0.05
Chloroform	NR	<0.005	**0.008**	<0.005	<0.005	**8.3**	<0.005	**0.023**	**0.0072**	**0.028**	**0.0074**	**0.0056**	<0.005	<0.005	<0.005	<0.005	<0.005
cis-1,2 Dichloroethene	0.07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Tetrachloroethene	0.005	<0.005	<0.005	<0.005	<0.005	**0.11**	**0.15**	**0.035**	**0.033**	**0.051**	**0.023**	**0.021**	**0.013**	**0.0095**	<0.005	<0.005	<0.005
Trichloroethene	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	1000	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SVOCs/PAHs																	
Caprolactam	NR	<0.01	NT	NT	<0.01	<0.01	**0.28**	NT	NT	**0.076**	**NT**	NT	**0.05**	**0.12**	**0.15**	NT	NT

Notes:

MCL	- U.S. EPA Maximum Cor
RRS	- Risk Reduction Standar
NT	- Not tested for constituer
ND	- Constituent not detectec
NR	- Constituent not regulate
X.XX	- Exceeds MCL/HSRA Ap

Table 3
Groundwater Analytical Data
Coronet Way Assemblage
Atlanta, Georgia
Results reported in milligrams per liter (mg/L)

Well ID	MCL/Type 1 RRS	MW-22	MW-23	MW-24	MW-25	MW-26	MW-27	MW-28	EW-1	EW-2	EW-3
Date		8/18/2015	8/17/2015	8/17/2015	8/13/2015	8/14/2015	9/11/2015	9/11/2015	12/19/2007	12/19/2007	12/19/2007
Constituent											
VOCs											
Acetone	4000	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chloroform	NR	**0.0077**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
cis-1,2 Dichloroethene	0.07	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Tetrachloroethene	0.005	**0.033**	<0.005	<0.005	**0.018**	**0.012**	**0.2**	**0.018**	**0.0063**	<0.005	**0.011**
Trichloroethene	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	1000	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SVOCs/PAHs											
Caprolactam	NR	NT	NT	NT	NT	NT	NT	NT	**0.049**	**0.023**	**0.033**

Notes:

MCL	- U.S. EPA Maximum Cor
RRS	- Risk Reduction Standar
NT	- Not tested for constituer
ND	- Constituent not detectec
NR	- Constituent not regulate
X.XX	- Exceeds MCL/HSRA Ap

Table 4
Soil Vapor Analytical Data
Coronet Way Assemblage
Atlanta, Georgia
Results reported in micrograms per cubic meter (µg/m^3)

Sample ID	**SV-1**	**SV-2**	**SV-3**	**SV-4**	**SV-5**
Date	8/12/2015	8/12/2015	8/12/2015	8/12/2015	8/12/2015
VOC Constituent					
Chloromethane	**2.1**	**2.6**	**2.6**	**2.5**	<2.1
Acetone	**46**	<24	**36**	**65**	**98**
Carbon Disulfide	<6.3	<6.3	<6.3	<6.3	**13**
1,2-Dichloroethane	<4.1	<4.1	<4.1	<4.1	**4.5**
Benzene	<3.2	<3.2	<3.2	<3.2	**36**
4-Methyl-2-pentanone (MIBK)	<8.3	<8.3	<8.3	<8.3	**9.3**
Toluene	**10**	**8.1**	<3.8	**21**	**80**
Tetrachloroethene	**97**	**210**	**23**	**71**	**180**
Ethylbenzene	<4.4	<4.4	<4.4	<4.4	**290**
m,p-Xylene	<8.8	<8.8	<8.8	**27**	**1800**
o-Xylene	<4.4	<4.4	<4.4	**11**	**750**
4-Ethyltoluene	<5.0	<5.0	<5.0	<5.0	**5.0**
1,3,5-Trimethylbenzene	<5.0	<5.0	<5.0	<5	**5.0**
1,2,4-Trimethylbenzene	<5.0	<5.0	<5.0	**8.3**	**20**

Notes:

µg/m^3 - micrograms per cubic meter of air

FIGURES

PROPERTY LOCATION

Legend

Site Boundary

0 1,000 2,000 3,000 4,000 Feet

SITE LOCATION/ USGS TOPOGRAPHIC MAP

CORONET WAY ASSEMBLAGE

Atlanta, Georgia

Prepared by/Date: CLS 11/11/15	amec foster wheeler	Figure Number: 1
Checked by/Date: SRF 11/11/15		
Project Number: 6124-07-0004		

Map Document: (C:\GIS\coronet way\coronet_bolton_rd\bolton_rd_site\fig1_BoltonRd_topo.mxd)
3/6/2008 -- 10:51:31 AM

T:\SFoley\Coronet Way\2 – 2014 Fulton County Tax Parcel Map.dwg – Layout1 11/16/2015 12:27pm alex.flont

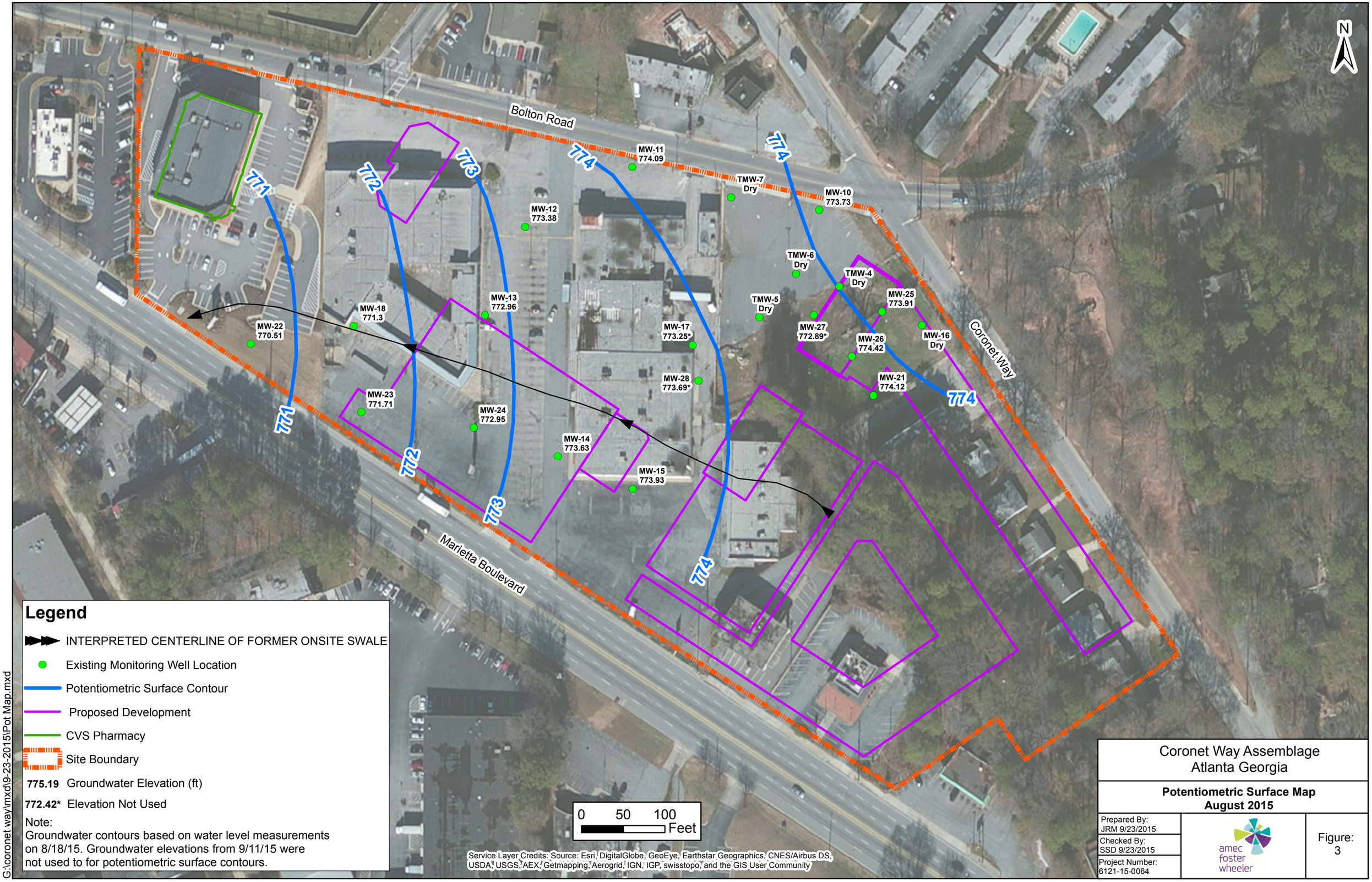
CORONET WAY ASSEMBLAGE
ATLANTA, GEORGIA

amec foster wheeler
Environment & Infrastructure, Inc.
2677 BUFORD HWY
ATLANTA, GEORGIA 30324 (404) 873-4761

2014 FULTON COUNTY
TAX PARCEL MAP

JOB NO. 6121-15-0064 FIGURE 2

PREPARED BY/DATE
CHECKED BY/DATE



Legend

- INTERPRETED CENTERLINE OF FORMER ONSITE SWALE
- Existing Monitoring Well Location
- Potentiometric Surface Contour
- Proposed Development
- CVS Pharmacy
- Site Boundary
- **775.19** Groundwater Elevation (ft)
- **772.42*** Elevation Not Used

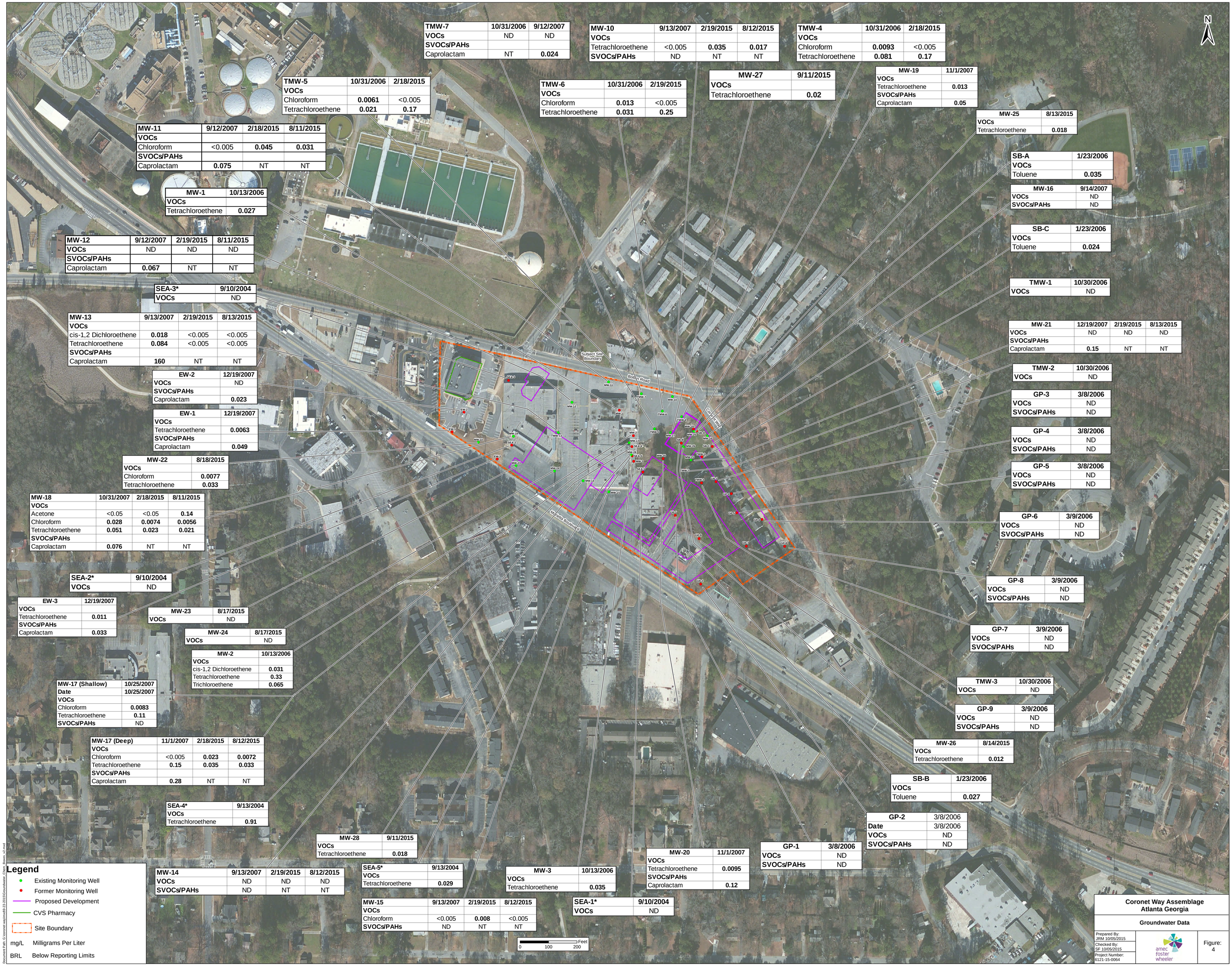
Note:
Groundwater contours based on water level measurements on 8/18/15. Groundwater elevations from 9/11/15 were not used to for potentiometric surface contours.

G:\coronet way\mxd\9-23-2015\Pot Map.mxd

Coronet Way Assemblage
Atlanta Georgia

Potentiometric Surface Map
August 2015

Prepared By: JRM 9/23/2015	amec foster wheeler	Figure: 3
Checked By: SSD 9/23/2015		
Project Number: 6121-15-0064		



TMW-7	10/31/2006	9/12/2007
VOCs	ND	ND
SVOCs/PAHs		
Caprolactam	NT	**0.024**

MW-10	9/13/2007	2/19/2015	8/12/2015
VOCs			
Tetrachloroethene	<0.005	**0.035**	**0.017**
SVOCs/PAHs	ND	NT	NT

TMW-4	10/31/2006	2/18/2015
VOCs		
Chloroform	**0.0093**	<0.005
Tetrachloroethene	**0.081**	**0.17**

TMW-5	10/31/2006	2/18/2015
VOCs		
Chloroform	**0.0061**	<0.005
Tetrachloroethene	**0.021**	**0.17**

TMW-6	10/31/2006	2/19/2015
VOCs		
Chloroform	**0.013**	<0.005
Tetrachloroethene	**0.031**	**0.25**

MW-27	9/11/2015
VOCs	
Tetrachloroethene	**0.02**

MW-19	11/1/2007
VOCs	
Tetrachloroethene	**0.013**
SVOCs/PAHs	
Caprolactam	**0.05**

MW-25	8/13/2015
VOCs	
Tetrachloroethene	**0.018**

MW-11	9/12/2007	2/18/2015	8/11/2015
VOCs			
Chloroform	<0.005	**0.045**	**0.031**
SVOCs/PAHs			
Caprolactam	**0.075**	NT	NT

SB-A	1/23/2006
VOCs	
Toluene	**0.035**

MW-1	10/13/2006
VOCs	
Tetrachloroethene	**0.027**

MW-16	9/14/2007
VOCs	ND
SVOCs/PAHs	ND

MW-12	9/12/2007	2/19/2015	8/11/2015
VOCs	ND	ND	ND
SVOCs/PAHs			
Caprolactam	**0.067**	NT	NT

SB-C	1/23/2006
VOCs	
Toluene	**0.024**

SEA-3*	9/10/2004
VOCs	ND

TMW-1	10/30/2006
VOCs	ND

MW-13	9/13/2007	2/19/2015	8/13/2015
VOCs			
cis-1,2 Dichloroethene	**0.018**	<0.005	<0.005
Tetrachloroethene	**0.084**	<0.005	<0.005
SVOCs/PAHs			
Caprolactam	**160**	NT	NT

MW-21	12/19/2007	2/19/2015	8/13/2015
VOCs	ND	ND	ND
SVOCs/PAHs			
Caprolactam	**0.15**	NT	NT

EW-2	12/19/2007
VOCs	ND
SVOCs/PAHs	
Caprolactam	**0.023**

TMW-2	10/30/2006
VOCs	ND

EW-1	12/19/2007
VOCs	
Tetrachloroethene	**0.0063**
SVOCs/PAHs	
Caprolactam	**0.049**

GP-3	3/8/2006
VOCs	ND
SVOCs/PAHs	ND

MW-22	8/18/2015
VOCs	
Chloroform	**0.0077**
Tetrachloroethene	**0.033**

GP-4	3/8/2006
VOCs	ND
SVOCs/PAHs	ND

GP-5	3/8/2006
VOCs	ND
SVOCs/PAHs	ND

MW-18	10/31/2007	2/18/2015	8/11/2015
VOCs			
Acetone	<0.05	<0.05	**0.14**
Chloroform	**0.028**	**0.0074**	**0.0056**
Tetrachloroethene	**0.051**	**0.023**	**0.021**
SVOCs/PAHs			
Caprolactam	**0.076**	NT	NT

GP-6	3/9/2006
VOCs	ND
SVOCs/PAHs	ND

SEA-2*	9/10/2004
VOCs	ND

GP-8	3/9/2006
VOCs	ND
SVOCs/PAHs	ND

EW-3	12/19/2007
VOCs	
Tetrachloroethene	**0.011**
SVOCs/PAHs	
Caprolactam	**0.033**

MW-23	8/17/2015
VOCs	ND

MW-24	8/17/2015
VOCs	ND

GP-7	3/9/2006
VOCs	ND
SVOCs/PAHs	ND

MW-2	10/13/2006
VOCs	
cis-1,2 Dichloroethene	**0.031**
Tetrachloroethene	**0.33**
Trichloroethene	**0.065**

TMW-3	10/30/2006
VOCs	ND

GP-9	3/9/2006
VOCs	ND
SVOCs/PAHs	ND

MW-17 (Shallow)	10/25/2007
Date	10/25/2007
VOCs	
Chloroform	**0.0083**
Tetrachloroethene	**0.11**
SVOCs/PAHs	ND

MW-26	8/14/2015
VOCs	
Tetrachloroethene	**0.012**

MW-17 (Deep)	11/1/2007	2/18/2015	8/12/2015
VOCs			
Chloroform	<0.005	**0.023**	**0.0072**
Tetrachloroethene	**0.15**	**0.035**	**0.033**
SVOCs/PAHs			
Caprolactam	**0.28**	NT	NT

SB-B	1/23/2006
VOCs	
Toluene	**0.027**

SEA-4*	9/13/2004
VOCs	
Tetrachloroethene	**0.91**

GP-2	3/8/2006
Date	3/8/2006
VOCs	ND
SVOCs/PAHs	ND

MW-28	9/11/2015
VOCs	
Tetrachloroethene	**0.018**

MW-20	11/1/2007
VOCs	
Tetrachloroethene	**0.0095**
SVOCs/PAHs	
Caprolactam	**0.12**

GP-1	3/8/2006
VOCs	ND
SVOCs/PAHs	ND

MW-14	9/13/2007	2/19/2015	8/12/2015
VOCs	ND	ND	ND
SVOCs/PAHs	ND	NT	NT

SEA-5*	9/13/2004
VOCs	
Tetrachloroethene	**0.029**

MW-3	10/13/2006
VOCs	
Tetrachloroethene	**0.035**

MW-15	9/13/2007	2/19/2015	8/12/2015
VOCs			
Chloroform	<0.005	**0.008**	<0.005
SVOCs/PAHs	ND	NT	NT

SEA-1*	9/10/2004
VOCs	ND

Legend

- Existing Monitoring Well
- Former Monitoring Well
- Proposed Development
- CVS Pharmacy
- Site Boundary

mg/L Milligrams Per Liter

BRL Below Reporting Limits

Coronet Way Assemblage
Atlanta Georgia

Groundwater Data

Prepared By: JRM 10/05/2015
Checked By: SF 10/05/2015
Project Number: 6121-15-0064

amec foster wheeler

Figure: 4

Document Path: G:\coronet way\mxd\9-23-2015\Groundwater_Chem_Boring_v2.mxd

SS-5	7/8/2008
VOCs	BRL
SVOCs	BRL

SS-6	7/8/2008
VOCs	BRL
SVOCs	BRL

SS-1	7/8/2008
VOCs	BRL
SVOCs	BRL

BF-1	2/18/2008
	1 ft
VOCs	
PCE	0.031
TCE	0.027
SVOCs	BRL

TMW-6	10/31/2006
	10 ft
VOCs	BRL

TMW-4	10/31/2006
	10 ft
VOCs	
Chloroform	0.0093
PCE	0.081

BF-3	2/18/2008
	1 ft
VOCs	
SVOCs	
bis-2(Ethylhexylphthalate)	0.4

HA-3	10/31/2006
	1 ft
VOCs	BRL

TMW-7	10/31/2006
	10 ft
VOCs	BRL

CS-NW1	2/12/2008	
	4 ft	8 ft
VOCs		
cis-1,2-DCE	0.077	<0.006
PCE	0.026	0.08

CS-N1	3/21/2008
	4 ft
VOCs	
PCE	0.13

CS-W7	3/21/2008
	4 ft
VOCs	BRL

SB-A	1/26/2006
	25 ft
VOCs	BRL

CS-W2	
	6 ft
VOCs	
PCE	0.056

CB-NW	2/11/2008
	9 ft
VOCs	BRL

CS-NE4	2/14/2008
	4 ft
VOCs	
PCE	0.16

CS-W3	3/25/2008	
	4 ft	6 ft
VOCs		
PCE	0.12	0.03

CS-NE3	2/13/2008
	8 ft
VOCs	
PCE	0.02

TMW-5	10/31/2008
	15 ft
VOCs	BRL

CB-N1	3/21/2008
	10 ft
VOCs	BRL

SS-2	7/8/2008
VOCs	BRL
SVOCs	BRL

B-5	9/5/2007
	1 ft
VOCs	BRL
SVOCs	BRL

SS-4	7/8/2008
VOCs	BRL
SVOCs	BRL

B-1	9/5/2007		
	2 ft	4 ft	8 ft
VOCs			
PCE	<0.0063	0.036	0.033

HA-6	10/31/2006
	1.5 ft
VOCs	
Methylene Chloride	0.0094

SB-C	1/26/2006
	25 ft
VOCs	BRL

SS-3	7/8/2008
VOCs	BRL
SVOCs	BRL

CS-NE2	2/11/2008	
	4ft	8ft
VOCs		
PCE	0.11	0.0037

CS-W1	3/21/2008
	9 ft
VOCs	BRL

CB-SE	2/11/2008
	9 ft
VOCs	BRL

BF-2	2/18/2008
	1 ft
VOCs	BRL
SVOCs	BRL

B-4	9/5/2007
	8 ft
VOCs	BRL

CS-SE1	2/11/2008	
	3.5 ft	7.5 ft
VOCs		
PCE	0.079	<0.0049

SB-B	1/26/2006
	25 ft
VOCs	BRL

GP-3	3/8/2006
	10 ft.
VOCs	BRL
SVOCs	BRL

BF-4	2/18/2015
	1 ft
VOCs	BRL
SVOCs	BRL

GP-4	3/8/2006
	5 ft.
VOCs	BRL
SVOCs	BRL

B-2	9/5/2007
	12 ft
VOCs	BRL

BF-6	2/18/2006
	1 ft
VOCs	BRL
SVOCs	BRL

CS-N5A	3/26/2008
	4 ft
VOCs	
PCE	0.11

GP-5	3/8/2006
	10 ft.
VOCs	BRL
SVOCs	BRL

CS-SW1	2/12/2008	
	4 ft	8 ft
VOCs		
cis-1,2-DCE	0.0092	<0.0058
PCE	0.057	0.0073
TCE	0.0087	<0.006

BF-5	2/18/2015
	1 ft
VOCs	BRL
SVOCs	BRL

GP-6	3/8/2006
	5 ft.
VOCs	BRL
SVOCs	BRL

HA-1	3/8/2006
	4 ft.
VOCs	BRL
SVOCs	BRL

GP-9	3/8/2006
	10 ft.
VOCs	BRL
SVOCs	BRL

GP-7	3/8/2006
	10 ft.
VOCs	BRL
SVOCs	BRL

GP-8	3/8/2006
	5 ft.
VOCs	BRL
SVOCs	BRL

GP-1	3/8/2006
	10 ft.
VOCs	BRL
SVOCs	BRL

B-3	9/15/2007
	8 ft
VOCs	
PCE	0.095
TCE	<0.0048

HA-2	3/8/2006
	3 ft.
VOCs	BRL
SVOCs	BRL

CS-SW2	2/11/2008	
	3.5 ft	7.5 ft
VOCs		
PCE	0.045	0.0061

GP-2	3/8/2006
	5 ft.
VOCs	BRL
SVOCs	BRL

Subject Site Boundary

Bolton Road

Marietta Boulevard

N

Legend

- Soil Sample Location
- Limits of Soil Excavation
- Site Boundary

Cross Sections

- A-A'
- B-B'
- C-C'
- D-D'

Approximate Depth of Excavation

- 4 ft
- 7 ft
- 8 ft
- 9 ft
- 10 ft

- Proposed Development
- CVS Pharmacy

mg/Kg milligrams per kilogram (parts per million)

BRL Below Reporting Limits

0 50 100 Feet

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Document Path: G:\coronet way\Soils_Excavation.mxd

Coronet Way Assemblage
Atlanta, Georgia

Soil Analytical Results

Prepared By: RD 7/31/2015
Checked By: SSD 7/31/2015
Project Number: 6121-15-0064

amec foster wheeler

Figure: 5

A'

A

EW-1	12/19/2007
VOCs	
PCE	6.3
SVOCs	BRL

MW-18	2/18/2015
VOCs	
Chloroform	7.4
PCE	23

MW-13	9/12/2007	2/19/2015
VOCs		
Cis-1,2-DCE	18	<5
PCE	84	<5
SVOCs	BRL	NT

MW-17	10/25/2007	11/1/2007	2/18/2015
VOCs			
Chloroform	8.3	<5	23
PCE	110	150	35
SVOCs			
Caprolactam	<10	280	NT

TMW-5	10/31/2008
15 ft	
VOCs	BRL

TMW-6	10/31/2006
10 ft	
VOCs	BRL

TMW-4	10/31/2006
10 ft	
VOCs	
Chloroform	0.0093
PCE	0.081

TMW-5	10/31/2016	2/18/2015
VOCs		
Chloroform	6.1	<5
PCE	21	170

TMW-6	10/31/2006	2/19/2015
VOCs		
Chloroform	13	<5
PCE	31	250

TMW-4	10/31/2006
VOCs	
Chloroform	9.3
PCE	81

MW-19	11/1/2007
VOCs	
PCE	13
SVOCs	
Caprolactam	50

MW-16	9/12/2007
VOCs	BRL
SVOCs	BRL

Monitoring Well

Screen

Asphalt

Water Table

Soil Sample

Alluvium

Bedrock

Fill

Residuum

Top Soil

Notes:
1. Ground water sample results in µ/L
2. Soil sample results in mg/kg
3. BRL = Below Reporting Limit
4. Vertical exaggeration X5

Coronet Way Assemblage
Atlanta, Georgia

Cross Section A to A'

Prepared By: THP 8/03/2015

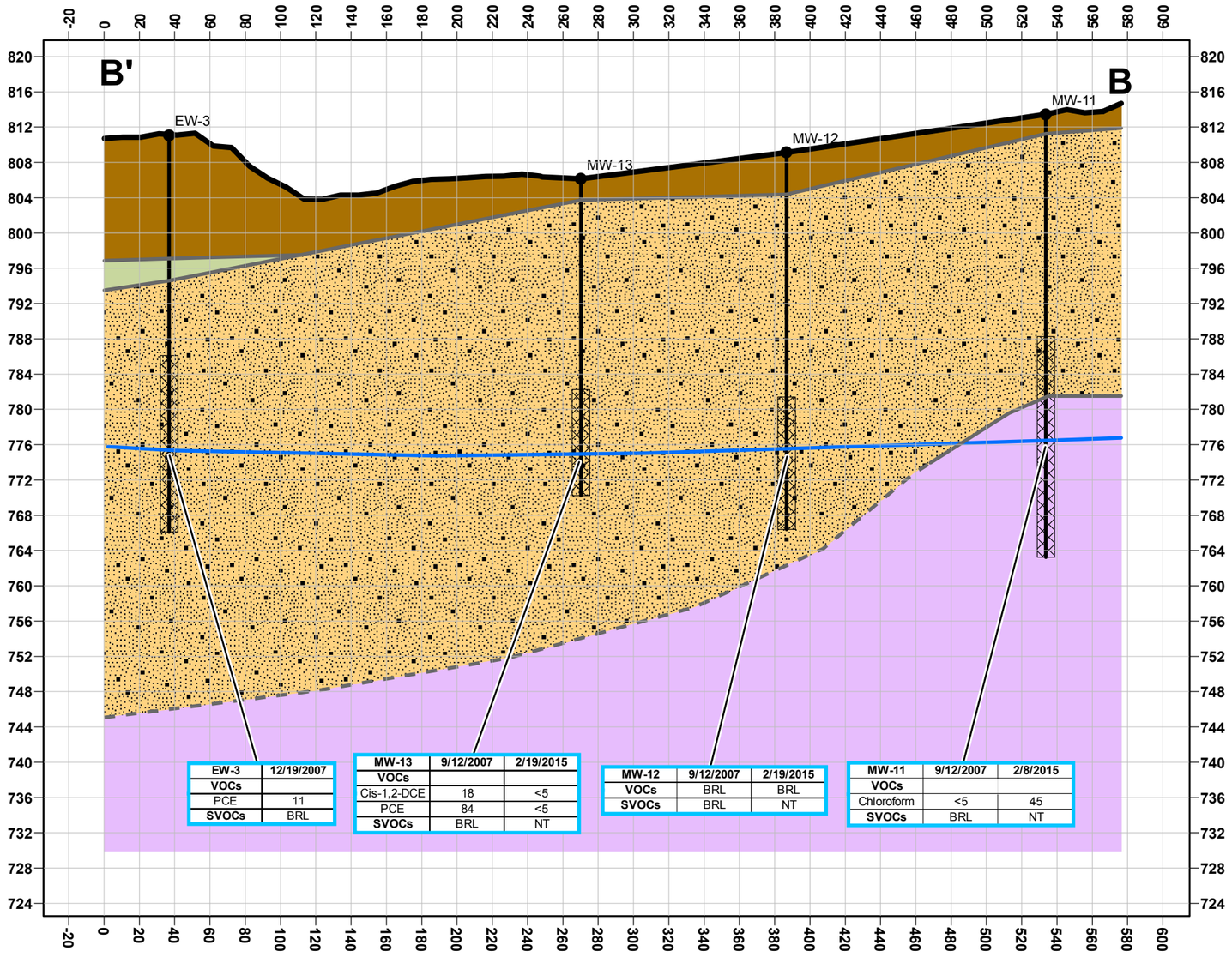
Checked By: SSD 8/03/2015

Project Number: 6121-15-0064

amec foster wheeler

Figure 6

G:\coronet way\mxd\Xsects\sectionA_rev2.mxd



EW-3	12/19/2007
VOCs	
PCE	11
SVOCs	BRL

MW-13	9/12/2007	2/19/2015
VOCs		
Cis-1,2-DCE	18	<5
PCE	84	<5
SVOCs	BRL	NT

MW-12	9/12/2007	2/19/2015
VOCs	BRL	BRL
SVOCs	BRL	NT

MW-11	9/12/2007	2/8/2015
VOCs		
Chloroform	<5	45
SVOCs	BRL	NT

Monitoring Well

Screen

Asphalt

Water Table

Alluvium

Bedrock

Fill

Residuum

Top Soil

Notes:
1. Ground water sample results in µ/L
2. Soil sample results in mg/kg
3. BRL = Below Reporting Limit
4. Vertical exaggeration X5

Coronet Way Assemblage
Atlanta, Georgia

Cross Section B to B'

Prepared By: THP 8/03/2015

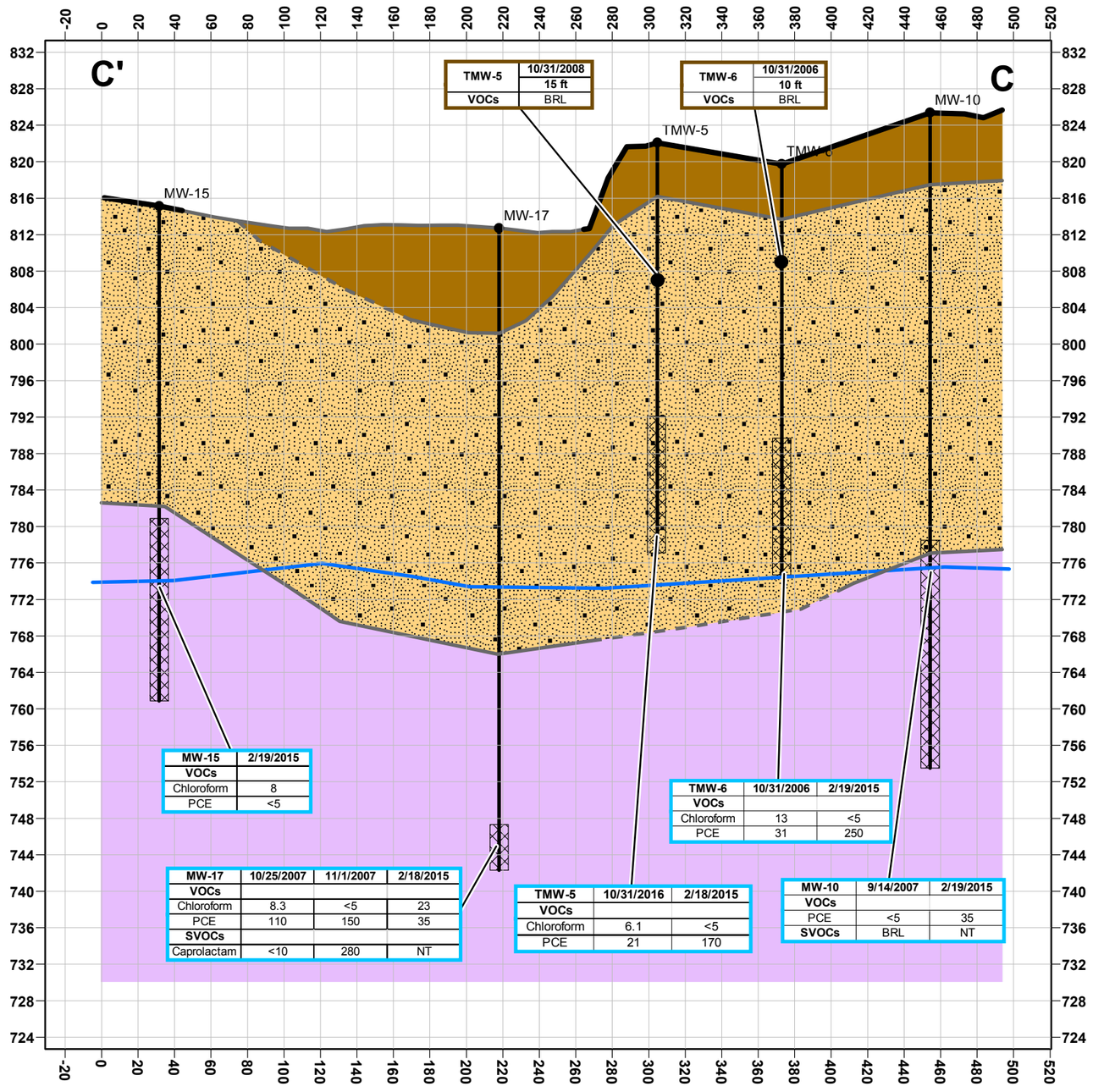
Checked By: SSD 8/03/2015

Project Number: 6121-15-0064

amec foster wheeler

Figure 7

G:\coronet way\mxd\Xsects\sectionB.mxd



Notes:
1. Ground water sample results in µ/L
2. Soil sample results in mg/kg
3. BRL = Below Reporting Limit
4. Vertical exaggeration X5

Coronet Way Assemblage
Atlanta, Georgia

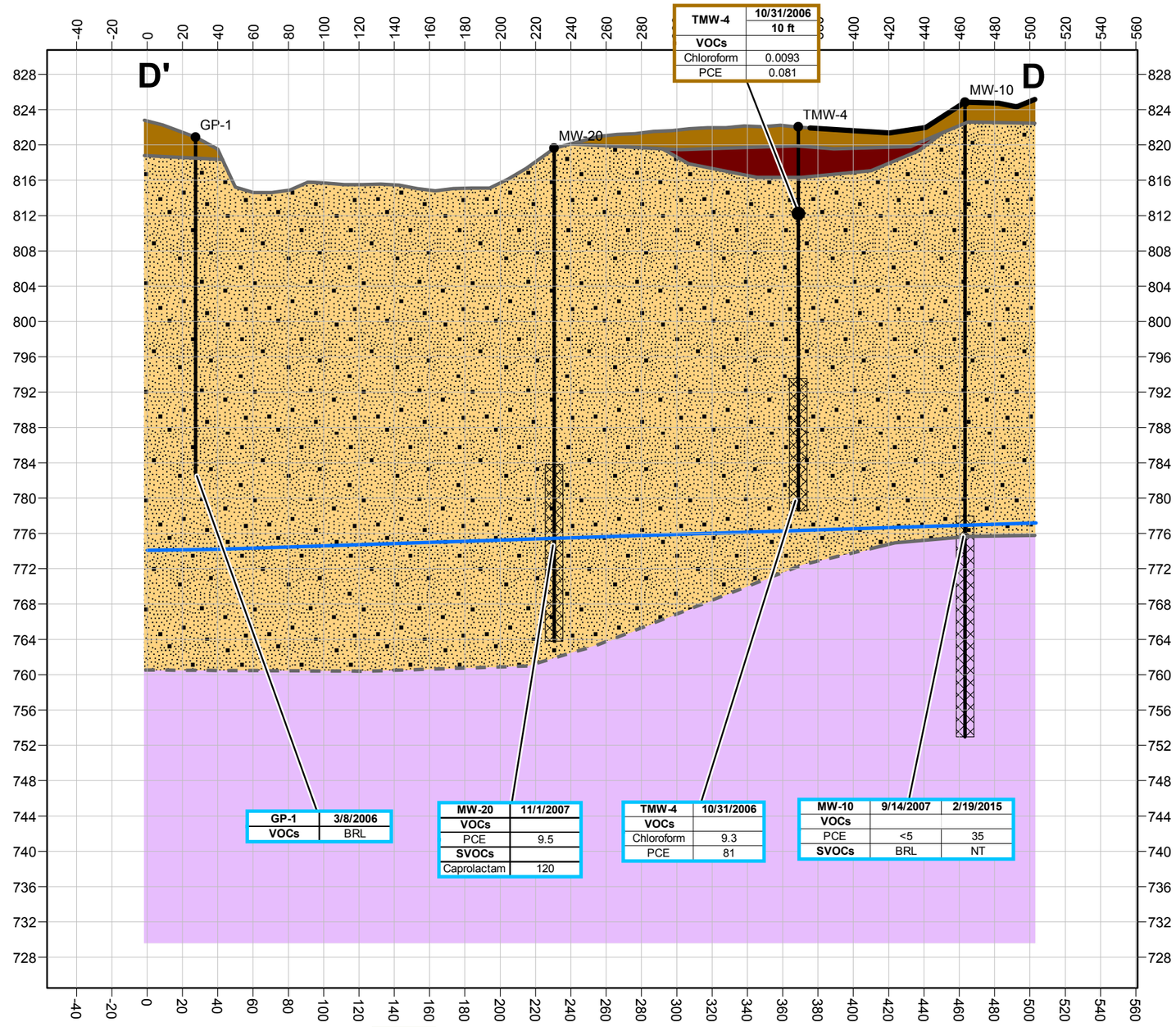
Cross Section C to C'

Prepared By: THP 8/03/2015
Checked By: SSD 8/03/2015
Project Number: 6121-15-0064

amec foster wheeler

Figure 8

G:\coronet way\mxd\Xsects\sectionC.mxd



Monitoring Well

Screen

Asphalt

Water Table

Soil Sample

Alluvium

Bedrock

Fill

Residuum

Top Soil

Notes:
1. Ground water sample results in µ/L
2. Soil sample results in mg/kg
3. BRL = Below Reporting Limit
4. Vertical exaggeration X5

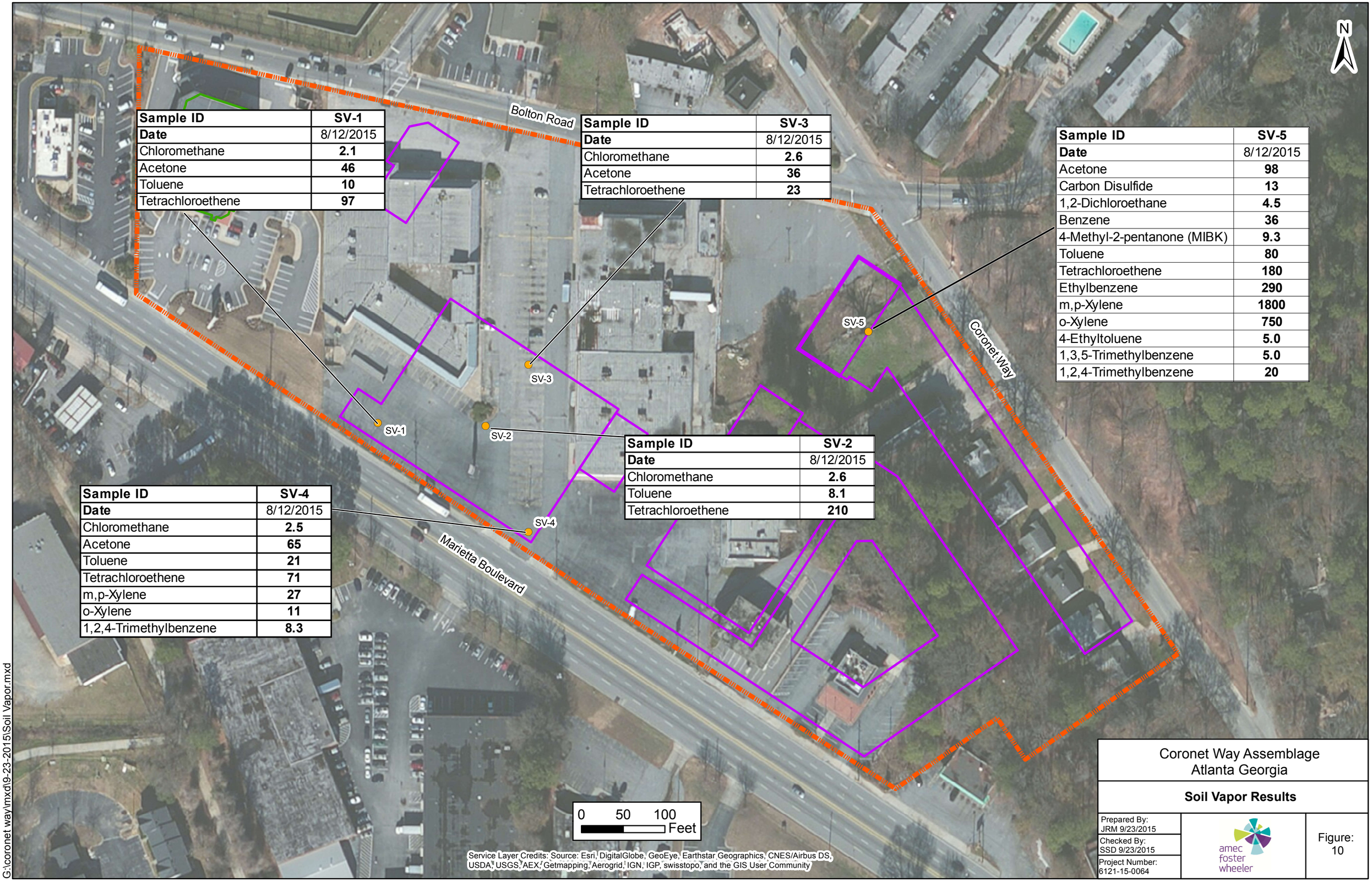
Coronet Way Assemblage
Atlanta, Georgia

Cross Section D to D'

Prepared By: THP 8/03/2015
Checked By: SSD 8/03/2015
Project Number: 6121-15-0064

amec foster wheeler

Figure 9



Sample ID	SV-1
Date	8/12/2015
Chloromethane	**2.1**
Acetone	**46**
Toluene	**10**
Tetrachloroethene	**97**

Sample ID	SV-3
Date	8/12/2015
Chloromethane	**2.6**
Acetone	**36**
Tetrachloroethene	**23**

Sample ID	SV-5
Date	8/12/2015
Acetone	**98**
Carbon Disulfide	**13**
1,2-Dichloroethane	**4.5**
Benzene	**36**
4-Methyl-2-pentanone (MIBK)	**9.3**
Toluene	**80**
Tetrachloroethene	**180**
Ethylbenzene	**290**
m,p-Xylene	**1800**
o-Xylene	**750**
4-Ethyltoluene	**5.0**
1,3,5-Trimethylbenzene	**5.0**
1,2,4-Trimethylbenzene	**20**

Sample ID	SV-2
Date	8/12/2015
Chloromethane	**2.6**
Toluene	**8.1**
Tetrachloroethene	**210**

Sample ID	SV-4
Date	8/12/2015
Chloromethane	**2.5**
Acetone	**65**
Toluene	**21**
Tetrachloroethene	**71**
m,p-Xylene	**27**
o-Xylene	**11**
1,2,4-Trimethylbenzene	**8.3**

Coronet Way Assemblage
Atlanta Georgia

Soil Vapor Results

Prepared By: JRM 9/23/2015	amec foster wheeler	Figure: 10
Checked By: SSD 9/23/2015		
Project Number: 6121-15-0064		

G:\coronet way\mxd\9-23-2015\Soil Vapor.mxd

Legend

- Existing Monitoring Well Location
- MCL — Tetrachloroethene Contour
- Site Boundary
- 0.033 - Tetrachloroethene Concentration
- Predicted extent of tetrachloroethene plume exceeding MCL based on BIOCHLOR model
- Proposed Development
- CVS Pharmacy

N

MW-11 <0.005
TMW-7 Dry
MW-10 0.017
MW-12 <0.005
TMW-6 Dry
TMW-4 Dry
TMW-5 Dry
MW-25 0.018
MW-27 0.2
MW-26 0.012
MW-16 Dry
MW-21 <0.005
MW-13 <0.005
MW-18 0.021
MW-22 0.033
MW-17 0.033
MW-28 0.018
MW-23 <0.005
MW-24 <0.005
MW-14 <0.005
MW-15 <0.005
MCL
0.1
ND

Whetstone Creek

0 50 100 Feet

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

G:\coronet way\mxd\9-23-2015\Predicted Tetrachloroethene.after 50 mxd.mxd

Coronet Way Assemblage
Atlanta Georgia

Tetrachloroethene Isoconcentration Map Mg/L (Predicted After 50 Years)

Prepared By: CLS 11/12/2015	amec foster wheeler	Figure: 11
Checked By: SRF 11/12/2015		
Project Number: 6121-15-0064		

APPENDIX A

TAX MAP

T:\SFoley\Coronet Way\2 – 2014 Fulton County Tax Parcel Map.dwg – Layout1 11/16/2015 12:27pm alex.flont

CORONET WAY ASSEMBLAGE
ATLANTA, GEORGIA

amec foster wheeler
Environment & Infrastructure, Inc.
2677 BUFORD HWY
ATLANTA, GEORGIA 30324 (404) 873-4761

2014 FULTON COUNTY
TAX PARCEL MAP

JOB NO. 6121-15-0064 FIGURE 2

PREPARED BY/DATE
CHECKED BY/DATE

APPENDIX B

LABORATORY RESULTS

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

February 27, 2015

Steve Foley
AMEC E&I, Inc. - Plasters
2677 Buford Highway NE
Atlanta GA 30324

TEL: (404) 873-4761
FAX: (404) 817-0183

RE: Coronet Way

Dear Steve Foley: Order No: 1502H03

Analytical Environmental Services, Inc. received 12 samples on 2/20/2015 10:55:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/14-06/30/15.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Tara Esbeck

Tara Esbeck
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1502H03

Date: 2-18 Page 1 of 1

COMPANY: AMEC
ADDRESS: 2677 Buford Hwy NE Atlanta, GA 30324
PHONE: 404 873-4761
FAX:
SAMPLED BY: Alex Flont / Matt Wortman
SIGNATURE:

