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September 1, 2016

Georgia Department of Natural Resources
Environmental Protection Division
2 Martin Luther King Jr. Drive SE
Suite 1054
Atlanta, GA 30334-9000

Re: Electronic Certification

Dear Mr. David Brownlee:

Wenck Associates, Inc. certifies that the electronic copy of the First VIRP Progress Report, dated September 1, 2016 for the Former Duluth Dry Cleaner Site, HSI Site Number 10892, Duluth, Gwinnett County, Georgia is complete, identical to the paper copy, and virus free.

If you have any questions regarding the First VIRP Progress Report or this response, please feel free to contact me at (678) 987-5854.

Sincerely,

Wenck Associates, Inc.

Katie Ross

Katie Ross, P.G.
Project Manager

Attachments

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September 1, 2016

Mr. David Brownlee
Response and Remediation Program
Georgia Department of Natural Resources
Environmental Protection Division
2 Martin Luther King Jr, Drive, SE
Suite 1054
Atlanta, Georgia 30334-9000

RE: Submittal of First Voluntary Investigation and Remediation Plan (VIRP) Progress Report
Response to February 16, 2016 Comments – VIRP, HSI Site 10892
3146 Main Street, Duluth, Gwinnett County, Georgia

Dear Mr. Brownlee:

Wenck Associates Inc. (WAI), on behalf of the City of Duluth is pleased to submit the First Voluntary Investigation and Remediation Plan (VIRP) Progress Report for the Former Dry Cleaner Site (HSI No. 10892) located in Duluth, Gwinnett County, Georgia. In addition, we are also providing a response to the Georgia Environmental Protection Division (EPD)'s February 16, 2016 comments on the VIRP, dated January 2016. EPD's comments and our responses are as follows:

EPD Comment 1: *The Application states that Corrective action is not planned for sub-surface soil because the property is intended to be maintained as an asphalt parking lot for the foreseeable future. The City intends to install environmental covenants so that the Site will remain capped with the asphalt parking lot and maintained. However, there is no mention of a maintenance and monitoring plan (MMP) to maximize the life and performance of the parking lot. A MMP will be required as part of the Type 5 Risk Reduction Standards (RRS) for the site.*

Response 1: Noted. A MMP will be submitted at the time of certification to a Type 5 RRS.

EPD Comment 2: *Please revise the three dimensional conceptual site model to better reflect conditions at the site. The following is suggested:*

a. *Superimpose Transect A-A' and B-B' onto Figure No. 3,*

b. *Label Figure Nos. 8 and 9 with their figure numbers, and*

c. *Correct Transect B-B' to show the correct spatial order of the wells.*

Response 2: Revised VIRP Figures 3, 8, and 9 are attached to this Response to Comment Letter. In the Second VIRP Progress Report, an updated Conceptual Site Model, including updated cross-sections, will be provided.

EPD Comment 3: *The Application currently contains a table of delineation standards, in Section 4, that does not match all of the contaminants listed in Tables 1 and 2 and in Appendix H. The table in Section 4 must include delineation standards for all contaminants detected at the site, or a discussion of why a contaminant is not related to the release at the site. In*

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addition, it would be helpful to include a column for Type 1 RRS in Tables 1 and 2, even if the value is identical to the Type 3 RRS for some contaminants. Note that the soil Type 3 for tetrachloroethene and vinyl chloride should be 500 ug/kg and 200 ug/kg, respectively, in Table 1.

Response 3: Noted. The delineation standard and remediation standard tables provided in the VIRP were preliminary and will be updated throughout the VRP process. In general, regulated substances that have been detected at the site but are not associated with the release from the site will not be given delineation and remediation standards. These compounds include the following:

- **Chloroform** – present in groundwater only. The presence is likely due to a leaking water line, since trihalomethanes are common in treated municipal water.
- **Acetone** – common laboratory artifact due to the reaction of organics in soil and laboratory preservative. It is not associated with a release at the Site.
- **Pyrene, fluoranthene, and benzo(b)fluoroanthene** - detected in a soil sample collected immediately below the asphalt pavement. These compounds are frequently associated with asphalt and are not considered