ANALYSIS REQUESTED: VOCs

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)	REMARKS	No # of Containers
1	MW-18	2-18	1125	X		GW	H+I		2
2	MW-11	2-18	1415	X					2
3	MW-17	2-18	1500	X					2
4	MW-15	2-19	1210	X					2
5	MW-14	2-19	1230	X					2
6	MW-13	2-19	1245	X					2
7	MW-12	2-19	1300	X					2
8	MW-21	2-19	1345	X					2
9	MW-10	2-19	1400	X					2
10	TMW-6	2-19	1430	X					2
11	TMW-5	2-19	1500	X					1
12	Trip Blank	2-19							2
13									
14									

RELINQUISHED BY / DATE/TIME
1: 2/20/15 10:55
2:
3:

RECEIVED BY / DATE/TIME
1: Latoya Reeves 2/20/15 10:55
2:
3:

PROJECT INFORMATION
PROJECT NAME: Corowa Way
PROJECT #: 6121500064
SITE ADDRESS: Bolton RD
SEND REPORT TO: Steve Foley
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 23

Turnaround Time Request
- (●) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / /
IN / /
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-18
Project Name:	Coronet Way	**Collection Date:**	2/18/2015 11:25:00 AM
Lab ID:	1502H03-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
1,1-Dichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
1,1-Dichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
1,2-Dibromoethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
1,2-Dichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
1,2-Dichloropropane	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
2-Butanone	BRL	50		ug/L	203627	1	02/27/2015 10:08	NP
2-Hexanone	BRL	10		ug/L	203627	1	02/27/2015 10:08	NP
4-Methyl-2-pentanone	BRL	10		ug/L	203627	1	02/27/2015 10:08	NP
Acetone	BRL	50		ug/L	203627	1	02/27/2015 10:08	NP
Benzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Bromodichloromethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Bromoform	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Bromomethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Carbon disulfide	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Carbon tetrachloride	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Chlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Chloroethane	BRL	10		ug/L	203627	1	02/27/2015 10:08	NP
Chloroform	7.4	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Chloromethane	BRL	10		ug/L	203627	1	02/27/2015 10:08	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Cyclohexane	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Dibromochloromethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Dichlorodifluoromethane	BRL	10		ug/L	203627	1	02/27/2015 10:08	NP
Ethylbenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Freon-113	BRL	10		ug/L	203627	1	02/27/2015 10:08	NP
Isopropylbenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
m,p-Xylene	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Methyl acetate	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Methylcyclohexane	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Methylene chloride	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
o-Xylene	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-18
Project Name:	Coronet Way	**Collection Date:**	2/18/2015 11:25:00 AM
Lab ID:	1502H03-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Tetrachloroethene	23	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Toluene	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Trichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Trichlorofluoromethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:08	NP
Vinyl chloride	BRL	2.0		ug/L	203627	1	02/27/2015 10:08	NP
Surr: 4-Bromofluorobenzene	95.3	70.6-123		%REC	203627	1	02/27/2015 10:08	NP
Surr: Dibromofluoromethane	101	78.7-124		%REC	203627	1	02/27/2015 10:08	NP
Surr: Toluene-d8	96.5	81.3-120		%REC	203627	1	02/27/2015 10:08	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-11
Project Name:	Coronet Way	**Collection Date:**	2/18/2015 2:15:00 PM
Lab ID:	1502H03-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
1,1-Dichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
1,1-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
1,2-Dibromoethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
1,2-Dichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
1,2-Dichloropropane	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
2-Butanone	BRL	50		ug/L	203627	1	02/26/2015 16:27	CH
2-Hexanone	BRL	10		ug/L	203627	1	02/26/2015 16:27	CH
4-Methyl-2-pentanone	BRL	10		ug/L	203627	1	02/26/2015 16:27	CH
Acetone	BRL	50		ug/L	203627	1	02/26/2015 16:27	CH
Benzene	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Bromodichloromethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Bromoform	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Bromomethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Carbon disulfide	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Carbon tetrachloride	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Chlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Chloroethane	BRL	10		ug/L	203627	1	02/26/2015 16:27	CH
Chloroform	45	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Chloromethane	BRL	10		ug/L	203627	1	02/26/2015 16:27	CH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Cyclohexane	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Dibromochloromethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Dichlorodifluoromethane	BRL	10		ug/L	203627	1	02/26/2015 16:27	CH
Ethylbenzene	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Freon-113	BRL	10		ug/L	203627	1	02/26/2015 16:27	CH
Isopropylbenzene	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
m,p-Xylene	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Methyl acetate	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Methylcyclohexane	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Methylene chloride	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
o-Xylene	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-11
Project Name:	Coronet Way	**Collection Date:**	2/18/2015 2:15:00 PM
Lab ID:	1502H03-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Tetrachloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Toluene	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Trichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Trichlorofluoromethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:27	CH
Vinyl chloride	BRL	2.0		ug/L	203627	1	02/26/2015 16:27	CH
Surr: 4-Bromofluorobenzene	81.3	70.6-123		%REC	203627	1	02/26/2015 16:27	CH
Surr: Dibromofluoromethane	112	78.7-124		%REC	203627	1	02/26/2015 16:27	CH
Surr: Toluene-d8	95.2	81.3-120		%REC	203627	1	02/26/2015 16:27	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-17
Project Name:	Coronet Way	**Collection Date:**	2/18/2015 3:00:00 PM
Lab ID:	1502H03-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
1,1-Dichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
1,1-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
1,2-Dibromoethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
1,2-Dichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
1,2-Dichloropropane	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
2-Butanone	BRL	50		ug/L	203627	1	02/26/2015 16:51	CH
2-Hexanone	BRL	10		ug/L	203627	1	02/26/2015 16:51	CH
4-Methyl-2-pentanone	BRL	10		ug/L	203627	1	02/26/2015 16:51	CH
Acetone	BRL	50		ug/L	203627	1	02/26/2015 16:51	CH
Benzene	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Bromodichloromethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Bromoform	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Bromomethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Carbon disulfide	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Carbon tetrachloride	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Chlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Chloroethane	BRL	10		ug/L	203627	1	02/26/2015 16:51	CH
Chloroform	23	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Chloromethane	BRL	10		ug/L	203627	1	02/26/2015 16:51	CH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Cyclohexane	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Dibromochloromethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Dichlorodifluoromethane	BRL	10		ug/L	203627	1	02/26/2015 16:51	CH
Ethylbenzene	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Freon-113	BRL	10		ug/L	203627	1	02/26/2015 16:51	CH
Isopropylbenzene	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
m,p-Xylene	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Methyl acetate	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Methylcyclohexane	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Methylene chloride	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
o-Xylene	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-17
Project Name:	Coronet Way	**Collection Date:**	2/18/2015 3:00:00 PM
Lab ID:	1502H03-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Tetrachloroethene	35	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Toluene	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Trichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Trichlorofluoromethane	BRL	5.0		ug/L	203627	1	02/26/2015 16:51	CH
Vinyl chloride	BRL	2.0		ug/L	203627	1	02/26/2015 16:51	CH
Surr: 4-Bromofluorobenzene	78	70.6-123		%REC	203627	1	02/26/2015 16:51	CH
Surr: Dibromofluoromethane	106	78.7-124		%REC	203627	1	02/26/2015 16:51	CH
Surr: Toluene-d8	89.8	81.3-120		%REC	203627	1	02/26/2015 16:51	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-15
Project Name:	Coronet Way	**Collection Date:**	2/19/2015 12:10:00 PM
Lab ID:	1502H03-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
1,1-Dichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
1,1-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
1,2-Dibromoethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
1,2-Dichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
1,2-Dichloropropane	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
2-Butanone	BRL	50		ug/L	203627	1	02/26/2015 17:15	CH
2-Hexanone	BRL	10		ug/L	203627	1	02/26/2015 17:15	CH
4-Methyl-2-pentanone	BRL	10		ug/L	203627	1	02/26/2015 17:15	CH
Acetone	BRL	50		ug/L	203627	1	02/26/2015 17:15	CH
Benzene	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Bromodichloromethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Bromoform	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Bromomethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Carbon disulfide	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Carbon tetrachloride	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Chlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Chloroethane	BRL	10		ug/L	203627	1	02/26/2015 17:15	CH
Chloroform	8.0	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Chloromethane	BRL	10		ug/L	203627	1	02/26/2015 17:15	CH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Cyclohexane	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Dibromochloromethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Dichlorodifluoromethane	BRL	10		ug/L	203627	1	02/26/2015 17:15	CH
Ethylbenzene	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Freon-113	BRL	10		ug/L	203627	1	02/26/2015 17:15	CH
Isopropylbenzene	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
m,p-Xylene	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Methyl acetate	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Methylcyclohexane	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Methylene chloride	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
o-Xylene	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-15
Project Name:	Coronet Way	**Collection Date:**	2/19/2015 12:10:00 PM
Lab ID:	1502H03-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Tetrachloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Toluene	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Trichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Trichlorofluoromethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:15	CH
Vinyl chloride	BRL	2.0		ug/L	203627	1	02/26/2015 17:15	CH
Surr: 4-Bromofluorobenzene	78	70.6-123		%REC	203627	1	02/26/2015 17:15	CH
Surr: Dibromofluoromethane	98.8	78.7-124		%REC	203627	1	02/26/2015 17:15	CH
Surr: Toluene-d8	92.5	81.3-120		%REC	203627	1	02/26/2015 17:15	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-14
Project Name:	Coronet Way	**Collection Date:**	2/19/2015 12:30:00 PM
Lab ID:	1502H03-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
1,1-Dichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
1,1-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
1,2-Dibromoethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
1,2-Dichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
1,2-Dichloropropane	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
2-Butanone	BRL	50		ug/L	203627	1	02/26/2015 17:39	CH
2-Hexanone	BRL	10		ug/L	203627	1	02/26/2015 17:39	CH
4-Methyl-2-pentanone	BRL	10		ug/L	203627	1	02/26/2015 17:39	CH
Acetone	BRL	50		ug/L	203627	1	02/26/2015 17:39	CH
Benzene	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Bromodichloromethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Bromoform	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Bromomethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Carbon disulfide	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Carbon tetrachloride	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Chlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Chloroethane	BRL	10		ug/L	203627	1	02/26/2015 17:39	CH
Chloroform	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Chloromethane	BRL	10		ug/L	203627	1	02/26/2015 17:39	CH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Cyclohexane	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Dibromochloromethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Dichlorodifluoromethane	BRL	10		ug/L	203627	1	02/26/2015 17:39	CH
Ethylbenzene	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Freon-113	BRL	10		ug/L	203627	1	02/26/2015 17:39	CH
Isopropylbenzene	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
m,p-Xylene	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Methyl acetate	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Methylcyclohexane	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Methylene chloride	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
o-Xylene	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-14
Project Name:	Coronet Way	**Collection Date:**	2/19/2015 12:30:00 PM
Lab ID:	1502H03-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Tetrachloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Toluene	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Trichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Trichlorofluoromethane	BRL	5.0		ug/L	203627	1	02/26/2015 17:39	CH
Vinyl chloride	BRL	2.0		ug/L	203627	1	02/26/2015 17:39	CH
Surr: 4-Bromofluorobenzene	78.8	70.6-123		%REC	203627	1	02/26/2015 17:39	CH
Surr: Dibromofluoromethane	105	78.7-124		%REC	203627	1	02/26/2015 17:39	CH
Surr: Toluene-d8	95.8	81.3-120		%REC	203627	1	02/26/2015 17:39	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-13
Project Name:	Coronet Way	**Collection Date:**	2/19/2015 12:45:00 PM
Lab ID:	1502H03-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
1,1-Dichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
1,1-Dichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
1,2-Dibromoethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
1,2-Dichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
1,2-Dichloropropane	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
2-Butanone	BRL	50		ug/L	203627	1	02/27/2015 10:32	NP
2-Hexanone	BRL	10		ug/L	203627	1	02/27/2015 10:32	NP
4-Methyl-2-pentanone	BRL	10		ug/L	203627	1	02/27/2015 10:32	NP
Acetone	BRL	50		ug/L	203627	1	02/27/2015 10:32	NP
Benzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Bromodichloromethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Bromoform	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Bromomethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Carbon disulfide	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Carbon tetrachloride	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Chlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Chloroethane	BRL	10		ug/L	203627	1	02/27/2015 10:32	NP
Chloroform	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Chloromethane	BRL	10		ug/L	203627	1	02/27/2015 10:32	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Cyclohexane	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Dibromochloromethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Dichlorodifluoromethane	BRL	10		ug/L	203627	1	02/27/2015 10:32	NP
Ethylbenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Freon-113	BRL	10		ug/L	203627	1	02/27/2015 10:32	NP
Isopropylbenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
m,p-Xylene	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Methyl acetate	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Methylcyclohexane	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Methylene chloride	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
o-Xylene	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-13
Project Name:	Coronet Way	**Collection Date:**	2/19/2015 12:45:00 PM
Lab ID:	1502H03-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Tetrachloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Toluene	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Trichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Trichlorofluoromethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:32	NP
Vinyl chloride	BRL	2.0		ug/L	203627	1	02/27/2015 10:32	NP
Surr: 4-Bromofluorobenzene	96.4	70.6-123		%REC	203627	1	02/27/2015 10:32	NP
Surr: Dibromofluoromethane	99.2	78.7-124		%REC	203627	1	02/27/2015 10:32	NP
Surr: Toluene-d8	96.2	81.3-120		%REC	203627	1	02/27/2015 10:32	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-12
Project Name:	Coronet Way	**Collection Date:**	2/19/2015 1:00:00 PM
Lab ID:	1502H03-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
1,1-Dichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
1,1-Dichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
1,2-Dibromoethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
1,2-Dichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
1,2-Dichloropropane	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
2-Butanone	BRL	50		ug/L	203627	1	02/27/2015 10:55	NP
2-Hexanone	BRL	10		ug/L	203627	1	02/27/2015 10:55	NP
4-Methyl-2-pentanone	BRL	10		ug/L	203627	1	02/27/2015 10:55	NP
Acetone	BRL	50		ug/L	203627	1	02/27/2015 10:55	NP
Benzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Bromodichloromethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Bromoform	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Bromomethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Carbon disulfide	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Carbon tetrachloride	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Chlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Chloroethane	BRL	10		ug/L	203627	1	02/27/2015 10:55	NP
Chloroform	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Chloromethane	BRL	10		ug/L	203627	1	02/27/2015 10:55	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Cyclohexane	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Dibromochloromethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Dichlorodifluoromethane	BRL	10		ug/L	203627	1	02/27/2015 10:55	NP
Ethylbenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Freon-113	BRL	10		ug/L	203627	1	02/27/2015 10:55	NP
Isopropylbenzene	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
m,p-Xylene	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Methyl acetate	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Methylcyclohexane	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Methylene chloride	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
o-Xylene	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-12
Project Name:	Coronet Way	**Collection Date:**	2/19/2015 1:00:00 PM
Lab ID:	1502H03-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Tetrachloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Toluene	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Trichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Trichlorofluoromethane	BRL	5.0		ug/L	203627	1	02/27/2015 10:55	NP
Vinyl chloride	BRL	2.0		ug/L	203627	1	02/27/2015 10:55	NP
Surr: 4-Bromofluorobenzene	94.3	70.6-123		%REC	203627	1	02/27/2015 10:55	NP
Surr: Dibromofluoromethane	102	78.7-124		%REC	203627	1	02/27/2015 10:55	NP
Surr: Toluene-d8	96.2	81.3-120		%REC	203627	1	02/27/2015 10:55	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-21
Project Name:	Coronet Way	**Collection Date:**	2/19/2015 1:45:00 PM
Lab ID:	1502H03-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
1,1-Dichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
1,1-Dichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
1,2-Dibromoethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
1,2-Dichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
1,2-Dichloropropane	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
2-Butanone	BRL	50		ug/L	203627	1	02/27/2015 11:18	NP
2-Hexanone	BRL	10		ug/L	203627	1	02/27/2015 11:18	NP
4-Methyl-2-pentanone	BRL	10		ug/L	203627	1	02/27/2015 11:18	NP
Acetone	BRL	50		ug/L	203627	1	02/27/2015 11:18	NP
Benzene	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Bromodichloromethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Bromoform	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Bromomethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Carbon disulfide	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Carbon tetrachloride	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Chlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Chloroethane	BRL	10		ug/L	203627	1	02/27/2015 11:18	NP
Chloroform	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Chloromethane	BRL	10		ug/L	203627	1	02/27/2015 11:18	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Cyclohexane	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Dibromochloromethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Dichlorodifluoromethane	BRL	10		ug/L	203627	1	02/27/2015 11:18	NP
Ethylbenzene	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Freon-113	BRL	10		ug/L	203627	1	02/27/2015 11:18	NP
Isopropylbenzene	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
m,p-Xylene	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Methyl acetate	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Methylcyclohexane	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Methylene chloride	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
o-Xylene	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-21
Project Name:	Coronet Way	**Collection Date:**	2/19/2015 1:45:00 PM
Lab ID:	1502H03-008	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Tetrachloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Toluene	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Trichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Trichlorofluoromethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:18	NP
Vinyl chloride	BRL	2.0		ug/L	203627	1	02/27/2015 11:18	NP
Surr: 4-Bromofluorobenzene	94.4	70.6-123		%REC	203627	1	02/27/2015 11:18	NP
Surr: Dibromofluoromethane	102	78.7-124		%REC	203627	1	02/27/2015 11:18	NP
Surr: Toluene-d8	97.3	81.3-120		%REC	203627	1	02/27/2015 11:18	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-10
Project Name:	Coronet Way	**Collection Date:**	2/19/2015 2:00:00 PM
Lab ID:	1502H03-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
1,1-Dichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
1,1-Dichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
1,2-Dibromoethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
1,2-Dichloroethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
1,2-Dichloropropane	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
2-Butanone	BRL	50		ug/L	203627	1	02/27/2015 11:42	NP
2-Hexanone	BRL	10		ug/L	203627	1	02/27/2015 11:42	NP
4-Methyl-2-pentanone	BRL	10		ug/L	203627	1	02/27/2015 11:42	NP
Acetone	BRL	50		ug/L	203627	1	02/27/2015 11:42	NP
Benzene	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Bromodichloromethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Bromoform	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Bromomethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Carbon disulfide	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Carbon tetrachloride	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Chlorobenzene	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Chloroethane	BRL	10		ug/L	203627	1	02/27/2015 11:42	NP
Chloroform	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Chloromethane	BRL	10		ug/L	203627	1	02/27/2015 11:42	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Cyclohexane	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Dibromochloromethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Dichlorodifluoromethane	BRL	10		ug/L	203627	1	02/27/2015 11:42	NP
Ethylbenzene	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Freon-113	BRL	10		ug/L	203627	1	02/27/2015 11:42	NP
Isopropylbenzene	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
m,p-Xylene	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Methyl acetate	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Methylcyclohexane	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Methylene chloride	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
o-Xylene	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-10
Project Name:	Coronet Way	**Collection Date:**	2/19/2015 2:00:00 PM
Lab ID:	1502H03-009	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Tetrachloroethene	35	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Toluene	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Trichloroethene	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Trichlorofluoromethane	BRL	5.0		ug/L	203627	1	02/27/2015 11:42	NP
Vinyl chloride	BRL	2.0		ug/L	203627	1	02/27/2015 11:42	NP
Surr: 4-Bromofluorobenzene	93.2	70.6-123		%REC	203627	1	02/27/2015 11:42	NP
Surr: Dibromofluoromethane	102	78.7-124		%REC	203627	1	02/27/2015 11:42	NP
Surr: Toluene-d8	97.6	81.3-120		%REC	203627	1	02/27/2015 11:42	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	TMW-6
Project Name:	Coronet Way	**Collection Date:**	2/19/2015 2:30:00 PM
Lab ID:	1502H03-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
1,1-Dichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
1,1-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
1,2-Dibromoethane	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
1,2-Dichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
1,2-Dichloropropane	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
2-Butanone	BRL	50		ug/L	203627	1	02/26/2015 19:44	CH
2-Hexanone	BRL	10		ug/L	203627	1	02/26/2015 19:44	CH
4-Methyl-2-pentanone	BRL	10		ug/L	203627	1	02/26/2015 19:44	CH
Acetone	BRL	50		ug/L	203627	1	02/26/2015 19:44	CH
Benzene	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Bromodichloromethane	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Bromoform	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Bromomethane	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Carbon disulfide	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Carbon tetrachloride	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Chlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Chloroethane	BRL	10		ug/L	203627	1	02/26/2015 19:44	CH
Chloroform	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Chloromethane	BRL	10		ug/L	203627	1	02/26/2015 19:44	CH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Cyclohexane	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Dibromochloromethane	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Dichlorodifluoromethane	BRL	10		ug/L	203627	1	02/26/2015 19:44	CH
Ethylbenzene	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Freon-113	BRL	10		ug/L	203627	1	02/26/2015 19:44	CH
Isopropylbenzene	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
m,p-Xylene	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Methyl acetate	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Methylcyclohexane	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Methylene chloride	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
o-Xylene	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	TMW-6
Project Name:	Coronet Way	**Collection Date:**	2/19/2015 2:30:00 PM
Lab ID:	1502H03-010	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Tetrachloroethene	250	50		ug/L	203627	10	02/27/2015 11:35	CH
Toluene	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Trichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Trichlorofluoromethane	BRL	5.0		ug/L	203627	1	02/26/2015 19:44	CH
Vinyl chloride	BRL	2.0		ug/L	203627	1	02/26/2015 19:44	CH
Surr: 4-Bromofluorobenzene	74.4	70.6-123		%REC	203627	1	02/26/2015 19:44	CH
Surr: 4-Bromofluorobenzene	75.4	70.6-123		%REC	203627	10	02/27/2015 11:35	CH
Surr: Dibromofluoromethane	105	78.7-124		%REC	203627	10	02/27/2015 11:35	CH
Surr: Dibromofluoromethane	106	78.7-124		%REC	203627	1	02/26/2015 19:44	CH
Surr: Toluene-d8	95.6	81.3-120		%REC	203627	1	02/26/2015 19:44	CH
Surr: Toluene-d8	94.5	81.3-120		%REC	203627	10	02/27/2015 11:35	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	TMW-5
Project Name:	Coronet Way	**Collection Date:**	2/19/2015 3:00:00 PM
Lab ID:	1502H03-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
1,1-Dichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
1,1-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
1,2-Dibromoethane	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
1,2-Dichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
1,2-Dichloropropane	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
2-Butanone	BRL	50		ug/L	203627	1	02/26/2015 20:07	CH
2-Hexanone	BRL	10		ug/L	203627	1	02/26/2015 20:07	CH
4-Methyl-2-pentanone	BRL	10		ug/L	203627	1	02/26/2015 20:07	CH
Acetone	BRL	50		ug/L	203627	1	02/26/2015 20:07	CH
Benzene	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Bromodichloromethane	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Bromoform	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Bromomethane	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Carbon disulfide	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Carbon tetrachloride	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Chlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Chloroethane	BRL	10		ug/L	203627	1	02/26/2015 20:07	CH
Chloroform	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Chloromethane	BRL	10		ug/L	203627	1	02/26/2015 20:07	CH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Cyclohexane	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Dibromochloromethane	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Dichlorodifluoromethane	BRL	10		ug/L	203627	1	02/26/2015 20:07	CH
Ethylbenzene	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Freon-113	BRL	10		ug/L	203627	1	02/26/2015 20:07	CH
Isopropylbenzene	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
m,p-Xylene	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Methyl acetate	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Methylcyclohexane	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Methylene chloride	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
o-Xylene	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	TMW-5
Project Name:	Coronet Way	**Collection Date:**	2/19/2015 3:00:00 PM
Lab ID:	1502H03-011	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Tetrachloroethene	170	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Toluene	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Trichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Trichlorofluoromethane	BRL	5.0		ug/L	203627	1	02/26/2015 20:07	CH
Vinyl chloride	BRL	2.0		ug/L	203627	1	02/26/2015 20:07	CH
Surr: 4-Bromofluorobenzene	77.6	70.6-123		%REC	203627	1	02/26/2015 20:07	CH
Surr: Dibromofluoromethane	99.8	78.7-124		%REC	203627	1	02/26/2015 20:07	CH
Surr: Toluene-d8	95.8	81.3-120		%REC	203627	1	02/26/2015 20:07	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	TRIP BLANK
Project Name:	Coronet Way	**Collection Date:**	2/19/2015
Lab ID:	1502H03-012	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
1,1-Dichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
1,1-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
1,2-Dibromoethane	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
1,2-Dichloroethane	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
1,2-Dichloropropane	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
2-Butanone	BRL	50		ug/L	203627	1	02/26/2015 12:43	CH
2-Hexanone	BRL	10		ug/L	203627	1	02/26/2015 12:43	CH
4-Methyl-2-pentanone	BRL	10		ug/L	203627	1	02/26/2015 12:43	CH
Acetone	BRL	50		ug/L	203627	1	02/26/2015 12:43	CH
Benzene	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Bromodichloromethane	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Bromoform	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Bromomethane	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Carbon disulfide	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Carbon tetrachloride	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Chlorobenzene	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Chloroethane	BRL	10		ug/L	203627	1	02/26/2015 12:43	CH
Chloroform	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Chloromethane	BRL	10		ug/L	203627	1	02/26/2015 12:43	CH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Cyclohexane	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Dibromochloromethane	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Dichlorodifluoromethane	BRL	10		ug/L	203627	1	02/26/2015 12:43	CH
Ethylbenzene	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Freon-113	BRL	10		ug/L	203627	1	02/26/2015 12:43	CH
Isopropylbenzene	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
m,p-Xylene	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Methyl acetate	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Methylcyclohexane	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Methylene chloride	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
o-Xylene	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
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- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Feb-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	TRIP BLANK
Project Name:	Coronet Way	**Collection Date:**	2/19/2015
Lab ID:	1502H03-012	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Tetrachloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Toluene	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Trichloroethene	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Trichlorofluoromethane	BRL	5.0		ug/L	203627	1	02/26/2015 12:43	CH
Vinyl chloride	BRL	2.0		ug/L	203627	1	02/26/2015 12:43	CH
Surr: 4-Bromofluorobenzene	82.9	70.6-123		%REC	203627	1	02/26/2015 12:43	CH
Surr: Dibromofluoromethane	97.9	78.7-124		%REC	203627	1	02/26/2015 12:43	CH
Surr: Toluene-d8	92	81.3-120		%REC	203627	1	02/26/2015 12:43	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client AMEC/Plasters Work Order Number 1502H03

Checklist completed by Katie Forrest 2/20/15
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.4°C Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Client: AMEC E&I, Inc. - Plasters
Project Name: Coronet Way
Workorder: 1502H03

ANALYTICAL QC SUMMARY REPORT

BatchID: 203627

Sample ID: **MB-203627**	Client ID:		Units: **ug/L**	Prep Date: **02/24/2015**	Run No: **286599**
SampleType: **MBLK**	TestCode: **TCL VOLATILE ORGANICS SW8260B**		BatchID: **203627**	Analysis Date: **02/26/2015**	Seq No: **6083586**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	50									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. - Plasters
Project Name: Coronet Way
Workorder: 1502H03

ANALYTICAL QC SUMMARY REPORT

BatchID: 203627

Sample ID: **MB-203627** Client ID: Units: **ug/L** Prep Date: **02/24/2015** Run No: **286599**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **203627** Analysis Date: **02/26/2015** Seq No: **6083586**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	2.0									
Surr: 4-Bromofluorobenzene	43.14	0	50.00		86.3	70.6	123				
Surr: Dibromofluoromethane	51.65	0	50.00		103	78.7	124				
Surr: Toluene-d8	44.51	0	50.00		89.0	81.3	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. - Plasters
Project Name: Coronet Way
Workorder: 1502H03

ANALYTICAL QC SUMMARY REPORT

BatchID: 203627

Sample ID: **LCS-203627** Client ID: Units: **ug/L** Prep Date: **02/24/2015** Run No: **286599**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **203627** Analysis Date: **02/26/2015** Seq No: **6083585**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	49.45	5.0	50.00		98.9	64.2	137				
Benzene	46.31	5.0	50.00		92.6	72.8	128				
Chlorobenzene	44.66	5.0	50.00		89.3	72.3	126				
Toluene	44.79	5.0	50.00		89.6	74.9	127				
Trichloroethene	44.26	5.0	50.00		88.5	70.5	134				
Surr: 4-Bromofluorobenzene	43.23	0	50.00		86.5	70.6	123				
Surr: Dibromofluoromethane	46.32	0	50.00		92.6	78.7	124				
Surr: Toluene-d8	45.49	0	50.00		91.0	81.3	120				

Sample ID: **1502H03-001AMS** Client ID: **MW-18** Units: **ug/L** Prep Date: **02/24/2015** Run No: **286599**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **203627** Analysis Date: **02/26/2015** Seq No: **6083587**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	3200	250	2500		128	60.5	156				
Benzene	2529	250	2500		101	70	135				
Chlorobenzene	2474	250	2500		99.0	70.5	132				
Toluene	2508	250	2500		100	70.5	137				
Trichloroethene	2485	250	2500		99.4	71.8	139				
Surr: 4-Bromofluorobenzene	2036	0	2500		81.4	70.6	123				
Surr: Dibromofluoromethane	2346	0	2500		93.9	78.7	124				
Surr: Toluene-d8	2218	0	2500		88.7	81.3	120				

Sample ID: **1502H03-001AMSD** Client ID: **MW-18** Units: **ug/L** Prep Date: **02/24/2015** Run No: **286599**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **203627** Analysis Date: **02/26/2015** Seq No: **6083692**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	3602	250	2500		144	60.5	156	3200	11.8	20	
Benzene	3066	250	2500		123	70	135	2529	19.2	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. - Plasters
Project Name: Coronet Way
Workorder: 1502H03

ANALYTICAL QC SUMMARY REPORT

BatchID: 203627

Sample ID: **1502H03-001AMSD** Client ID: **MW-18** Units: **ug/L** Prep Date: **02/24/2015** Run No: **286599**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **203627** Analysis Date: **02/26/2015** Seq No: **6083692**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	2763	250	2500		111	70.5	132	2474	11.0	20	
Toluene	2944	250	2500		118	70.5	137	2508	16.0	20	
Trichloroethene	2994	250	2500		120	71.8	139	2485	18.6	20	
Surr: 4-Bromofluorobenzene	1986	0	2500		79.4	70.6	123	2036	0	0	
Surr: Dibromofluoromethane	2669	0	2500		107	78.7	124	2346	0	0	
Surr: Toluene-d8	2283	0	2500		91.3	81.3	120	2218	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 19, 2015

Steve Davenport
AMEC E&I, Inc. - Plasters
2677 Buford Highway NE
Atlanta GA 30324

TEL: (404) 788-7909
FAX: (404) 817-0183

RE: Moore's Mill

Dear Steve Davenport: Order No: 1508858

Analytical Environmental Services, Inc. received 4 samples on 8/11/2015 3:10:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/15-06/30/16.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Ioana Pacurar

Ioana Pacurar
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1508858

Date: 8-10-15 Page ____ of ____

COMPANY:	ADDRESS:
AMEC	2677 Bond Hwy
PHONE: 404-373-4761	FAX:
SAMPLED BY: Matt Wortman	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOCs	Alkalinity	Chloride	Hardness	Chlorine	Ferrous Iron	Methane	Nitrate	Nitrite	Sulfate	Sulfide	No # of Containers
	PRESERVATION (See codes)																	
1	MW-18	8-10	1040	X		GW	X	X	X	X	X	X	X	X	X	X		6
2	MW-12	8-10	1300	X		GW	X											2
3	MW-11	8-10	1430	X		GW	X											2
4	Trip Blank																	2
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		

REMARKS

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	8/11/15 1510	1:	8/11/15 1510
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER_____

PROJECT INFORMATION
PROJECT NAME: Moore's Mill
PROJECT #: C121-15-0004
SITE ADDRESS: Moore's Mill Rd
SEND REPORT TO: S. Davant / C. Fury
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #:_____ PO#:_____

RECEIPT
Total # of Containers: 12

Turnaround Time Request
- (✓) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other _____

STATE PROGRAM (if any): _____
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

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

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 19-Aug-15

Client: AMEC E&I, Inc. - Plasters
Project: Moore's Mill
Lab ID: 1508858

Case Narrative

Volatile Organic Compounds Analysis by Method 8260B:

Toluene value for the QC sample 1508902-001AMS/MSD is "E" qualified indicating estimated value over linear calibration range due to the level of target analyte present in the unspiked sample.

GC Analysis of Gaseous Samples by Method RSKSOP-175:

Due to limited sample volume provided, sample 1508858-001A required reduced volume extraction resulting in elevated reporting limits.

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-18
Project Name:	Moore's Mill	**Collection Date:**	8/11/2015 10:20:00 AM
Lab ID:	1508858-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
1,1-Dichloroethane	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
1,1-Dichloroethene	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
1,2-Dibromoethane	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
1,2-Dichloroethane	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
1,2-Dichloropropane	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
2-Butanone	BRL	50		ug/L	211397	1	08/13/2015 09:55	NP
2-Hexanone	BRL	10		ug/L	211397	1	08/13/2015 09:55	NP
4-Methyl-2-pentanone	BRL	10		ug/L	211397	1	08/13/2015 09:55	NP
Acetone	140	50		ug/L	211397	1	08/13/2015 09:55	NP
Benzene	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Bromodichloromethane	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Bromoform	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Bromomethane	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Carbon disulfide	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Carbon tetrachloride	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Chlorobenzene	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Chloroethane	BRL	10		ug/L	211397	1	08/13/2015 09:55	NP
Chloroform	5.6	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Chloromethane	BRL	10		ug/L	211397	1	08/13/2015 09:55	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Cyclohexane	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Dibromochloromethane	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Dichlorodifluoromethane	BRL	10		ug/L	211397	1	08/13/2015 09:55	NP
Ethylbenzene	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Freon-113	BRL	10		ug/L	211397	1	08/13/2015 09:55	NP
Isopropylbenzene	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
m,p-Xylene	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Methyl acetate	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Methylcyclohexane	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Methylene chloride	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
o-Xylene	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-18
Project Name:	Moore's Mill	**Collection Date:**	8/11/2015 10:20:00 AM
Lab ID:	1508858-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Tetrachloroethene	21	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Toluene	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Trichloroethene	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Trichlorofluoromethane	BRL	5.0		ug/L	211397	1	08/13/2015 09:55	NP
Vinyl chloride	BRL	2.0		ug/L	211397	1	08/13/2015 09:55	NP
Surr: 4-Bromofluorobenzene	79.1	70.6-123		%REC	211397	1	08/13/2015 09:55	NP
Surr: Dibromofluoromethane	105	78.7-124		%REC	211397	1	08/13/2015 09:55	NP
Surr: Toluene-d8	99.1	81.3-120		%REC	211397	1	08/13/2015 09:55	NP
Sulfide by SW9030B/9034				**(SW9030B)**				
Sulfide	BRL	2.00		mg/L	211662	1	08/18/2015 10:00	PF
ION SCAN SW9056A								
Chloride	17	1.0		mg/L	R297922	1	08/11/2015 16:54	JW
Nitrate	2.5	0.25		mg/L	R297922	1	08/11/2015 16:54	JW
Nitrite	BRL	0.25		mg/L	R297922	1	08/11/2015 16:54	JW
Sulfate	BRL	1.0		mg/L	R297922	1	08/11/2015 16:54	JW
GC Analysis of Gaseous Samples SOP-RSK 175				**(RSK175)**				
Ethane	BRL	11		ug/L	211460	1	08/14/2015 10:56	AB
Ethylene	BRL	8		ug/L	211460	1	08/14/2015 10:56	AB
Methane	BRL	5		ug/L	211460	1	08/14/2015 10:56	AB
Ferrous Iron SM3500-Fe-B								
Iron, as Ferrous (Fe+2)	BRL	0.100		mg/L	R297729	1	08/12/2015 09:00	OM
Alkalinity by SM2320B								
Alkalinity, Total (As CaCO3)	25.0	3.00		mg/L	R298182	1	08/18/2015 10:00	PF

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

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-12
Project Name:	Moore's Mill	**Collection Date:**	8/11/2015 1:00:00 PM
Lab ID:	1508858-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
1,1,2-Trichloroethane	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
1,1-Dichloroethane	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
1,1-Dichloroethene	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
1,2-Dibromoethane	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
1,2-Dichlorobenzene	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
1,2-Dichloroethane	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
1,2-Dichloropropane	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
1,3-Dichlorobenzene	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
1,4-Dichlorobenzene	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
2-Butanone	BRL	50		ug/L	211397	1	08/14/2015 06:18	AR
2-Hexanone	BRL	10		ug/L	211397	1	08/14/2015 06:18	AR
4-Methyl-2-pentanone	BRL	10		ug/L	211397	1	08/14/2015 06:18	AR
Acetone	BRL	50		ug/L	211397	1	08/14/2015 06:18	AR
Benzene	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Bromodichloromethane	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Bromoform	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Bromomethane	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Carbon disulfide	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Carbon tetrachloride	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Chlorobenzene	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Chloroethane	BRL	10		ug/L	211397	1	08/14/2015 06:18	AR
Chloroform	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Chloromethane	BRL	10		ug/L	211397	1	08/14/2015 06:18	AR
cis-1,2-Dichloroethene	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
cis-1,3-Dichloropropene	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Cyclohexane	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Dibromochloromethane	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Dichlorodifluoromethane	BRL	10		ug/L	211397	1	08/14/2015 06:18	AR
Ethylbenzene	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Freon-113	BRL	10		ug/L	211397	1	08/14/2015 06:18	AR
Isopropylbenzene	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
m,p-Xylene	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Methyl acetate	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Methyl tert-butyl ether	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Methylcyclohexane	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Methylene chloride	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
o-Xylene	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR

Qualifiers:

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- BRL Below reporting limit
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- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-12
Project Name:	Moore's Mill	**Collection Date:**	8/11/2015 1:00:00 PM
Lab ID:	1508858-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Tetrachloroethene	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Toluene	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
trans-1,2-Dichloroethene	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
trans-1,3-Dichloropropene	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Trichloroethene	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Trichlorofluoromethane	BRL	5.0		ug/L	211397	1	08/14/2015 06:18	AR
Vinyl chloride	BRL	2.0		ug/L	211397	1	08/14/2015 06:18	AR
Surr: 4-Bromofluorobenzene	83.7	70.6-123		%REC	211397	1	08/14/2015 06:18	AR
Surr: Dibromofluoromethane	95.9	78.7-124		%REC	211397	1	08/14/2015 06:18	AR
Surr: Toluene-d8	96.4	81.3-120		%REC	211397	1	08/14/2015 06:18	AR

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
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- N Analyte not NELAC certified
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- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-11
Project Name:	Moore's Mill	**Collection Date:**	8/11/2015 2:30:00 PM
Lab ID:	1508858-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
1,1,2-Trichloroethane	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
1,1-Dichloroethane	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
1,1-Dichloroethene	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
1,2-Dibromoethane	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
1,2-Dichlorobenzene	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
1,2-Dichloroethane	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
1,2-Dichloropropane	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
1,3-Dichlorobenzene	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
1,4-Dichlorobenzene	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
2-Butanone	BRL	50		ug/L	211397	1	08/14/2015 15:52	AR
2-Hexanone	BRL	10		ug/L	211397	1	08/14/2015 15:52	AR
4-Methyl-2-pentanone	BRL	10		ug/L	211397	1	08/14/2015 15:52	AR
Acetone	BRL	50		ug/L	211397	1	08/14/2015 15:52	AR
Benzene	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Bromodichloromethane	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Bromoform	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Bromomethane	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Carbon disulfide	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Carbon tetrachloride	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Chlorobenzene	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Chloroethane	BRL	10		ug/L	211397	1	08/14/2015 15:52	AR
Chloroform	31	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Chloromethane	BRL	10		ug/L	211397	1	08/14/2015 15:52	AR
cis-1,2-Dichloroethene	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
cis-1,3-Dichloropropene	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Cyclohexane	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Dibromochloromethane	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Dichlorodifluoromethane	BRL	10		ug/L	211397	1	08/14/2015 15:52	AR
Ethylbenzene	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Freon-113	BRL	10		ug/L	211397	1	08/14/2015 15:52	AR
Isopropylbenzene	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
m,p-Xylene	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Methyl acetate	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Methyl tert-butyl ether	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Methylcyclohexane	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Methylene chloride	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
o-Xylene	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-11
Project Name:	Moore's Mill	**Collection Date:**	8/11/2015 2:30:00 PM
Lab ID:	1508858-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Tetrachloroethene	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Toluene	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
trans-1,2-Dichloroethene	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
trans-1,3-Dichloropropene	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Trichloroethene	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Trichlorofluoromethane	BRL	5.0		ug/L	211397	1	08/14/2015 15:52	AR
Vinyl chloride	BRL	2.0		ug/L	211397	1	08/14/2015 15:52	AR
Surr: 4-Bromofluorobenzene	84	70.6-123		%REC	211397	1	08/14/2015 15:52	AR
Surr: Dibromofluoromethane	99.1	78.7-124		%REC	211397	1	08/14/2015 15:52	AR
Surr: Toluene-d8	96.5	81.3-120		%REC	211397	1	08/14/2015 15:52	AR

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
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- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	TRIP BLANK
Project Name:	Moore's Mill	**Collection Date:**	8/11/2015
Lab ID:	1508858-004	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
1,1,2-Trichloroethane	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
1,1-Dichloroethane	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
1,1-Dichloroethene	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
1,2-Dibromoethane	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
1,2-Dichlorobenzene	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
1,2-Dichloroethane	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
1,2-Dichloropropane	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
1,3-Dichlorobenzene	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
1,4-Dichlorobenzene	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
2-Butanone	BRL	50		ug/L	211397	1	08/14/2015 05:01	AR
2-Hexanone	BRL	10		ug/L	211397	1	08/14/2015 05:01	AR
4-Methyl-2-pentanone	BRL	10		ug/L	211397	1	08/14/2015 05:01	AR
Acetone	BRL	50		ug/L	211397	1	08/14/2015 05:01	AR
Benzene	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Bromodichloromethane	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Bromoform	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Bromomethane	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Carbon disulfide	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Carbon tetrachloride	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Chlorobenzene	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Chloroethane	BRL	10		ug/L	211397	1	08/14/2015 05:01	AR
Chloroform	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Chloromethane	BRL	10		ug/L	211397	1	08/14/2015 05:01	AR
cis-1,2-Dichloroethene	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
cis-1,3-Dichloropropene	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Cyclohexane	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Dibromochloromethane	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Dichlorodifluoromethane	BRL	10		ug/L	211397	1	08/14/2015 05:01	AR
Ethylbenzene	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Freon-113	BRL	10		ug/L	211397	1	08/14/2015 05:01	AR
Isopropylbenzene	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
m,p-Xylene	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Methyl acetate	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Methyl tert-butyl ether	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Methylcyclohexane	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Methylene chloride	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
o-Xylene	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	TRIP BLANK
Project Name:	Moore's Mill	**Collection Date:**	8/11/2015
Lab ID:	1508858-004	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Tetrachloroethene	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Toluene	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
trans-1,2-Dichloroethene	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
trans-1,3-Dichloropropene	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Trichloroethene	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Trichlorofluoromethane	BRL	5.0		ug/L	211397	1	08/14/2015 05:01	AR
Vinyl chloride	BRL	2.0		ug/L	211397	1	08/14/2015 05:01	AR
Surr: 4-Bromofluorobenzene	79.5	70.6-123		%REC	211397	1	08/14/2015 05:01	AR
Surr: Dibromofluoromethane	94.6	78.7-124		%REC	211397	1	08/14/2015 05:01	AR
Surr: Toluene-d8	95.7	81.3-120		%REC	211397	1	08/14/2015 05:01	AR

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Amec Work Order Number 1508858

Checklist completed by Jam B 8/11/15
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.2° Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by JB

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Analytical Environmental Services, Inc

Date: 19-Aug-15

Client: AMEC E&I, Inc. - Plasters
Project Name: Moore's Mill
Lab Order: 1508858

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1508858-001A	MW-18	8/11/2015 10:20:00AM	Groundwater	TCL VOLATILE ORGANICS		8/12/2015 11:18:50 PM	08/13/2015
1508858-001A	MW-18	8/11/2015 10:20:00AM	Groundwater	GC Analysis of Gaseous Samples		8/14/2015 9:52:08 AM	08/14/2015
1508858-001C	MW-18	8/11/2015 10:20:00AM	Groundwater	Alkalinity by SM2320B			08/18/2015
1508858-001D	MW-18	8/11/2015 10:20:00AM	Groundwater	ION SCAN			08/11/2015
1508858-001E	MW-18	8/11/2015 10:20:00AM	Groundwater	Ferrous Iron			08/12/2015
1508858-001F	MW-18	8/11/2015 10:20:00AM	Groundwater	Sulfide by SW9030/9034		8/18/2015 10:00:00 AM	08/18/2015
1508858-002A	MW-12	8/11/2015 1:00:00PM	Groundwater	TCL VOLATILE ORGANICS		8/12/2015 7:31:00 PM	08/14/2015
1508858-003A	MW-11	8/11/2015 2:30:00PM	Groundwater	TCL VOLATILE ORGANICS		8/12/2015 7:31:00 PM	08/14/2015
1508858-004A	TRIP BLANK	8/11/2015 12:00:00AM	Aqueous	TCL VOLATILE ORGANICS		8/12/2015 7:31:00 PM	08/14/2015

Client: AMEC E&I, Inc. - Plasters
Project Name: Moore's Mill
Workorder: 1508858

ANALYTICAL QC SUMMARY REPORT

BatchID: 211397

Sample ID: **MB-211397**	Client ID:	Units: **ug/L**	Prep Date: **08/12/2015**	Run No: **297810**
SampleType: **MBLK**	TestCode: **TCL VOLATILE ORGANICS SW8260B**	BatchID: **211397**	Analysis Date: **08/12/2015**	Seq No: **6357121**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	50									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. - Plasters
Project Name: Moore's Mill
Workorder: 1508858

ANALYTICAL QC SUMMARY REPORT

BatchID: 211397

Sample ID: **MB-211397** Client ID: Units: **ug/L** Prep Date: **08/12/2015** Run No: **297810**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **211397** Analysis Date: **08/12/2015** Seq No: **6357121**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	2.0									
Surr: 4-Bromofluorobenzene	45.36	0	50.00		90.7	70.6	123				
Surr: Dibromofluoromethane	49.14	0	50.00		98.3	78.7	124				
Surr: Toluene-d8	48.99	0	50.00		98.0	81.3	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. - Plasters
Project Name: Moore's Mill
Workorder: 1508858

ANALYTICAL QC SUMMARY REPORT

BatchID: 211397

Sample ID: **LCS-211397** Client ID: Units: **ug/L** Prep Date: **08/12/2015** Run No: **297810**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **211397** Analysis Date: **08/13/2015** Seq No: **6357122**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	44.22	5.0	50.00		88.4	64.2	137				
Benzene	49.11	5.0	50.00		98.2	72.8	128				
Chlorobenzene	46.91	5.0	50.00		93.8	72.3	126				
Toluene	49.99	5.0	50.00		100.0	74.9	127				
Trichloroethene	49.74	5.0	50.00		99.5	70.5	134				
Surr: 4-Bromofluorobenzene	44.06	0	50.00		88.1	70.6	123				
Surr: Dibromofluoromethane	48.26	0	50.00		96.5	78.7	124				
Surr: Toluene-d8	49.56	0	50.00		99.1	81.3	120				

Sample ID: **1508902-001AMS** Client ID: Units: **ug/L** Prep Date: **08/12/2015** Run No: **297810**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **211397** Analysis Date: **08/13/2015** Seq No: **6358306**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	4520	500	5000		90.4	60.5	156				
Benzene	16990	500	5000	11460	111	70	135				
Chlorobenzene	4522	500	5000		90.4	70.5	132				
Toluene	33990	500	5000	27410	132	70.5	137				E
Trichloroethene	4967	500	5000		99.3	71.8	139				
Surr: 4-Bromofluorobenzene	4626	0	5000		92.5	70.6	123				
Surr: Dibromofluoromethane	4775	0	5000		95.5	78.7	124				
Surr: Toluene-d8	5030	0	5000		101	81.3	120				

Sample ID: **1508902-001AMSD** Client ID: Units: **ug/L** Prep Date: **08/12/2015** Run No: **297810**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **211397** Analysis Date: **08/13/2015** Seq No: **6358312**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	4673	500	5000		93.5	60.5	156	4520	3.33	20	
Benzene	16680	500	5000	11460	104	70	135	16990	1.83	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. - Plasters
Project Name: Moore's Mill
Workorder: 1508858

ANALYTICAL QC SUMMARY REPORT

BatchID: 211397

Sample ID: **1508902-001AMSD** Client ID:
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **ug/L** Prep Date: **08/12/2015** Run No: **297810**
BatchID: **211397** Analysis Date: **08/13/2015** Seq No: **6358312**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	4632	500	5000		92.6	70.5	132	4522	2.40	20	
Toluene	33630	500	5000	27410	124	70.5	137	33990	1.05	20	E
Trichloroethene	4903	500	5000		98.1	71.8	139	4967	1.30	20	
Surr: 4-Bromofluorobenzene	4562	0	5000		91.2	70.6	123	4626	0	0	
Surr: Dibromofluoromethane	4793	0	5000		95.9	78.7	124	4775	0	0	
Surr: Toluene-d8	4991	0	5000		99.8	81.3	120	5030	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. - Plasters
Project Name: Moore's Mill
Workorder: 1508858

ANALYTICAL QC SUMMARY REPORT

BatchID: 211460

Sample ID: **LCS-211460** Client ID: Units: **ug/L** Prep Date: **08/14/2015** Run No: **297942**
SampleType: **LCS** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **211460** Analysis Date: **08/14/2015** Seq No: **6359865**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	102.0	9	200.0		51.0	41.2	115				
Ethylene	67.56	7	200.0		33.8	26.5	115				
Methane	100.0	4	200.0		50.0	45.1	115				

Sample ID: **LCSD-211460** Client ID: Units: **ug/L** Prep Date: **08/14/2015** Run No: **297942**
SampleType: **LCSD** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **211460** Analysis Date: **08/14/2015** Seq No: **6359866**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	100.2	9	200.0		50.1	41.2	115	102.0	1.79	20	
Ethylene	66.46	7	200.0		33.2	26.5	115	67.56	1.64	20	
Methane	98.62	4	200.0		49.3	45.1	115	100.0	1.41	20	

Sample ID: **1508724-019AMS** Client ID: Units: **ug/L** Prep Date: **08/14/2015** Run No: **297942**
SampleType: **MS** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **211460** Analysis Date: **08/14/2015** Seq No: **6359873**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	113.1	9	200.0		56.5	40.5	115				
Ethylene	75.68	7	200.0		37.8	25.1	115				
Methane	113.9	4	200.0	2.727	55.6	40.4	115				

Sample ID: **1508724-019AMSD** Client ID: Units: **ug/L** Prep Date: **08/14/2015** Run No: **297942**
SampleType: **MSD** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **211460** Analysis Date: **08/14/2015** Seq No: **6359874**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	105.9	9	200.0		53.0	40.5	115	113.1	6.52	20	
Ethylene	71.31	7	200.0		35.7	25.1	115	75.68	5.94	20	
Methane	106.7	4	200.0	2.727	52.0	40.4	115	113.9	6.45	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. - Plasters
Project Name: Moore's Mill
Workorder: 1508858

ANALYTICAL QC SUMMARY REPORT

BatchID: 211662

Sample ID: **MB-211662**	Client ID:			Units: **mg/L**	Prep Date: **08/18/2015**	Run No: **298181**
SampleType: **MBLK**	TestCode: **Sulfide by SW9030B/9034**			BatchID: **211662**	Analysis Date: **08/18/2015**	Seq No: **6365031**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	BRL	2.00									

Sample ID: **LCS-211662**	Client ID:			Units: **mg/L**	Prep Date: **08/18/2015**	Run No: **298181**
SampleType: **LCS**	TestCode: **Sulfide by SW9030B/9034**			BatchID: **211662**	Analysis Date: **08/18/2015**	Seq No: **6365032**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	204.0	2.00	204.0		100	40	120				

Sample ID: **1508858-001FMS**	Client ID: **MW-18**			Units: **mg/L**	Prep Date: **08/18/2015**	Run No: **298181**
SampleType: **MS**	TestCode: **Sulfide by SW9030B/9034**			BatchID: **211662**	Analysis Date: **08/18/2015**	Seq No: **6365035**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	9.400	2.00	10.20		92.2	73.7	120				

Sample ID: **1508858-001FMSD**	Client ID: **MW-18**			Units: **mg/L**	Prep Date: **08/18/2015**	Run No: **298181**
SampleType: **MSD**	TestCode: **Sulfide by SW9030B/9034**			BatchID: **211662**	Analysis Date: **08/18/2015**	Seq No: **6365036**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	9.400	2.00	10.20		92.2	73.7	120	9.400	0	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. - Plasters
Project Name: Moore's Mill
Workorder: 1508858

ANALYTICAL QC SUMMARY REPORT

BatchID: R297729

Sample ID: **MB-R297729**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **297729**
SampleType: **MBLK**	TestCode: **Ferrous Iron**	**SM3500-Fe-B**		BatchID: **R297729**	Analysis Date: **08/12/2015**	Seq No: **6354817**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	BRL	0.100									

Sample ID: **LCS-R297729**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **297729**
SampleType: **LCS**	TestCode: **Ferrous Iron**	**SM3500-Fe-B**		BatchID: **R297729**	Analysis Date: **08/12/2015**	Seq No: **6354818**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.5567	0.100	0.5000		111	85	115				

Sample ID: **1508858-001EMS**	Client ID: **MW-18**			Units: **mg/L**	Prep Date:	Run No: **297729**
SampleType: **MS**	TestCode: **Ferrous Iron**	**SM3500-Fe-B**		BatchID: **R297729**	Analysis Date: **08/12/2015**	Seq No: **6354842**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.5798	0.100	0.5000		116	80	120				

Sample ID: **1508858-001EMSD**	Client ID: **MW-18**			Units: **mg/L**	Prep Date:	Run No: **297729**
SampleType: **MSD**	TestCode: **Ferrous Iron**	**SM3500-Fe-B**		BatchID: **R297729**	Analysis Date: **08/12/2015**	Seq No: **6354851**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron, as Ferrous (Fe+2)	0.5746	0.100	0.5000		115	80	120	0.5798	0.901	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. - Plasters
Project Name: Moore's Mill
Workorder: 1508858

ANALYTICAL QC SUMMARY REPORT

BatchID: R297922

Sample ID: **MB-R297922**	Client ID:					Units: **mg/L**		Prep Date:		Run No: **297922**	
SampleType: **MBLK**	TestCode: **ION SCAN SW9056A**					BatchID: **R297922**		Analysis Date: **08/11/2015**		Seq No: **6359420**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	BRL	1.0									
Nitrate	BRL	0.25									
Nitrite	BRL	0.25									
Sulfate	BRL	1.0									

Sample ID: **LCS-R297922**	Client ID:					Units: **mg/L**		Prep Date:		Run No: **297922**	
SampleType: **LCS**	TestCode: **ION SCAN SW9056A**					BatchID: **R297922**		Analysis Date: **08/11/2015**		Seq No: **6359419**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	4.757	1.0	5.000		95.1	90	110				
Nitrate	4.972	0.25	5.000		99.4	90	110				
Nitrite	4.920	0.25	5.000		98.4	90	110				
Sulfate	22.90	1.0	25.00		91.6	90	110				

Sample ID: **1508850-002BMS**	Client ID:					Units: **mg/L**		Prep Date:		Run No: **297922**	
SampleType: **MS**	TestCode: **ION SCAN SW9056A**					BatchID: **R297922**		Analysis Date: **08/11/2015**		Seq No: **6359424**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	84.88	10	50.00	36.45	96.9	90	110				
Nitrate	64.48	2.5	50.00	12.01	105	90	110				
Nitrite	51.35	2.5	50.00		103	90	110				
Sulfate	288.8	10	250.0	49.59	95.7	90	110				

Sample ID: **1508850-002BMSD**	Client ID:					Units: **mg/L**		Prep Date:		Run No: **297922**	
SampleType: **MSD**	TestCode: **ION SCAN SW9056A**					BatchID: **R297922**		Analysis Date: **08/11/2015**		Seq No: **6359425**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	86.92	10	50.00	36.45	101	90	110	84.88	2.37	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. - Plasters
Project Name: Moore's Mill
Workorder: 1508858

ANALYTICAL QC SUMMARY REPORT

BatchID: R297922

Sample ID: **1508850-002BMSD** Client ID:
SampleType: **MSD** TestCode: **ION SCAN SW9056A**
Units: **mg/L** Prep Date: Run No: **297922**
BatchID: **R297922** Analysis Date: **08/11/2015** Seq No: **6359425**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nitrate	65.98	2.5	50.00	12.01	108	90	110	64.48	2.30	20	
Nitrite	53.17	2.5	50.00		106	90	110	51.35	3.48	20	
Sulfate	295.3	10	250.0	49.59	98.3	90	110	288.8	2.25	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. - Plasters
Project Name: Moore's Mill
Workorder: 1508858

ANALYTICAL QC SUMMARY REPORT

BatchID: R298182

Sample ID: **MB-R298182**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **298182**
SampleType: **MBLK**	TestCode: **Alkalinity by SM2320B**			BatchID: **R298182**	Analysis Date: **08/18/2015**	Seq No: **6365040**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	BRL	3.00									

Sample ID: **LCS-R298182**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **298182**
SampleType: **LCS**	TestCode: **Alkalinity by SM2320B**			BatchID: **R298182**	Analysis Date: **08/18/2015**	Seq No: **6365041**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	124.0	3.00	125.0		99.2	75	125				

Sample ID: **1508858-001CDUP**	Client ID: **MW-18**			Units: **mg/L**	Prep Date:	Run No: **298182**
SampleType: **DUP**	TestCode: **Alkalinity by SM2320B**			BatchID: **R298182**	Analysis Date: **08/18/2015**	Seq No: **6365047**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	23.00	3.00						25.00	8.33	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 19, 2015

Steve Davenport
AMEC E&I, Inc. - Plasters
2677 Buford Highway NE
Atlanta GA 30324

TEL: (404) 788-7909
FAX: (404) 817-0183

RE: Moores Mill

Dear Steve Davenport: Order No: 1508B09

Analytical Environmental Services, Inc. received 8 samples on 8/13/2015 2:25:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/15-06/30/16.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Ioana Pacurar

Ioana Pacurar
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1508B09

Date: 8-12 Page ____ of ____

COMPANY: AMEC	ADDRESS: 2677 Buford Hwy.
PHONE: 404-873-4761	FAX:
SAMPLED BY: Matt Worthan	SIGNATURE:

ANALYSIS REQUESTED

VOCs

PRESERVATION (See codes)

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION	REMARKS	No # of Containers
1	MW-14	8-12	930	X		GW	X		2
2	MW-15	8-12	1130	X		GW	X		2
3	MW-17	8-12	1300	X		GW	X		2
4	MW-10	8-12	1515	X		GW	X		2
5	MW-13	8-13	855	X		GW	X		2
6	MW-21	8-13	1030	X		GW	X		2
7	MW-25	8-13	1330	X		GW	X		2
8	Trip Blank								2
9									
10									
11									
12									
13									
14									

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	8/13/15 1425	1: Tampa Police	8/13/15 1405
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
(CLIENT) FedEx UPS MAIL COURIER
GREYHOUND OTHER_____

PROJECT INFORMATION
PROJECT NAME: Mooks Mill
PROJECT #: 612-15-0064
SITE ADDRESS: Mooks Mill Rd.
SEND REPORT TO: S. Davenport / C. Terry
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #:_____ PO#:_____

RECEIPT
Total # of Containers: 16

Turnaround Time Request
(X) Standard 5 Business Days
( ) 2 Business Day Rush
( ) Next Business Day Rush
( ) Same Day Rush (auth req.)
( ) Other _____

STATE PROGRAM (if any): _____
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-14
Project Name:	Moores Mill	**Collection Date:**	8/12/2015 9:30:00 AM
Lab ID:	1508B09-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
1,1-Dichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
1,1-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
1,2-Dibromoethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
1,2-Dichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
1,2-Dichloropropane	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
2-Butanone	BRL	50		ug/L	211599	1	08/18/2015 01:03	CH
2-Hexanone	BRL	10		ug/L	211599	1	08/18/2015 01:03	CH
4-Methyl-2-pentanone	BRL	10		ug/L	211599	1	08/18/2015 01:03	CH
Acetone	BRL	50		ug/L	211599	1	08/18/2015 01:03	CH
Benzene	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Bromodichloromethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Bromoform	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Bromomethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Carbon disulfide	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Carbon tetrachloride	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Chlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Chloroethane	BRL	10		ug/L	211599	1	08/18/2015 01:03	CH
Chloroform	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Chloromethane	BRL	10		ug/L	211599	1	08/18/2015 01:03	CH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Cyclohexane	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Dibromochloromethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Dichlorodifluoromethane	BRL	10		ug/L	211599	1	08/18/2015 01:03	CH
Ethylbenzene	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Freon-113	BRL	10		ug/L	211599	1	08/18/2015 01:03	CH
Isopropylbenzene	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
m,p-Xylene	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Methyl acetate	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Methylcyclohexane	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Methylene chloride	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
o-Xylene	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-14
Project Name:	Moores Mill	**Collection Date:**	8/12/2015 9:30:00 AM
Lab ID:	1508B09-001	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Tetrachloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Toluene	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Trichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Trichlorofluoromethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:03	CH
Vinyl chloride	BRL	2.0		ug/L	211599	1	08/18/2015 01:03	CH
Surr: 4-Bromofluorobenzene	83.4	70.6-123		%REC	211599	1	08/18/2015 01:03	CH
Surr: Dibromofluoromethane	99	78.7-124		%REC	211599	1	08/18/2015 01:03	CH
Surr: Toluene-d8	91.8	81.3-120		%REC	211599	1	08/18/2015 01:03	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-15
Project Name:	Moores Mill	**Collection Date:**	8/12/2015 11:30:00 AM
Lab ID:	1508B09-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
1,1-Dichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
1,1-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
1,2-Dibromoethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
1,2-Dichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
1,2-Dichloropropane	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
2-Butanone	BRL	50		ug/L	211599	1	08/18/2015 01:26	CH
2-Hexanone	BRL	10		ug/L	211599	1	08/18/2015 01:26	CH
4-Methyl-2-pentanone	BRL	10		ug/L	211599	1	08/18/2015 01:26	CH
Acetone	BRL	50		ug/L	211599	1	08/18/2015 01:26	CH
Benzene	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Bromodichloromethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Bromoform	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Bromomethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Carbon disulfide	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Carbon tetrachloride	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Chlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Chloroethane	BRL	10		ug/L	211599	1	08/18/2015 01:26	CH
Chloroform	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Chloromethane	BRL	10		ug/L	211599	1	08/18/2015 01:26	CH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Cyclohexane	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Dibromochloromethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Dichlorodifluoromethane	BRL	10		ug/L	211599	1	08/18/2015 01:26	CH
Ethylbenzene	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Freon-113	BRL	10		ug/L	211599	1	08/18/2015 01:26	CH
Isopropylbenzene	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
m,p-Xylene	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Methyl acetate	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Methylcyclohexane	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Methylene chloride	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
o-Xylene	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-15
Project Name:	Moores Mill	**Collection Date:**	8/12/2015 11:30:00 AM
Lab ID:	1508B09-002	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Tetrachloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Toluene	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Trichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Trichlorofluoromethane	BRL	5.0		ug/L	211599	1	08/18/2015 01:26	CH
Vinyl chloride	BRL	2.0		ug/L	211599	1	08/18/2015 01:26	CH
Surr: 4-Bromofluorobenzene	80.3	70.6-123		%REC	211599	1	08/18/2015 01:26	CH
Surr: Dibromofluoromethane	103	78.7-124		%REC	211599	1	08/18/2015 01:26	CH
Surr: Toluene-d8	95.4	81.3-120		%REC	211599	1	08/18/2015 01:26	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-17
Project Name:	Moores Mill	**Collection Date:**	8/12/2015 1:00:00 PM
Lab ID:	1508B09-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
1,1-Dichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
1,1-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
1,2-Dibromoethane	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
1,2-Dichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
1,2-Dichloropropane	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
2-Butanone	BRL	50		ug/L	211599	1	08/18/2015 19:38	CH
2-Hexanone	BRL	10		ug/L	211599	1	08/18/2015 19:38	CH
4-Methyl-2-pentanone	BRL	10		ug/L	211599	1	08/18/2015 19:38	CH
Acetone	BRL	50		ug/L	211599	1	08/18/2015 19:38	CH
Benzene	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Bromodichloromethane	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Bromoform	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Bromomethane	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Carbon disulfide	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Carbon tetrachloride	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Chlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Chloroethane	BRL	10		ug/L	211599	1	08/18/2015 19:38	CH
Chloroform	7.2	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Chloromethane	BRL	10		ug/L	211599	1	08/18/2015 19:38	CH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Cyclohexane	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Dibromochloromethane	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Dichlorodifluoromethane	BRL	10		ug/L	211599	1	08/18/2015 19:38	CH
Ethylbenzene	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Freon-113	BRL	10		ug/L	211599	1	08/18/2015 19:38	CH
Isopropylbenzene	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
m,p-Xylene	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Methyl acetate	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Methylcyclohexane	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Methylene chloride	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
o-Xylene	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-17
Project Name:	Moores Mill	**Collection Date:**	8/12/2015 1:00:00 PM
Lab ID:	1508B09-003	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Tetrachloroethene	33	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Toluene	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Trichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Trichlorofluoromethane	BRL	5.0		ug/L	211599	1	08/18/2015 19:38	CH
Vinyl chloride	BRL	2.0		ug/L	211599	1	08/18/2015 19:38	CH
Surr: 4-Bromofluorobenzene	82.1	70.6-123		%REC	211599	1	08/18/2015 19:38	CH
Surr: Dibromofluoromethane	103	78.7-124		%REC	211599	1	08/18/2015 19:38	CH
Surr: Toluene-d8	92.3	81.3-120		%REC	211599	1	08/18/2015 19:38	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-10
Project Name:	Moores Mill	**Collection Date:**	8/12/2015 3:15:00 PM
Lab ID:	1508B09-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
1,1-Dichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
1,1-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
1,2-Dibromoethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
1,2-Dichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
1,2-Dichloropropane	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
2-Butanone	BRL	50		ug/L	211599	1	08/18/2015 02:14	CH
2-Hexanone	BRL	10		ug/L	211599	1	08/18/2015 02:14	CH
4-Methyl-2-pentanone	BRL	10		ug/L	211599	1	08/18/2015 02:14	CH
Acetone	BRL	50		ug/L	211599	1	08/18/2015 02:14	CH
Benzene	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Bromodichloromethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Bromoform	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Bromomethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Carbon disulfide	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Carbon tetrachloride	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Chlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Chloroethane	BRL	10		ug/L	211599	1	08/18/2015 02:14	CH
Chloroform	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Chloromethane	BRL	10		ug/L	211599	1	08/18/2015 02:14	CH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Cyclohexane	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Dibromochloromethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Dichlorodifluoromethane	BRL	10		ug/L	211599	1	08/18/2015 02:14	CH
Ethylbenzene	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Freon-113	BRL	10		ug/L	211599	1	08/18/2015 02:14	CH
Isopropylbenzene	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
m,p-Xylene	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Methyl acetate	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Methylcyclohexane	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Methylene chloride	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
o-Xylene	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-10
Project Name:	Moores Mill	**Collection Date:**	8/12/2015 3:15:00 PM
Lab ID:	1508B09-004	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Tetrachloroethene	17	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Toluene	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Trichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Trichlorofluoromethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:14	CH
Vinyl chloride	BRL	2.0		ug/L	211599	1	08/18/2015 02:14	CH
Surr: 4-Bromofluorobenzene	84.4	70.6-123		%REC	211599	1	08/18/2015 02:14	CH
Surr: Dibromofluoromethane	95.2	78.7-124		%REC	211599	1	08/18/2015 02:14	CH
Surr: Toluene-d8	90.6	81.3-120		%REC	211599	1	08/18/2015 02:14	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-13
Project Name:	Moores Mill	**Collection Date:**	8/13/2015 8:55:00 AM
Lab ID:	1508B09-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
1,1-Dichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
1,1-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
1,2-Dibromoethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
1,2-Dichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
1,2-Dichloropropane	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
2-Butanone	BRL	50		ug/L	211599	1	08/18/2015 02:37	CH
2-Hexanone	BRL	10		ug/L	211599	1	08/18/2015 02:37	CH
4-Methyl-2-pentanone	BRL	10		ug/L	211599	1	08/18/2015 02:37	CH
Acetone	BRL	50		ug/L	211599	1	08/18/2015 02:37	CH
Benzene	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Bromodichloromethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Bromoform	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Bromomethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Carbon disulfide	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Carbon tetrachloride	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Chlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Chloroethane	BRL	10		ug/L	211599	1	08/18/2015 02:37	CH
Chloroform	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Chloromethane	BRL	10		ug/L	211599	1	08/18/2015 02:37	CH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Cyclohexane	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Dibromochloromethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Dichlorodifluoromethane	BRL	10		ug/L	211599	1	08/18/2015 02:37	CH
Ethylbenzene	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Freon-113	BRL	10		ug/L	211599	1	08/18/2015 02:37	CH
Isopropylbenzene	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
m,p-Xylene	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Methyl acetate	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Methylcyclohexane	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Methylene chloride	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
o-Xylene	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-13
Project Name:	Moores Mill	**Collection Date:**	8/13/2015 8:55:00 AM
Lab ID:	1508B09-005	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Tetrachloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Toluene	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Trichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Trichlorofluoromethane	BRL	5.0		ug/L	211599	1	08/18/2015 02:37	CH
Vinyl chloride	BRL	2.0		ug/L	211599	1	08/18/2015 02:37	CH
Surr: 4-Bromofluorobenzene	86.8	70.6-123		%REC	211599	1	08/18/2015 02:37	CH
Surr: Dibromofluoromethane	101	78.7-124		%REC	211599	1	08/18/2015 02:37	CH
Surr: Toluene-d8	92.2	81.3-120		%REC	211599	1	08/18/2015 02:37	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-21
Project Name:	Moores Mill	**Collection Date:**	8/13/2015 10:30:00 AM
Lab ID:	1508B09-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
1,1-Dichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
1,1-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
1,2-Dibromoethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
1,2-Dichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
1,2-Dichloropropane	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
2-Butanone	BRL	50		ug/L	211599	1	08/18/2015 03:01	CH
2-Hexanone	BRL	10		ug/L	211599	1	08/18/2015 03:01	CH
4-Methyl-2-pentanone	BRL	10		ug/L	211599	1	08/18/2015 03:01	CH
Acetone	BRL	50		ug/L	211599	1	08/18/2015 03:01	CH
Benzene	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Bromodichloromethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Bromoform	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Bromomethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Carbon disulfide	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Carbon tetrachloride	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Chlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Chloroethane	BRL	10		ug/L	211599	1	08/18/2015 03:01	CH
Chloroform	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Chloromethane	BRL	10		ug/L	211599	1	08/18/2015 03:01	CH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Cyclohexane	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Dibromochloromethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Dichlorodifluoromethane	BRL	10		ug/L	211599	1	08/18/2015 03:01	CH
Ethylbenzene	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Freon-113	BRL	10		ug/L	211599	1	08/18/2015 03:01	CH
Isopropylbenzene	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
m,p-Xylene	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Methyl acetate	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Methylcyclohexane	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Methylene chloride	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
o-Xylene	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-21
Project Name:	Moores Mill	**Collection Date:**	8/13/2015 10:30:00 AM
Lab ID:	1508B09-006	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Tetrachloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Toluene	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Trichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Trichlorofluoromethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:01	CH
Vinyl chloride	BRL	2.0		ug/L	211599	1	08/18/2015 03:01	CH
Surr: 4-Bromofluorobenzene	85.5	70.6-123		%REC	211599	1	08/18/2015 03:01	CH
Surr: Dibromofluoromethane	96.3	78.7-124		%REC	211599	1	08/18/2015 03:01	CH
Surr: Toluene-d8	93.4	81.3-120		%REC	211599	1	08/18/2015 03:01	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-25
Project Name:	Moores Mill	**Collection Date:**	8/13/2015 1:30:00 PM
Lab ID:	1508B09-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
1,1-Dichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
1,1-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
1,2-Dibromoethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
1,2-Dichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
1,2-Dichloropropane	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
2-Butanone	BRL	50		ug/L	211599	1	08/18/2015 03:25	CH
2-Hexanone	BRL	10		ug/L	211599	1	08/18/2015 03:25	CH
4-Methyl-2-pentanone	BRL	10		ug/L	211599	1	08/18/2015 03:25	CH
Acetone	BRL	50		ug/L	211599	1	08/18/2015 03:25	CH
Benzene	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Bromodichloromethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Bromoform	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Bromomethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Carbon disulfide	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Carbon tetrachloride	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Chlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Chloroethane	BRL	10		ug/L	211599	1	08/18/2015 03:25	CH
Chloroform	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Chloromethane	BRL	10		ug/L	211599	1	08/18/2015 03:25	CH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Cyclohexane	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Dibromochloromethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Dichlorodifluoromethane	BRL	10		ug/L	211599	1	08/18/2015 03:25	CH
Ethylbenzene	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Freon-113	BRL	10		ug/L	211599	1	08/18/2015 03:25	CH
Isopropylbenzene	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
m,p-Xylene	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Methyl acetate	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Methylcyclohexane	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Methylene chloride	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
o-Xylene	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-25
Project Name:	Moores Mill	**Collection Date:**	8/13/2015 1:30:00 PM
Lab ID:	1508B09-007	**Matrix:**	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Tetrachloroethene	18	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Toluene	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Trichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Trichlorofluoromethane	BRL	5.0		ug/L	211599	1	08/18/2015 03:25	CH
Vinyl chloride	BRL	2.0		ug/L	211599	1	08/18/2015 03:25	CH
Surr: 4-Bromofluorobenzene	85.1	70.6-123		%REC	211599	1	08/18/2015 03:25	CH
Surr: Dibromofluoromethane	96.4	78.7-124		%REC	211599	1	08/18/2015 03:25	CH
Surr: Toluene-d8	91.6	81.3-120		%REC	211599	1	08/18/2015 03:25	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	TRIP BLANK
Project Name:	Moores Mill	**Collection Date:**	8/14/2015
Lab ID:	1508B09-008	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
1,1,2-Trichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
1,1-Dichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
1,1-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
1,2-Dibromoethane	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
1,2-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
1,2-Dichloroethane	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
1,2-Dichloropropane	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
1,3-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
1,4-Dichlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
2-Butanone	BRL	50		ug/L	211599	1	08/18/2015 00:39	CH
2-Hexanone	BRL	10		ug/L	211599	1	08/18/2015 00:39	CH
4-Methyl-2-pentanone	BRL	10		ug/L	211599	1	08/18/2015 00:39	CH
Acetone	BRL	50		ug/L	211599	1	08/18/2015 00:39	CH
Benzene	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Bromodichloromethane	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Bromoform	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Bromomethane	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Carbon disulfide	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Carbon tetrachloride	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Chlorobenzene	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Chloroethane	BRL	10		ug/L	211599	1	08/18/2015 00:39	CH
Chloroform	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Chloromethane	BRL	10		ug/L	211599	1	08/18/2015 00:39	CH
cis-1,2-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
cis-1,3-Dichloropropene	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Cyclohexane	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Dibromochloromethane	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Dichlorodifluoromethane	BRL	10		ug/L	211599	1	08/18/2015 00:39	CH
Ethylbenzene	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Freon-113	BRL	10		ug/L	211599	1	08/18/2015 00:39	CH
Isopropylbenzene	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
m,p-Xylene	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Methyl acetate	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Methyl tert-butyl ether	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Methylcyclohexane	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Methylene chloride	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
o-Xylene	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 19-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	TRIP BLANK
Project Name:	Moores Mill	**Collection Date:**	8/14/2015
Lab ID:	1508B09-008	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Tetrachloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Toluene	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
trans-1,2-Dichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
trans-1,3-Dichloropropene	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Trichloroethene	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Trichlorofluoromethane	BRL	5.0		ug/L	211599	1	08/18/2015 00:39	CH
Vinyl chloride	BRL	2.0		ug/L	211599	1	08/18/2015 00:39	CH
Surr: 4-Bromofluorobenzene	86.4	70.6-123		%REC	211599	1	08/18/2015 00:39	CH
Surr: Dibromofluoromethane	94.8	78.7-124		%REC	211599	1	08/18/2015 00:39	CH
Surr: Toluene-d8	93.7	81.3-120		%REC	211599	1	08/18/2015 00:39	CH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client AMEC Work Order Number 1508009

Checklist completed by _____ 8/13/15
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.5 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

Client: AMEC E&I, Inc. - Plasters
Project Name: Moores Mill
Workorder: 1508B09

ANALYTICAL QC SUMMARY REPORT

BatchID: 211599

Sample ID: **MB-211599** Client ID: Units: **ug/L** Prep Date: **08/17/2015** Run No: **298152**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **211599** Analysis Date: **08/17/2015** Seq No: **6363968**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	50									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. - Plasters
Project Name: Moores Mill
Workorder: 1508B09

ANALYTICAL QC SUMMARY REPORT

BatchID: 211599

Sample ID: **MB-211599** Client ID: Units: **ug/L** Prep Date: **08/17/2015** Run No: **298152**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **211599** Analysis Date: **08/17/2015** Seq No: **6363968**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	2.0									
Surr: 4-Bromofluorobenzene	41.26	0	50.00		82.5	70.6	123				
Surr: Dibromofluoromethane	50.06	0	50.00		100	78.7	124				
Surr: Toluene-d8	44.42	0	50.00		88.8	81.3	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. - Plasters
Project Name: Moores Mill
Workorder: 1508B09

ANALYTICAL QC SUMMARY REPORT

BatchID: 211599

Sample ID: **LCS-211599** Client ID: Units: **ug/L** Prep Date: **08/17/2015** Run No: **298152**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **211599** Analysis Date: **08/17/2015** Seq No: **6363967**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	43.55	5.0	50.00		87.1	64.2	137				
Benzene	46.96	5.0	50.00		93.9	72.8	128				
Chlorobenzene	49.17	5.0	50.00		98.3	72.3	126				
Toluene	47.86	5.0	50.00		95.7	74.9	127				
Trichloroethene	46.92	5.0	50.00		93.8	70.5	134				
Surr: 4-Bromofluorobenzene	45.59	0	50.00		91.2	70.6	123				
Surr: Dibromofluoromethane	43.79	0	50.00		87.6	78.7	124				
Surr: Toluene-d8	44.00	0	50.00		88.0	81.3	120				

Sample ID: **1508B09-007AMS** Client ID: **MW-25** Units: **ug/L** Prep Date: **08/17/2015** Run No: **298152**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **211599** Analysis Date: **08/18/2015** Seq No: **6364007**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	46.77	5.0	50.00		93.5	60.5	156				
Benzene	52.01	5.0	50.00		104	70	135				
Chlorobenzene	53.34	5.0	50.00		107	70.5	132				
Toluene	55.32	5.0	50.00		111	70.5	137				
Trichloroethene	54.18	5.0	50.00		108	71.8	139				
Surr: 4-Bromofluorobenzene	43.23	0	50.00		86.5	70.6	123				
Surr: Dibromofluoromethane	46.77	0	50.00		93.5	78.7	124				
Surr: Toluene-d8	45.12	0	50.00		90.2	81.3	120				

Sample ID: **1508B09-007AMSD** Client ID: **MW-25** Units: **ug/L** Prep Date: **08/17/2015** Run No: **298152**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **211599** Analysis Date: **08/18/2015** Seq No: **6364008**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	44.65	5.0	50.00		89.3	60.5	156	46.77	4.64	20	
Benzene	51.66	5.0	50.00		103	70	135	52.01	0.675	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: AMEC E&I, Inc. - Plasters
Project Name: Moores Mill
Workorder: 1508B09

ANALYTICAL QC SUMMARY REPORT

BatchID: 211599

Sample ID: **1508B09-007AMSD** Client ID: **MW-25** Units: **ug/L** Prep Date: **08/17/2015** Run No: **298152**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **211599** Analysis Date: **08/18/2015** Seq No: **6364008**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	52.64	5.0	50.00		105	70.5	132	53.34	1.32	20	
Toluene	55.07	5.0	50.00		110	70.5	137	55.32	0.453	20	
Trichloroethene	54.15	5.0	50.00		108	71.8	139	54.18	0.055	20	
Surr: 4-Bromofluorobenzene	42.79	0	50.00		85.6	70.6	123	43.23	0	0	
Surr: Dibromofluoromethane	46.80	0	50.00		93.6	78.7	124	46.77	0	0	
Surr: Toluene-d8	45.82	0	50.00		91.6	81.3	120	45.12	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Mobile Geochemistry Inc.

21 August 2015

Mr. Jim Fineis
Atlas Geo-Sampling Company
120 Nottaway Lane
Alpharetta, GA 30009

H&P Project: AG081415-11
Client Project: AMEC / Moores Mill

Dear Mr. Jim Fineis:

Enclosed is the analytical report for the above referenced project. The data herein applies to samples as received by H&P Mobile Geochemistry, Inc. on 14-Aug-15 which were analyzed in accordance with the attached Chain of Custody record(s).

The results for all sample analyses and required QA/QC analyses are presented in the following sections and summarized in the documents:

- Sample Summary
- Case Narrative (if applicable)
- Sample Results
- Quality Control Summary
- Notes and Definitions / Appendix
- Chain of Custody
- Sampling Logs (if applicable)

Unless otherwise noted, I certify that all analyses were performed and reviewed in compliance with our Quality Systems Manual and Standard Operating Procedures. This report shall not be reproduced, except in full, without the written approval of H&P Mobile Geochemistry, Inc.

We at H&P Mobile Geochemistry, Inc. sincerely appreciate the opportunity to provide analytical services to you on this project. If you have any questions or concerns regarding this analytical report, please contact me at your convenience at 760-804-9678.

Sincerely,

Janis Villarreal

Janis Villarreal
Laboratory Director

H&P Mobile Geochemistry, Inc. is certified under the California ELAP, the National Environmental Laboratory Accreditation Conference (NELAC) and the Department of Defense Accreditation Programs.

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Atlas Geo-Sampling Company	Project: AG081415-11	
120 Nottaway Lane	Project Number: AMEC / Moores Mill	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	21-Aug-15 12:13

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SV-1	E508070-01	Vapor	12-Aug-15	14-Aug-15
SV-2	E508070-02	Vapor	12-Aug-15	14-Aug-15
SV-3	E508070-03	Vapor	12-Aug-15	14-Aug-15
SV-4	E508070-04	Vapor	12-Aug-15	14-Aug-15
SV-5	E508070-05	Vapor	12-Aug-15	14-Aug-15

The percent recoveries for 2-Hexanone, 2-Butanone and 4-Methyl-2-pentanone fell below the method criteria in the continuing calibration verifiation. Any results for these analytes may be biased low.

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Atlas Geo-Sampling Company	Project: AG081415-11	
120 Nottaway Lane	Project Number: AMEC / Moores Mill	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	21-Aug-15 12:13

DETECTIONS SUMMARY

Sample ID: **SV-1** Laboratory ID: **E508070-01**

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**2.1**	2.1	ug/m3	EPA TO-15	
Acetone	**46**	24	ug/m3	EPA TO-15	
Toluene	**10**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**97**	6.9	ug/m3	EPA TO-15	

Sample ID: **SV-2** Laboratory ID: **E508070-02**

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**2.6**	2.1	ug/m3	EPA TO-15	
Toluene	**8.1**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**210**	6.9	ug/m3	EPA TO-15	

Sample ID: **SV-3** Laboratory ID: **E508070-03**

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**2.6**	2.1	ug/m3	EPA TO-15	
Acetone	**36**	24	ug/m3	EPA TO-15	
Tetrachloroethene	**23**	6.9	ug/m3	EPA TO-15	

Sample ID: **SV-4** Laboratory ID: **E508070-04**

Analyte	Result	Reporting Limit	Units	Method	Notes
Chloromethane	**2.5**	2.1	ug/m3	EPA TO-15	
Acetone	**65**	24	ug/m3	EPA TO-15	
Toluene	**21**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**71**	6.9	ug/m3	EPA TO-15	
m,p-Xylene	**27**	8.8	ug/m3	EPA TO-15	
o-Xylene	**11**	4.4	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**8.3**	5.0	ug/m3	EPA TO-15	

Sample ID: **SV-5** Laboratory ID: **E508070-05**

Analyte	Result	Reporting Limit	Units	Method	Notes
Acetone	**98**	24	ug/m3	EPA TO-15	
Carbon disulfide	**13**	6.3	ug/m3	EPA TO-15	
1,2-Dichloroethane (EDC)	**4.5**	4.1	ug/m3	EPA TO-15	
Benzene	**36**	3.2	ug/m3	EPA TO-15	

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Atlas Geo-Sampling Company	Project: AG081415-11	
120 Nottaway Lane	Project Number: AMEC / Moores Mill	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	21-Aug-15 12:13

Sample ID: **SV-5** Laboratory ID: **E508070-05**

Analyte	Result	Reporting Limit	Units	Method	Notes
4-Methyl-2-pentanone (MIBK)	**9.3**	8.3	ug/m3	EPA TO-15	
Toluene	**80**	3.8	ug/m3	EPA TO-15	
Tetrachloroethene	**180**	6.9	ug/m3	EPA TO-15	
Ethylbenzene	**290**	4.4	ug/m3	EPA TO-15	
m,p-Xylene	**1800**	8.8	ug/m3	EPA TO-15	
o-Xylene	**750**	4.4	ug/m3	EPA TO-15	
4-Ethyltoluene	**5.0**	5.0	ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	**5.0**	5.0	ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	**20**	5.0	ug/m3	EPA TO-15	

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Geochemistry Inc.

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Carlsbad, CA 92010
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Atlas Geo-Sampling Company	Project: AG081415-11	
120 Nottaway Lane	Project Number: AMEC / Moores Mill	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	21-Aug-15 12:13

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-1 (E508070-01) Vapor Sampled: 12-Aug-15 Received: 14-Aug-15									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EH51806	17-Aug-15	19-Aug-15	EPA TO-15	
Chloromethane	**2.1**	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
Acetone	**46**	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**10**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**97**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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Atlas Geo-Sampling Company	Project: AG081415-11	
120 Nottaway Lane	Project Number: AMEC / Moores Mill	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	21-Aug-15 12:13

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-1 (E508070-01) Vapor Sampled: 12-Aug-15 Received: 14-Aug-15									
o-Xylene	ND	4.4	ug/m3	1	EH51806	17-Aug-15	19-Aug-15	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*125 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*113 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.4 %*		*77-127*	"	"	"	"	
SV-2 (E508070-02) Vapor Sampled: 12-Aug-15 Received: 14-Aug-15									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EH51806	17-Aug-15	19-Aug-15	EPA TO-15	
Chloromethane	**2.6**	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
Acetone	ND	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Atlas Geo-Sampling Company	Project: AG081415-11	
120 Nottaway Lane	Project Number: AMEC / Moores Mill	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	21-Aug-15 12:13

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-2 (E508070-02) Vapor Sampled: 12-Aug-15 Received: 14-Aug-15									
Trichloroethene	ND	5.5	ug/m3	1	EH51806	17-Aug-15	19-Aug-15	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**8.1**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**210**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*123 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*112 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.7 %*		*77-127*	"	"	"	"	

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Geochemistry Inc.

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Carlsbad, CA 92010
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760-804-9159 Fax

Atlas Geo-Sampling Company	Project: AG081415-11	
120 Nottaway Lane	Project Number: AMEC / Moores Mill	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	21-Aug-15 12:13

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-3 (E508070-03) Vapor Sampled: 12-Aug-15 Received: 14-Aug-15									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EH51806	17-Aug-15	19-Aug-15	EPA TO-15	
Chloromethane	**2.6**	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
Acetone	**36**	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**23**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Atlas Geo-Sampling Company	Project: AG081415-11	
120 Nottaway Lane	Project Number: AMEC / Moores Mill	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	21-Aug-15 12:13

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-3 (E508070-03) Vapor Sampled: 12-Aug-15 Received: 14-Aug-15									
o-Xylene	ND	4.4	ug/m3	1	EH51806	17-Aug-15	19-Aug-15	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*123 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*107 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.6 %*		*77-127*	"	"	"	"	
SV-4 (E508070-04) Vapor Sampled: 12-Aug-15 Received: 14-Aug-15									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EH51806	17-Aug-15	19-Aug-15	EPA TO-15	
Chloromethane	**2.5**	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
Acetone	**65**	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	

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Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Atlas Geo-Sampling Company	Project: AG081415-11	
120 Nottaway Lane	Project Number: AMEC / Moores Mill	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	21-Aug-15 12:13

Volatile Organic Compounds by EPA TO-15

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-4 (E508070-04) Vapor Sampled: 12-Aug-15 Received: 14-Aug-15									
Trichloroethene	ND	5.5	ug/m3	1	EH51806	17-Aug-15	19-Aug-15	EPA TO-15	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**21**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**71**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	**27**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	**11**	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**8.3**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*126 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*112 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*87.7 %*		*77-127*	"	"	"	"	

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Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
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760-804-9159 Fax

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Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	21-Aug-15 12:13

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-5 (E508070-05) Vapor Sampled: 12-Aug-15 Received: 14-Aug-15									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EH51806	17-Aug-15	19-Aug-15	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
Acetone	**98**	24	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	**13**	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	**4.5**	4.1	"	"	"	"	"	"	
Benzene	**36**	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	**9.3**	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	**80**	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	**180**	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	**290**	4.4	"	"	"	"	"	"	
m,p-Xylene	**1800**	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	

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Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

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120 Nottaway Lane	Project Number: AMEC / Moores Mill	Reported:
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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-5 (E508070-05) Vapor Sampled: 12-Aug-15 Received: 14-Aug-15									
o-Xylene	**750**	4.4	ug/m3	1	EH51806	17-Aug-15	19-Aug-15	EPA TO-15	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	**5.0**	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	**5.0**	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**20**	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*123 %*		*76-134*	"	"	"	"	
Surrogate: Toluene-d8		*111 %*		*78-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*84.6 %*		*77-127*	"	"	"	"	

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Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
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Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	21-Aug-15 12:13

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EH51806 - TO-15										
Blank (EH51806-BLK1)				Prepared & Analyzed: 18-Aug-15						
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3							
Chloromethane	ND	2.1	"							
Dichlorotetrafluoroethane (F114)	ND	7.1	"							
Vinyl chloride	ND	2.6	"							
Bromomethane	ND	16	"							
Chloroethane	ND	8.0	"							
Trichlorofluoromethane (F11)	ND	5.6	"							
Acetone	ND	24	"							
1,1-Dichloroethene	ND	4.0	"							
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"							
Methylene chloride (Dichloromethane)	ND	3.5	"							
Carbon disulfide	ND	6.3	"							
trans-1,2-Dichloroethene	ND	8.0	"							
1,1-Dichloroethane	ND	4.1	"							
2-Butanone (MEK)	ND	30	"							
cis-1,2-Dichloroethene	ND	4.0	"							
Chloroform	ND	4.9	"							
1,1,1-Trichloroethane	ND	5.5	"							
1,2-Dichloroethane (EDC)	ND	4.1	"							
Benzene	ND	3.2	"							
Carbon tetrachloride	ND	6.4	"							
Trichloroethene	ND	5.5	"							
1,2-Dichloropropane	ND	9.4	"							
Bromodichloromethane	ND	6.8	"							
cis-1,3-Dichloropropene	ND	4.6	"							
4-Methyl-2-pentanone (MIBK)	ND	8.3	"							
trans-1,3-Dichloropropene	ND	4.6	"							
Toluene	ND	3.8	"							
1,1,2-Trichloroethane	ND	5.5	"							
2-Hexanone (MBK)	ND	8.3	"							
Dibromochloromethane	ND	8.6	"							
Tetrachloroethene	ND	6.9	"							
1,2-Dibromoethane (EDB)	ND	7.8	"							
1,1,1,2-Tetrachloroethane	ND	7.0	"							

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Atlas Geo-Sampling Company	Project: AG081415-11	
120 Nottaway Lane	Project Number: AMEC / Moores Mill	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	21-Aug-15 12:13

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EH51806 - TO-15										
Blank (EH51806-BLK1)				Prepared & Analyzed: 18-Aug-15						
Chlorobenzene	ND	4.7	ug/m3							
Ethylbenzene	ND	4.4	"							
m,p-Xylene	ND	8.8	"							
Styrene	ND	4.3	"							
o-Xylene	ND	4.4	"							
Bromoform	ND	10	"							
1,1,2,2-Tetrachloroethane	ND	7.0	"							
4-Ethyltoluene	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	12	"							
1,4-Dichlorobenzene	ND	12	"							
1,2-Dichlorobenzene	ND	12	"							
1,2,4-Trichlorobenzene	ND	38	"							
Hexachlorobutadiene	ND	54	"							
Surrogate: 1,2-Dichloroethane-d4	*253*		*"*	*214*		*118*	*76-134*			
Surrogate: Toluene-d8	*215*		*"*	*207*		*104*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*303*		*"*	*364*		*83.1*	*77-127*			
LCS (EH51806-BS1)				Prepared & Analyzed: 18-Aug-15						
Dichlorodifluoromethane (F12)	120	5.0	ug/m3	101		121	70-130			
Vinyl chloride	62	2.6	"	52.0		120	70-130			
Chloroethane	66	8.0	"	53.6		122	70-130			
Trichlorofluoromethane (F11)	140	5.6	"	113		123	70-130			
1,1-Dichloroethene	98	4.0	"	80.8		121	70-130			
1,1,2-Trichlorotrifluoroethane (F113)	190	7.7	"	155		123	70-130			
Methylene chloride (Dichloromethane)	86	3.5	"	70.8		121	70-130			
trans-1,2-Dichloroethene	73	8.0	"	80.8		90.0	70-130			
1,1-Dichloroethane	84	4.1	"	82.4		101	70-130			
cis-1,2-Dichloroethene	69	4.0	"	80.0		85.7	70-130			
Chloroform	95	4.9	"	99.2		95.9	70-130			
1,1,1-Trichloroethane	110	5.5	"	111		95.2	70-130			
1,2-Dichloroethane (EDC)	82	4.1	"	82.4		100	70-130			

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Atlas Geo-Sampling Company	Project: AG081415-11	
120 Nottaway Lane	Project Number: AMEC / Moores Mill	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	21-Aug-15 12:13

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EH51806 - TO-15										
LCS (EH51806-BS1)				Prepared & Analyzed: 18-Aug-15						
Benzene	62	3.2	ug/m3	64.8		95.4	70-130			
Carbon tetrachloride	130	6.4	"	128		101	70-130			
Trichloroethene	100	5.5	"	110		92.1	70-130			
Toluene	67	3.8	"	76.8		87.3	70-130			
1,1,2-Trichloroethane	93	5.5	"	111		83.9	70-130			
Tetrachloroethene	110	6.9	"	138		77.6	70-130			
1,1,1,2-Tetrachloroethane	110	7.0	"	140		81.5	70-130			
Ethylbenzene	69	4.4	"	88.4		77.6	70-130			
m,p-Xylene	150	8.8	"	177		85.4	70-130			
o-Xylene	71	4.4	"	88.4		80.9	70-130			
1,1,2,2-Tetrachloroethane	120	7.0	"	140		84.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	*250*		*"*	*214*		*117*	*76-134*			
Surrogate: Toluene-d8	*210*		*"*	*207*		*102*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*343*		*"*	*364*		*94.2*	*77-127*			
LCS Dup (EH51806-BSD1)				Prepared & Analyzed: 18-Aug-15						
Dichlorodifluoromethane (F12)	110	5.0	ug/m3	101		110	70-130	9.60	25	
Vinyl chloride	64	2.6	"	52.0		122	70-130	2.26	25	
Chloroethane	64	8.0	"	53.6		120	70-130	1.90	25	
Trichlorofluoromethane (F11)	140	5.6	"	113		125	70-130	1.44	25	
1,1-Dichloroethene	75	4.0	"	80.8		93.1	70-130	26.3	25	QR-02
1,1,2-Trichlorotrifluoroethane (F113)	140	7.7	"	155		92.0	70-130	28.7	25	QR-02
Methylene chloride (Dichloromethane)	65	3.5	"	70.8		91.2	70-130	28.0	25	QR-02
trans-1,2-Dichloroethene	69	8.0	"	80.8		85.3	70-130	5.34	25	
1,1-Dichloroethane	82	4.1	"	82.4		99.7	70-130	1.73	25	
cis-1,2-Dichloroethene	70	4.0	"	80.0		87.9	70-130	2.55	25	
Chloroform	97	4.9	"	99.2		97.4	70-130	1.49	25	
1,1,1-Trichloroethane	110	5.5	"	111		96.7	70-130	1.60	25	
1,2-Dichloroethane (EDC)	82	4.1	"	82.4		99.5	70-130	0.450	25	
Benzene	64	3.2	"	64.8		98.5	70-130	3.14	25	
Carbon tetrachloride	130	6.4	"	128		102	70-130	1.43	25	
Trichloroethene	100	5.5	"	110		93.1	70-130	1.07	25	
Toluene	70	3.8	"	76.8		90.7	70-130	3.79	25	

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Atlas Geo-Sampling Company	Project: AG081415-11	
120 Nottaway Lane	Project Number: AMEC / Moores Mill	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	21-Aug-15 12:13

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EH51806 - TO-15										
LCS Dup (EH51806-BSD1)				Prepared & Analyzed: 18-Aug-15						
1,1,2-Trichloroethane	100	5.5	ug/m3	111		90.1	70-130	7.07	25	
Tetrachloroethene	110	6.9	"	138		80.8	70-130	4.03	25	
1,1,1,2-Tetrachloroethane	110	7.0	"	140		81.5	70-130	0.00	25	
Ethylbenzene	71	4.4	"	88.4		79.8	70-130	2.72	25	
m,p-Xylene	150	8.8	"	177		86.5	70-130	1.27	25	
o-Xylene	74	4.4	"	88.4		83.4	70-130	3.09	25	
1,1,2,2-Tetrachloroethane	120	7.0	"	140		85.5	70-130	0.643	25	
Surrogate: 1,2-Dichloroethane-d4	*253*		*"*	*214*		*118*	*76-134*			
Surrogate: Toluene-d8	*214*		*"*	*207*		*103*	*78-125*			
Surrogate: 4-Bromofluorobenzene	*340*		*"*	*364*		*93.2*	*77-127*			

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Atlas Geo-Sampling Company	Project: AG081415-11	
120 Nottaway Lane	Project Number: AMEC / Moores Mill	Reported:
Alpharetta, GA 30009	Project Manager: Mr. Jim Fineis	21-Aug-15 12:13

Notes and Definitions

QR-02	The RPD result exceeded the QC control limits. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
LCC	Leak Check Compound
ND	Analyte NOT DETECTED at or above the reporting limit
MDL	Method Detection Limit
%REC	Percent Recovery
RPD	Relative Percent Difference

Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP and the ISO 17025 programs, certification number L11-175.

H&P is approved by the State of Arizona as an Environmental Testing Laboratory and Mobile Laboratory, certification numbers AZM758 and AZ0779.

H&P is approved by the State of California as an Environmental Laboratory and Mobile Laboratory in conformance with the Environmental Laboratory Accreditation Program (ELAP) for the category of Volatile and Semi-Volatile Organic Chemistry of Hazardous Waste, certification numbers 2740, 2741, 2743, 2744, 2745, 2754 & 2930.

H&P is approved by the State of Florida Department of Health under the National Environmental Laboratory Accreditation Conference (NELAC) certification number E871100.

The complete list of stationary and mobile laboratory certifications along with the fields of testing (FOTs) and analyte lists are available at www.handpmg.com/about/certifications.

Mobile Geochemistry, Inc.
2470 Impala Drive, Carlsbad, CA 92010
& Field Office - Signal Hill, CA
W handpmg.com E info@handpmg.com
P 760.804.9678 F 760.804.9159

VAPOR / AIR Chain of Custody

DATE: 8-12-15
Page 1 of 1

Lab Client and Project Information

Lab Client/Consultant: Atlas Geo Sampling	Project Name / #: AMEC
Lab Client Project Manager: Jim Fineis	Project Location: Moores Mill
Lab Client Address: 120 Wolfawing Ln	Report E-Mail(s): jimfineis@Atlas-Geo.com
Lab Client City, State, Zip: Alpharetta GA 30009	
Phone Number: 770 883 3372	

Reporting Requirements
- [x] Standard Report [ ] Level III [ ] Level IV
- [ ] Excel EDD [ ] Other EDD:
- [ ] CA Geotracker Global ID:

Turnaround Time
- [x] 5-7 day Stnd [ ] 24-Hr Rush
- [ ] 3-day Rush [ ] Mobile Lab
- [ ] 48-Hr Rush [ ] Other:

Sampler Information
Sampler(s): Ferguson
Signature:
Date: 8-12-15

Sample Receipt (Lab Use Only)

Date Rec'd: 8/14/15	Control #: 150671.01
H&P Project # AG081415-11	
Lab Work Order #	
Sample Intact: [x] Yes [ ] No [ ] See Notes Below	
Receipt Gauge ID: 11167	Temp: 22°C
Outside Lab:	
Receipt Notes/Tracking #: 1Z93TT618747624260	
Lab PM Initials: SN	

Additional Instructions to Laboratory:

- [ ] Check if Project Analyte List is Attached
- ** Preferred VOC units (please choose one):*
- [ ] µg/L [ ] µg/m³ [ ] ppbv [ ] ppmv

SAMPLE NAME	~~FIELD POINT NAME~~ Reg (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa or Tedlar or Tube	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List [x] 8260SV [x] TO-15	VOCs Short List / Project List [ ] 8260SV [ ] TO-15	Oxygenates [ ] 8260SV [ ] TO-15	Naphthalene [ ] 8260SV [ ] TO-15 [ ] TO-17m	TPHv as Gas [ ] 8260SVm [ ] TO-15m	TPHv as Diesel (sorbent tube) [ ] TO-17m	Aromatic/Aliphatic Fractions [ ] 8260SVm [ ] TO-15m	Leak Check Compound [ ] DFA [ ] IPA [ ] He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 [ ] CO2 [ ] O2 [ ] N2			
SV-1	032	8-12-15	10:18	SV	400mL	153	-2.17	✓												
SV-2	070	8-12-15	10:09	SV	400mL	457	-1.60	✓												
SV-3	010	8-12-15	10:30	SV	400mL	876	-1.84	✓												
SV-4	079	8-12-15	10:00	SV	400mL	200	-2.18	✓												
SV-5	077	8-12-15	9:45	SV	400 mL	107	-.95	✓												

Approved/Relinquished by:	Company:	Date:	Time:	Received by: Joni Unsworth	Company: H&P	Date: 8/14/15	Time: 1045
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

Approved/Relinquished by: Atlas-Geo Sampling 8-12-15

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back

Rev 08/18/2014

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 31, 2015

Steve Davenport
AMEC E&I, Inc. - Plasters
2677 Buford Highway NE
Atlanta GA 30324

TEL: (404) 788-7909
FAX: (404) 817-0183

RE: Moores Mill

Dear Steve Davenport: Order No: 1508B10

Analytical Environmental Services, Inc. received 2 samples on August 27, 2015 12:00 am for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/15-06/30/16.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Ioana Pacurar

Ioana Pacurar
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704

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

CHAIN OF CUSTODY

Work Order: 1508B10

Date: 8/13/15 Page 1 of 2

COMPANY:	ADDRESS:
Amec Foster Wheeler	2677 Buford Hwy Atlanta, Ga 30324
PHONE: 404 - 873-4751	FAX:
SAMPLED BY: S. Davenport	SIGNATURE:

ANALYSIS REQUESTED

PRESERVATION (See codes)

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	REMARKS	No # of Containers
1	MW-25 | 5'	8/12/15	9:51	✓		SO		1
2	MW-25 | 10		9:57	✓		SO		1
3	MW-25 | 15'		9:55	✓		SO		1
4	MW-25 | 20		9:58	✓		SO		1
5	MW-25 | 25'		10:00	✓		SO		1
6	MW-25 | 30		10:03	✓		SO		1
7	MW-25 | 35'		10:07	✓		SO		1
8	MW-25 | 40		10:11	✓		SO		1
9	MW-25 | 45'		10:15	✓		SO		1
10	MW-2C | 5'		11:30	✓		SO		1
11	MW-2C | 10		11:31	✓		SO		1
12	MW-2C | 15'		11:34	✓		SO		1
13	MW-2C | 20		11:42	✓		SO		1
14	MW-2C | 25'	↓	11:45	✓		SO		1

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	8/13/15 1:52	1:	8/13/15 1:50
2:	8/13/15 1425	2:	8/13/15 1425
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

Hold All 5s instructions

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

(CLIENT) FedEx UPS MAIL COURIER

GREYHOUND OTHER_____

PROJECT INFORMATION

PROJECT NAME: Moore's Mill

PROJECT #: 6121500064

SITE ADDRESS:

SEND REPORT TO: S. Davenport / C. Ford

INVOICE TO:
(IF DIFFERENT FROM ABOVE)

QUOTE #:_____ PO#:_____

RECEIPT

Total # of Containers: 14

Turnaround Time Request

- (●) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush **(auth req.)**
- ( ) Other _____

STATE PROGRAM (if any): _____

E-mail? Y / N; Fax? Y / N

DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

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

White Copy - Original; Yellow Copy - Client

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1508B10

Date: 8/13/15 Page 2 of 2

COMPANY:	ADDRESS:
Amec Foster Wheeler	2677 Bald Hwy Atlanta, GA 30324
PHONE: 404-873-4761	FAX:
SAMPLED BY: S. Daught	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	No # of Containers
1	MW-2C/30	8/12/15	11:48	✓		✓	1
2	MW-2C/35	"	11:51	✓		✓	1
3	MW-2C/40	"	11:54	✓		✓	1
4	MW-2C/45	"	11:58	✓		✓	1
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							

ANALYSIS REQUESTED

PRESERVATION (See codes)

REMARKS

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	8/13/15 1:50	1:	8-13-15 1550
2:	8/13/15 1425	2:	8/13/15 1425
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS: Hold for Instruction

SHIPMENT METHOD
OUT / / VIA:
IN / VIA:
(CLIENT) FedEx UPS MAIL COURIER
GREYHOUND OTHER_____

PROJECT INFORMATION

PROJECT NAME: Moore's Mill
PROJECT #: 1121 15 0004
SITE ADDRESS:
SEND REPORT TO: S. Daught & C. Fong
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #:_____ PO#:_____

RECEIPT

Total # of Containers: 4

Turnaround Time Request
- (✓) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush (auth req.)
- ( ) Other _____

STATE PROGRAM (if any): _____
E-mail? Y / N: Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 31-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-25/45
Project Name:	Moores Mill	**Collection Date:**	8/12/2015 10:15:00 AM
Lab ID:	1508B10-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
FOC/FOM ASTMD2974								
Fractional Organic Carbon	3.10	0.0580		%	212142	1	08/28/2015 11:45	OM

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 31-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-26/45
Project Name:	Moores Mill	**Collection Date:**	8/12/2015 11:58:00 AM
Lab ID:	1508B10-018	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
FOC/FOM ASTMD2974								
Fractional Organic Carbon	1.90	0.0580		%	212142	1	08/28/2015 11:45	OM

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

ytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client AMEC Work Order Number 1508810

Checklist completed by _____ 8/13/15
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.1 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Client: AMEC E&I, Inc. - Plasters
Project Name: Moores Mill
Workorder: 1508B10

ANALYTICAL QC SUMMARY REPORT

BatchID: 212142

Sample ID: **MB-212142**	Client ID:			Units: **%**	Prep Date: **08/28/2015**	Run No: **298975**
SampleType: **MBLK**	TestCode: **FOC/FOM ASTMD2974**			BatchID: **212142**	Analysis Date: **08/28/2015**	Seq No: **6383599**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Fractional Organic Carbon	BRL	0.0580									

Sample ID: **1508B10-009ADUP**	Client ID: **MW-25/45**			Units: **%**	Prep Date: **08/28/2015**	Run No: **298975**
SampleType: **DUP**	TestCode: **FOC/FOM ASTMD2974**			BatchID: **212142**	Analysis Date: **08/28/2015**	Seq No: **6383604**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Fractional Organic Carbon	3.000	0.0580						3.100	3.28	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 31, 2015

Steve Davenport
AMEC E&I, Inc. - Plasters
2677 Buford Highway NE
Atlanta GA 30324

TEL: (404) 788-7909
FAX: (404) 817-0183

RE: Moores Mill

Dear Steve Davenport: Order No: 1508F38

Analytical Environmental Services, Inc. received 2 samples on August 27, 2015 12:00 am for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/15-06/30/16.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/15.

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

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

Ioana Pacurar

Ioana Pacurar
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1508F38

Date: _____ Page _____ of _____

COMPANY: Anac Food Wholesale	ADDRESS: 2077 Bankhead Hwy Atlanta, GA 30324
PHONE: 404-873-4261	FAX:
SAMPLED BY: S. Dang	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	No # of Containers	REMARKS
1	MW-22/10	8/15	3:55	✓		SO		
2	MW-22/15		4:03	✓		SO		
3	MW-22/20		4:10	✓		SO		
4	MW-22/25		4:14	✓		SO		
5	MW-22/30		4:23	✓		SO		
6	MW-22/35		4:30	✓		SO		
7	MW-22/40		4:37	✓		SO		
8	MW-22/45		4:45	✓		SO		
9								
10								
11								
12								
13								
14								

ANALYSIS REQUESTED

PRESERVATION (See codes)

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	8/18/15 - 15:30	1:	8/19/15 1130
2:	8-19-15 1350	2:	8/18/15 1:50
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS: Hold For instructions

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

CLIENT FedEx UPS MAIL COURIER

GREYHOUND OTHER_____

PROJECT INFORMATION

PROJECT NAME: Moore's Mill

PROJECT #: G121150004

SITE ADDRESS:

SEND REPORT TO: S. Dang & C. Ling

INVOICE TO:
(IF DIFFERENT FROM ABOVE)

QUOTE #:_____ PO#:_____

RECEIPT

Total # of Containers

Turnaround Time Request

- ○ Standard 5 Business Days
- ○ 2 Business Day Rush
- ○ Next Business Day Rush
- ○ Same Day Rush **(auth req.)**
- ○ Other _____

STATE PROGRAM (if any): _____

E-mail? Y / N: Fax? Y / N

DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

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

White Copy - Original; Yellow Copy - Client

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 150 8F38

Date: _____ Page _____ of _____

COMPANY:	ADDRESS:
Amec Foster Wheeler	2077 Buford Hwy Atlanta, Ga 30324
PHONE: 404-873-4761	FAX:
SAMPLED BY: S. Daunt	SIGNATURE:

ANALYSIS REQUESTED

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)	REMARKS	No # of Containers
1	MW-24/5	8/13/15	1:10	✓		SO			
2	MW-24/10	"	1:11	✓		SO			
3	MW-24/15	"	1:18	✓		SO			
4	MW-24/30	8/14/15	10:30	✓		SO			
5	MW-23/5	8/13/15	1:40	✓		SO			
6	MW-23/10	"	1:43	✓		SO			
7	MW-23/15	"	1:45	✓		SO			
8	~~MW-23/20~~	"	1:50	✓		~~SO~~			
9	MW-23/30	"	2:30	✓		SO			
10	MW-23/35	8/14/15	11:00	✓		SO			
11									
12									
13									
14									

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	8/13/15 1:20pm	1:	8-13-15 1120
2:	8-18-15 1350	2:	8/18/15 1:50
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:
Hold for instructions

Page 3 of 7

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER_____

PROJECT INFORMATION
PROJECT NAME: Moore's Mill
PROJECT #: C121150004
SITE ADDRESS:
SEND REPORT TO: S. Daunt / C. Berry
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #:_____ PO#:_____

RECEIPT
Total # of Containers

Turnaround Time Request
- ○ Standard 5 Business Days
- ○ 2 Business Day Rush
- ○ Next Business Day Rush
- ○ Same Day Rush (auth req.)
- ○ Other _____

STATE PROGRAM (if any): _____
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

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

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 31-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-24/30
Project Name:	Moores Mill	**Collection Date:**	8/14/2015 10:30:00 AM
Lab ID:	1508F38-012	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
FOC/FOM ASTMD2974								
Fractional Organic Carbon	0.900	0.0580		%	212142	1	08/28/2015 11:45	OM

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 31-Aug-15

Client:	AMEC E&I, Inc. - Plasters	**Client Sample ID:**	MW-23/35
Project Name:	Moores Mill	**Collection Date:**	8/14/2015 11:00:00 AM
Lab ID:	1508F38-017	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
FOC/FOM ASTMD2974								
Fractional Organic Carbon	1.40	0.0580		%	212142	1	08/28/2015 11:45	OM

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client AMEC Work Order Number 1508F38

Checklist completed by [signature] 8/18/15
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.2 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes __ No ✓

Proceed with Standard TAT as per project history? Yes ✓ No __ Not Applicable __

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\l\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Client: AMEC E&I, Inc. - Plasters
Project Name: Moores Mill
Workorder: 1508F38

ANALYTICAL QC SUMMARY REPORT

BatchID: 212142

Sample ID: **MB-212142**	Client ID:			Units: **%**	Prep Date: **08/28/2015**	Run No: **298975**
SampleType: **MBLK**	TestCode: **FOC/FOM ASTMD2974**			BatchID: **212142**	Analysis Date: **08/28/2015**	Seq No: **6383599**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Fractional Organic Carbon	BRL	0.0580									

Sample ID: **1508B10-009ADUP**	Client ID:			Units: **%**	Prep Date: **08/28/2015**	Run No: **298975**
SampleType: **DUP**	TestCode: **FOC/FOM ASTMD2974**			BatchID: **212142**	Analysis Date: **08/28/2015**	Seq No: **6383604**

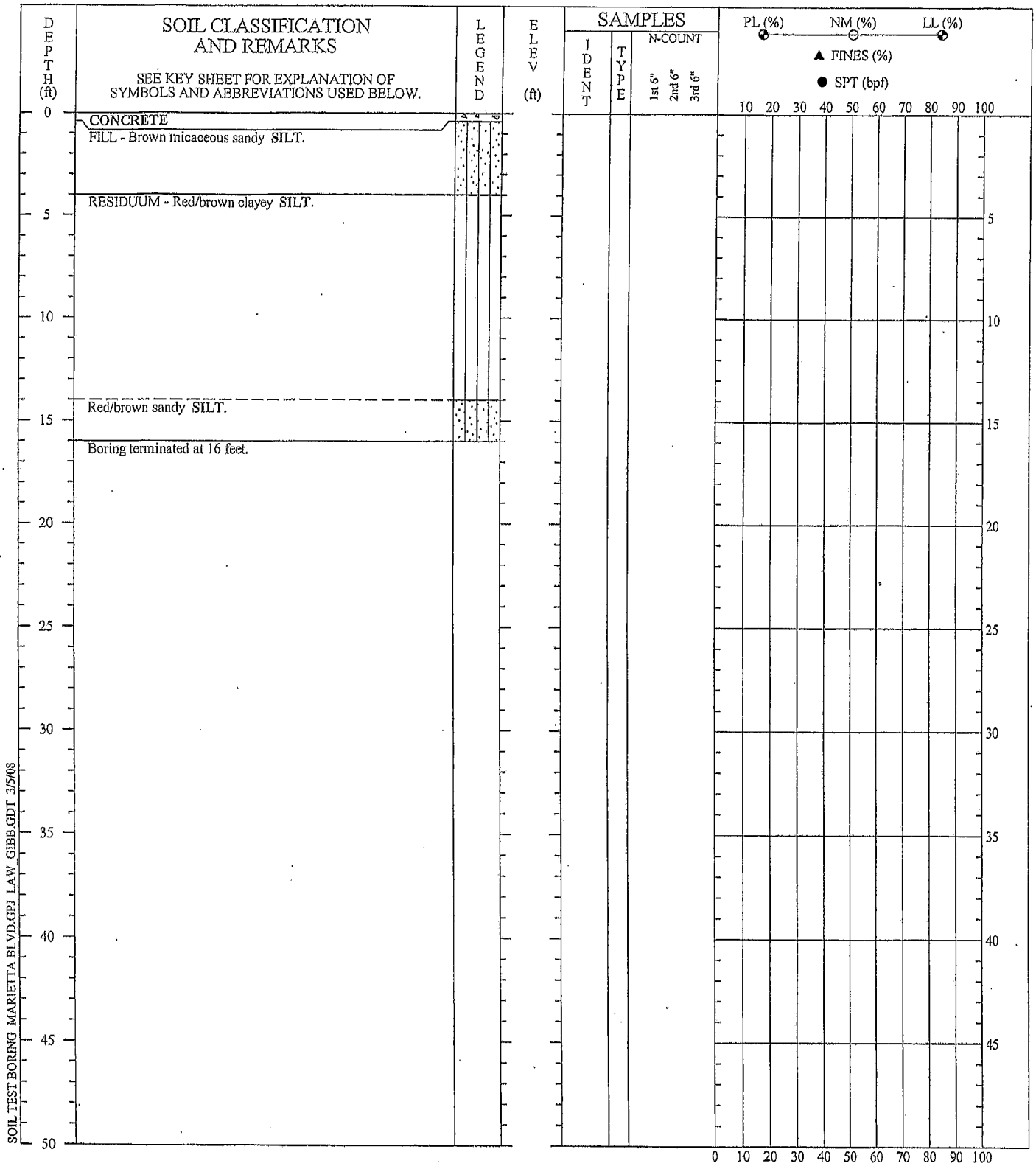
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Fractional Organic Carbon	3.000	0.0580						3.100	3.28	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

APPENDIX C

BORING LOGS



SOIL TEST BORING MARIETTA BLVD.GPJ LAW_GIBB.GDT 3/5/08

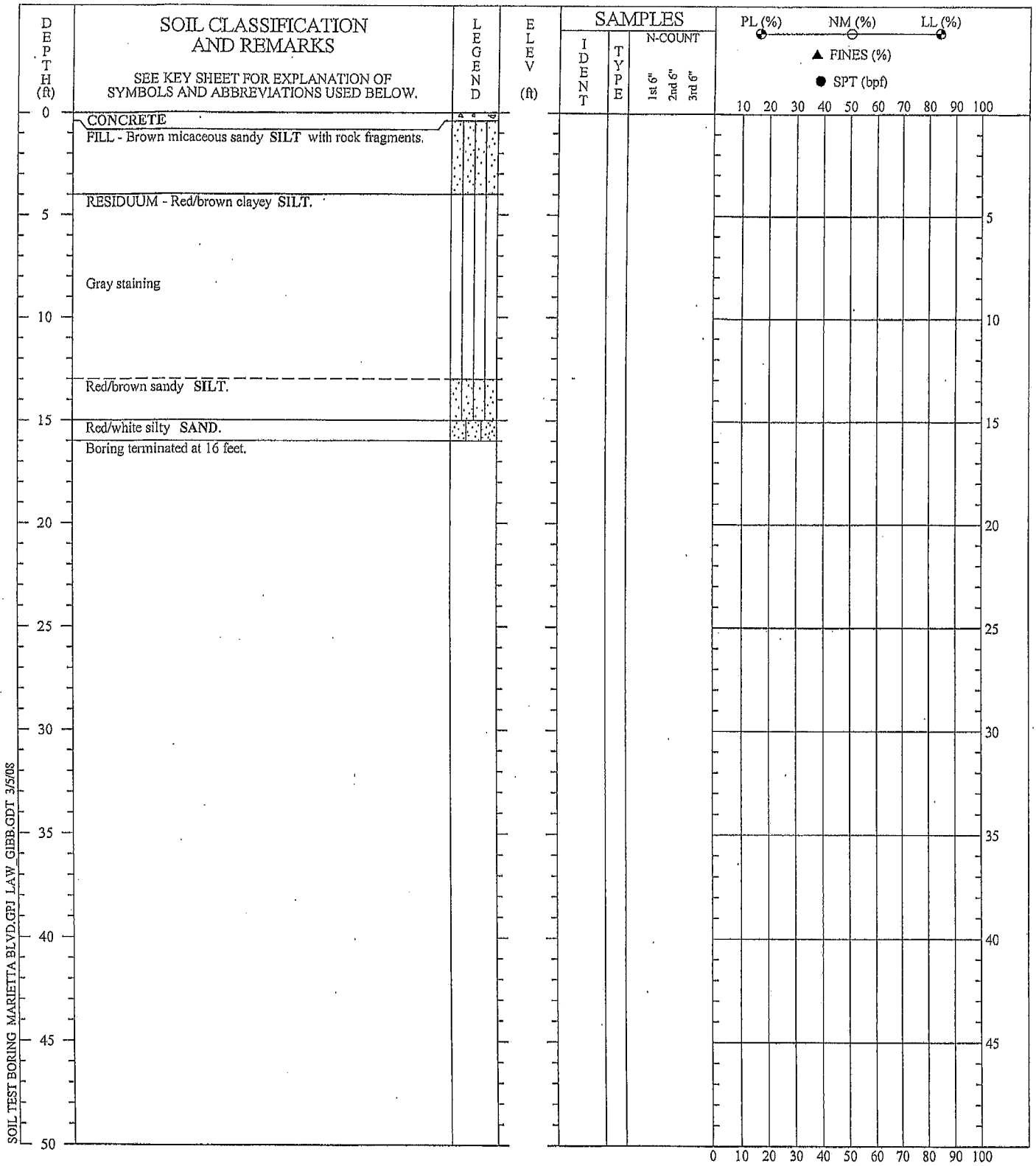
DRILLER:	ESN
EQUIPMENT:	Geoprobe
METHOD:	Direct Push
HOLE DIA.:	2 inches
REMARKS:	Soil boring.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	B-1
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	September 4, 2007
PROJECT NO.:	6124-07-0004

MACTEC



SOIL TEST BORING MARIETTA BLVD.GPJ LAW_GIBB.GDT 3/5/08

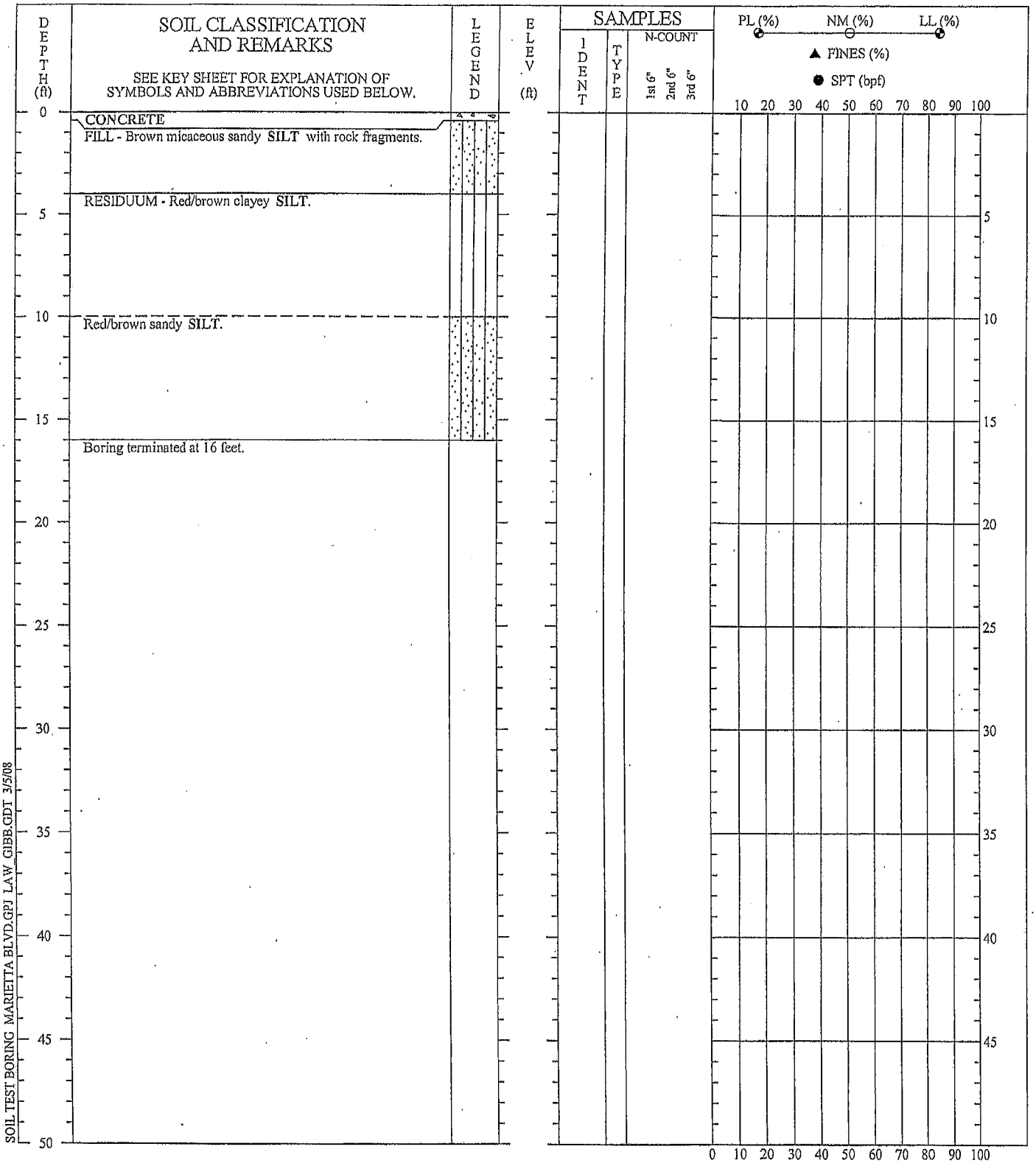
DRILLER:	ESN
EQUIPMENT:	Geoprobe
METHOD:	Direct Push
HOLE DIA.:	2 inches
REMARKS:	Soil boring.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	B-2
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	September 5, 2007
PROJECT NO.:	6124-07-0004

MACTEC



SOIL TEST BORING MARIETTA BLVD.GPJ LAW_GIBB.GDT 3/5/08

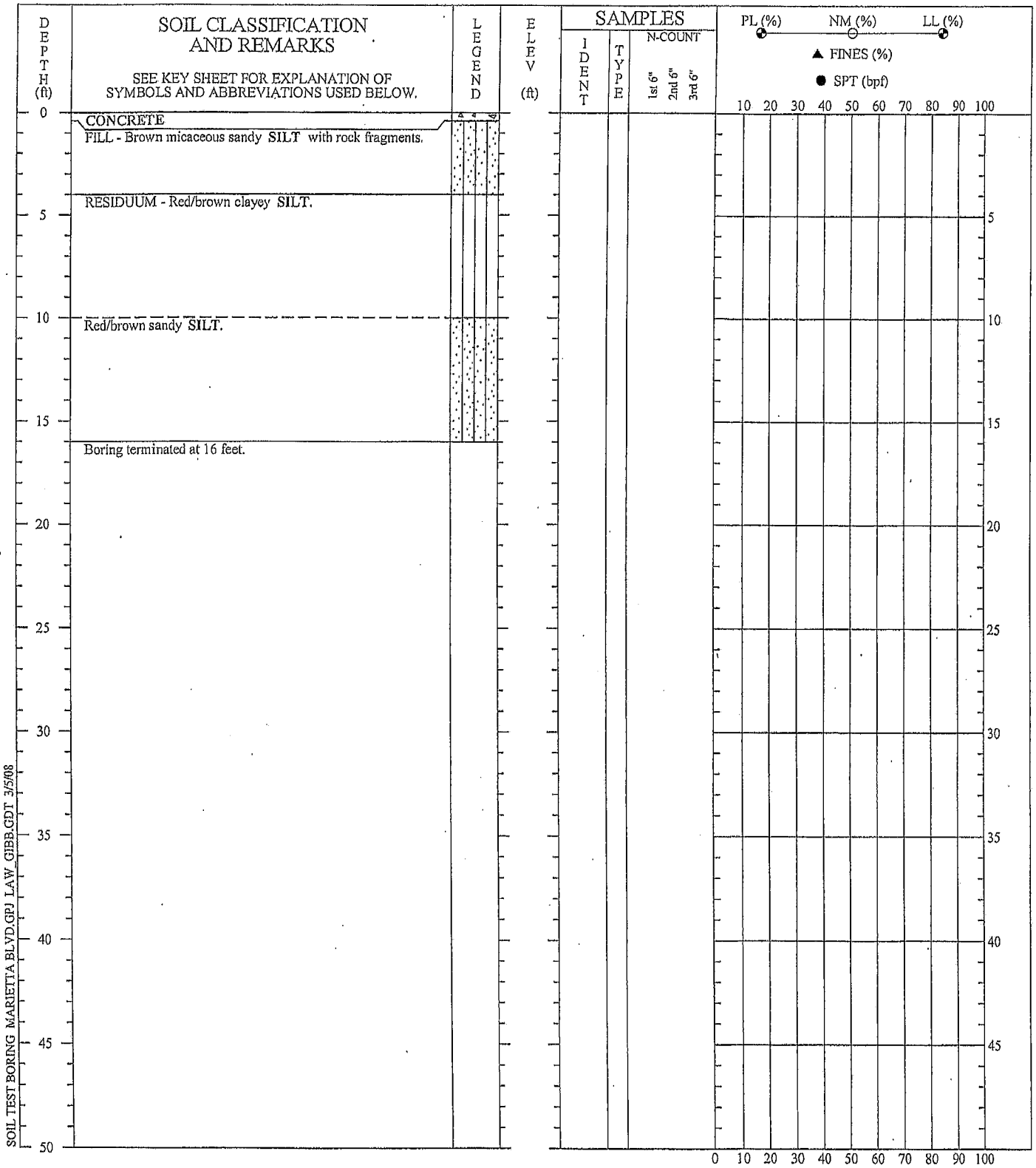
DRILLER:	ESN
EQUIPMENT:	Geoprobe
METHOD:	Direct Push
HOLE DIA.:	2 inches
REMARKS:	Soil boring.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	B-3
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	September 4, 2007
PROJECT NO.:	6124-07-0004

MACTEC



SOIL TEST BORING MARIETTA BLVD.GPJ LAW_GIBB.GDT 3/5/08

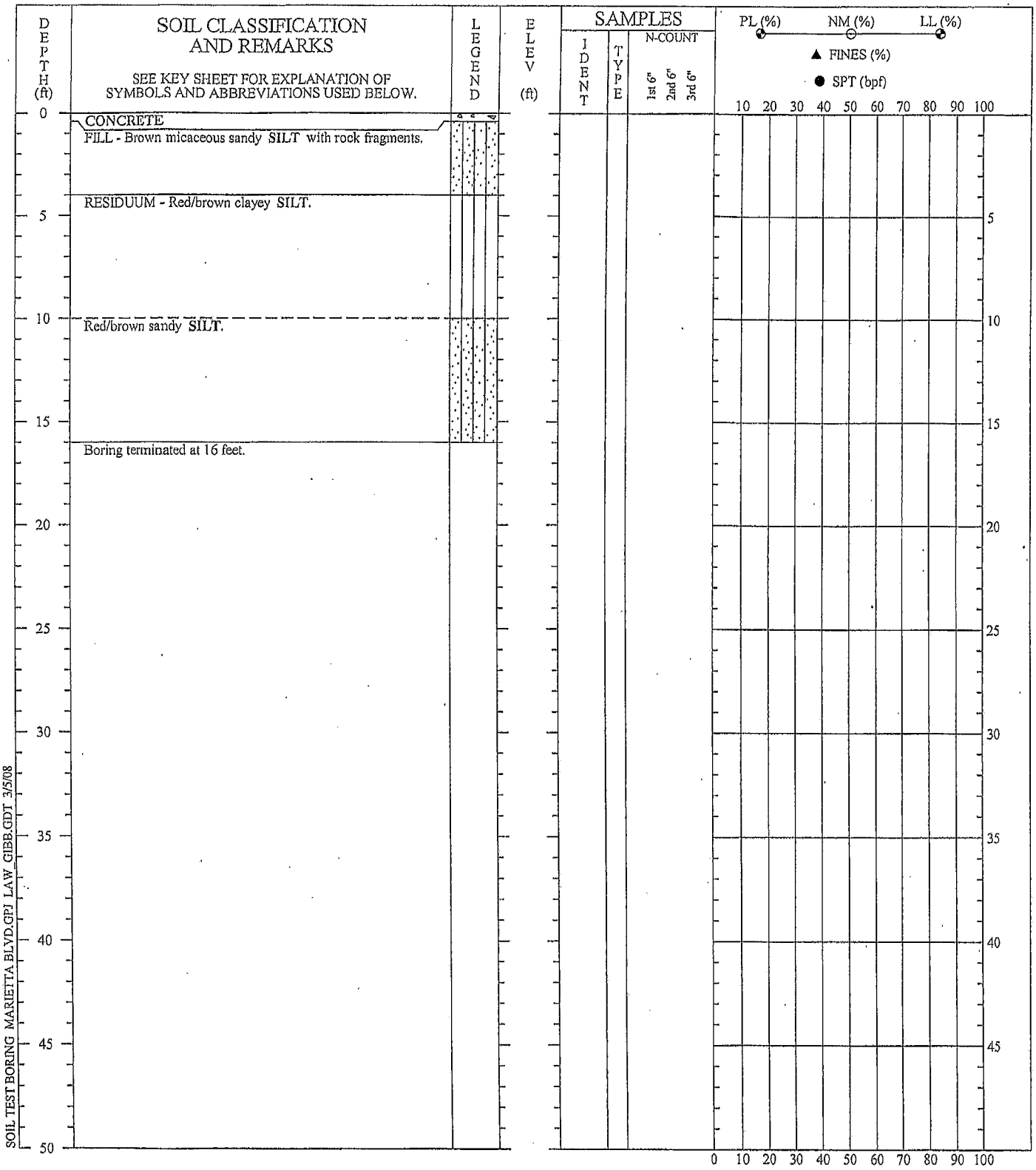
DRILLER:	ESN
EQUIPMENT:	Geoprobe
METHOD:	Direct Push
HOLE DIA.:	2 inches
REMARKS:	Soil boring.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	B-4
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	September 4, 2007
PROJECT NO.:	6124-07-0004

MACTEC



SOIL TEST BORING MARIETTA BLVD.GPJ LAW GIBB.GDT 3/5/08

DRILLER:	ESN
EQUIPMENT:	Geoprobe
METHOD:	Direct Push
HOLE DIA.:	2 inches
REMARKS:	Soil boring.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	B-5
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	September 5, 2007
PROJECT NO.:	6124-07-0004

MACTEC

UNITED CONSULTING
625 HOLCOMB BRIDGE ROAD
NORCROSS, GEORGIA 30071
(770)209-0029, FAX (770)582-2800

LOG OF BORING

HAND AUGER

CONTRACTED WITH: EVANS & AVANT BORING NO.: HA - 3

PROJECT NAME: ROSEBRIAR COURT TRACT JOB NO.: 2006.1218-07 DATE: 10/31/06

ELEV.	DESCRIPTION	DEPTH In FEET	PENETROMETER TESTS NO.	BLOWS PER 2"	BLOWS PER 1.75"	NOTES
	1.5" - CONCRETE	0				OVM (PPM)
	Silt-some sand and rock fragments, trace clay and mica; brown (Fill)		1			ND
		1				2" PVC pipe observed at edge of boring at ≅ 0.5'
		2				No chemical odors observed during drilling
		3				
	HAND AUGER REFUSAL AT 1'					Concrete rubble in boring - wire mesh like portion of former bldg. slab at Refusal Depth.
		4				
		5				
		6				
		7				
		8				ND - Non Detect

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(770)209-0029, FAX (770)582-2800

LOG OF BORING

HAND AUGER

CONTRACTED WITH: EVANS & AVANT BORING NO.: HA - 4

PROJECT NAME: ROSEBRIAR COURT TRACT JOB NO.: 2006.1218-07 DATE: 10/31/06

ELEV.	DESCRIPTION	DEPTH In FEET	PENETROMETER TESTS NO.	BLOWS PER 2"	BLOWS PER 1.75"	NOTES
	4" - CONCRETE	0				OVM (PPM)
	Sand-some silt, trace clay, mica and rock fragments; brown (Fill)		1			ND
		1	2			ND
		2	3			ND
	-trace organics	3	4			
		4	5			
	Silt-some sand, trace clay and mica; orange (Residual)	5	6			ND
	AUGER REFUSAL AT 5'	6				No chemical odors observed during drilling
		7				
		8				

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LOG OF BORING

HAND AUGER

CONTRACTED WITH: EVANS & AVANT BORING NO.: HA - 5

PROJECT NAME: ROSEBRIAR COURT TRACT JOB NO.: 2006.1218-07 DATE: 10/31/06

ELEV.	DESCRIPTION	DEPTH In FEET	PENETROMETER TESTS NO.	BLOWS PER 2"	BLOWS PER 1.75"	NOTES
	4" - CONCRETE	0				OVM (PPM)
	Sand-some silt, trace clay, mica and rock fragments; brown (Fill)		1			ND
		1	2			ND
		2	3			ND
		3	4			
	-trace organics	4	5			
	Silt-trace to some sand, clay, trace mica; orange (Residual)	5	6			ND
		6	7			
	AUGER REFUSAL AT 6.5'	7				No chemical odors observed during drilling
		8				

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LOG OF BORING

HAND AUGER

CONTRACTED WITH: EVANS & AVANT BORING NO.: HA - 6

PROJECT NAME: ROSEBRIAR COURT TRACT JOB NO.: 2006.1218-07 DATE: 10/31/06

ELEV.	DESCRIPTION	DEPTH In FEET	PENETROMETER TESTS NO.	BLOWS PER 2"	BLOWS PER 1.75"	NOTES
	4" - CONCRETE	0				OVM (PPM)
	Sand-some silt, trace clay, mica and rock fragments; brown (Fill)		1			ND
		1	2			
		2	3			ND
	AUGER REFUSAL AT 2'	3				No chemical odors observed during drilling
		4				
		5				
		6				
		7				
		8				

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NORCROSS, GEORGIA 30071
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BORING LOG

CONTRACTED WITH: CORONET WAY, LLC
PROJECT NAME: CORONET WAY PROJECT SITE
JOB NO.: 2006.1218-02 DRILLER: JOE RIG: 5410

BORING NO.: GP-1 (LOT 70)
DATE: 03/08/06
LOGGED BY: KALEN

ELEV.	DESCRIPTION	DEPTH In FEET	SAMPLES NO.	SAMPLES TYPE	SAMPLES BLOWS/6"	SAMPLES RECOV.	SAMPLES W%	NOTES
	3" - ASPHALT	0						(OVM/PPM)
	Sand-some silt, trace clay; orangish brown (Fill)		1					
		5	2					OVM = ND
	Sand-silty, some clay; reddish brown (Residual)	10	3					OVM = ND
	Clay-some silt, trace sand; light gray	15	4					OVM = ND
	Sand-some silt, trace clay; light gray-orange banded	20	5					OVM = ND
		25	6					
		30	7					
		35	8					Groundwater encountered at 35' at time of boring
	PROBE REFUSAL AT 36'	40						ND - Non Detect

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BORING LOG

CONTRACTED WITH: CORONET WAY, LLC
PROJECT NAME: CORONET WAY PROJECT SITE
JOB NO.: 2006.1218-02 DRILLER: JOE RIG: 5410

BORING NO.: GP-2 (LOT 54)
DATE: 03/08/06
LOGGED BY: KALEN

ELEV.	DESCRIPTION	DEPTH in FEET	SAMPLES NO.	TYPE	BLOWS/6"	RECOV.	W%	NOTES
	2" - TOPSOIL	0						(OVM/PPM)
	Sand-some silt and clay; brownish orange (Fill)		1					
		5	2					OVM = ND
	Sand-some silt, trace clay; orangish tan (Residual)							
	-light brown	10	3					OVM = ND
		15	4					OVM = ND
		20	5					OVM = ND
		25	6					
		30	7					
		▽						Groundwater encountered at 31' at time of boring
	PROBE REFUSAL AT 34'	35						
		40						ND - Non Detect

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NORCROSS, GEORGIA 30071
(770)209-0029, FAX (770)582-2800

BORING LOG

CONTRACTED WITH: CORONET WAY, LLC
PROJECT NAME: CORONET WAY PROJECT SITE
JOB NO.: 2006.1218-02 DRILLER: JOE RIG: 5410

BORING NO.: GP-3 (LOT 27)
DATE: 03/08/06
LOGGED BY: KALEN

ELEV.	DESCRIPTION	DEPTH In FEET	SAMPLES NO.	TYPE	BLOWS/6"	RECOV.	W%	NOTES
		0						(OVM/PPM)
	Topsoil		1					
	Sand-some silt, trace clay; dark brown (Fill)							
	Sand-some silt and clay; brownish orange (Residual)	5	2					OVM = ND
		10	3					OVM = ND
		15	4					OVM = ND
		20	5					OVM = ND
		25	6					
		30	7					
		▽ 35	8					Groundwater encountered at 34' at time of boring
		40	9					
	PROBE TERMINATED AT 40'							ND - Non Dctect

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BORING LOG

CONTRACTED WITH: CORONET WAY, LLC
PROJECT NAME: CORONET WAY PROJECT SITE
JOB NO.: 2006.1218-02 DRILLER: JOE RIG: 5410

BORING NO.: GP-4 (LOT 28)
DATE: 03/08/06
LOGGED BY: KALEN

ELEV.	DESCRIPTION	DEPTH In FEET	SAMPLES NO.	TYPE	BLOWS/6"	RECOV.	W%	NOTES
	6" - TOPSOIL	0						(OVM/PPM)
	Sand-silty, some clay; orangish tan (Residual)		1					
	-orange-light gray mottles							
	-some silt and clay	5	2					OVM = ND
	-trace clay	10	3					OVM = ND
	-orange	15	4					OVM = ND
		20	5					OVM = ND
		25	6					
		30	7					
		▽						Groundwater encountered at 32' at time of boring
	PROBE REFUSAL AT 34'	35	8					
		40	9					ND - Non Detect

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BORING LOG

CONTRACTED WITH: CORONET WAY, LLC
PROJECT NAME: CORONET WAY PROJECT SITE
JOB NO.: 2006.1218-02 DRILLER: JOE RIG: 5410

BORING NO.: GP-5 (LOT 29)1
DATE: 03/08/06
LOGGED BY: KALEN

ELEV.	DESCRIPTION	DEPTH in FEET	SAMPLES NO.	TYPE	BLOWS/6"	RECOV.	W%	NOTES
		0						(OVM/PPM)
	Topsoil		1					
	Sand-some silt, trace sand; orange (Residual)							
		5	2					OVM = ND
	-silty; orangish tan	10	3					OVM = ND
		15	4					OVM = ND
		20	5					OVM = ND
		25	6					
		30	7					
								Groundwater encountered at 31' at time of boring
	PROBE REFUSAL AT 33'	35						
		40						ND - Non Detect

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BORING LOG

CONTRACTED WITH: CORONET WAY, LLC
PROJECT NAME: CORONET WAY PROJECT SITE
JOB NO.: 2006.1218-02 DRILLER: JOE RIG: 5410

BORING NO.: GP-6 (LOT 30)
DATE: 03/09/06
LOGGED BY: KALEN

ELEV.	DESCRIPTION	DEPTH In FEET	SAMPLES NO.	TYPE	BLOWS/6"	RECOV.	W%	NOTES
	1" - TOPSOIL	0						(OVM/PPM)
	Sand-some silt, trace clay; reddish brown (Residual)		1					
	-orangish brown							
	-orangish tan	5	2					OVM = ND
		10	3					OVM = ND
		15	4					OVM = ND
		20	5					OVM = ND
		25	6					
		30	7					
		▽						Groundwater encountered at 31' at time of boring
	PROBE REFUSAL AT 32'	35						
		40						ND - Non Detect

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BORING LOG

CONTRACTED WITH: CORONET WAY, LLC
PROJECT NAME: CORONET WAY PROJECT SITE
JOB NO.: 2006.1218-02 DRILLER: JOE RIG: 5410

BORING NO.: GP-7 (LOT 31)
DATE: 03/09/06
LOGGED BY: KALEN

ELEV.	DESCRIPTION	DEPTH in FEET	SAMPLES NO.	TYPE	BLOWS/6"	RECOV.	W%	NOTES
	3" - GRAVEL	0						(OVM/PPM)
	Sand-some silt, trace clay; brownish orange (Residual)		1					
	-silty; orangish tan	5	2					OVM = ND
		10	3					OVM = ND
	-some silt	15	4					OVM = ND
		20	5					OVM = ND
		25	6					
		30 ▽	7					Groundwater encountered at 30' at time of boring
	PROBE REFUSAL AT 31.5'	35						
		40						ND - Non Detect

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BORING LOG

CONTRACTED WITH: CORONET WAY, LLC
PROJECT NAME: CORONET WAY PROJECT SITE
JOB NO.: 2006.1218-02 DRILLER: JOE RIG: 5410

BORING NO.: GP-8 (LOT 32)
DATE: 03/09/06
LOGGED BY: KALEN

ELEV.	DESCRIPTION	DEPTH In FEET	SAMPLES NO.	TYPE	BLOWS/6"	RECOV.	W%	NOTES
	8" - TOPSOIL	0						(OVM/PPM)
	Sand-some silt and clay; reddish brown (Fill)		1					
	Sand-some clay and silt; brownish red (Residual)							
		5	2					OVM = ND
	-trace clay; orangish red							
	-orangish tan	10	3					OVM = ND
		15	4					OVM = ND
		20	5					OVM = ND
		25	6					
		30	7					
		35 ▽	8					Groundwater encountered at 35' at time of boring
	PROBE REFUSAL AT 39'	40	9					ND - Non Detect

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BORING LOG

CONTRACTED WITH: CORONET WAY, LLC
PROJECT NAME: CORONET WAY PROJECT SITE
JOB NO.: 2006.1218-02 DRILLER: JOE RIG: 5410

BORING NO.: GP-9 (LOT 69)
DATE: 03/09/06
LOGGED BY: KALEN

ELEV.	DESCRIPTION	DEPTH In FEET	SAMPLES NO.	TYPE	BLOWS/6"	RECOV.	W%	NOTES
	5" - ASPHALT/gab - 6"	0						(OVM/PPM)
	Silt-some clay and sand; brownish red (Fill)		1					
	-sandy	5	2					OVM = ND
	-trace sand; orangish red	10	3					OVM = ND
	Sand-some silt and clay; orangish tan (Residual)	15	4					OVM = ND
		20	5					OVM = ND
		25	6					
		30	7					
		▽ 35	8					Groundwater encountered at 33' at time of boring
	PROBE REFUSAL AT 37.5'	40						ND - Non Detect

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TEMPORARY WELL LOG

CLIENT: EDENS & AVANT
PROJECT NAME: 2400 CORONET WAY
PROJECT NUMBER: 2006.1213.08
DRILLED BY: JOE
LOGGED BY: B. STONE

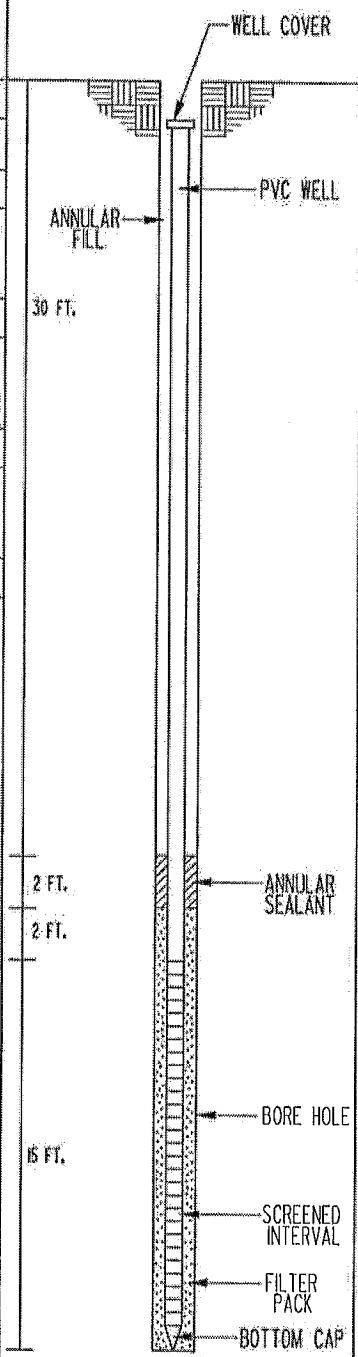
	DATE	TIME
STARTED:	10-30-06	9:15
COMPLETED:	10-30-06	10:15
DEVELOPED:	-	-

STATIC GROUNDWATER DEPTH: 38.18' (BELOW T.O.C.)

WELL NO.: TMW-1
LOCATION:
ELEVATION (G.S.):
ELEVATION (T.O.C.):

ELEV. (FEET)	DESCRIPTION	SAMPLES DEPTH (FEET)	BLOWS/6"	RECOV.	OVM (ppm)
	4" CONCRETE	0			
	SAND; SOME SILT; BROWN (RESIDUAL)				ND
	SILT; SOME SAND; TRACE CLAY; ORANGISH-RED	5			ND
	-TANNISH	10			ND
	-TAN & LIGHT GRAY	15			ND
		20			ND
		25			
		30			
		35			
		40			
		45			
	BORING TERMINATED AT 49'	50			

SKETCH



WELL INFORMATION

RISER HEIGHT FROM GROUND SURFACE: -1.51 FEET
ANNULAR FILL: NA
ANNULAR SEALANT: BENTONITE
FILTER: FILTER SAND
PVC WELL DIAMETER: 2 INCHES
BORE HOLE DIAMETER: 7¾ INCHES
TOP OF SCREEN: 34 FEET
SCREEN LENGTH: 15 FEET
SCREEN SLOT SIZE: 0.010 INCH
BOTTOM OF SCREEN: 49 FEET
BOTTOM OF WELL: 49 FEET

NOTES

ND - NON DETECT

▼ 24-HOUR GROUNDWATER LEVEL: 38.18'
▼ GROUNDWATER LEVEL AFTER DEVELOPMENT:
▽ GROUNDWATER LEVEL AT TIME OF DRILLING: 44'

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TEMPORARY WELL LOG

CLIENT: EDENS & AVANT
PROJECT NAME: 2400 CORONET WAY
PROJECT NUMBER: 2006.1213.08
DRILLED BY: JOE
LOGGED BY: B. STONE

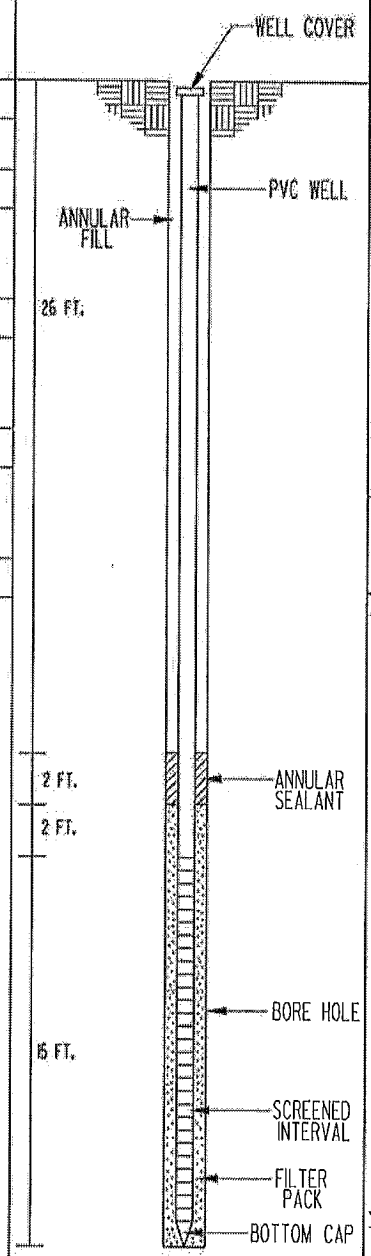
	DATE	TIME
STARTED:	10-30-06	10:30
COMPLETED:	10-30-06	12:00
DEVELOPED:	-	-

STATIC GROUNDWATER DEPTH: 39.27' (BELOW T.O.C.)

WELL NO.: TMW-2
LOCATION:
ELEVATION (G.S.):
ELEVATION (T.O.C.):

ELEV. (FEET)	DESCRIPTION	SAMPLES DEPTH (FEET)	BLOWS/6"	RECOV.	OVM (ppm)
	4" CONCRETE	0			
	SILT; SOME SAND; TRACE CLAY; BROWNISH (RESIDUAL)				ND
	-ORANGISH	5			ND
	-SOME CLAY	10			ND
	-BROWN	15			ND
		20			ND
		25			
		30			
		35			
		40			
	BORING TERMINATED AT 45'	45			
		50			

SKETCH



WELL INFORMATION

RISER HEIGHT FROM GROUND SURFACE: -0.24 FEET
ANNULAR FILL: NA
ANNULAR SEALANT: BENTONITE
FILTER: FILTER SAND
PVC WELL DIAMETER: 2 INCHES
BORE HOLE DIAMETER: 7¾ INCHES
TOP OF SCREEN: 30 FEET
SCREEN LENGTH: 15 FEET
SCREEN SLOT SIZE: 0.010 INCH
BOTTOM OF SCREEN: 45 FEET
BOTTOM OF WELL: 45 FEET

NOTES

ND - NON DETECT

▼ 24-HOUR GROUNDWATER LEVEL 39.27'
▼ GROUNDWATER LEVEL AFTER DEVELOPMENT:
▽ GROUNDWATER LEVEL AT TIME OF DRILLING: 42.5'

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TEMPORARY WELL LOG

CLIENT: EDENS & AVANT
PROJECT NAME: 2400 CORONET WAY
PROJECT NUMBER: 2006.1213.08
DRILLED BY: JOE
LOGGED BY: K. KRAMER

	DATE	TIME
STARTED:	10-30-06	14:00
COMPLETED:	10-30-06	15:30
DEVELOPED:	-	-

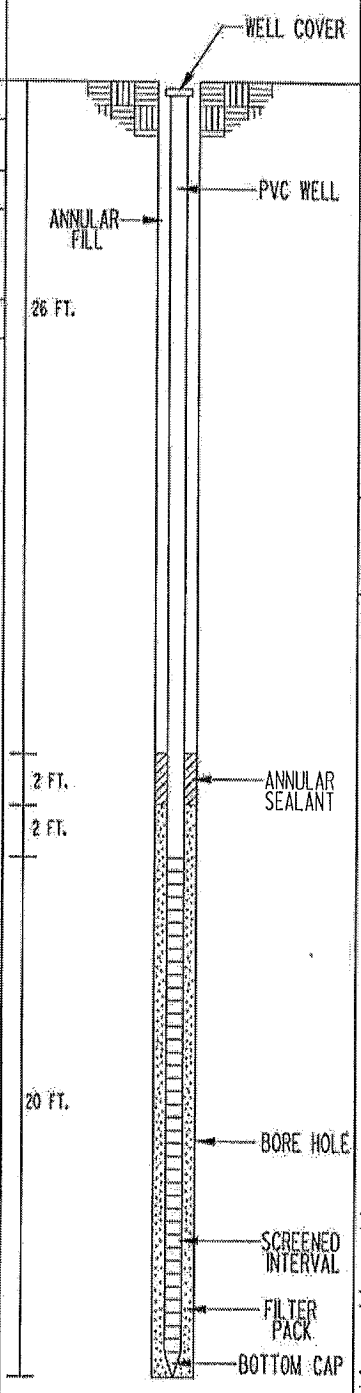
STATIC GROUNDWATER DEPTH: 39.85' (BELOW T.O.C.)

WELL NO.: TMW-3
LOCATION:

ELEVATION (G.S.):
ELEVATION (T.O.C.):

ELEV. (FEET)	DESCRIPTION	SAMPLES DEPTH (FEET)	BLOWS/6"	RECOV.	OVM (ppm)
	4" CONCRETE	0			
	SILT; SOME SAND; TRACE CLAY; ORANGISH (RESIDUAL)				ND
		5			ND
	-SOME CLAY				
		10			ND
		15			
	-SANDY; TRACE CLAY; TAN				
		20			
		25			
		30			
		35			
		40			
		45			
	BORING TERMINATED AT 50'	50			

SKETCH



WELL INFORMATION

RISER HEIGHT FROM GROUND SURFACE: -0.68 FEET
ANNULAR FILL: NA
ANNULAR SEALANT: BENTONITE
FILTER: FILTER SAND
PVC WELL DIAMETER: 2 INCHES
BORE HOLE DIAMETER: 7¾ INCHES
TOP OF SCREEN: 30 FEET
SCREEN LENGTH: 20 FEET
SCREEN SLOT SIZE: 0.010 INCH
BOTTOM OF SCREEN: 50 FEET
BOTTOM OF WELL: 50 FEET

NOTES

ND - NON DETECT

24-HOUR GROUNDWATER LEVEL 39.85'
GROUNDWATER LEVEL AFTER DEVELOPMENT:
GROUNDWATER LEVEL AT TIME OF DRILLING: 45.0'

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TEMPORARY WELL LOG

CLIENT: EDENS & AVANT
PROJECT NAME: ROSEBRIAR COURT TRACT
PROJECT NUMBER: 2006.1213.07
DRILLED BY: JOE
LOGGED BY: K. KRAMER

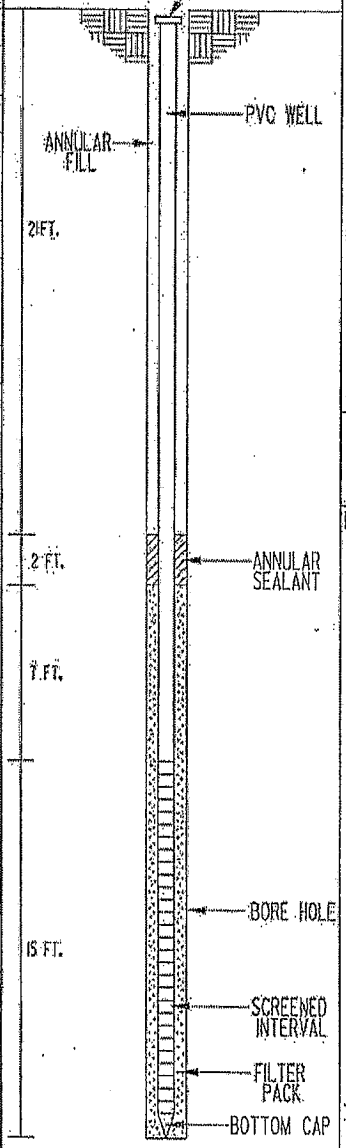
	DATE	TIME
STARTED:	10-31-06	9:00
COMPLETED:	10-31-06	10:30
DEVELOPED:	-	-

STATIC GROUNDWATER DEPTH: 39.10' (BELOW T.O.C.)

WELL NO.: TMW-4
LOCATION:
ELEVATION (G.S.):
ELEVATION (T.O.C.):

ELEV. (FEET)	DESCRIPTION	SAMPLES: DEPTH (FEET)	BLOWS/6"	RECOV.	OVM (ppm)
	2" ASPHALT	0			ND
	SAND; SILTY; TRACE CLAY; MICACEOUS; ORANGISH-RED (FILL)				
	TOP SOIL	5			ND
	SILT; SOME CLAY; TRACE SAND; REDDISH-ORANGE (RESIDUAL)				
	SAND; SILTY; TRACE CLAY; ORANGISH-TAN	10			ND
		15			ND
		20			ND
		25			ND
		30			
		35			
		40			
	BORING TERMINATED AT 45'	45			
		50			

SKETCH



WELL INFORMATION

RISER HEIGHT FROM GROUND SURFACE: +0.30 FEET
ANNULAR FILL: NA
ANNULAR SEALANT: BENTONITE
FILTER: FILTER SAND
PVC WELL DIAMETER: 2 INCHES
BORE HOLE DIAMETER: 7¾ INCHES
TOP OF SCREEN: 30 FEET
SCREEN LENGTH: 15 FEET
SCREEN SLOT SIZE: 0.010 INCH
BOTTOM OF SCREEN: 45 FEET
BOTTOM OF WELL: 45 FEET

NOTES

ND - NON DETECT

24-HOUR GROUNDWATER LEVEL 39.10'
GROUNDWATER LEVEL AFTER DEVELOPMENT:
GROUNDWATER LEVEL AT TIME OF DRILLING:

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TEMPORARY WELL LOG

CLIENT: EDENS & AVANT
PROJECT NAME: ROSEBRIAR COURT TRACT
PROJECT NUMBER: 2006.1213.07
DRILLED BY: JOE
LOGGED BY: K. KRAMER

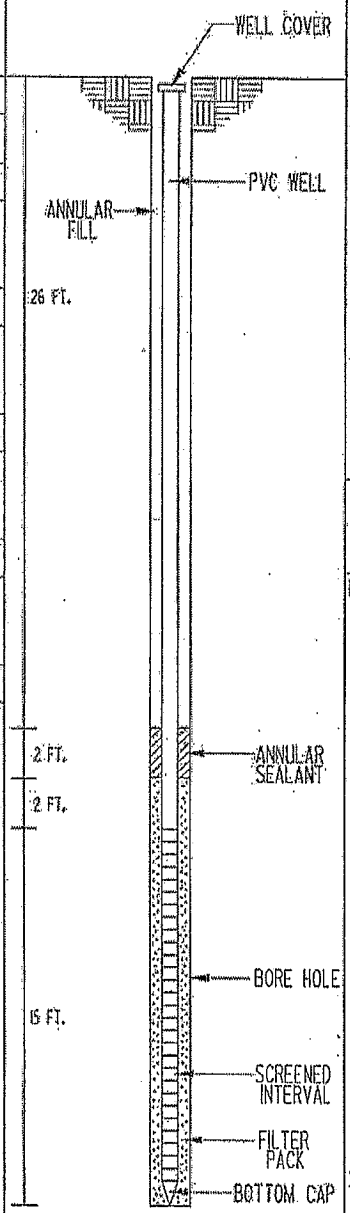
	DATE	TIME
STARTED:	10-31-06	10:30
COMPLETED:	10-31-06	12:00
DEVELOPED:	-	-

STATIC GROUNDWATER DEPTH: 39.80' (BELOW T.O.C.)

WELL NO.: TMW-5
LOCATION:
ELEVATION (G.S.):
ELEVATION (T.O.C.):

ELEV. (FEET)	DESCRIPTION	SAMPLES DEPTH (FEET)	BLOWS/6"	RECOV.	OVM (ppm)
	2" ASPHALT	0			
	SAND; SOME SILT; TRACE CLAY; BROWN (FILL)				ND
	SILT; SOME CLAY; TRACE SAND; REDDISH-ORANGE (RESIDUAL)	5			ND
					ND
	SAND; SILTY; TRACE CLAY; PINKISH-TAN	10			
		15			ND
		20			ND
		25			ND
	-SOME SILT & CLAY; BROWN	30			
		35			
		40			
	BORING TERMINATED AT 45'	45			
		50			

SKETCH



WELL INFORMATION

RISER HEIGHT FROM GROUND SURFACE: +0.32 FEET
ANNULAR FILL: NA
ANNULAR SEALANT: BENTONITE
FILTER: FILTER SAND
PVC WELL DIAMETER: 2 INCHES
BORE HOLE DIAMETER: 7¾ INCHES
TOP OF SCREEN: 30 FEET
SCREEN LENGTH: 15 FEET
SCREEN SLOT SIZE: 0.010 INCH
BOTTOM OF SCREEN: 45 FEET
BOTTOM OF WELL: 45 FEET

NOTES

ND. - NON DETECT

24-HOUR GROUNDWATER LEVEL 39.80'
GROUNDWATER LEVEL AFTER DEVELOPMENT:
GROUNDWATER LEVEL AT TIME OF DRILLING:

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TEMPORARY WELL LOG

CLIENT: EDENS & AVANT
PROJECT NAME: ROSEBRIAR COURT TRACT
PROJECT NUMBER: 2006.1213.07
DRILLED BY: JOE
LOGGED BY: K. KRAMER

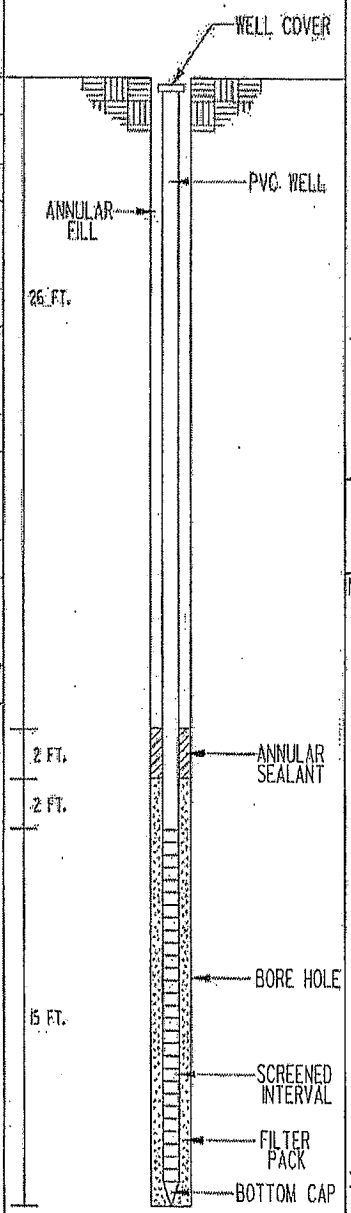
	DATE	TIME
STARTED:	10-31-06	12:00
COMPLETED:	10-31-06	13:30
DEVELOPED:	-	-

STATIC GROUNDWATER DEPTH: 37.42' (BELOW T.O.C.)

WELL NO.: TMW-6
LOCATION:
ELEVATION (G.S.):
ELEVATION (T.O.C.):

ELEV. (FEET)	DESCRIPTION	SAMPLES DEPTH (FEET)	BLOWS/6"	RECOV.	OVM (ppm)
	3" ASPHALT/3" CAB				
	SAND; SOME SILT; TRACE CLAY; BROWN (FILL)	0			ND
	SILT; SOME CLAY & SAND; ORANGISH-RED (RESIDUAL)	5			ND
		10			ND
	SAND; SILTY; TRACE CLAY; ORANGE	15			ND
	-BROWN	20			ND
		25			ND
		30			
		35			
		40			
	BORING TERMINATED AT 45'	45			
		50			

SKETCH



WELL INFORMATION

RISER HEIGHT FROM GROUND SURFACE: -0.38 FEET
ANNULAR FILL: NA
ANNULAR SEALANT: BENTONITE
FILTER: FILTER SAND
PVC WELL DIAMETER: 2 INCHES
BORE HOLE DIAMETER: 7¾ INCHES
TOP OF SCREEN: 30 FEET
SCREEN LENGTH: 15 FEET
SCREEN SLOT SIZE: 0.010 INCH
BOTTOM OF SCREEN: 45 FEET
BOTTOM OF WELL: 45 FEET

NOTES

ND - NON DETECT

24-HOUR GROUNDWATER LEVEL 37.42'
GROUNDWATER LEVEL AFTER DEVELOPMENT:
GROUNDWATER LEVEL AT TIME OF DRILLING:

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TEMPORARY WELL LOG

CLIENT: EDENS & AVANT
PROJECT NAME: ROSEBRIAR COURT TRACT
PROJECT NUMBER: 2006.1213.07
DRILLED BY: JOE
LOGGED BY: K. KRAMER

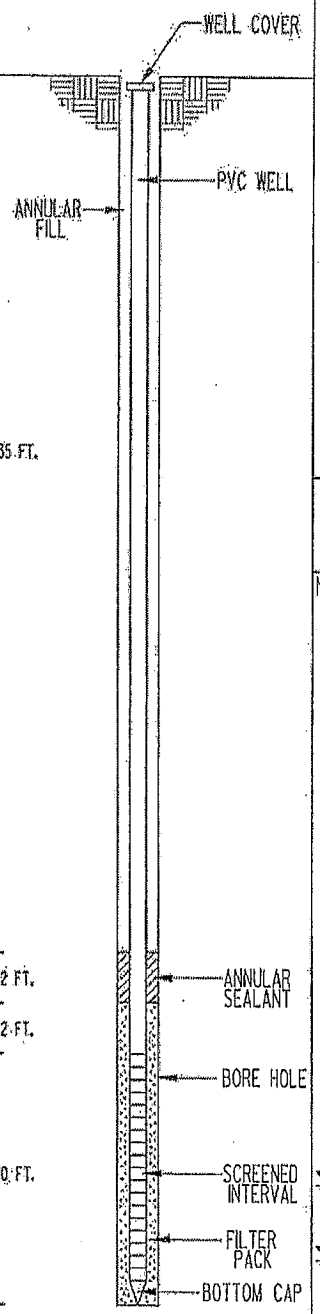
	DATE	TIME
STARTED:	10-31-06	13:30
COMPLETED:	10-31-06	15:00
DEVELOPED:	-	-

STATIC GROUNDWATER DEPTH: 39.62' (BELOW T.O.C.)

WELL NO.: TMW-7
LOCATION:
ELEVATION (G.S.):
ELEVATION (T.O.C.):

ELEV. (FEET)	DESCRIPTION	SAMPLES DEPTH (FEET)	BLOWS/6"	RECOV.	OVM (ppm)
	3" ASPHALT/3" CAB	0			ND
	SAND; SOME SILT & CLAY; GRAYISH-BROWN (FILL)				
	SILT; SOME CLAY & SAND; ORANGISH-RED (RESIDUAL)	5			ND
		10			ND
	SAND; SILTY; TRACE CLAY; ORANGISH-TAN	15			ND
		20			ND
	-BROWN	25			ND
		30			
		35			
		40			
		45			
	BORING TERMINATED AT 49'	50			

SKETCH



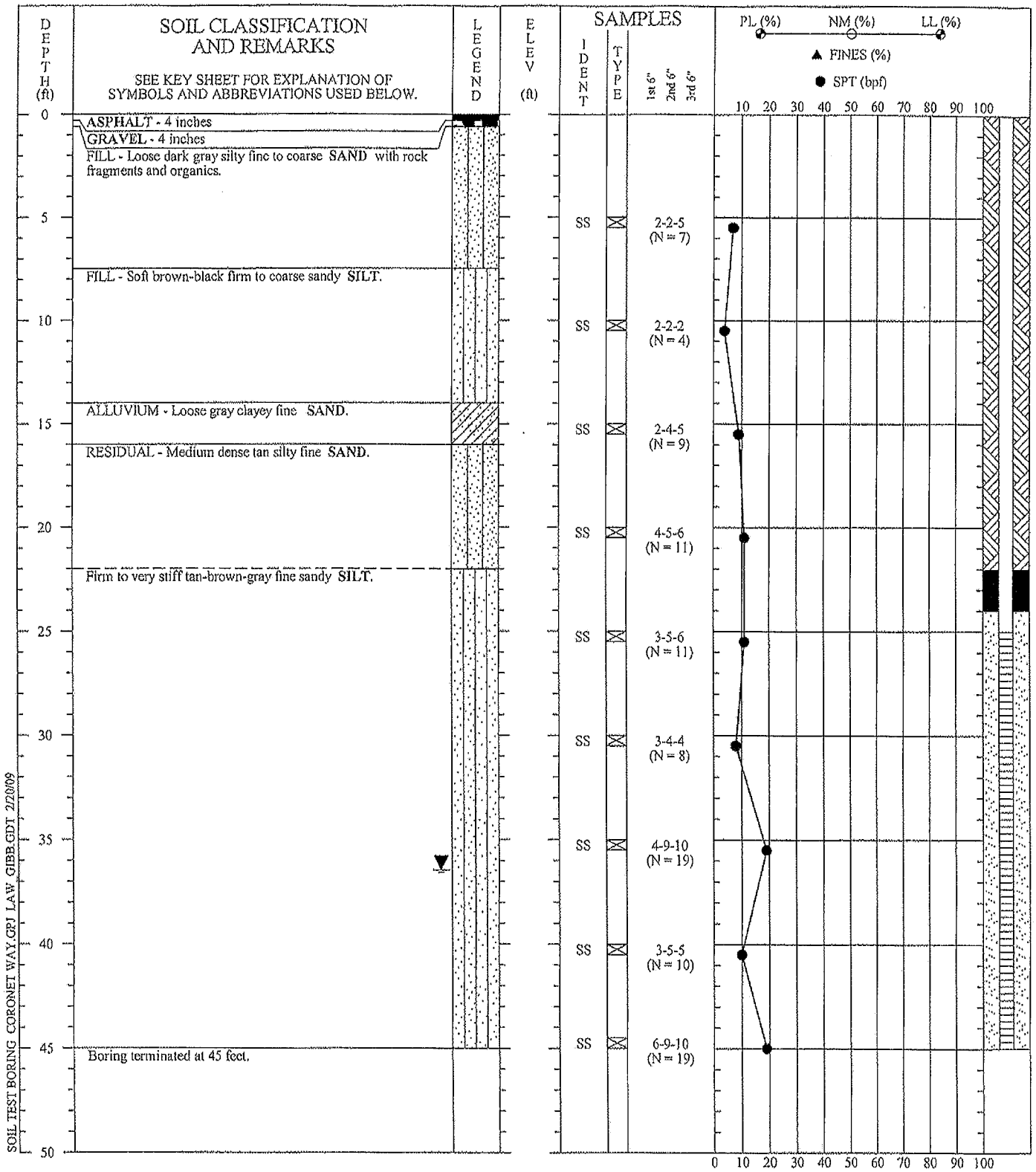
WELL INFORMATION

RISER HEIGHT FROM GROUND SURFACE: -0.34 FEET
ANNULAR FILL: NA
ANNULAR SEALANT: BENTONITE
FILTER: FILTER SAND
PVC WELL DIAMETER: 2 INCHES
BORE HOLE DIAMETER: 7¼ INCHES
TOP OF SCREEN: 39 FEET
SCREEN LENGTH: 10 FEET
SCREEN SLOT SIZE: 0.010 INCH
BOTTOM OF SCREEN: 49 FEET
BOTTOM OF WELL: 49 FEET

NOTES

ND - NON DETECT

24-HOUR GROUNDWATER LEVEL 39.62'
GROUNDWATER LEVEL AFTER DEVELOPMENT:
GROUNDWATER LEVEL AT TIME OF DRILLING:



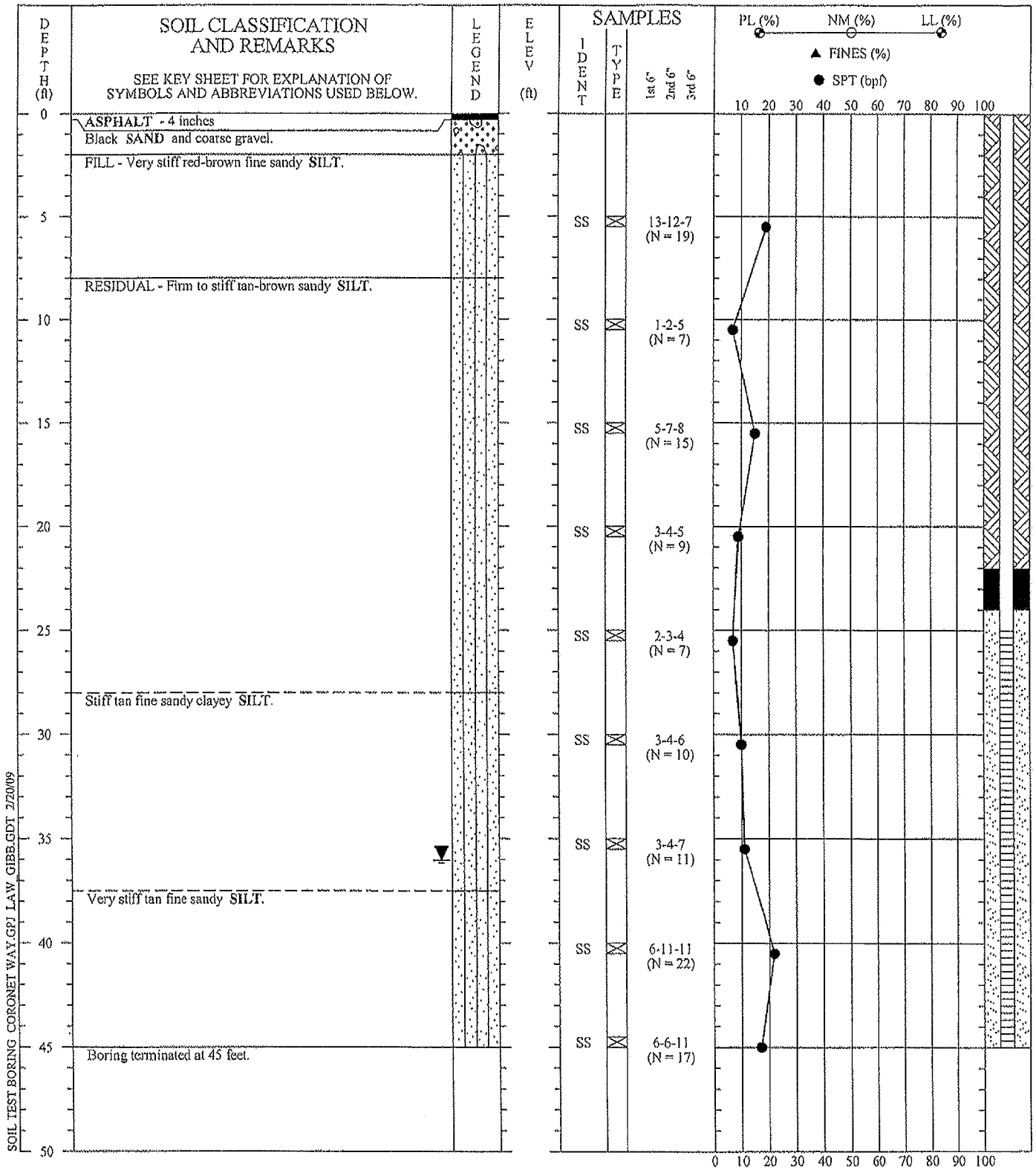
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	
METHOD:	Hollow Stem Auger
HOLE DIA.:	8.5 inches
REMARKS:	Boring terminated at 45 feet. Stabilized depth to groundwater 36.95 ft on 12/19/07.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	EW-1
PROJECT:	Coronet Way
LOCATION:	Atlanta, GA
DRILLED:	December 19, 2007
PROJECT NO.:	6124-07-0004

MACTEC



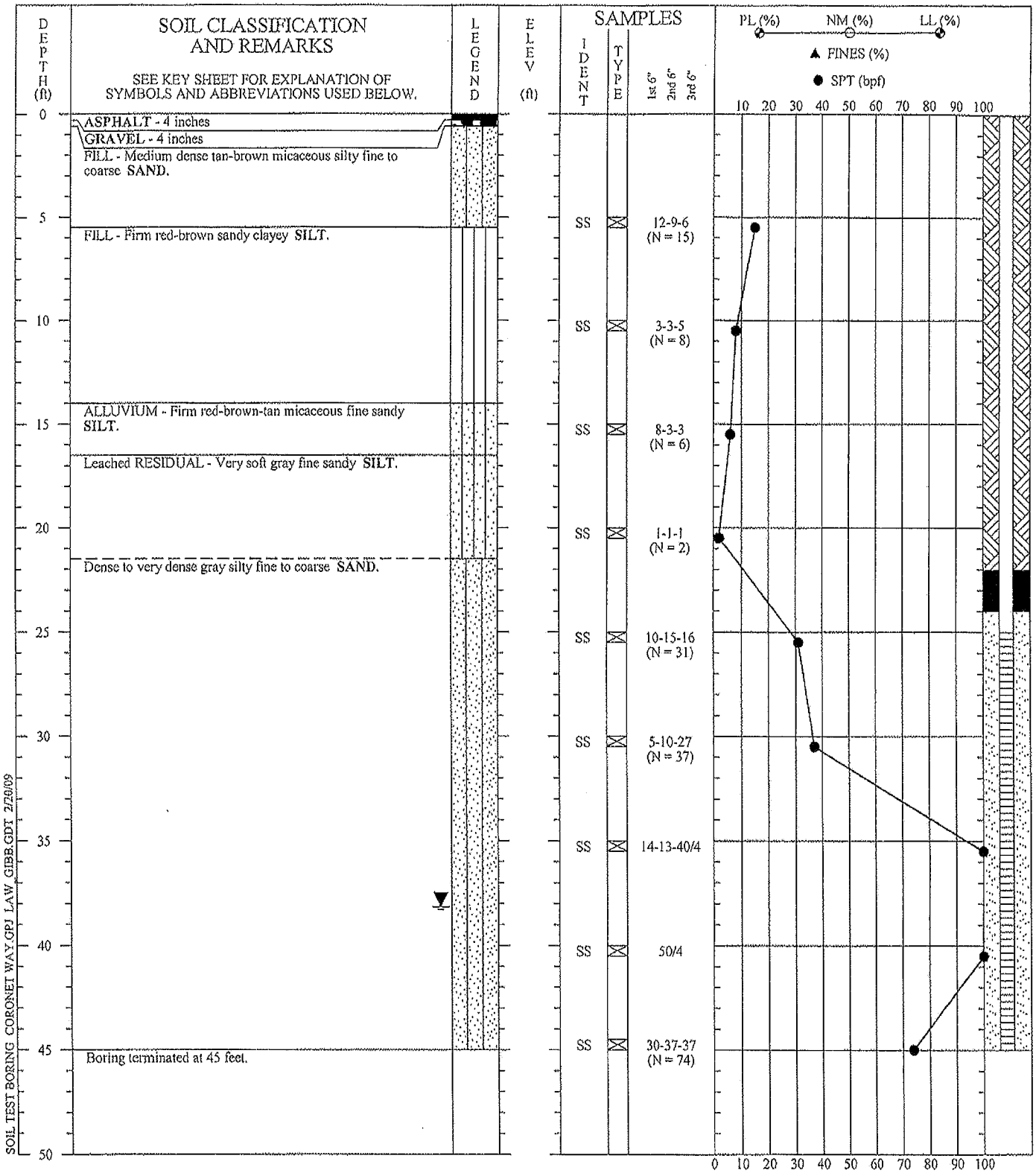
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	
METHOD:	Hollow Stem Auger
HOLE DIA.:	8.5 inches
REMARKS:	Boring terminated at 45 feet. Stabilized depth to groundwater 36.05 ft on 12/19/07.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	EW-2
PROJECT:	Coronet Way
LOCATION:	Atlanta, GA
DRILLED:	December 18, 2007
PROJECT NO.:	6124-07-0004

MACTEC



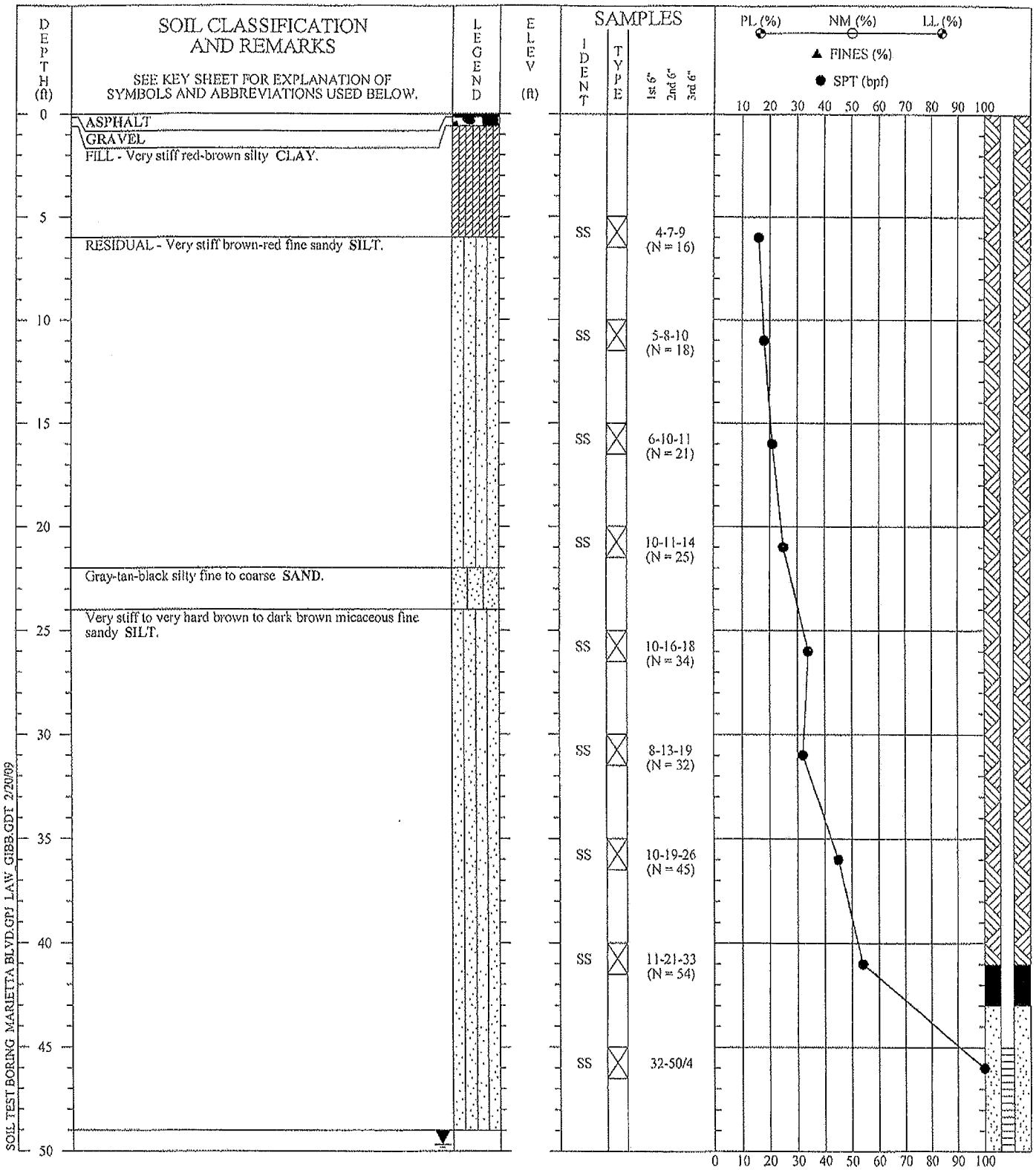
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	
METHOD:	Hollow Stem Auger
HOLE DIA.:	8.5 inches
REMARKS:	Boring terminated at 45 feet. Stabilized depth to groundwater 38.14 ft on 12/19/07.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	EW-3
PROJECT:	Coronet Way
LOCATION:	Atlanta, GA
DRILLED:	December 18, 2007
PROJECT NO.:	6124-07-0004

MACTEC



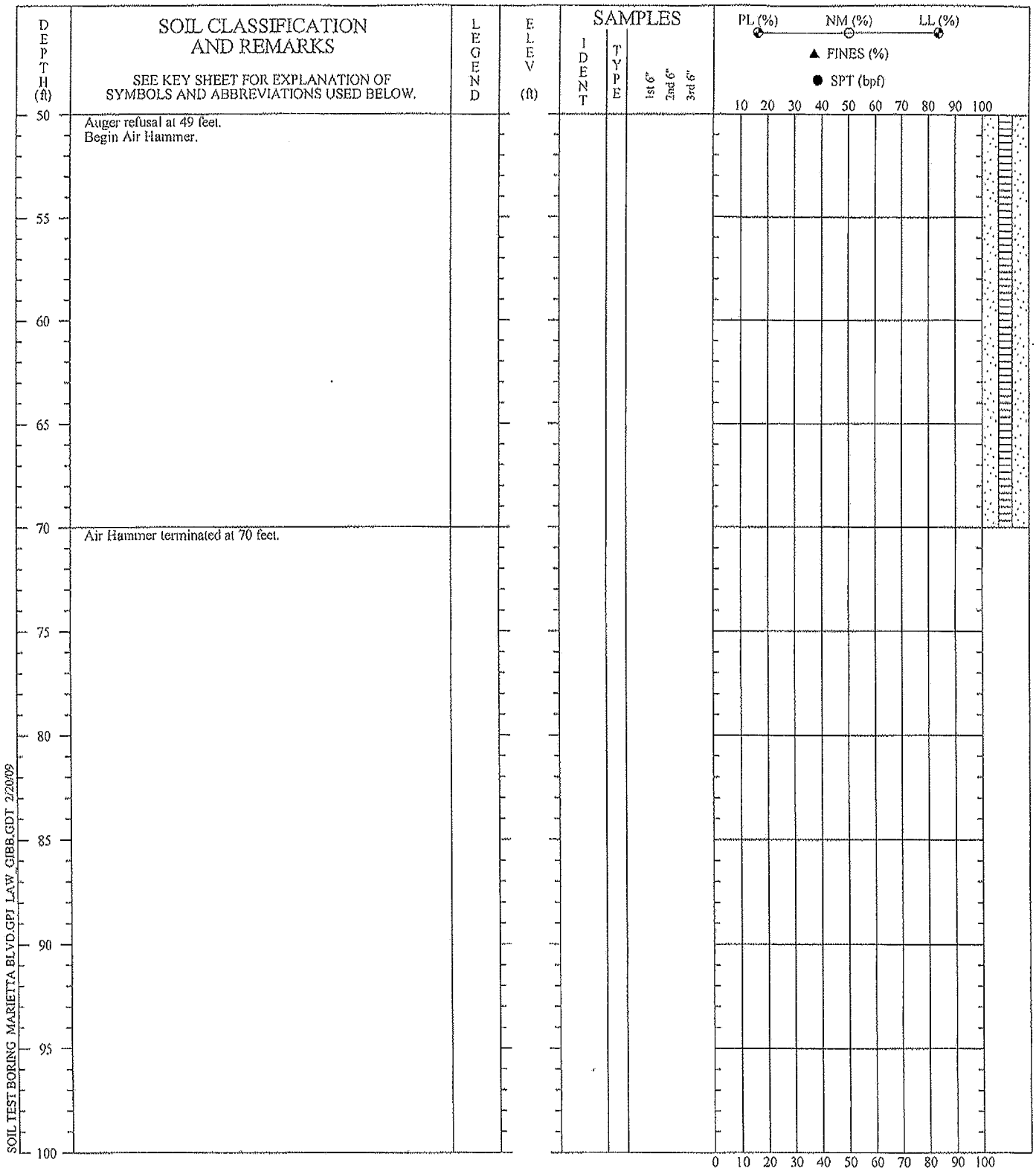
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	Acker
METHOD:	Hollow Stem Auger/Air Hammer
HOLE DIA.:	8.5 inches/3.5 inches
REMARKS:	Auger refusal at 49 feet. Air hammer terminated at 70 feet. Stabilized depth to water on 9/14/07 49.70 feet.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	MW-10
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	September 10, 2007
PROJECT NO.:	6124-07-0004

MACTEC



SOIL TEST BORING MARIETTA BLVD.GPJ LAW_GIBB.GDT 2/20/09

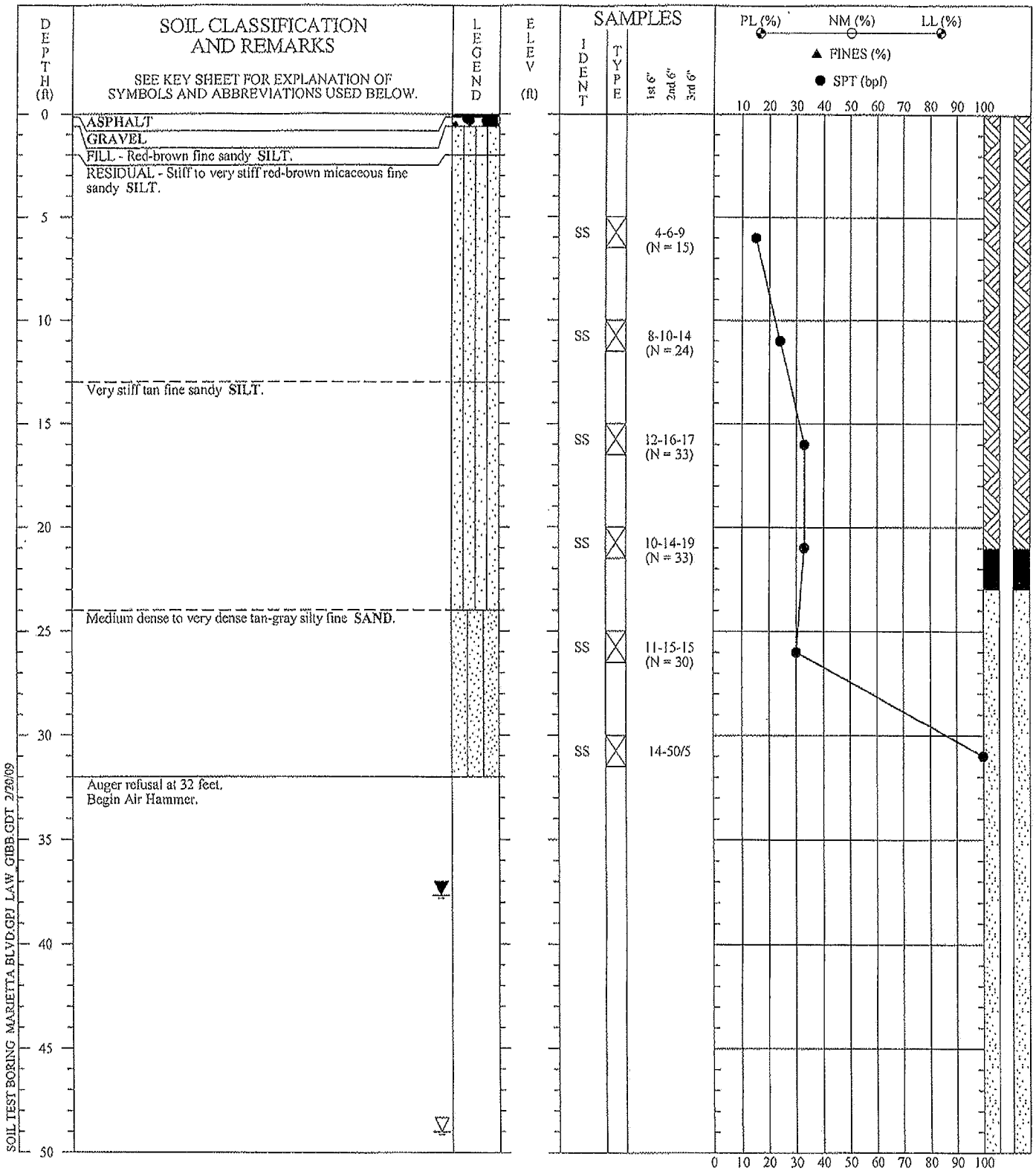
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	Acker
METHOD:	Hollow Stem Auger/Air Hammer
HOLE DIA.:	8.5 inches/3.5 inches
REMARKS:	Auger refusal at 49 feet. Air hammer terminated at 70 feet. Stabilized depth to water on 9/14/07 49.70 feet.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	MW-10
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	September 10, 2007
PROJECT NO.:	6124-07-0004

MACTEC



DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	Acker
METHOD:	Hollow Stem Auger/Air Hammer
HOLE DIA.:	8.5 inches/3.5 inches
REMARKS:	Auger refusal at 32 feet. Air hammer terminated at 50 feet. Depth to groundwater at time of boring 49 feet. Stabilized depth to water on 9/12/07 37.68 feet.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	MW-11
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	September 10, 2007
PROJECT NO.:	6124-07-0004

MACTEC

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES IDENT	SAMPLES TYPE	SAMPLES 1st 6" 2nd 6" 3rd 6"	PL (%) NM (%) LL (%) ▲ FINES (%) ● SPT (bpf)
50	Air Hammer terminated at 50 feet.						
55							
60							
65							
70							
75							
80							
85							
90							
95							
100							0 10 20 30 40 50 60 70 80 90 100

10 20 30 40 50 60 70 80 90 100

SOIL TEST BORING MARIETTA BLVD.GPJ LAW_GIBB.GDT 2/20/09

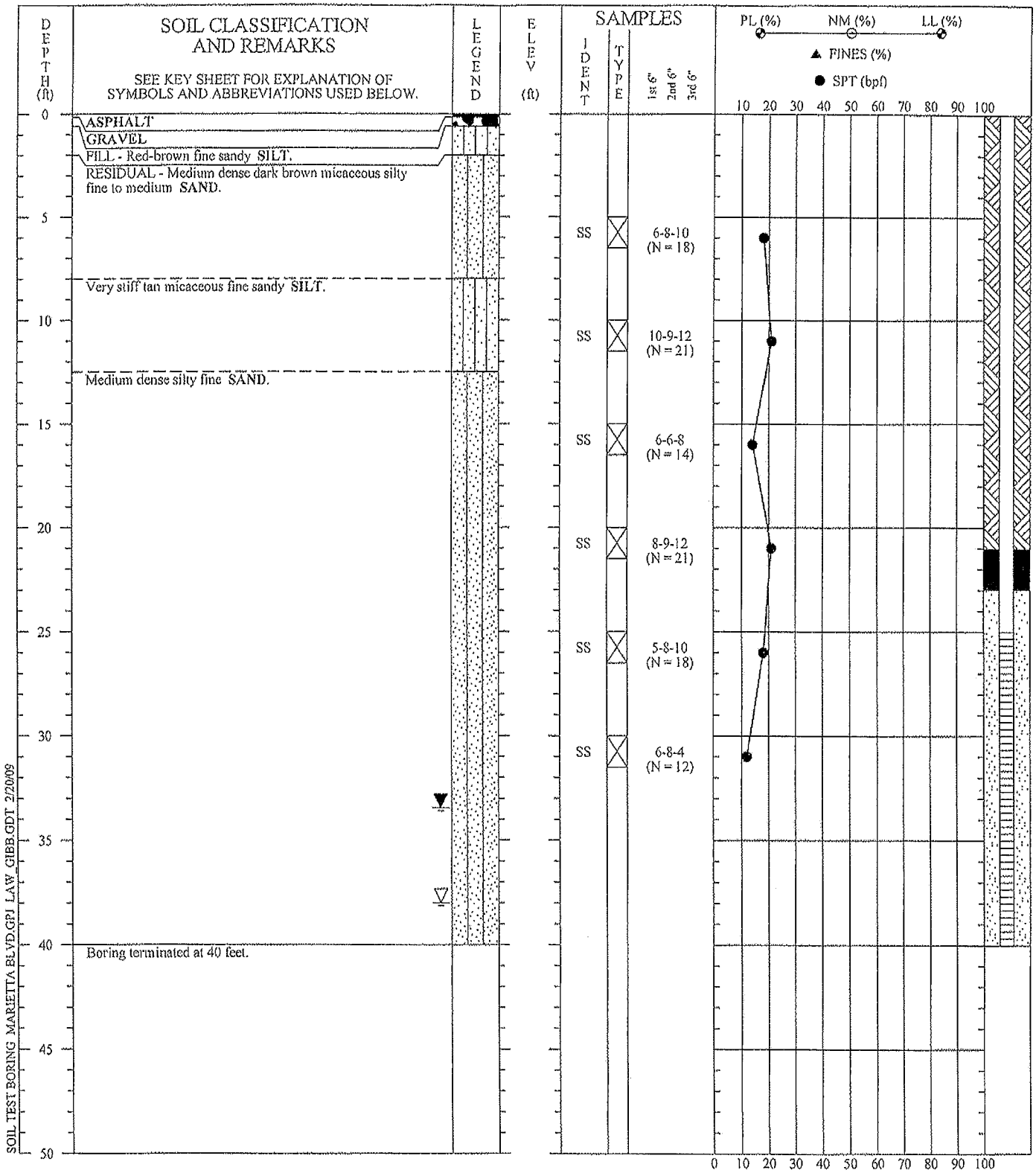
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	Acker
METHOD:	Hollow Stem Auger/Air Hammer
HOLE DIA.:	8.5 inches/3.5 inches
REMARKS:	Auger refusal at 32 feet. Air hammer terminated at 50 feet. Depth to groundwater at time of boring 49 feet. Stabilized depth to water on 9/12/07 37.68 feet.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	MW-11
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	September 10, 2007
PROJECT NO.:	6124-07-0004

MACTEC



SOIL TEST BORING MARIETTA BLVD.GPJ LAW_GIBB.GDT 2/20/09

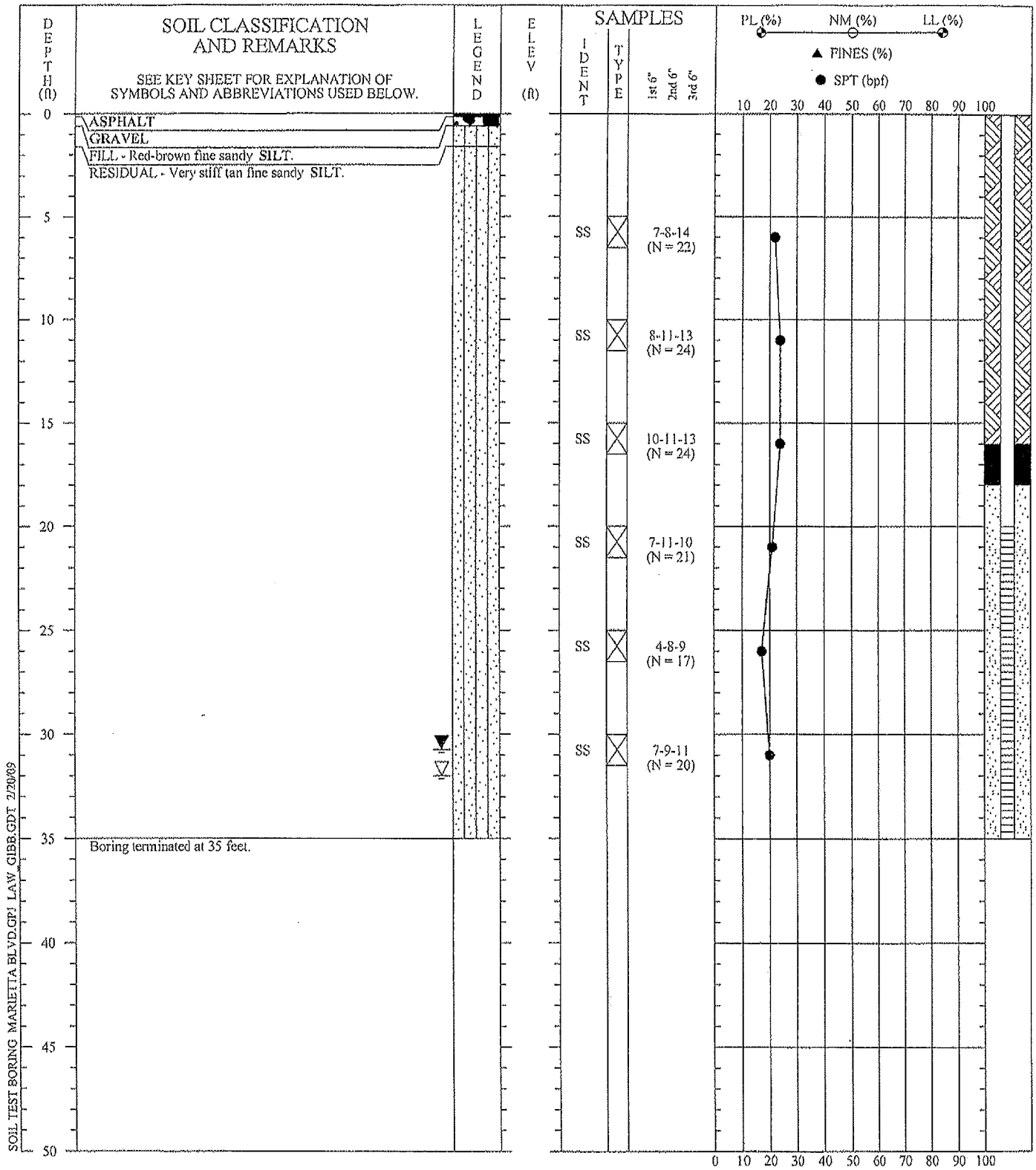
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	Acker
METHOD:	Hollow Stem Auger
HOLE DIA.:	8.5 inches
REMARKS:	Boring terminated at 40 feet. Depth to water at time of boring 38 feet. Stabilized depth to water on 9/11/07 33.48 feet.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	MW-12
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	September 10, 2007
PROJECT NO.:	6124-07-0004

MACTEC



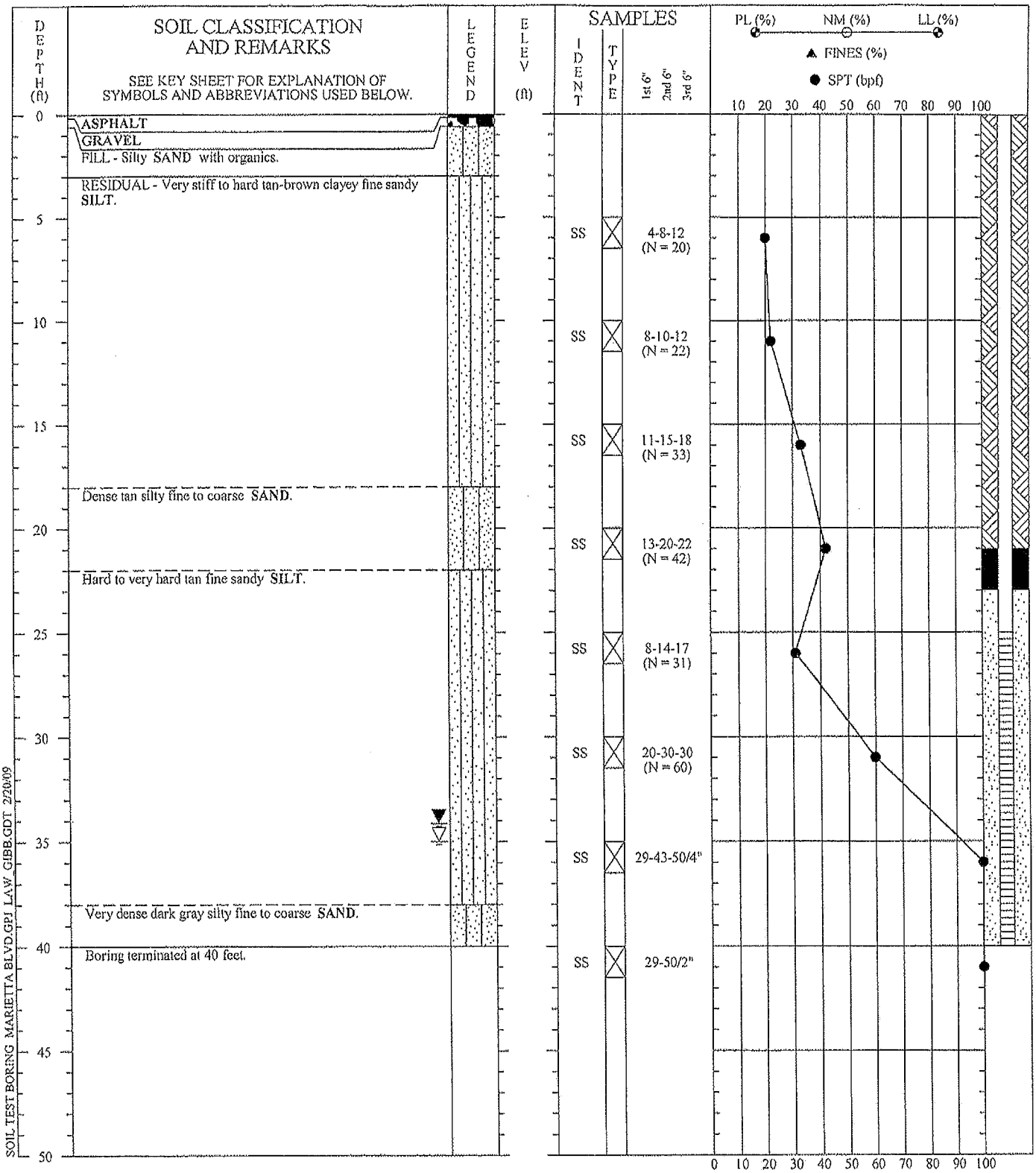
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	Acker
METHOD:	Hollow Stem Auger
HOLE DIA.:	8.5 inches
REMARKS:	Boring terminated at 35 feet. Depth to water at time of boring 32 feet. Stabilized depth to water on 9/13/07 30.74 feet.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	MW-13
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	September 12, 2007
PROJECT NO.:	6124-07-0004

MACTEC



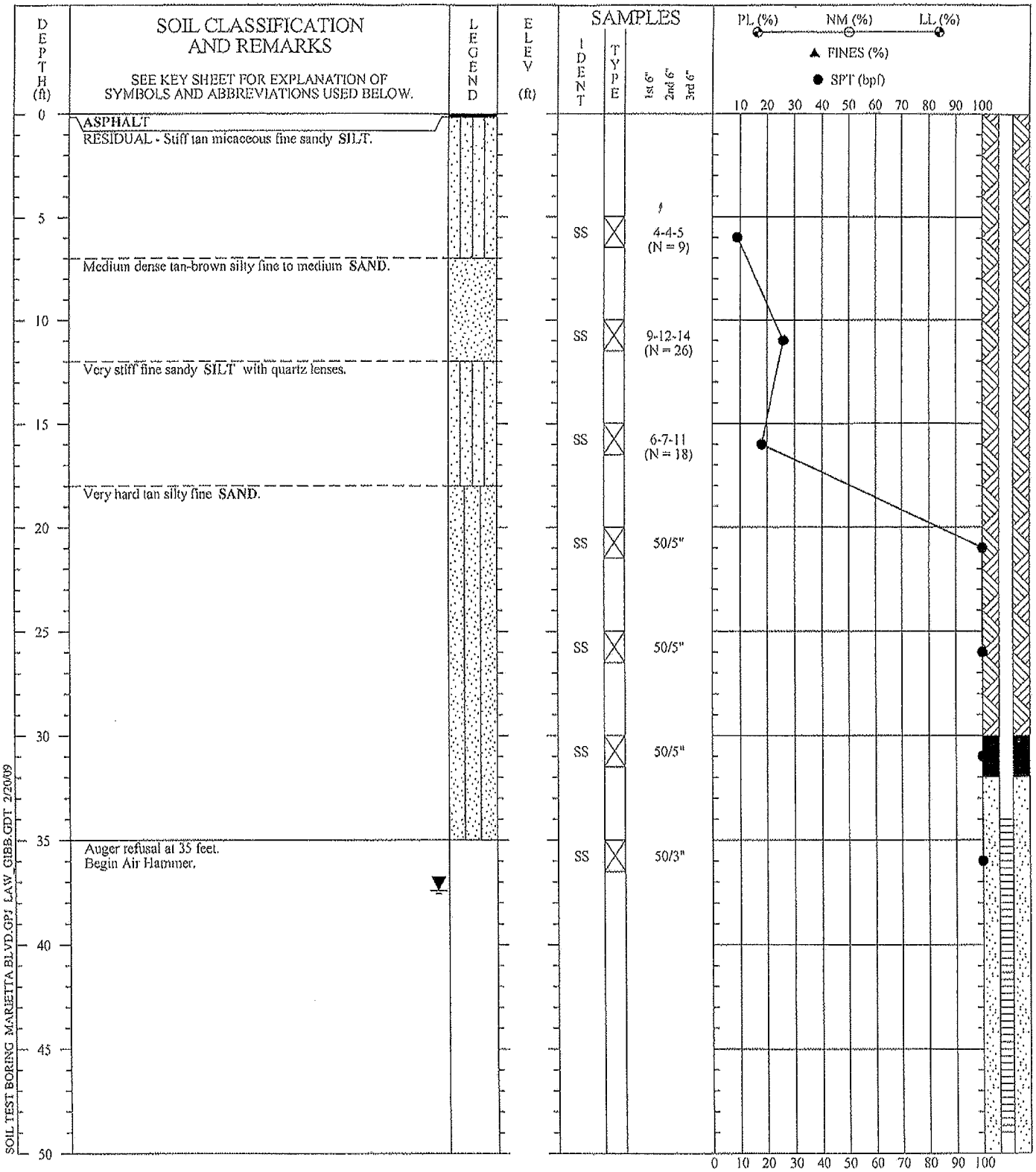
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	Acker
METHOD:	Hollow Stem Auger
HOLE DIA.:	8.5 inches
REMARKS:	Boring terminated at 40 feet. Depth to water at time of boring 35 feet. Stabilized depth to water on 9/13/07 34.14 feet.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	MW-14
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	September 12, 2007
PROJECT NO.:	6124-07-0004

MACTEC



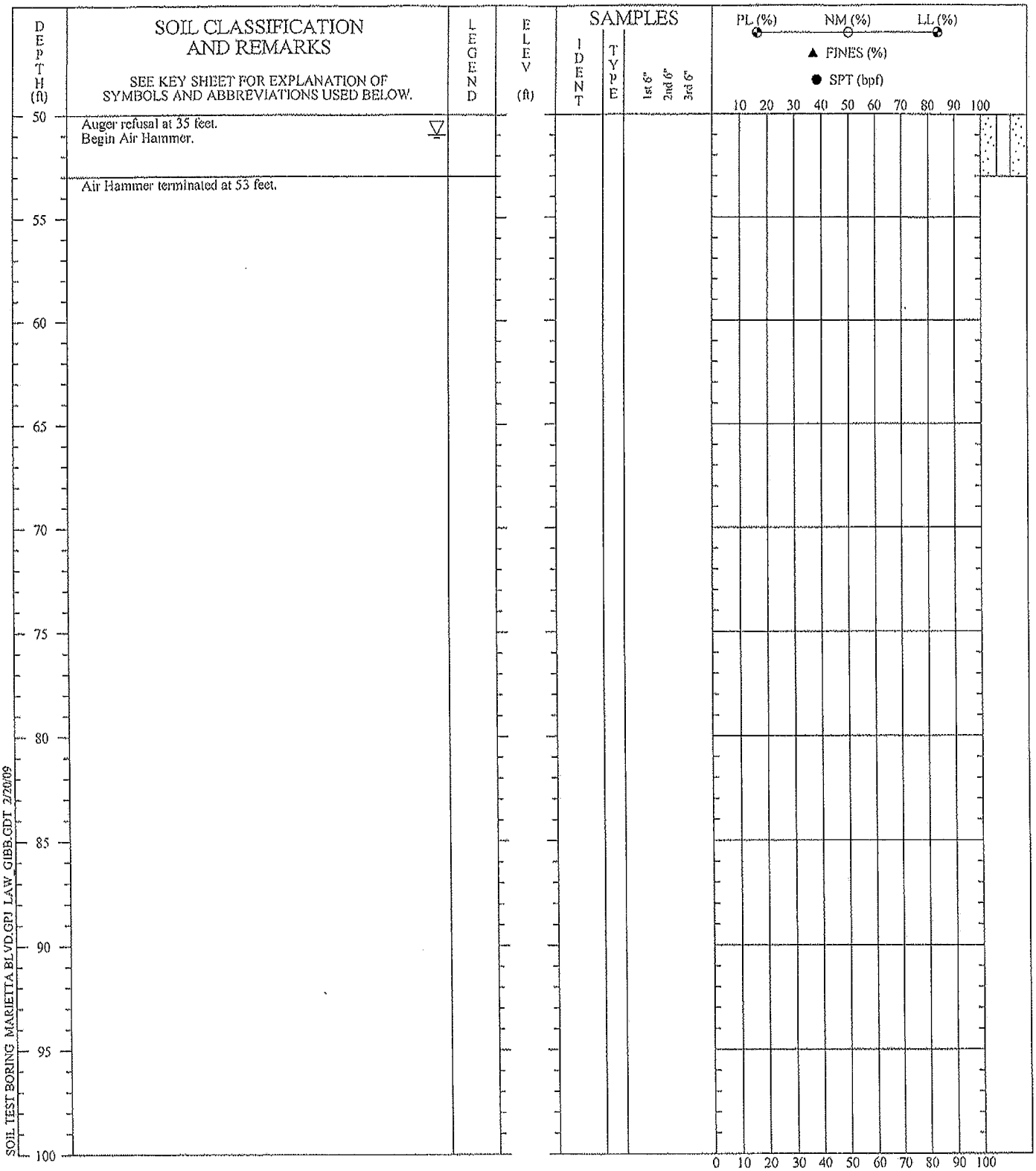
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	Acker
METHOD:	Hollow Stem Auger/Air Hammer
HOLE DIA.:	8.5 inches/3.5 inches
REMARKS:	Auger refusal at 35 feet. Air hammer terminated at 53 feet. Depth to groundwater at time of boring 51 feet. Stabilized depth to water on 9/13/07 37.42 feet.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	MW-15
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	September 12, 2007
PROJECT NO.:	6124-07-0004

MACTEC



SOIL TEST BORING MARIETTA BLVD.GPJ LAW_GIBB.GDT 2/26/09

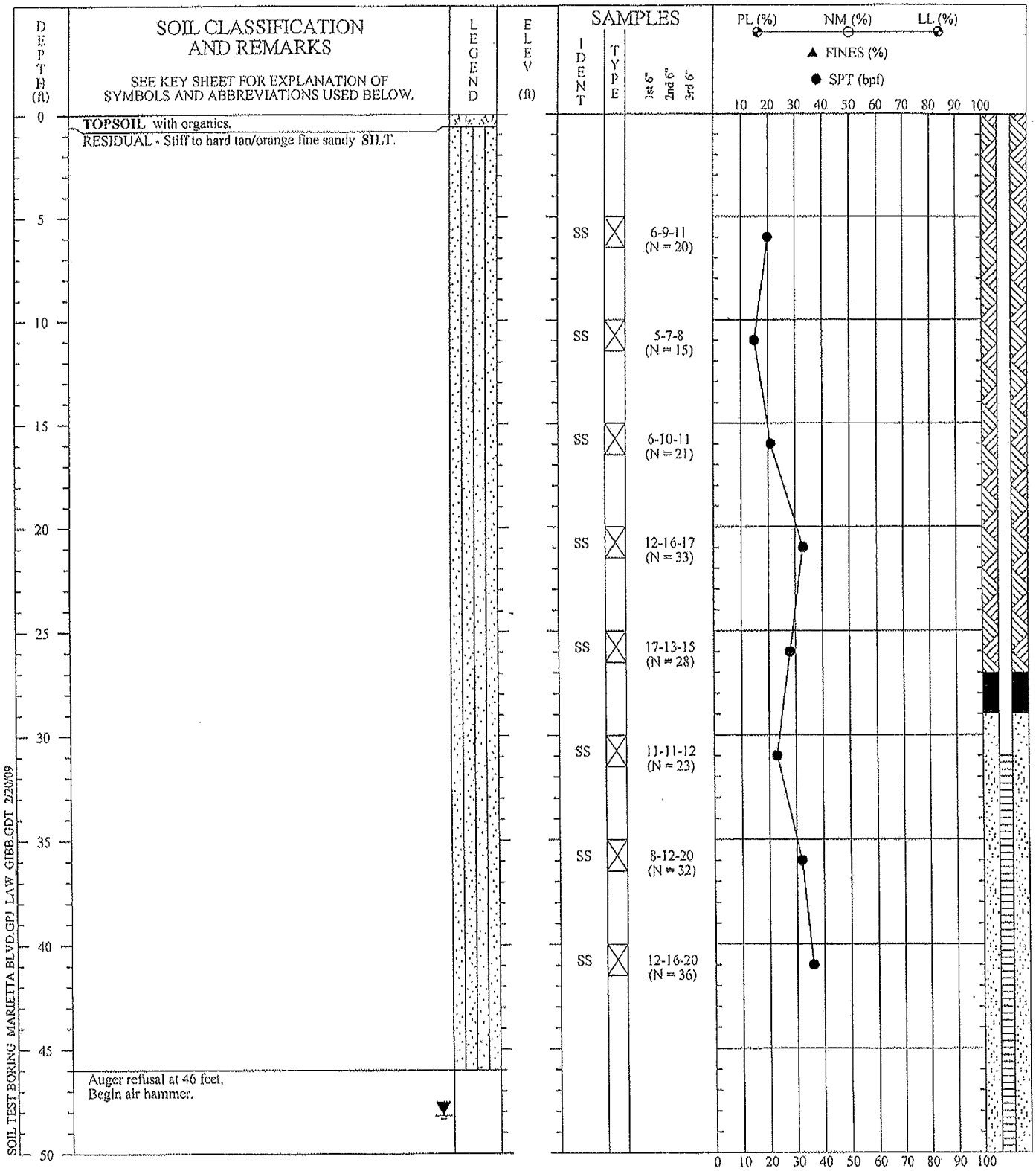
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	Acker
METHOD:	Hollow Stem Auger/Air Hammer
HOLE DIA.:	8.5 inches/3.5 inches
REMARKS:	Auger refusal at 35 feet. Air hammer terminated at 53 feet. Depth to groundwater at time of boring 51 feet. Stabilized depth to water on 9/13/07 37.42 feet.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	MW-15
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	September 12, 2007
PROJECT NO.:	6124-07-0004

MACTEC



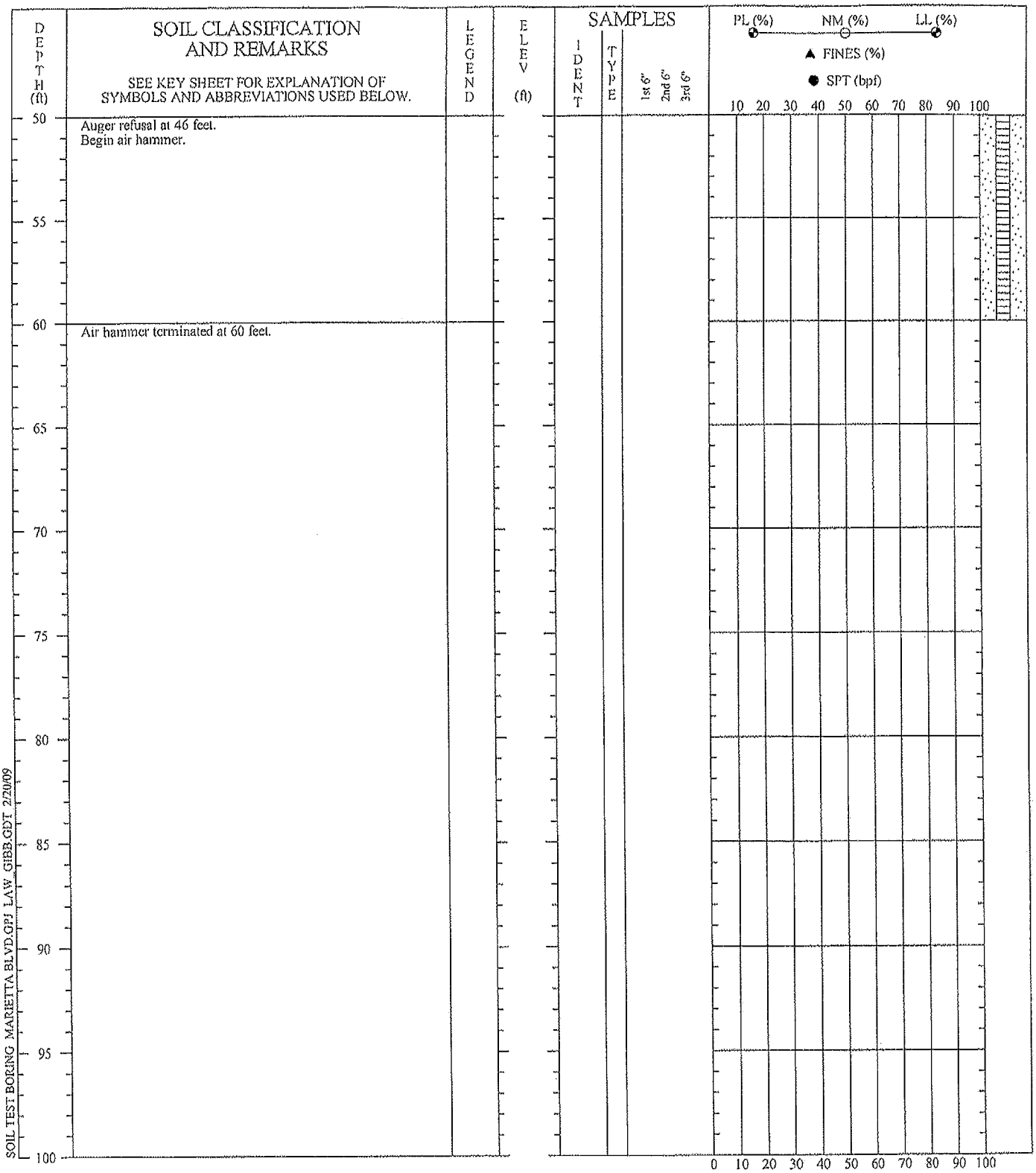
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	Acker
METHOD:	Hollow Stem Auger
HOLE DIA.:	8.5 inches
REMARKS:	Boring terminated at 60 feet. Stabilized depth to water on 9/14/07 48.20 feet.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	MW-16
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	September 13, 2007
PROJECT NO.:	6124-07-0004

MACTEC



SOIL TEST BORING MARIETTA BLVD.GPJ LAW_GIBB.GDT 2/20/09

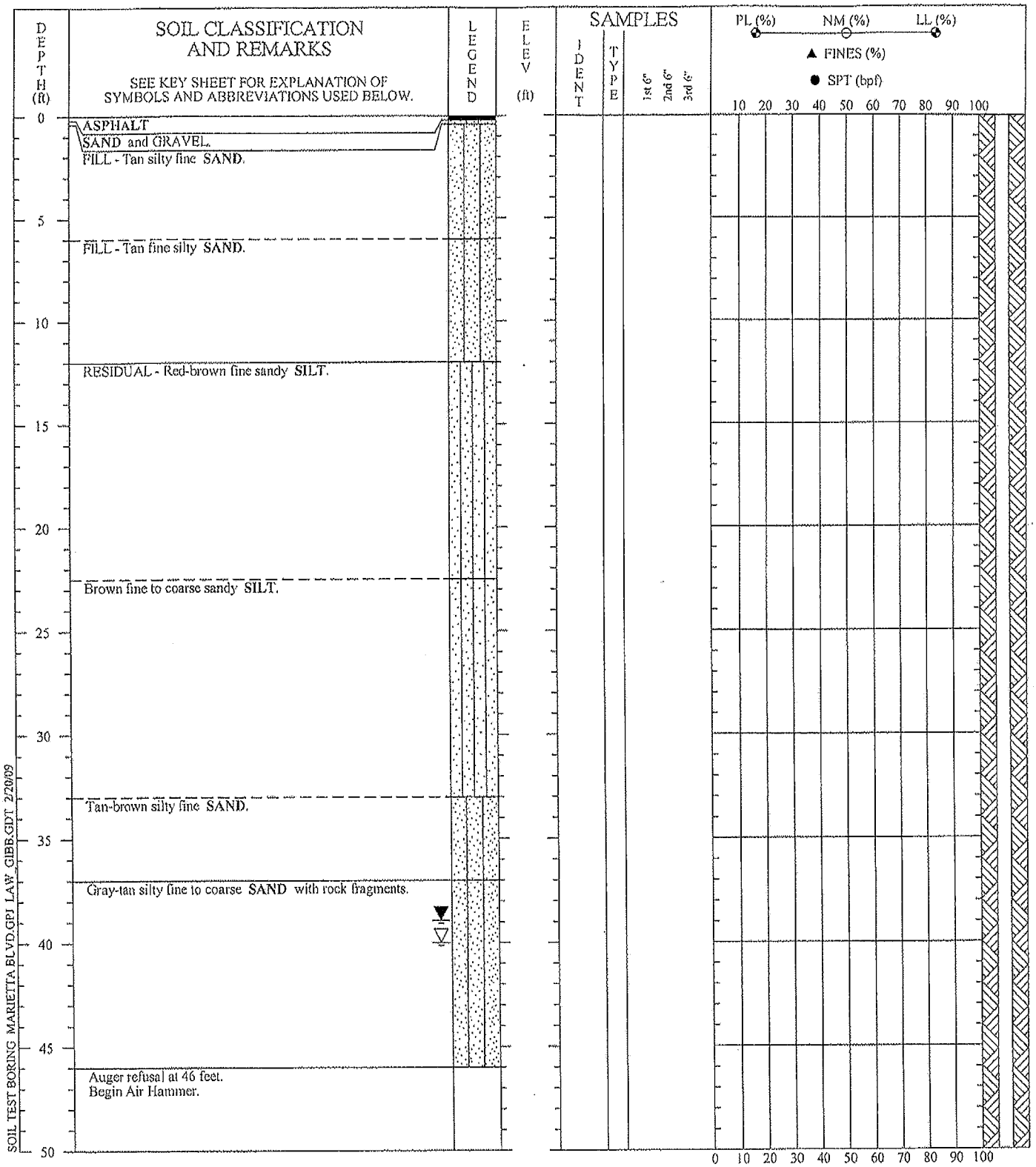
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	Acker
METHOD:	Hollow Stem Auger
HOLE DIA.:	8.5 inches
REMARKS:	Boring terminated at 60 feet. Stabilized depth to water on 9/14/07 48.20 feet.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	MW-16
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	September 13, 2007
PROJECT NO.:	6124-07-0004

MACTEC



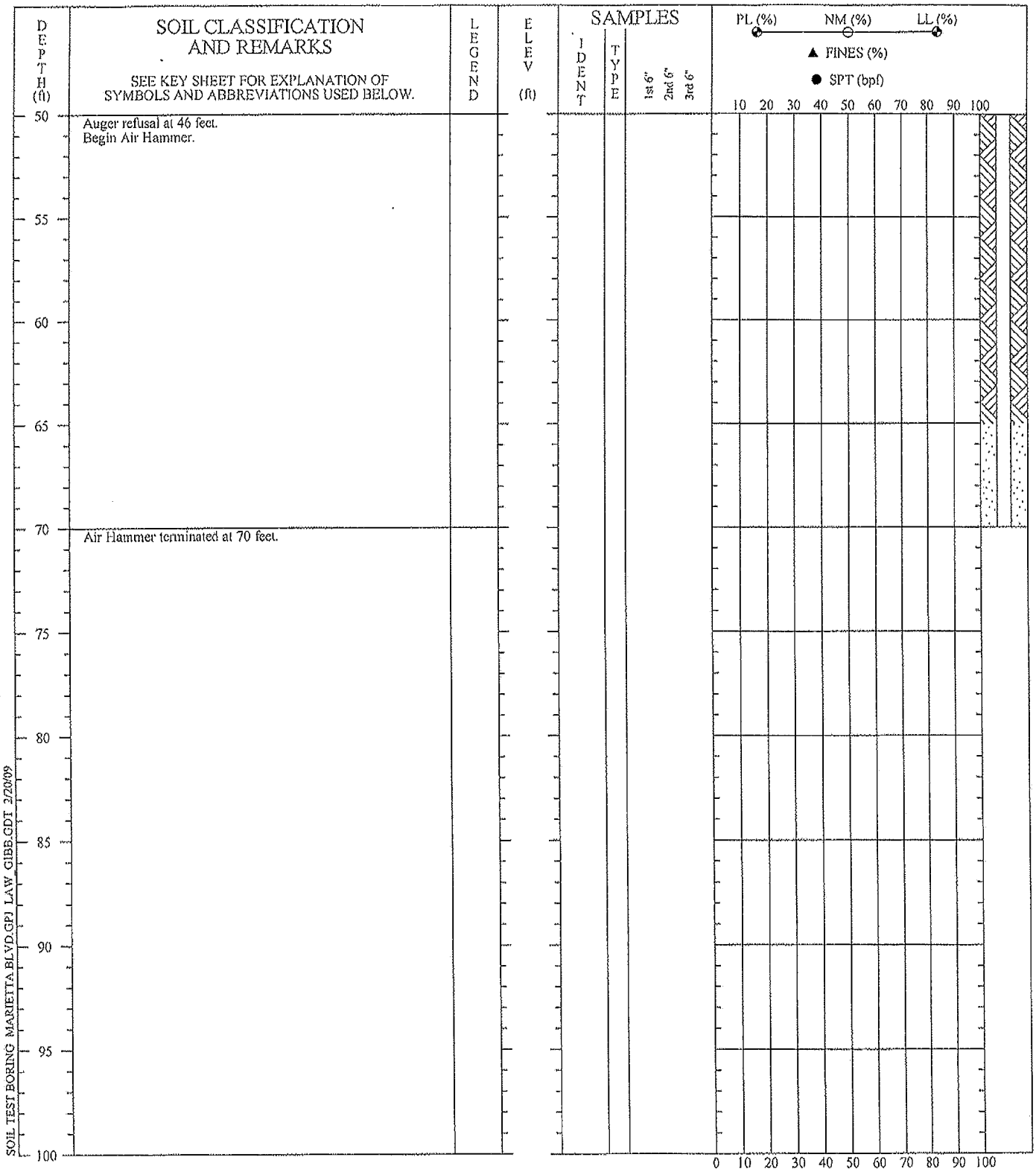
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	CME
METHOD:	Hollow Stem Auger/Air Hammer
HOLE DIA.:	8.5 inches/3.5 inches
REMARKS:	Auger refusal at 46 feet. Air hammer to 70 feet. Depth to water at time of boring 40 feet. Stabilized depth to water 38.93 feet.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	MW-17
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	October 25, 2007
PROJECT NO.:	6124-07-0004

MACTEC



SOIL TEST BORING MARIETTA BLVD.GPJ LAW_GIBB.GDT 2/20/09

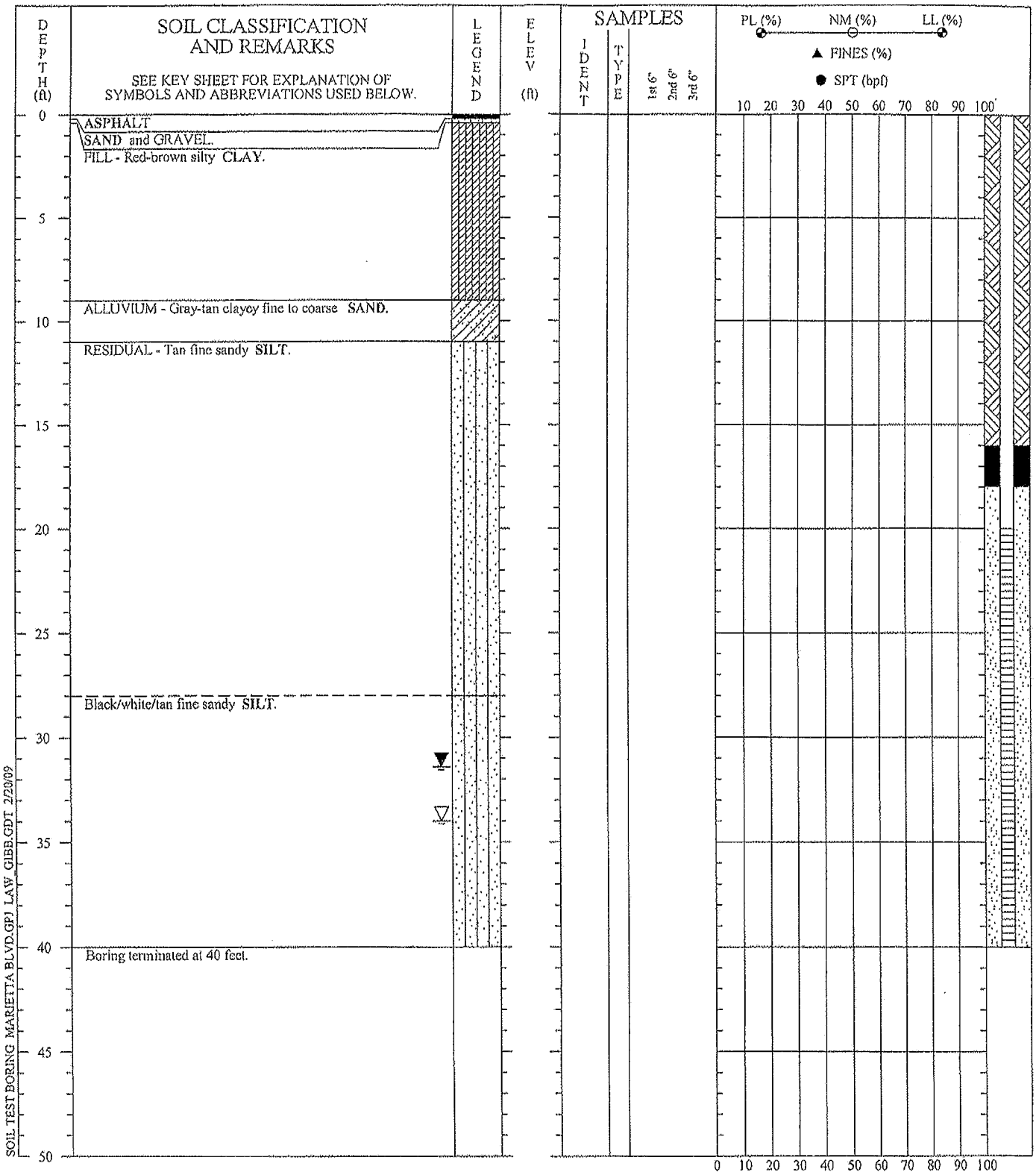
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	CME
METHOD:	Hollow Stem Auger/Air Hammer
HOLE DIA.:	8.5 inches/3.5 inches
REMARKS:	Auger refusal at 46 feet. Air hammer to 70 feet. Depth to water at time of boring 40 feet. Stabilized depth to water 38.93 feet.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	MW-17
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	October 25, 2007
PROJECT NO.:	6124-07-0004

MACTEC



SOIL TEST BORING MARIETTA BLVD.GPJ LAW_GIBB.GDT 2/20/09

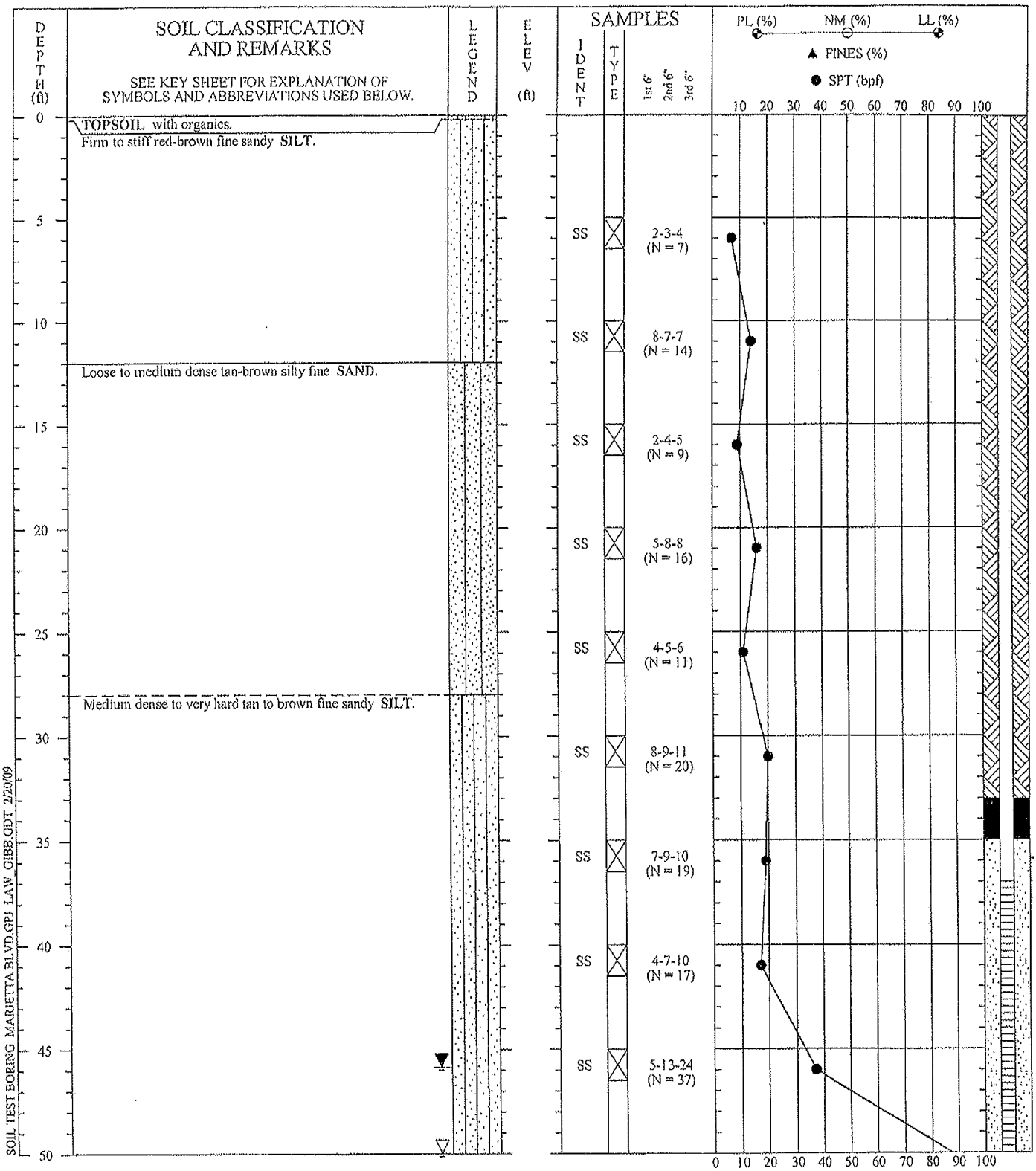
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	CME
METHOD:	Hollow Stem Auger
HOLE DIA.:	8.5 inches
REMARKS:	Boring terminated at 40 feet. Depth to water at time of boring 34 feet. Stabilized depth to water 31.41 feet.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	MW-18
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	October 26, 2007
PROJECT NO.:	6124-07-0004

MACTEC



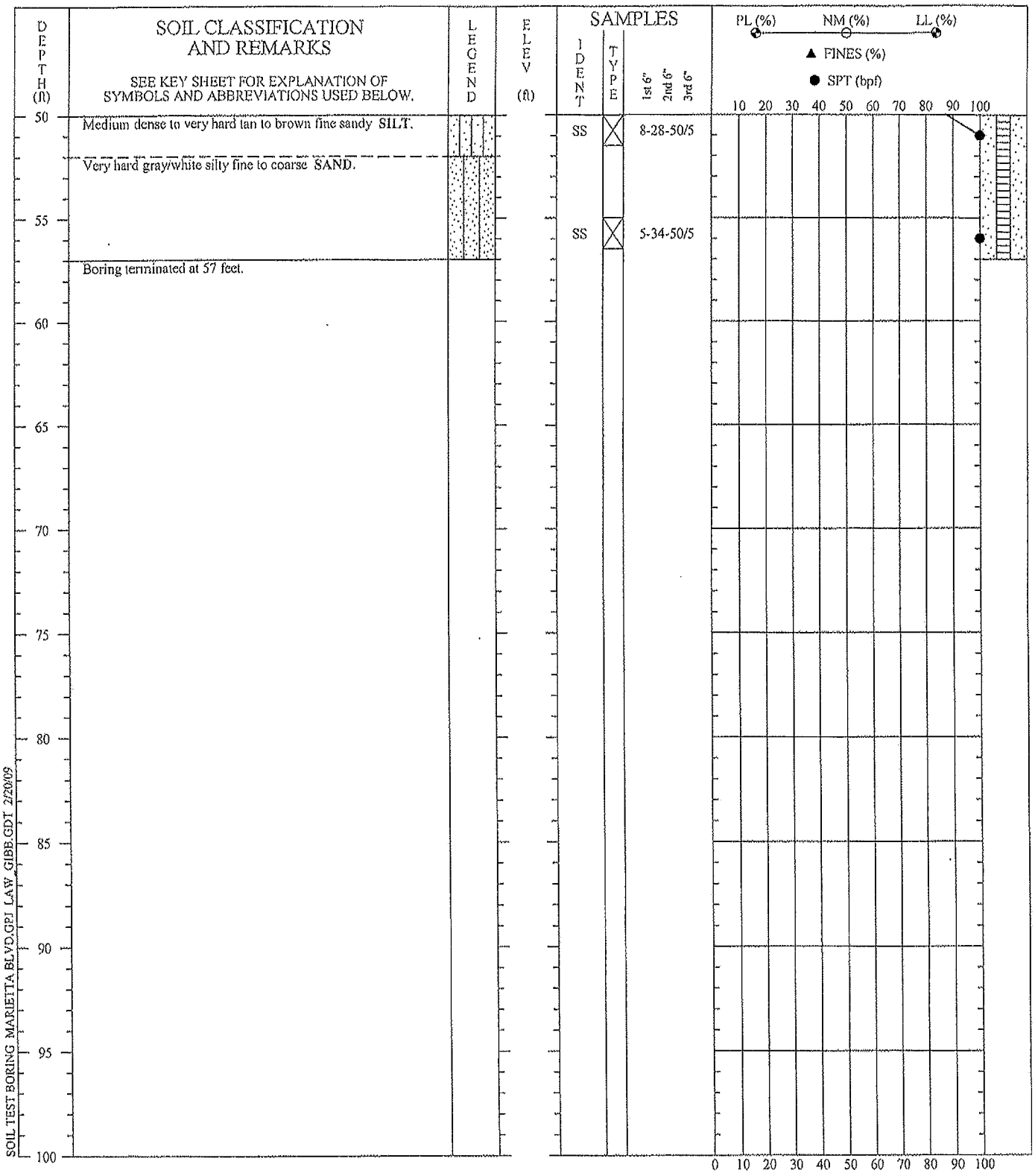
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	CME
METHOD:	Hollow Stem Auger
HOLE DIA.:	8.5 inches
REMARKS:	Boring terminated at 57 feet. Depth to water at time of boring 50 feet. Stabilized depth to water 45.87 feet

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	MW-19
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	September 29, 2007
PROJECT NO.:	6124-07-0004

MACTEC



SOIL TEST BORING MARIETTA BLVD.GPJ LAW_GIBB.GDT 2/20/09

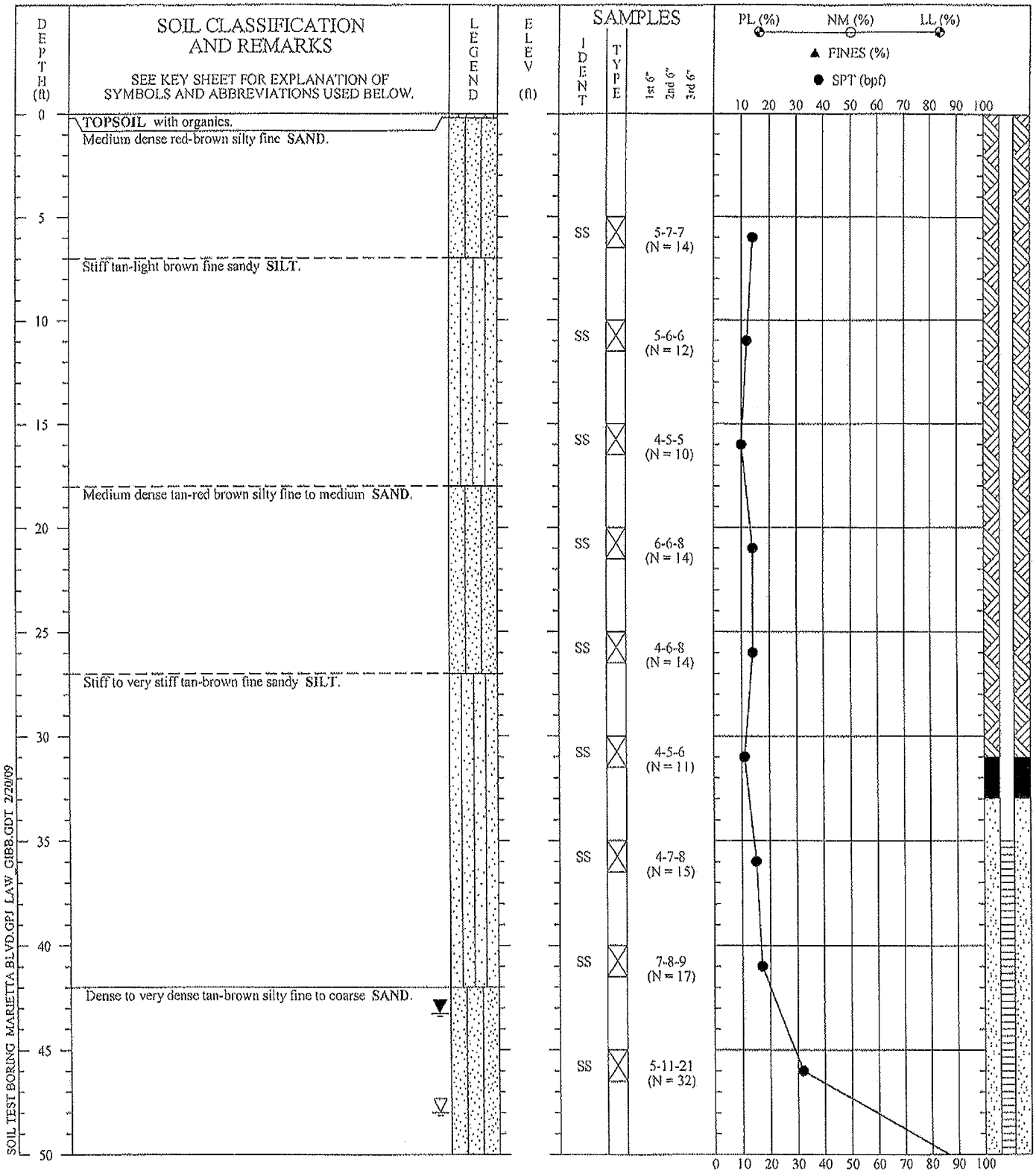
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	CME
METHOD:	Hollow Stem Auger
HOLE DIA.:	8.5 inches
REMARKS:	Boring terminated at 57 feet. Depth to water at time of boring 50 feet. Stabilized depth to water 45.87 feet

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	MW-19
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	September 29, 2007
PROJECT NO.:	6124-07-0004

MACTEC



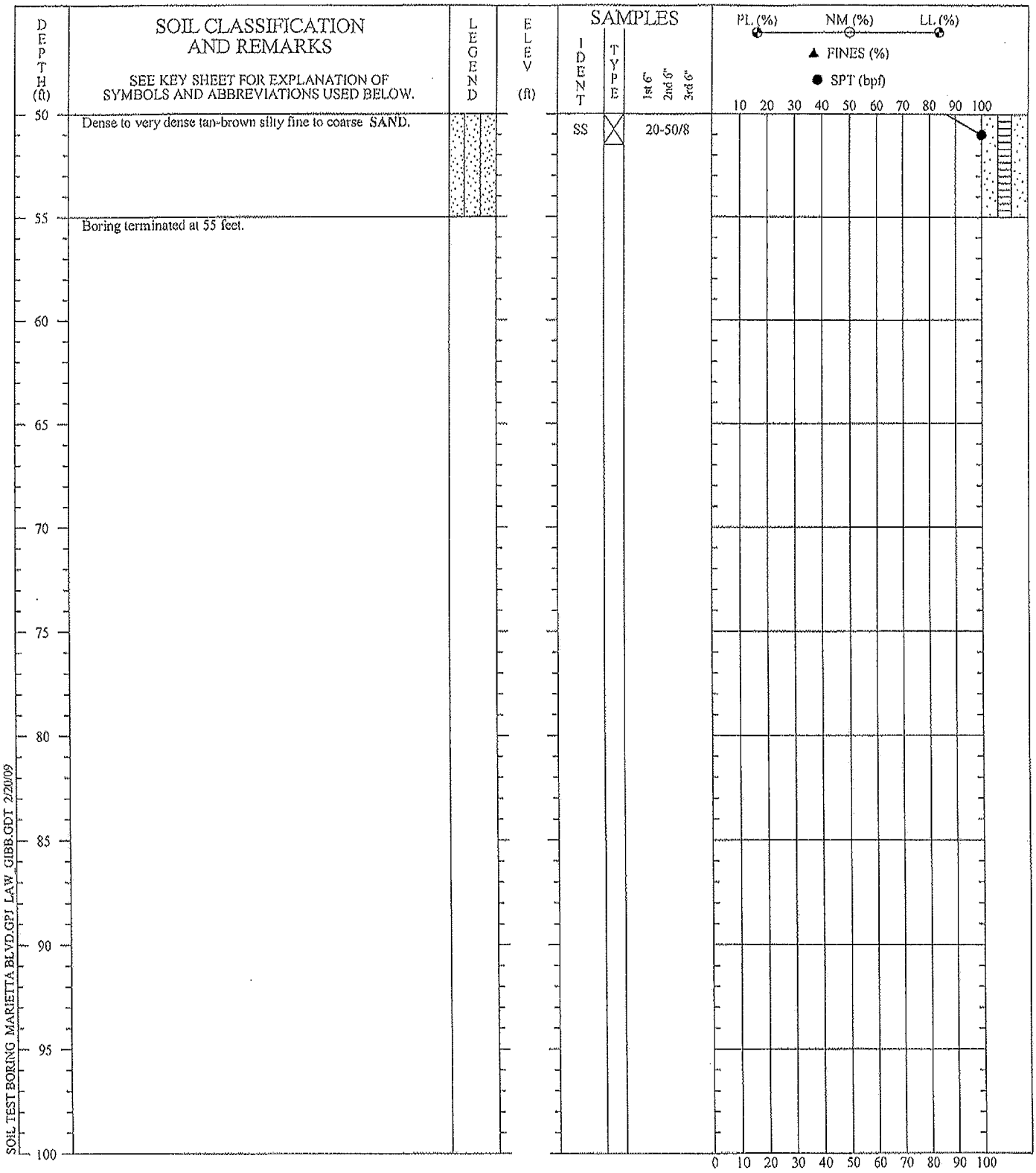
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	CME
METHOD:	Hollow Stem Auger
HOLE DIA.:	8.5 inches
REMARKS:	Boring terminated at 55 feet. Depth to water at time of boring 48 feet. Stabilized depth to water 43.27 feet.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	MW-20
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	October 30, 2007
PROJECT NO.:	6124-07-0004

MACTEC



SOIL TEST BORING MARIETTA BLVD.GPJ LAW_GIBB.GDT 2/20/09

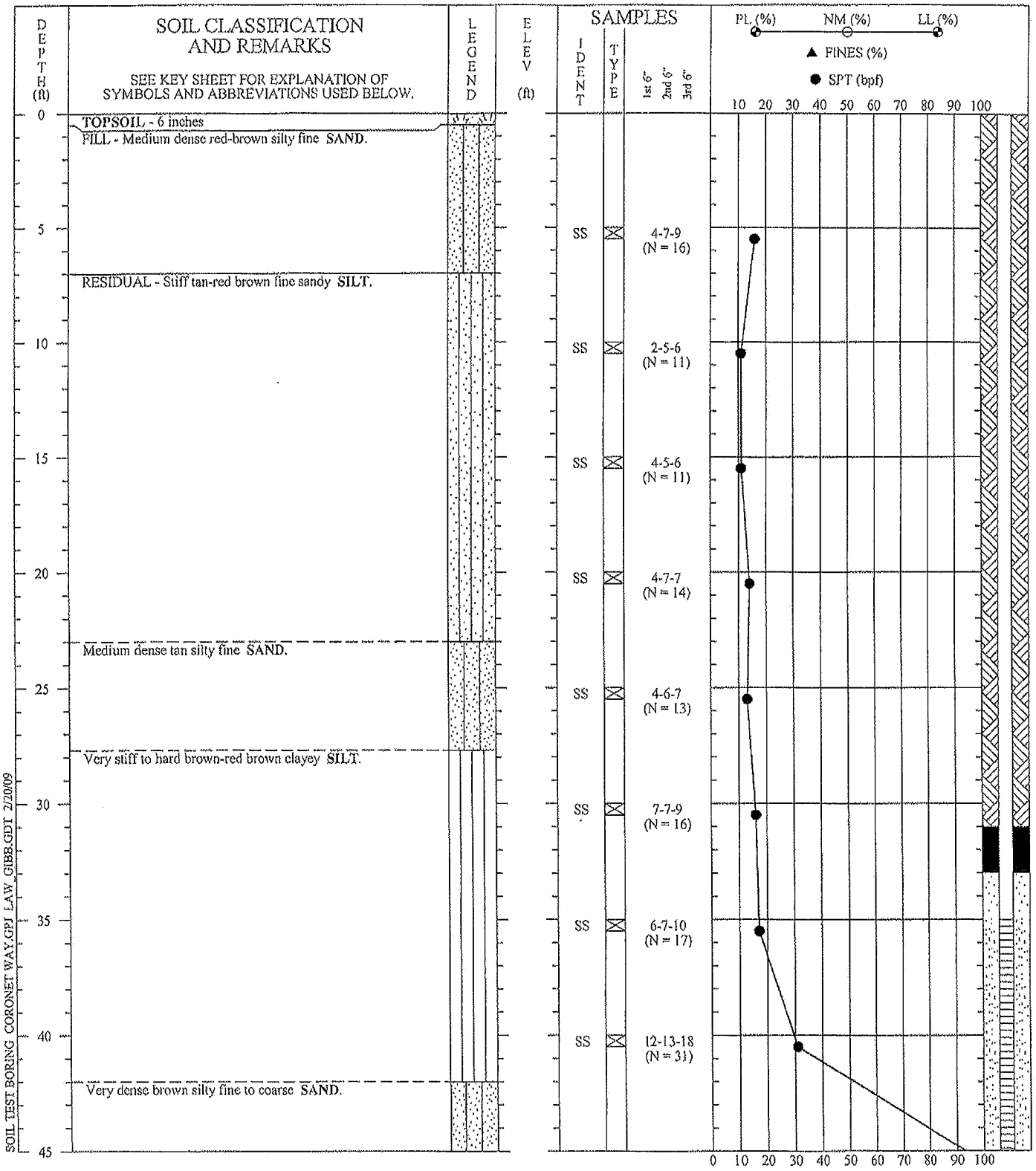
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	CME
METHOD:	Hollow Stem Auger
HOLE DIA.:	8.5 inches
REMARKS:	Boring terminated at 55 feet. Depth to water at time of boring 48 feet. Stabilized depth to water 43.27 feet.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	MW-20
PROJECT:	Marietta Blvd
LOCATION:	Atlanta, GA
DRILLED:	October 30, 2007
PROJECT NO.:	6124-07-0004

MACTEC



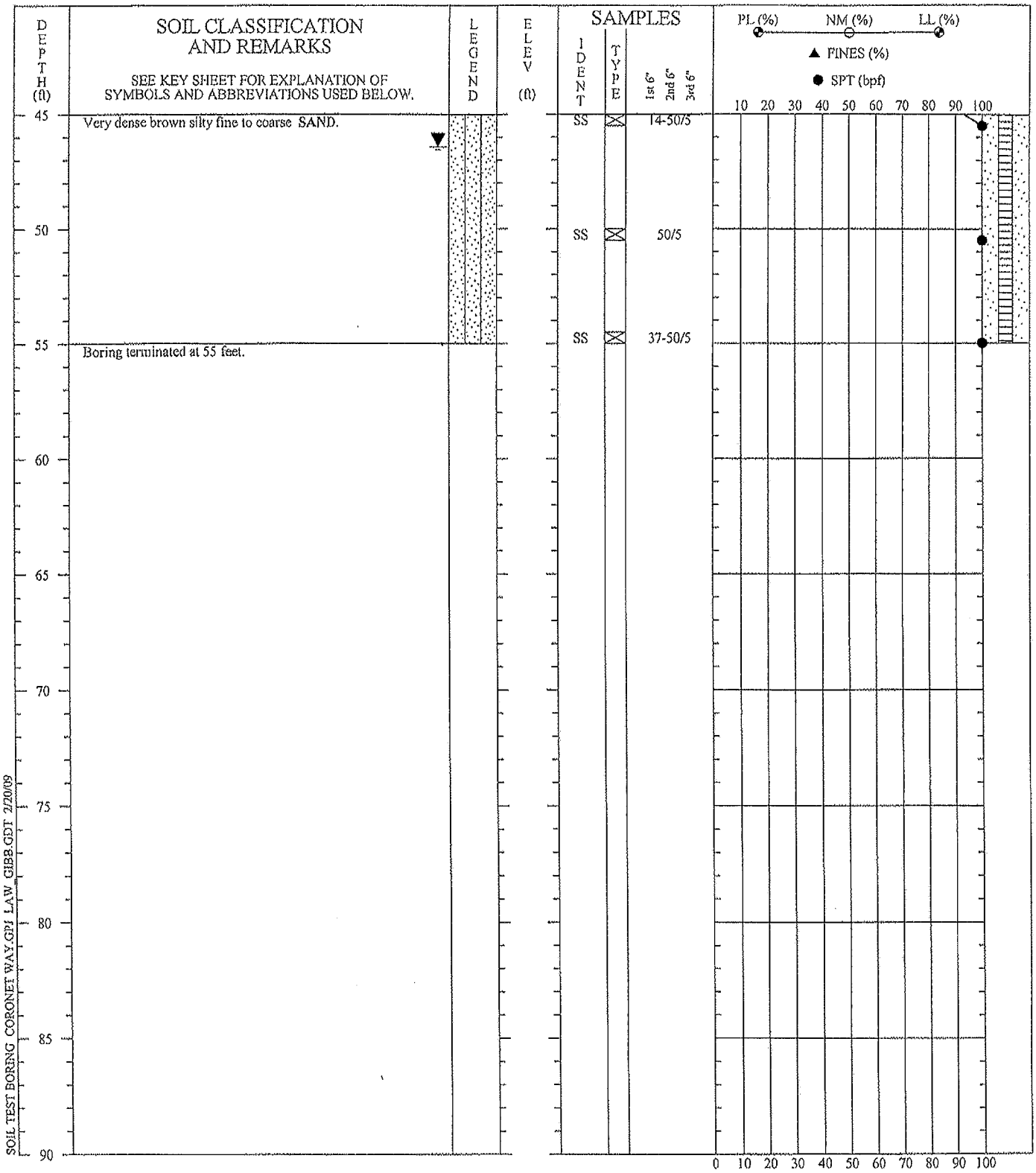
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	
METHOD:	Hollow Stem Auger
HOLE DIA.:	8.5 inches
REMARKS:	Boring terminated at 55 feet. Stabilized depth to groundwater 46.44 ft on 12/21/07.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.: MW-21
PROJECT: Coronet Way
LOCATION: Atlanta, GA
DRILLED:
PROJECT NO.: 6124-07-0004

MACTEC



SOIL TEST BORING CORONET WAY.GPJ LAW_GIBB.GDT 2/20/09

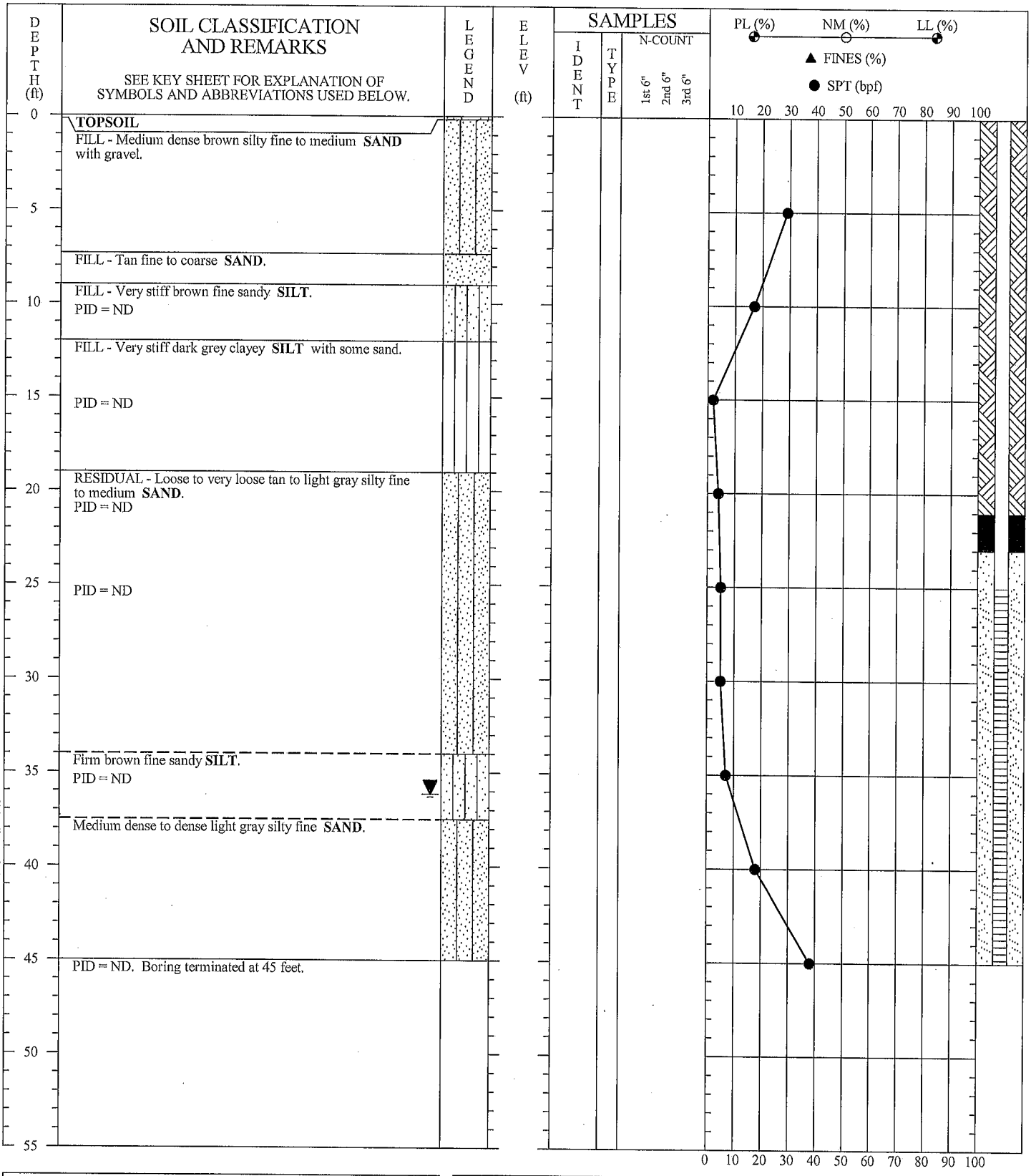
DRILLER:	Piedmont Environmental Drilling
EQUIPMENT:	
METHOD:	Hollow Stem Auger
HOLE DIA.:	8.5 inches
REMARKS:	Boring terminated at 55 feet. Stabilized depth to groundwater 46.44 ft on 12/21/07.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.:	MW-21
PROJECT:	Coronet Way
LOCATION:	Atlanta, GA
DRILLED:	
PROJECT NO.:	6124-07-0004

MACTEC



SOIL TEST BORING CORONET WAY.GPJ AMEC.GDT 8/24/15

DRILLER:	GeoLab
EQUIPMENT:	CME
METHOD:	Hollow Stem Auger
HOLE DIA.:	7.5 inches
REMARKS:	Boring terminated at 45 feet. Groundwater stabilized at 36.14 feet on 8/18/15.

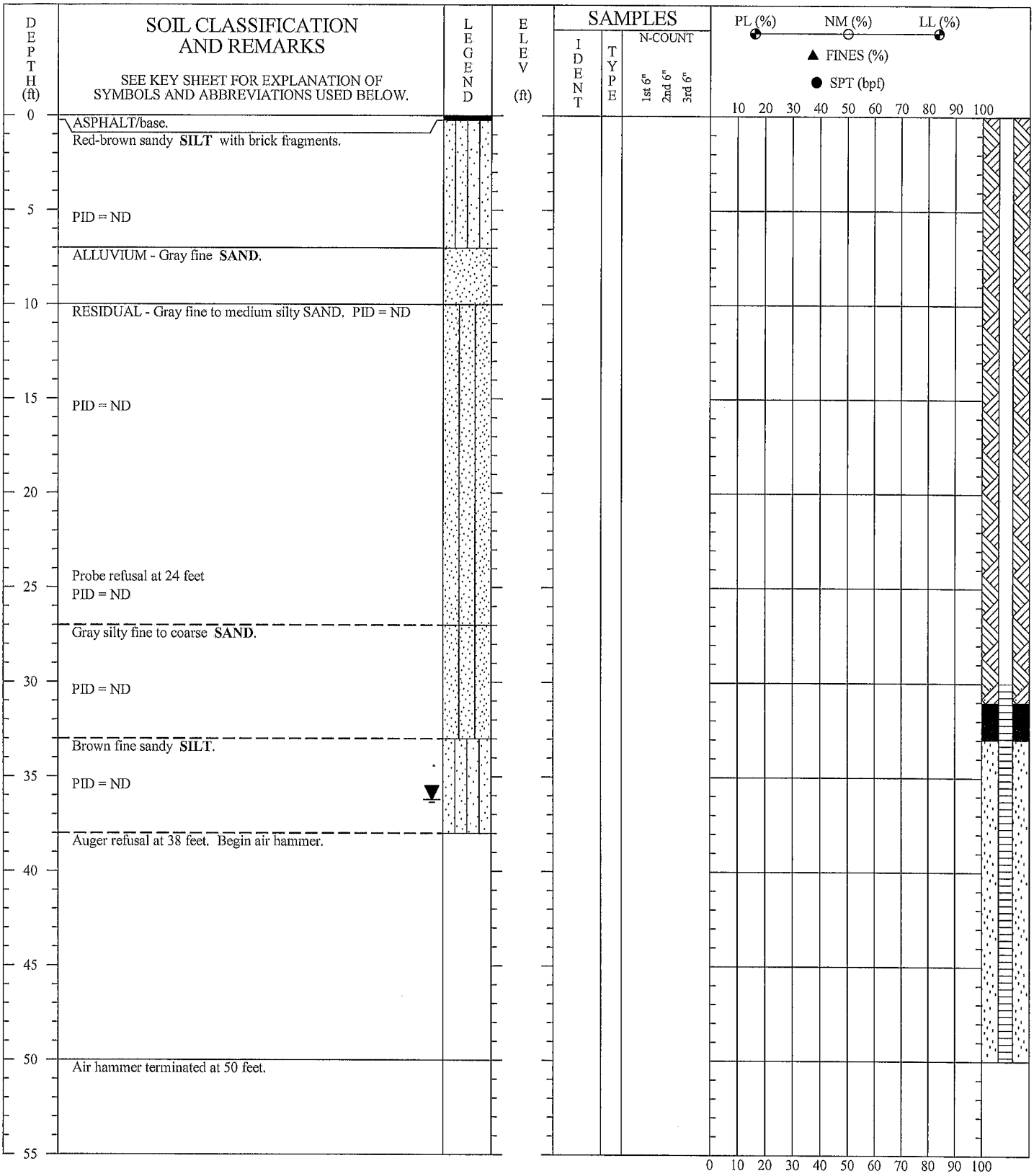
Prepared by: S. Davenport Reviewed by: C. Ferry

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.: MW-22
PROJECT: Coronet Way
LOCATION: Atlanta, Georgia
DRILLED: August 14, 2015
PROJECT NO.: 6121-15-0064

amec foster wheeler



SOIL TEST BORING CORONET WAY.GPJ AMEC.GDT 8/24/15

DRILLER:	GeoLab
EQUIPMENT:	Geoprobe
METHOD:	Hollow Stem Auger/Air Hammer
HOLE DIA.:	7.5 inches/4 inches
REMARKS:	Auger refusal at 38 feet. Air hammer terminated at 50 feet. Groundwater stablized at 36.21 feet on 8/18/15.

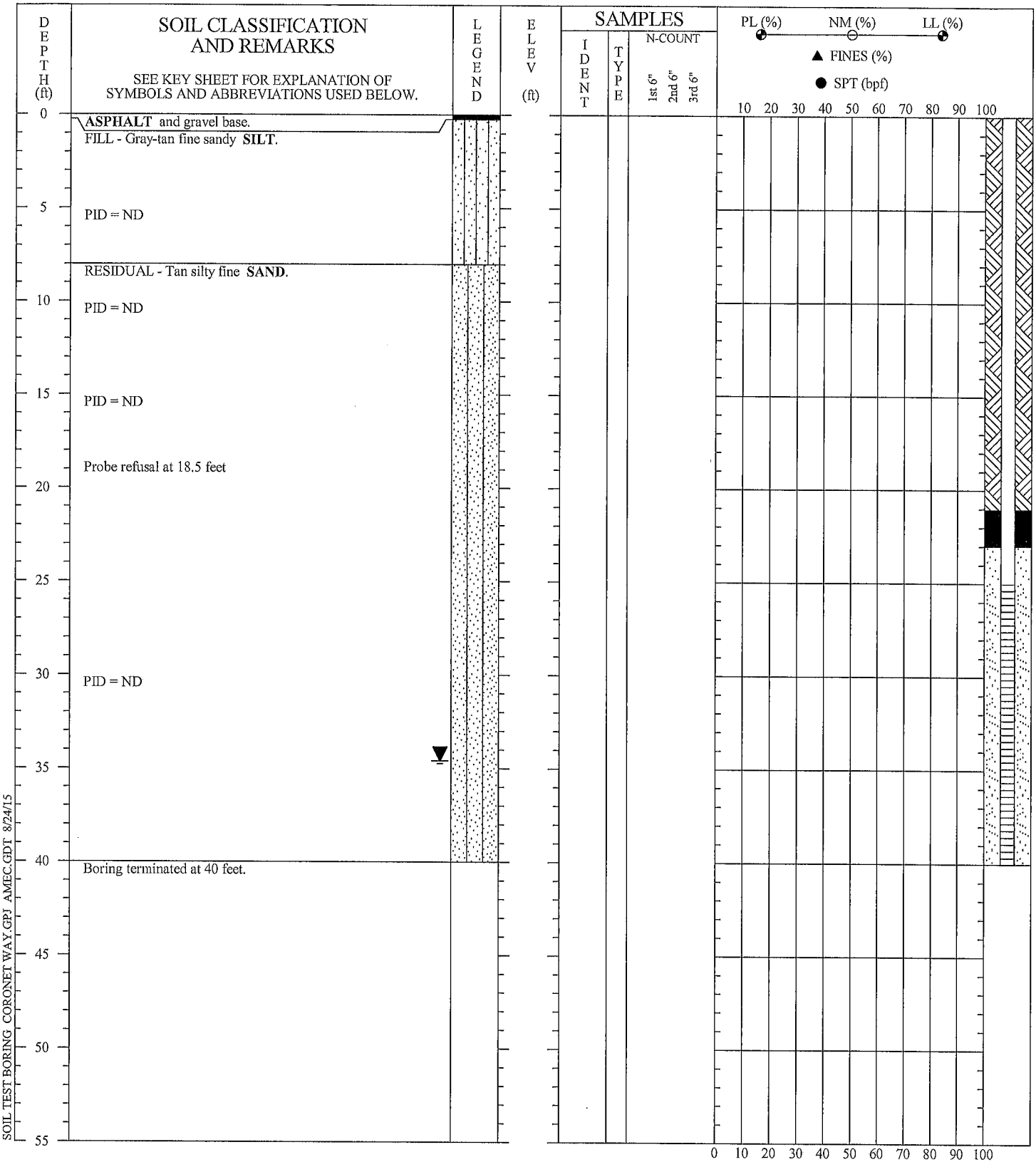
Prepared by: S. Davenport Reviewed by: C. Ferry

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.: MW-23
PROJECT: Coronet Way
LOCATION: Atlanta, Georgia
DRILLED: August 13, 2015
PROJECT NO.: 6121-15-0064

amec foster wheeler



SOIL TEST BORING CORONET WAY.GPJ AMEC.GDT 8/24/15

DRILLER:	GeoLab
EQUIPMENT:	Geoprobe
METHOD:	Direct Push/Hollow Stem Auger
HOLE DIA.:	7.5 inches
REMARKS:	Boring terminated at 40 feet. Groundwater stabilized at 34.59 feet on 8/18/15.

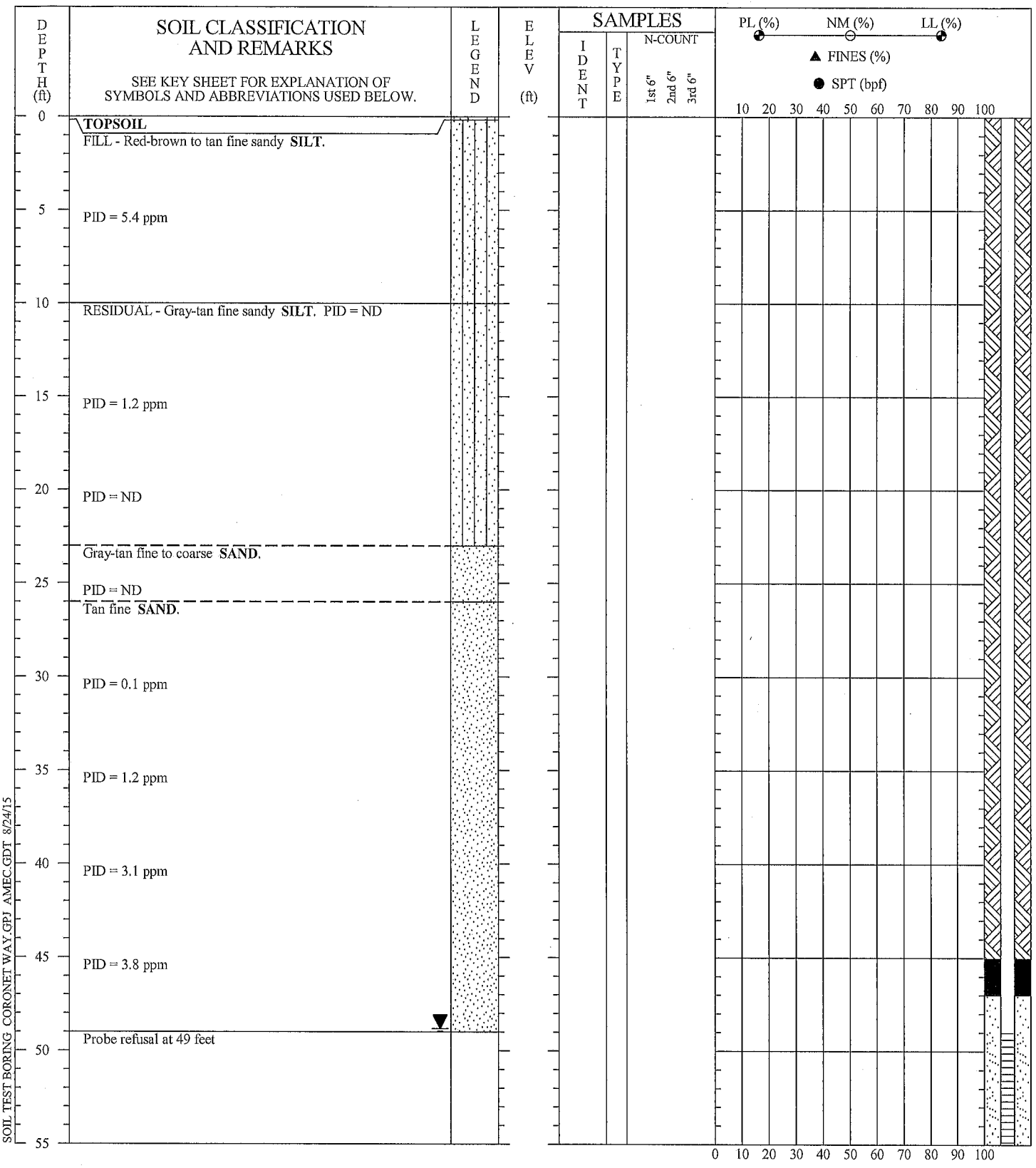
Prepared by: S. Davenport Reviewed by: C. Ferry

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.: MW-24
PROJECT: Coronet Way
LOCATION: Atlanta, Georgia
DRILLED: August 13, 2015
PROJECT NO.: 6121-15-0064

amec foster wheeler



SOIL TEST BORING CORONET WAY.GPJ AMEC.GDT 8/24/15

DRILLER:	GeoLab
EQUIPMENT:	Geoprobe
METHOD:	Direct Push/Hollow Stem Auger
HOLE DIA.:	7.5 inches
REMARKS:	Auger refusal at 69 feet. Groundwater stabilized at 48.82 feet on 8/18/15.

Prepared by: S. Davenport Reviewed by: C. Ferry

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.: MW-25
PROJECT: Coronet Way
LOCATION: Atlanta, Georgia
DRILLED: August 12, 2015
PROJECT NO.: 6121-15-0064

amec foster wheeler

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES IDENT	SAMPLES TYPE	SAMPLES N-COUNT 1st 6" 2nd 6" 3rd 6"	PL (%) NM (%) LL (%) ▲ FINES (%) ● SPT (bpf) 10 20 30 40 50 60 70 80 90 100
55	Probe refusal at 49 feet						
60							
65							
70	Auger refusal at 69 feet.						
75							
80							
85							
90							
95							
100							
105							
110							0 10 20 30 40 50 60 70 80 90 100

SOIL TEST BORING CORONET WAY.GPJ AMEC.GDT 8/24/15

DRILLER:	GeoLab
EQUIPMENT:	Geoprobe
METHOD:	Direct Push/Hollow Stem Auger
HOLE DIA.:	7.5 inches
REMARKS:	Auger refusal at 69 feet. Groundwater stabilized at 48.82 feet on 8/18/15.

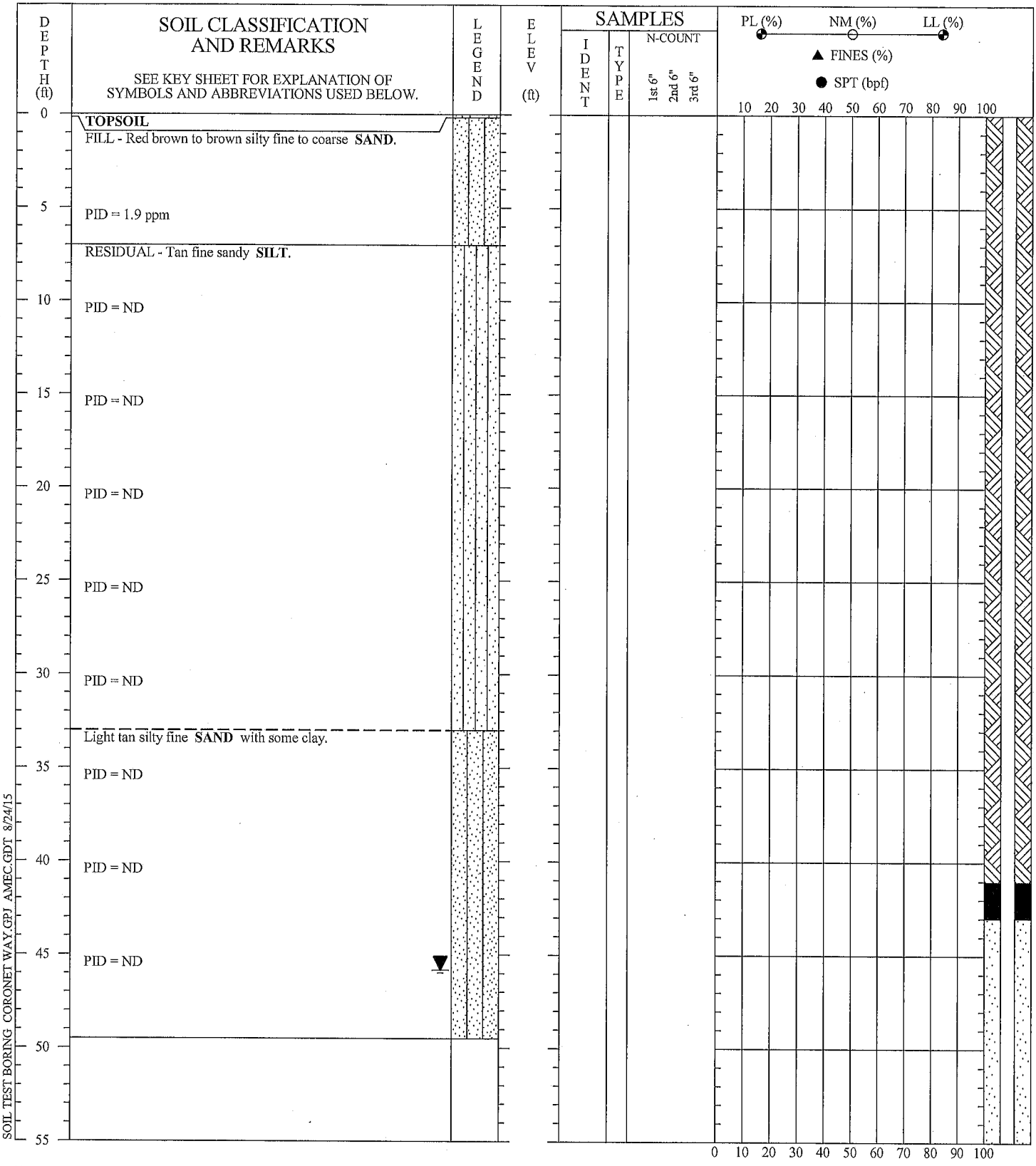
Prepared by: S. Davenport Reviewed by: C. Ferry

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.: MW-25
PROJECT: Coronet Way
LOCATION: Atlanta, Georgia
DRILLED: August 12, 2015
PROJECT NO.: 6121-15-0064

amec foster wheeler



SOIL TEST BORING CORONET WAY.GPJ AMEC.GDT 8/24/15

DRILLER:	GeoLab
EQUIPMENT:	Geoprobe
METHOD:	Direct Push/Hollow Stem Auger
HOLE DIA.:	7.5 inches
REMARKS:	Boring terminated at 60 feet. Groundwater stabilized at 45.82 feet.

Prepared by: S. Davenport Reviewed by: C. Ferry

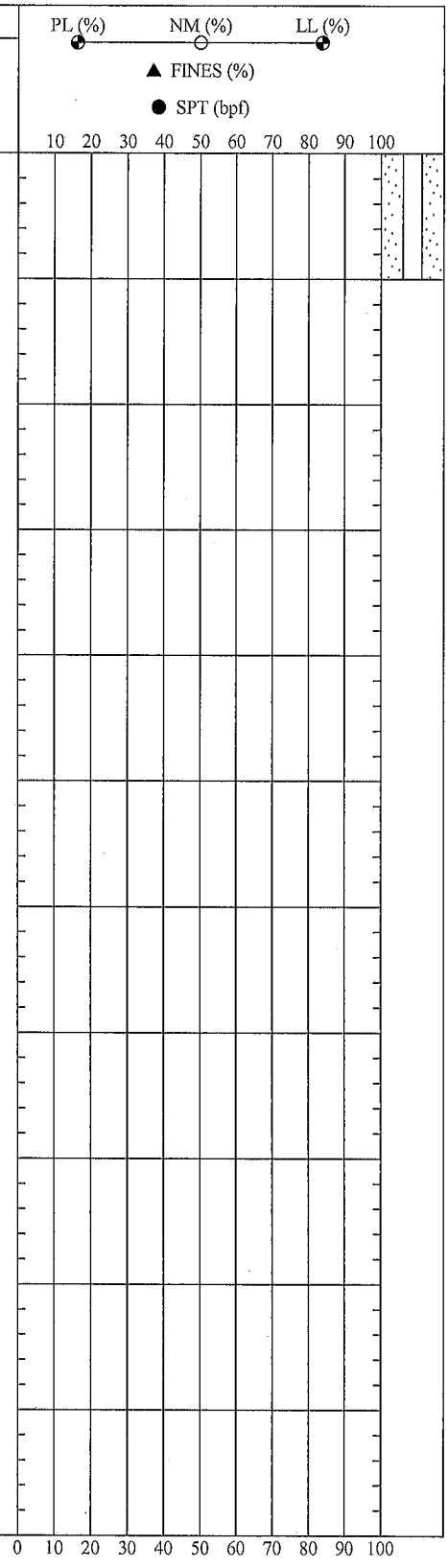
THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.: MW-26
PROJECT: Coronet Way
LOCATION: Atlanta, Georgia
DRILLED: August 12, 2015
PROJECT NO.: 6121-15-0064

amec foster wheeler

DEPTH (ft)	SOIL CLASSIFICATION AND REMARKS SEE KEY SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS USED BELOW.	LEGEND	ELEV (ft)	SAMPLES IDENT	SAMPLES TYPE	SAMPLES N-COUNT 1st 6" 2nd 6" 3rd 6"	PL (%) NM (%) LL (%) ▲ FINES (%) ● SPT (bpf)
55							
60	Boring terminated at 60 feet.						
65							
70							
75							
80							
85							
90							
95							
100							
105							
110							



SOIL TEST BORING CORONET WAY.GPJ AMEC.GDT 8/24/15

DRILLER:	GeoLab
EQUIPMENT:	Geoprobe
METHOD:	Direct Push/Hollow Stem Auger
HOLE DIA.:	7.5 inches
REMARKS:	Boring terminated at 60 feet. Groundwater stabilized at 45.82 feet.

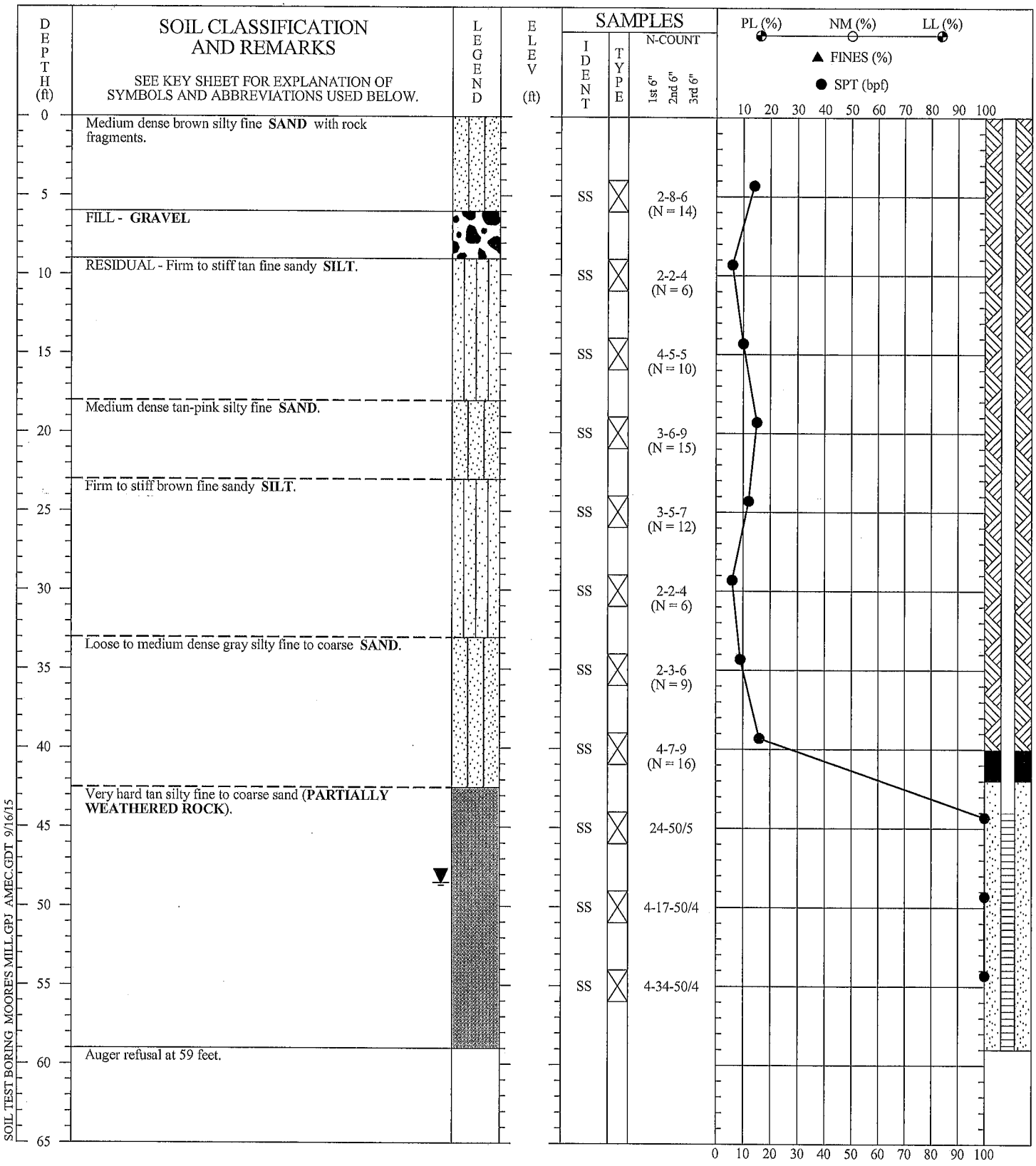
Prepared by: S. Davenport Reviewed by: C. Ferry

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.: MW-26
PROJECT: Coronet Way
LOCATION: Atlanta, Georgia
DRILLED: August 12, 2015
PROJECT NO.: 6121-15-0064

amec foster wheeler



DRILLER:	GeoLabs
EQUIPMENT:	CME 550
METHOD:	Hollow Stem Auger
HOLE DIA.:	7.5 inches
REMARKS:	Auger refusal at 59 feet. Depth to stabilized groundwater 48.5 feet.

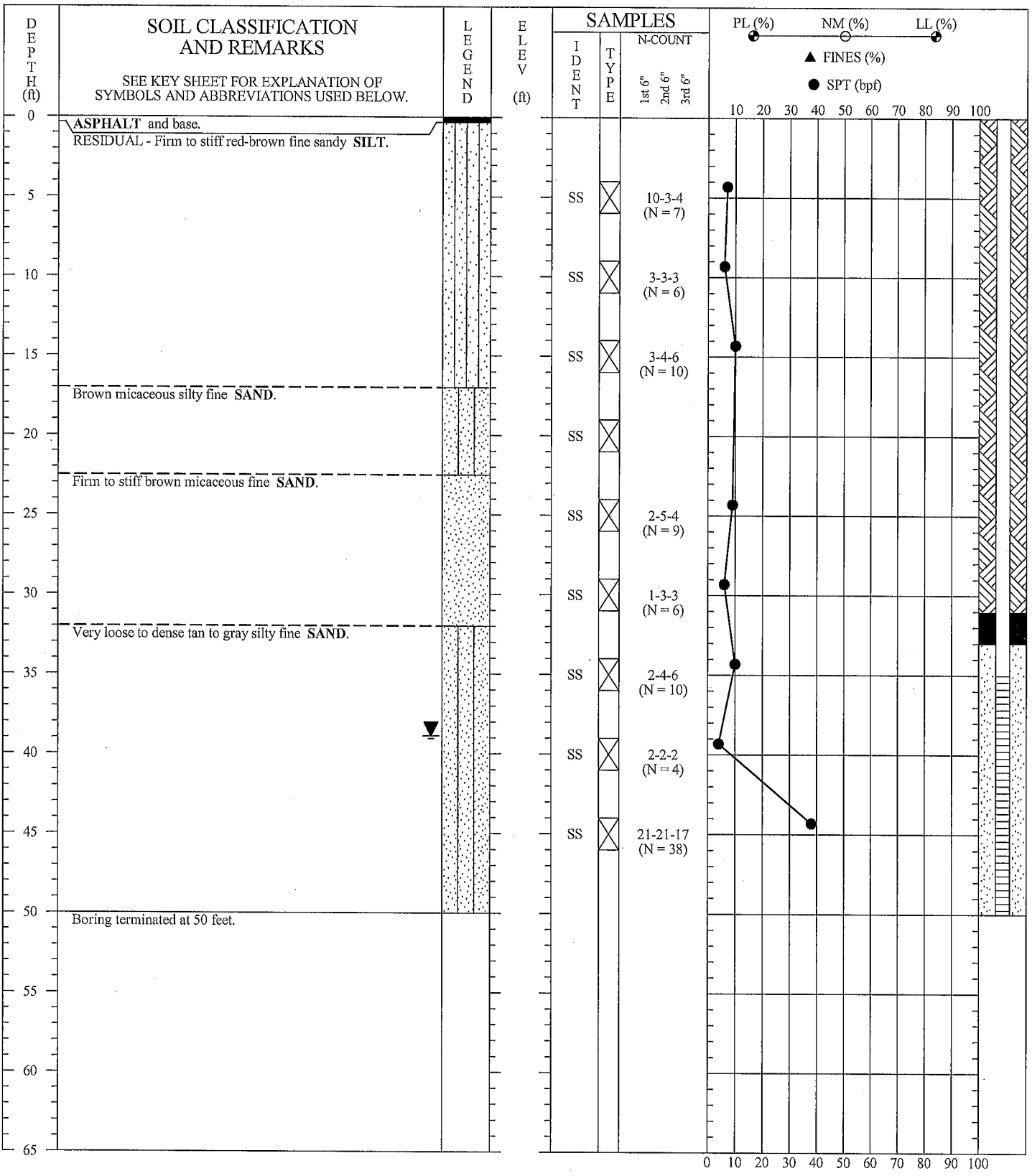
Prepared by: S. Davenport Reviewed by: C. Ferry

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.: MW-27
PROJECT: Moore's Mill
LOCATION: Atlanta, Georgia
DRILLED: September 10, 2015
PROJECT NO.: 6121-15-0064

amec foster wheeler



DRILLER:	GeoLabs
EQUIPMENT:	CME 550
METHOD:	Hollow Stem Auger
HOLE DIA.:	7.5 inches
REMARKS:	Boring terminated at 50 feet. Depth to stabilized groundwater 38.89 feet.

Prepared by: S. Davenport Reviewed by: C. Ferry

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

SOIL TEST BORING RECORD

BORING NO.: MW-28
PROJECT: Moore's Mill
LOCATION: Atlanta, Georgia
DRILLED: September 10, 2015
PROJECT NO.: 6121-15-0064

amec foster wheeler

APPENDIX D

GROUNDWATER MODELING

BIOCHLOR Natural Attenuation Decision Support System

Version 2.2
Excel 2000

Coronet Way East - We
Atlanta, Georgia
Run Name

Data Input Instructions:
115 → 1. Enter value directly....or
↑ or 2. Calculate by filling in gray
0.02 cells. Press Enter, then (C)
(To restore formulas, hit "Restore Formulas" button)
Variable* → Data used directly in model.

Test if Biotransformation is Occurring → Natural Attenuation Screening Protocol

TYPE OF CHLORINATED SOLVENT: Ethenes (●) Ethanes (○)

1. ADVECTION

Seepage Velocity*	Vs	20.0	(ft/yr)
or			
Hydraulic Conductivity	K	4.3E-04	(cm/sec)
Hydraulic Gradient	i	0.009	(ft/ft)
Effective Porosity	n	0.2	(-)

2. DISPERSION

Alpha x*	21.276	(ft)
(Alpha y) / (Alpha x)*	0.1	(-)
(Alpha z) / (Alpha x)*	5.E-03	(-)

Calc. Alpha x

3. ADSORPTION

Retardation Factor* → R

or

Soil Bulk Density, rho		1.6	(kg/L)	
FractionOrganicCarbon, foc		5.0E-4	(-)	
Partition Coefficient	Koc			
PCE	426	(L/kg)	2.70	(-)
TCE	130	(L/kg)	1.52	(-)
DCE	125	(L/kg)	1.50	(-)
VC	30	(L/kg)	1.12	(-)
ETH	302	(L/kg)	2.21	(-)
Common R (used in model)* =			**1.52**	

4. BIOTRANSFORMATION

-1st Order Decay Coefficient*

	Zone 1 λ (1/yr)		Zone 1 half-life (yrs)	Yield	Zone 2 λ (1/yr)		Zone 2 half-life (yrs)
PCE → TCE	0.069	←	10.00	0.79	0.000	←	
TCE → DCE	0.053	←	13.00	0.74	0.000	←	
DCE → VC	0.198	←	3.50	0.64	0.000	←	
VC → ETH	0.139	←	5.00	0.45	0.000	←	

λ HELP

5. GENERAL

Simulation Time*	40	(yr)
Modeled Area Width*	250	(ft)
Modeled Area Length*	1500	(ft)
Zone 1 Length*	1500	(ft)
Zone 2 Length*	0	(ft)

L, W

Zone 2= L - Zone 1

6. SOURCE DATA

TYPE: Decaying Single Planar

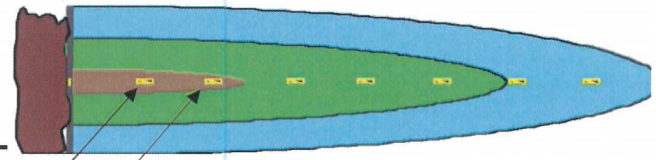
Source Options

Source Thickness in Sat. Zone* 10 (ft)

Y1
Width* (ft) 100

Conc. (mg/L)*	C1	k_s* (1/yr)
PCE	.4	0.01
TCE	.0	0.01
DCE	.0	0.01
VC	.0	0.01
ETH		0.01

Vertical Plane Source: Determine Source Well Location and Input Solvent Concentrations



View of Plume Looking Down

Observed Centerline Conc. at Monitoring Wells

7. FIELD DATA FOR COMPARISON

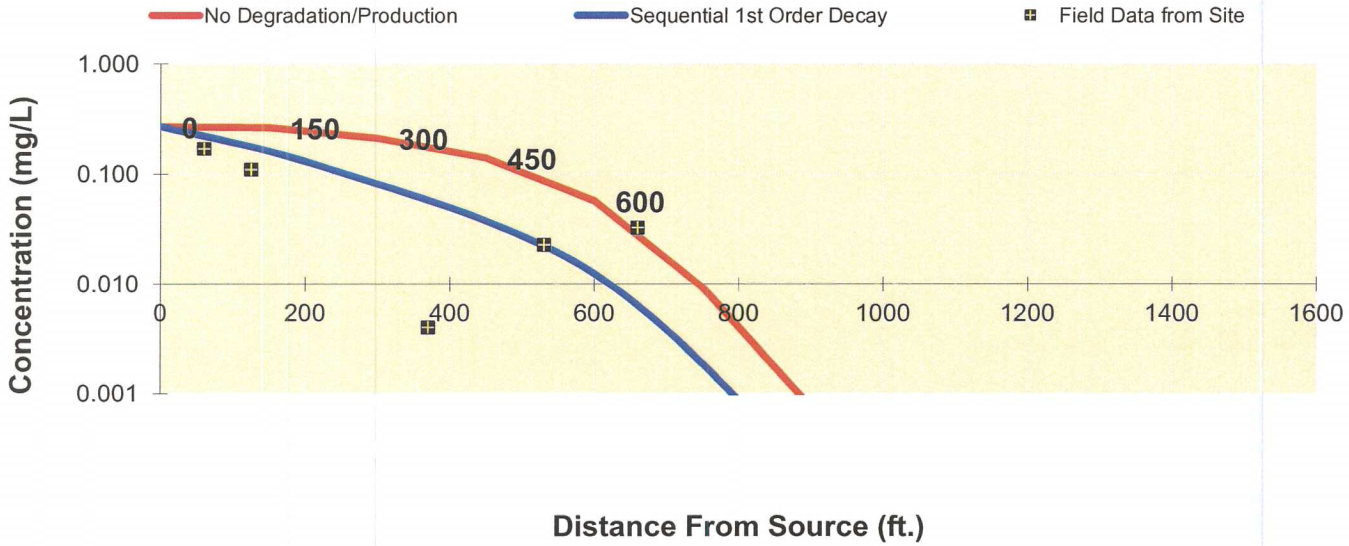
PCE Conc. (mg/L)	.17	.11	.004	.023	.033						
TCE Conc. (mg/L)	.0	.0	.0	.0	.0						
DCE Conc. (mg/L)	.0	.0	.0	.005	.005						
VC Conc. (mg/L)	.0	.0	.0	.0	.0						
ETH Conc. (mg/L)											
Distance from Source (ft)	60	125	370	530	660						
Date Data Collected	2015	199/									

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE | RUN ARRAY | Help | Restore | RESET | SEE OUTPUT | Paste

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

	Distance from Source (ft)										
PCE	0	150	300	450	600	750	900	1050	1200	1350	1500
No Degradation	0.268	0.264	0.212	0.140	0.057	0.009	0.001	0.000	0.000	0.000	0.000
Biotransformation	0.2681	0.160	0.081	0.037	0.012	0.002	0.000	0.000	0.000	0.000	0.000
	Monitoring Well Locations (ft)										
	60	125	370	530	660						
Field Data from Site	0.170	0.110	0.004	0.023	0.033						



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

40.0 Years

Log ⟺ Linear

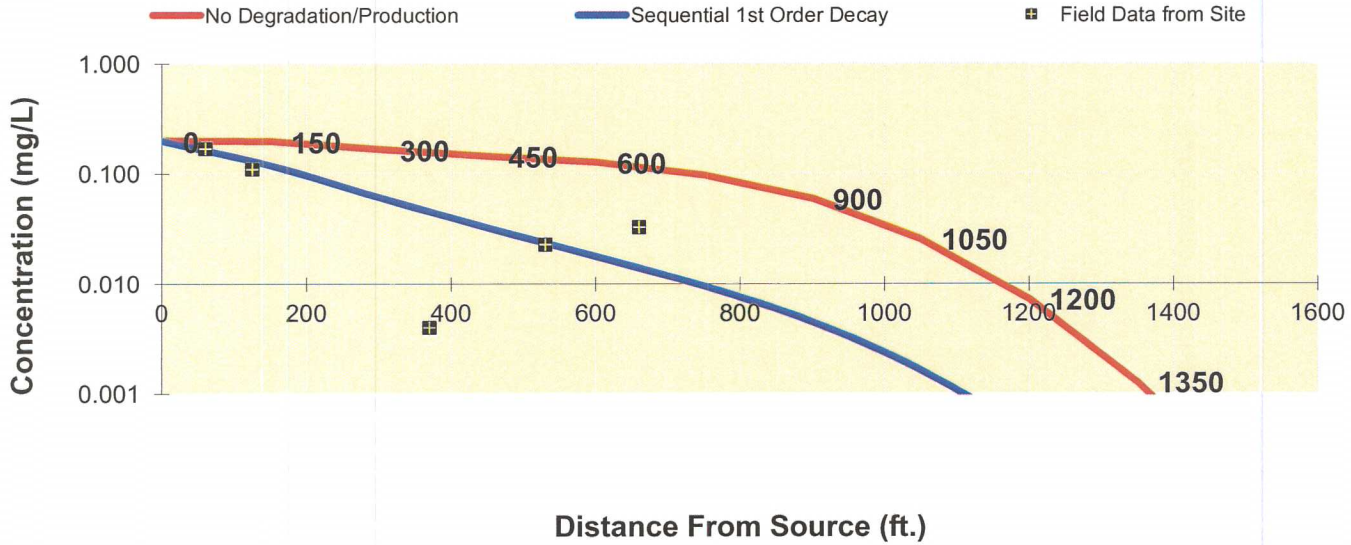
Return to Input

To All

To Array

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

PCE	Distance from Source (ft)										
	0	150	300	450	600	750	900	1050	1200	1350	1500
No Degradation	0.199	0.196	0.166	0.144	0.126	0.096	0.059	0.026	0.007	0.001	0.000
Biotransformation	0.1986	0.119	0.061	0.032	0.018	0.009	0.004	0.002	0.000	0.000	0.000
	Monitoring Well Locations (ft)										
	60	125	370	530	660						
Field Data from Site	0.170	0.110	0.004	0.023	0.033						



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

70.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

BIOCHLOR Natural Attenuation Decision Support System

Version 2.2
Excel 2000

Coronet Way South-Nor
Atlanta, Georgia
Run Name

TYPE OF CHLORINATED SOLVENT: Ethenes ◉ Ethanes ○

1. ADVECTION

Seepage Velocity*	Vs	7.4	(ft/yr)
or			
Hydraulic Conductivity	K	1.8E-04	(cm/sec)
Hydraulic Gradient	i	0.008	(ft/ft)
Effective Porosity	n	0.2	(-)

2. DISPERSION

Alpha x*	11.099	(ft)
(Alpha y) / (Alpha x)*	0.1	(-)
(Alpha z) / (Alpha x)*	5.E-03	(-)

Calc. Alpha x

3. ADSORPTION

Retardation Factor*			R	
or				
Soil Bulk Density, rho		1.6	(kg/L)	
FractionOrganicCarbon, foc		1.2E-3	(-)	
Partition Coefficient	Koc			
PCE		426	(L/kg)	5.09 (-)
TCE		130	(L/kg)	2.25 (-)
DCE		125	(L/kg)	2.20 (-)
VC		30	(L/kg)	1.28 (-)
ETH		302	(L/kg)	3.90 (-)
Common R (used in model)* =				**5.09**

4. BIOTRANSFORMATION

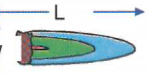
-1st Order Decay Coefficient*

	Zone 1 λ (1/yr)	Zone 1 half-life (yrs)	Yield	Zone 2 λ (1/yr)	Zone 2 half-life (yrs)
PCE → TCE	0.069	10.00	0.79	0.000	
TCE → DCE	0.053	13.00	0.74	0.000	
DCE → VC	0.198	3.50	0.64	0.000	
VC → ETH	0.139	5.00	0.45	0.000	

λ HELP

5. GENERAL

Simulation Time*	40	(yr)
Modeled Area Width*	250	(ft)
Modeled Area Length*	250	(ft)
Zone 1 Length*	250	(ft)
Zone 2 Length*	0	(ft)



Zone 2= L - Zone 1

6. SOURCE DATA

TYPE: Decaying Single Planar

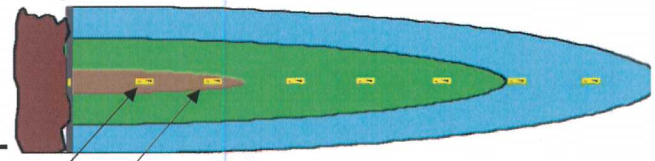
Source Options

Source Thickness in Sat. Zone* 10 (ft)

Width* (ft) Y1: 100

Conc. (mg/L)*	C1	k_s* (1/yr)
PCE	.4	0.01
TCE	.0	0.01
DCE	.0	0.01
VC	.0	0.01
ETH		0.01

Vertical Plane Source: Determine Source Well Location and Input Solvent Concentrations



View of Plume Looking Down

Observed Centerline Conc. at Monitoring Wells

7. FIELD DATA FOR COMPARISON

PCE Conc. (mg/L)	.25	.017									
TCE Conc. (mg/L)	.002	.0									
DCE Conc. (mg/L)	.0	.0									
VC Conc. (mg/L)	.0	.0									
ETH Conc. (mg/L)											
Distance from Source (ft)	60	125									
Date Data Collected	2015	1997									

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE | RUN ARRAY | Help | Restore | RESET | SEE OUTPUT | Paste

Data Input Instructions:

115 → 1. Enter value directly....or
↑ or
0.02 → 2. Calculate by filling in gray cells. Press Enter, then (C)

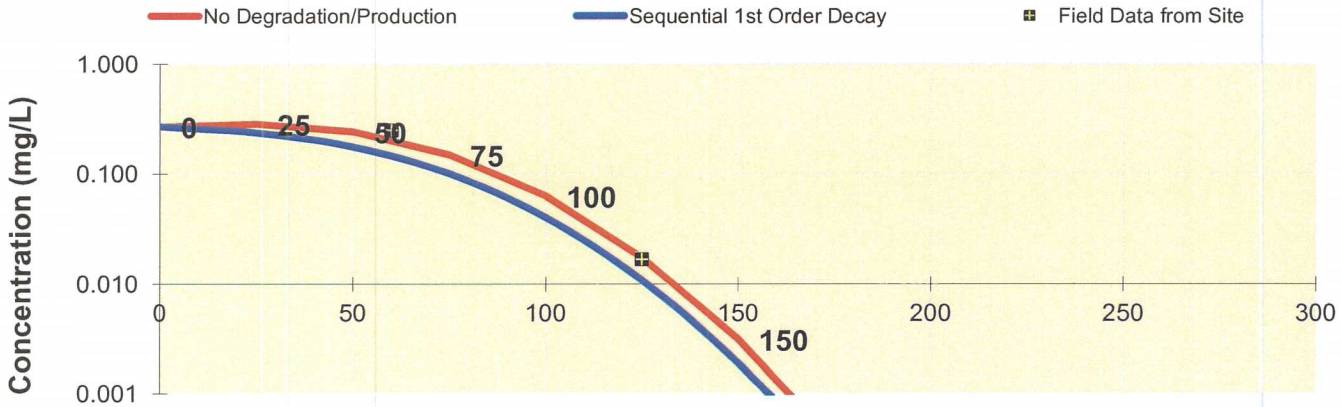
(To restore formulas, hit "Restore Formulas" button)

Variable* → Data used directly in model.

Test if Biotransformation is Occurring → Natural Attenuation Screening Protocol

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

PCE	Distance from Source (ft)										
	0	25	50	75	100	125	150	175	200	225	250
No Degradation	0.268	0.284	0.241	0.149	0.063	0.017	0.003	0.000	0.000	0.000	0.000
Biotransformation	0.2681	0.235	0.176	0.100	0.040	0.011	0.002	0.000	0.000	0.000	0.000
	Monitoring Well Locations (ft)										
	60	125									
Field Data from Site	0.250	0.017									



Distance From Source (ft.)

See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

40.0 Years

Log ⟺ Linear

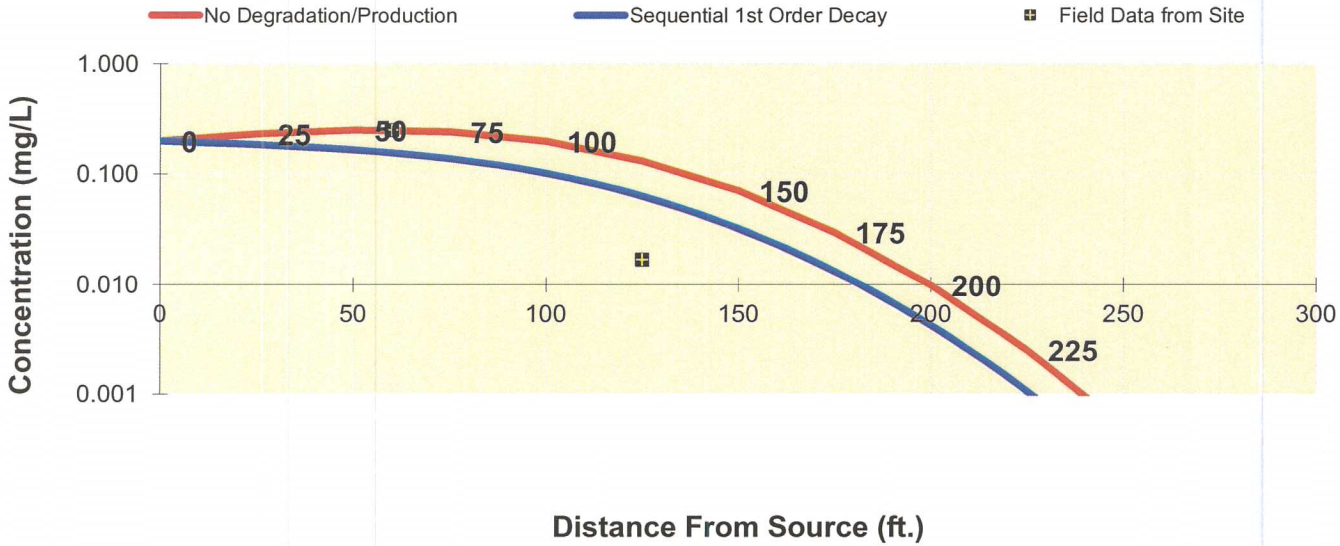
Return to Input

To All

To Array

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

PCE	Distance from Source (ft)										
	0	25	50	75	100	125	150	175	200	225	250
No Degradation	0.199	0.231	0.250	0.241	0.197	0.132	0.071	0.030	0.010	0.003	0.000
Biotransformation	0.1986	0.185	0.166	0.138	0.101	0.063	0.032	0.013	0.004	0.001	0.000
	Monitoring Well Locations (ft)										
	60	125									
Field Data from Site	0.250	0.017									



See PCE

See TCE

See DCE

See VC

See ETH

Prepare Animation

Time:

70.0 Years

Log ⟺ Linear

Return to Input

To All

To Array

APPENDIX E

VAPOR INTRUSION MODELING

OSWER VAPOR INTRUSION ASSESSMENT

Vapor Intrusion Screening Level (VISL) Calculator Version 3.4, June 2015 RSLs

The primary objective of risk-based screening is to identify sites or buildings unlikely to pose a health concern through the vapor intrusion pathway. Generally, at properties where subsurface concentrations of vapor-forming chemicals (e.g., groundwater or "near source" soil gas concentrations) fall below screening levels (i.e., VISLs), no further action or study is warranted, so long as the exposure assumptions match those taken into account by the calculations and the site fulfills the conditions and assumptions of the generic conceptual model underlying the screening levels. In a similar fashion, the results of risk-based screening can help the data review team identify areas, buildings, and/or chemicals that can be eliminated from further assessment. The generic conceptual model underlying these screening levels is described in OSWER Publication 9200.2-154 (OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway From Subsurface Vapor Sources to Indoor Air) (EPA 2015; Section 6.5)

Parameter	Symbol	Value	Instructions
Exposure Scenario	Scenario	Residential	Select residential or commercial scenario from pull down list
Target Risk for Carcinogens	TCR	1.00E-05	Enter target risk for carcinogens
Target Hazard Quotient for Non-Carcinogens	THQ	1	Enter target hazard quotient for non-carcinogens
Average Groundwater Temperature (°C)	Tgw	19.4	Enter average of the stabilized groundwater temperature to correct Henry's Law Constant for groundwater target concentrations

CAS	Chemical Name	Does the chemical meet the definition for volatility? (HLC>1E-5 or VP>1) Yes/No	Does chemical have inhalation toxicity data? (IUR and/or RfC) Yes/No	Is Chemical Sufficiently Volatile and Toxic to Pose Inhalation Risk Via Vapor Intrusion from Soil Source? Cvp > Cia,target? Yes/No	Is Chemical Sufficiently Volatile and Toxic to Pose Inhalation Risk Via Vapor Intrusion from Groundwater Source? Chc > Cia,target? Yes/No	Target Indoor Air Conc. @ TCR = 10E-06 or THQ = 1 MIN(Cia,c;Cia,nc) (ug/m^3)	Toxicity Basis C/NC	Target Sub-Slab and Exterior Soil Gas Conc. @ TCR = 10E-06 or THQ = 1 Csg (ug/m^3)	Target Ground Water Conc. @ TCR = 10E-06 or THQ = 1 Cgw (ug/L)	Is Target Ground Water Conc. < MCL? Cgw<MCL? Yes/No (MCL ug/L)	Pure Phase Vapor Conc. @ 25°C Cvp (ug/m^3)	Groundwater Vapor Conc. Chc (ug/m^3)	Temperature for Groundwater Vapor Conc. Tgw or 25 C	Lower Explosive Limit** LEL (% by vol)	LEL Source	Inhalation Unit Risk IUR ($(ug/m^3)^{-1}$)	IUR Source*	Reference Concentration RfC (mg/m^3)	RFC Source*	Mutagenic Indicator i	Target Indoor Air Conc. for Carcinogens @ TCR = 10E-06 Cia,c (ug/m^3)	Target Indoor Air Conc. for Non-Carcinogens @ THQ = 1 Cia,nc (ug/m^3)
67-64-1	Acetone	Yes	Yes	Yes	Yes	3.2E+04	NC	1.1E+06	2.9E+07	--	7.25E+08	1.12E+09	19.4	2.6	E			3.10E+01	A			3.2E+04
71-43-2	Benzene	Yes	Yes	Yes	Yes	3.6E+00	C	1.2E+02	2.1E+01	No (5)	3.98E+08	3.13E+08	19.4	1.2	N	7.80E-06	I	3.00E-02	I		3.6E+00	3.1E+01
75-15-0	Carbon Disulfide	Yes	Yes	Yes	Yes	7.3E+02	NC	2.4E+04	1.5E+03	--	1.47E+09	1.03E+09	19.4	1.3	N			7.00E-01	I			7.3E+02
107-06-2	Dichloroethane, 1,2-	Yes	Yes	Yes	Yes	1.1E+00	C	3.6E+01	2.9E+01	No (5)	4.20E+08	3.16E+08	19.4	6.2	N	2.60E-05	I	7.00E-03	P		1.1E+00	7.3E+00
100-41-4	Ethylbenzene	Yes	Yes	Yes	Yes	1.1E+01	C	3.7E+02	4.8E+01	Yes (700)	5.48E+07	3.93E+07	19.4	0.8	N	2.50E-06	CA	1.00E+00	I		1.1E+01	1.0E+03
108-10-1	Methyl Isobutyl Ketone (4-methyl-2-pentanone)	Yes	Yes	Yes	Yes	3.1E+03	NC	1.0E+05	7.6E+05	--	1.07E+08	7.82E+07	19.4	1.2	N			3.00E+00	I			3.1E+03
127-18-4	Tetrachloroethylene	Yes	Yes	Yes	Yes	4.2E+01	NC	1.4E+03	7.8E+01	No (5)	1.65E+08	1.10E+08	19.4			2.60E-07	I	4.00E-02	I		1.1E+02	4.2E+01
108-88-3	Toluene	Yes	Yes	Yes	Yes	5.2E+03	NC	1.7E+05	2.6E+04	No (1000)	1.41E+08	1.07E+08	19.4	1.1	N			5.00E+00	I			5.2E+03
95-63-6	Trimethylbenzene, 1,2,4-	Yes	Yes	Yes	Yes	7.3E+00	NC	2.4E+02	4.2E+01	--	1.36E+07	9.87E+06	19.4	0.9	N			7.00E-03	P			7.3E+00
108-38-3	Xylene, m-	Yes	Yes	Yes	Yes	1.0E+02	NC	3.5E+03	4.9E+02	--	4.74E+07	3.40E+07	19.4	1.1	N			1.00E-01	S			1.0E+02
95-47-6	Xylene, o-	Yes	Yes	Yes	Yes	1.0E+02	NC	3.5E+03	6.8E+02	--	3.78E+07	2.71E+07	19.4	0.9	N			1.00E-01	S			1.0E+02

Notes:

(1) **Inhalation Pathway Exposure Parameters (RME):**

Exposure Scenario	Units	Residential Symbol	Residential Value	Commercial Symbol	Commercial Value	Selected (based on scenario in cell G10) Symbol	Selected Value
Averaging time for carcinogens	(yrs)	ATc_R	70	ATc_C	70	ATc	70
Averaging time for non-carcinogens	(yrs)	ATnc_R	26	ATnc_C	25	ATnc	26
Exposure duration	(yrs)	ED_R	26	ED_C	25	ED	26
Exposure frequency	(days/yr)	EF_R	350	EF_C	250	EF	350
Exposure time	(hr/day)	ET_R	24	ET_C	8	ET	24

(2) **Generic Attenuation Factors:**

Source Medium of Vapors	Residential Symbol	Residential Value	Commercial Symbol	Commercial Value	Selected (based on scenario in cell G10) Symbol	Selected Value
Groundwater	AFgw_R	0.001	AFgw_C	0.001	AFgw	0.001
Sub-Slab and Exterior Soil Gas	AFss_R	0.03	AFss_C	0.03	AFss	0.03

(3) **Formulas**

Cia, target = MIN(Cia,c; Cia,nc)

Cia,c (ug/m3) = TCR x ATc x (365 days/yr) x (24 hrs/day) / (ED x EF x ET x IUR)

Cia,nc (ug/m3) = THQ x ATnc x (365 days/yr) x (24 hrs/day) x RfC x (1000 ug/mg) / (ED x EF x ET)

(4) **Special Case Chemicals**

Trichloroethylene

Residential Symbol	Residential Value	Commercial Symbol	Commercial Value	Selected (based on scenario in cell G10) Symbol	Selected Value
mIURTCE_R	1.00E-06	mIURTCE_C	0.00E+00	mIURTCE	1.00E-06
IURTCE_R	3.10E-06	IURTCE_C	4.10E-06	IURTCE	3.10E-06

Mutagenic Chemicals

The exposure durations and age-dependent adjustment factors for mutagenic-mode-of-action are listed in the table below:

Note: This section applies to trichloroethylene and other mutagenic chemicals, but not to vinyl chloride.

Age Cohort	Exposure Duration (years)	Age-dependent adjustment factor
0 - 2 years	2	10
2 - 6 years	4	3
6 - 16 years	10	3
16 - 26 years	10	1

Mutagenic-mode-of-action (MMOA) adjustment factor 72 This factor is used in the equations for mutagenic chemicals.

Vinyl Chloride

See the Navigation Guide equation for Cia,c for vinyl chloride.

Notation:

NVT = Not sufficiently volatile and/or toxic to pose inhalation risk in selected exposure scenario for the indicated medium

C = Carcinogenic

NC = Non-carcinogenic

I = IRIS: EPA Integrated Risk Information System (IRIS). Available online at: http://www.epa.gov/iris/subst/index.html

P = PPRTV. EPA Provisional Peer Reviewed Toxicity Values (PPRTVs). Available online at: http://hhpprtv.ornl.gov/pprtv.shtml

A = Agency for Toxic Substances and Disease Registry (ATSDR) Minimum Risk Levels (MRLs). Available online at: http://www.atsdr.cdc.gov/mrls/index.html

CA = California Environmental Protection Agency/Office of Environmental Health Hazard Assessment assessments. Available online at: http://www.oehha.ca.gov/risk/ChemicalDB/index.asp

H = HEAST. EPA Superfund Health Effects Assessment Summary Tables (HEAST) database. Available online at: http://epa-heast.ornl.gov/heast.shtml

S = See RSL User Guide, Section 5

X = PPRTV Appendix

E = The Engineering ToolBox. Available online at http://www.engineeringtoolbox.com/explosive-concentration-limits-d_423.html

N = Centers for Disease Control and Prevention (CDC) National Institute for Occupational Safety and Health (NIOSH). Pocket Guide to Chemical Hazards. Available online at: http://www.cdc.gov/niosh/npg/default.html http://www.cdc.gov/niosh/npg/default.html

M = Chemical-specific MSDS

Mut = Chemical acts according to the mutagenic-mode-of-action, special exposure parameters apply (see footnote (4) above).

VC = Special exposure equation for vinyl chloride applies (see Navigation Guide for equation).

TCE = Special mutagenic and non-mutagenic IURs for trichloroethylene apply (see footnote (4) above).

Yellow highlighting indicates site-specific parameters that may be edited by the user.

Blue highlighting indicates exposure factors that are based on Risk Assessment Guidance for Superfund (RAGS) or EPA vapor intrusion guidance, which generally should not be changed.

**Lower explosive limit is the minimum concentration of the compound in air (% by volume) that is needed for the gas to ignite and explode.

OSWER VAPOR INTRUSION ASSESSMENT

Vapor Intrusion Screening Level (VISL) Calculator Version 3.4, June 2015 RSLs

The primary objective of risk-based screening is to identify sites or buildings unlikely to pose a health concern through the vapor intrusion pathway. Generally, at properties where subsurface concentrations of vapor-forming chemicals (e.g., groundwater or "near source" soil gas concentrations) fall below screening levels (i.e., VISLs), no further action or study is warranted, so long as the exposure assumptions match those taken into account by the calculations and the site fulfills the conditions and assumptions of the generic conceptual model underlying the screening levels. In a similar fashion, the results of risk-based screening can help the data review team identify areas, buildings, and/or chemicals that can be eliminated from further assessment. The generic conceptual model underlying these screening levels is described in OSWER Publication 9200.2-154 (OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway From Subsurface Vapor Sources to Indoor Air) (EPA 2015; Section 6.5)

Parameter	Symbol	Value	Instructions
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Target Hazard Quotient for Non-Carcinogens	THQ	1	Enter target hazard quotient for non-carcinogens
Average Groundwater Temperature (°C)	Tgw	19.4	Enter average of the stabilized groundwater temperature to correct Henry's Law Constant for groundwater target concentrations

CAS	Chemical Name	Does the chemical meet the definition for volatility? (HLC>1E-5 or VP>1) Yes/No	Does chemical have inhalation toxicity data? (IUR and/or RfC) Yes/No	Is Chemical Sufficiently Volatile and Toxic to Pose Inhalation Risk Via Vapor Intrusion from Soil Source? Cvp > Cia,target? Yes/No	Is Chemical Sufficiently Volatile and Toxic to Pose Inhalation Risk Via Vapor Intrusion from Groundwater Source? Chc > Cia,target? Yes/No	Target Indoor Air Conc. @ TCR = 10E-06 or THQ = 1 MIN(Cia,c;Cia,nc) (ug/m^3)	Toxicity Basis C/NC	Target Sub-Slab and Exterior Soil Gas Conc. @ TCR = 10E-06 or THQ = 1 Csg (ug/m^3)	Target Ground Water Conc. @ TCR = 10E-06 or THQ = 1 Cgw (ug/L)	Is Target Ground Water Conc. < MCL? Cgw<MCL? Yes/No (MCL ug/L)	Pure Phase Vapor Conc. @ 25°C Cvp (ug/m^3)	Groundwater Vapor Conc. Chc (ug/m^3)	Temperature for Groundwater Vapor Conc. Tgw or 25 C	Lower Explosive Limit** LEL (% by vol)	LEL Source	Inhalation Unit Risk IUR (ug/m^3)$^{-1}$	IUR Source*	Reference Concentration RfC (mg/m^3)	RFC Source*	Mutagenic Indicator i	Target Indoor Air Conc. for Carcinogens @ TCR = 10E-06 Cia,c (ug/m^3)	Target Indoor Air Conc. for Non-Carcinogens @ THQ = 1 Cia,nc (ug/m^3)
67-64-1	Acetone	Yes	Yes	Yes	Yes	1.4E+05	NC	4.5E+06	1.2E+08	--	7.25E+08	1.12E+09	19.4	2.6	E			3.10E+01	A			1.4E+05
74-87-3	Chloromethane	Yes	Yes	Yes	Yes	3.9E+02	NC	1.3E+04	1.3E+03	--	1.17E+10	1.65E+09	19.4	8.1	N			9.00E-02	I			3.9E+02
127-18-4	Tetrachloroethylene	Yes	Yes	Yes	Yes	1.8E+02	NC	5.8E+03	3.3E+02	No (5)	1.65E+08	1.10E+08	19.4			2.60E-07	I	4.00E-02	I		4.7E+02	1.8E+02
108-88-3	Toluene	Yes	Yes	Yes	Yes	2.2E+04	NC	7.3E+05	1.1E+05	No (1000)	1.41E+08	1.07E+08	19.4	1.1	N			5.00E+00	I			2.2E+04
95-63-6	Trimethylbenzene, 1,2,4-	Yes	Yes	Yes	Yes	3.1E+01	NC	1.0E+03	1.8E+02	--	1.36E+07	9.87E+06	19.4	0.9	N			7.00E-03	P			3.1E+01
108-38-3	Xylene, m-	Yes	Yes	Yes	Yes	4.4E+02	NC	1.5E+04	2.1E+03	--	4.74E+07	3.40E+07	19.4	1.1	N			1.00E-01	S			4.4E+02
95-47-6	Xylene, o-	Yes	Yes	Yes	Yes	4.4E+02	NC	1.5E+04	2.9E+03	--	3.78E+07	2.71E+07	19.4	0.9	N			1.00E-01	S			4.4E+02

Notes:

(1) **Inhalation Pathway Exposure Parameters (RME):**

Exposure Scenario	Units	Residential Symbol	Residential Value	Commercial Symbol	Commercial Value	Selected (based on scenario in cell G10) Symbol	Selected (based on scenario in cell G10) Value
Averaging time for carcinogens	(yrs)	ATc_R	70	ATc_C	70	ATc	70
Averaging time for non-carcinogens	(yrs)	ATnc_R	26	ATnc_C	25	ATnc	25
Exposure duration	(yrs)	ED_R	26	ED_C	25	ED	25
Exposure frequency	(days/yr)	EF_R	350	EF_C	250	EF	250
Exposure time	(hr/day)	ET_R	24	ET_C	8	ET	8

(2) **Generic Attenuation Factors:**

Source Medium of Vapors	Residential Symbol	Residential Value	Commercial Symbol	Commercial Value	Selected (based on scenario in cell G10) Symbol	Selected (based on scenario in cell G10) Value
Groundwater	AFgw_R	0.001	AFgw_C	0.001	AFgw	0.001
Sub-Slab and Exterior Soil Gas	AFss_R	0.03	AFss_C	0.03	AFss	0.03

(3) **Formulas**

Cia, target = MIN(Cia,c; Cia,nc)

Cia,c (ug/m3) = TCR x ATc x (365 days/yr) x (24 hrs/day) / (ED x EF x ET x IUR)

Cia,nc (ug/m3) = THQ x ATnc x (365 days/yr) x (24 hrs/day) x RfC x (1000 ug/mg) / (ED x EF x ET)

(4) **Special Case Chemicals**

Trichloroethylene	Residential Symbol	Residential Value	Commercial Symbol	Commercial Value	Selected (based on scenario in cell G10) Symbol	Selected (based on scenario in cell G10) Value
	mIURTCE_R	1.00E-06	mIURTCE_C	0.00E+00	mIURTCE	0.00E+00
	IURTCE_R	3.10E-06	IURTCE_C	4.10E-06	IURTCE	4.10E-06

Mutagenic Chemicals

The exposure durations and age-dependent adjustment factors for mutagenic-mode-of-action are listed in the table below:

Age Cohort	Exposure Duration (years)	Age-dependent adjustment factor
0 - 2 years	2	10
2 - 6 years	4	3
6 - 16 years	10	3
16 - 26 years	10	1

Note: This section applies to trichloroethylene and other mutagenic chemicals, but not to vinyl chloride.

Mutagenic-mode-of-action (MMOA) adjustment factor 25 This factor is used in the equations for mutagenic chemicals.

Vinyl Chloride

See the Navigation Guide equation for Cia,c for vinyl chloride.

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C = Carcinogenic

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I = IRIS: EPA Integrated Risk Information System (IRIS). Available online at: http://www.epa.gov/iris/subst/index.html

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M = Chemical-specific MSDS

Mut = Chemical acts according to the mutagenic-mode-of-action, special exposure parameters apply (see footnote (4) above).

VC = Special exposure equation for vinyl chloride applies (see Navigation Guide for equation).

TCE = Special mutagenic and non-mutagenic IURs for trichloroethylene apply (see footnote (4) above).

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Blue highlighting indicates exposure factors that are based on Risk Assessment Guidance for Superfund (RAGS) or EPA vapor intrusion guidance, which generally should not be changed.

**Lower explosive limit is the minimum concentration of the compound in air (% by volume) that is needed for the gas to ignite and explode.

GW-ADV
Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES | x

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES |

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (µg/L)	Chemical
127184		Tetrachloroethylene

MORE ↓

ENTER Average soil/ groundwater temperature, T_S (°C)	ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum directly above water table, (Enter A, B, or C)	ENTER SCS soil type directly above water table	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined stratum A soil vapor permeability, k_v (cm^2)
			Totals must add up to value of L_{WT} (cell G28)							
19.4	15	1524	1524	0	0	A	SL	SL		

MORE ↓

ENTER Stratum A SCS soil type	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum B SCS soil type	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum C SCS soil type	ENTER Stratum C soil dry bulk density, ρ_b^C (g/cm^3)	ENTER Stratum C soil total porosity, n^C (unitless)	ENTER Stratum C soil water-filled porosity, θ_w^C (cm^3/cm^3)
Lookup Soil Parameters				Lookup Soil Parameters				Lookup Soil Parameters			
SL	1.62	0.387	0.103	SL	1.62	0.387	0.103	SL	1.62	0.387	0.103

MORE ↓

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP ($g/cm\text{-}s^2$)	ENTER Enclosed space floor length, L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculate Q_{soil} (L/m)
10	40	1219	762	244	0.1	0.25	

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	30	30	350	1.0E-06	1
				Used to calculate risk-based groundwater concentration.	

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Henry's law constant at reference temperature, H (atm-m^3/mol)	Henry's law constant reference temperature, T_R (^oC)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (^oK)	Critical temperature, T_C (^oK)	Organic carbon partition coefficient, K_{oc} (cm^3/g)	Pure component water solubility, S (mg/L)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
7.20E-02	8.20E-06	1.84E-02	25	8,288	394.40	620.20	1.55E+02	2.00E+02	2.6E-07	4.0E-02

END

INTERMEDIATE CALCULATIONS SHEET

Exposure duration, τ (sec)	Source-building separation, L_T (cm)	Stratum A soil air-filled porosity, θ_a^A (cm^3/cm^3)	Stratum B soil air-filled porosity, θ_a^B (cm^3/cm^3)	Stratum C soil air-filled porosity, θ_a^C (cm^3/cm^3)	Stratum A effective total fluid saturation, S_{te} (cm^3/cm^3)	Stratum A soil intrinsic permeability, k_i (cm^2)	Stratum A soil relative air permeability, k_{rg} (cm^2)	Stratum A soil effective vapor permeability, k_v (cm^2)	Thickness of capillary zone, L_{cz} (cm)	Total porosity in capillary zone, n_{cz} (cm^3/cm^3)	Air-filled porosity in capillary zone, $\theta_{a,cz}$ (cm^3/cm^3)	Water-filled porosity in capillary zone, $\theta_{w,cz}$ (cm^3/cm^3)	Floor-wall seam perimeter, X_{crack} (cm)
9.46E+08	1509	0.284	0.284	0.284	0.184	6.03E-09	0.901	5.43E-09	25.00	0.387	0.067	0.320	3,962

Bldg. ventilation rate, $Q_{building}$ (cm^3/s)	Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. groundwater temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. groundwater temperature, H_{TS} (atm-m^3/mol)	Henry's law constant at ave. groundwater temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Stratum A effective diffusion coefficient, D^{eff}_A (cm^2/s)	Stratum B effective diffusion coefficient, D^{eff}_B (cm^2/s)	Stratum C effective diffusion coefficient, D^{eff}_C (cm^2/s)	Capillary zone effective diffusion coefficient, D^{eff}_{cz} (cm^2/s)	Total overall effective diffusion coefficient, D^{eff}_T (cm^2/s)	Diffusion path length, L_d (cm)
1.57E+04	9.88E+05	4.01E-04	15	9,458	1.35E-02	5.63E-01	1.78E-04	7.27E-03	0.00E+00	0.00E+00	6.22E-05	2.49E-03	1509

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu g/m^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D^{crack} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, exp(Pe^f) (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$)	Unit risk factor, URF $(\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)
15	5.63E+02	0.10	5.32E+00	7.27E-03	3.96E+02	1.04E+08	7.93E-05	4.47E-02	2.6E-07	4.0E-02

END

Prepared/Date: LWC 9/24/2012
Checked/Date: LMS 9/27/2012

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
2.10E+02	9.34E+02	2.10E+02	2.00E+05	2.10E+02

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	NA

MESSAGE AND ERROR SUMMARY BELOW: (DO NOT USE RESULTS IF ERRORS ARE PRESENT)
MESSAGE: The values of Csource and Cbuilding on the INTERCALCS worksheet are based on unity and do not represent actual values.

SCROLL DOWN TO "END"

END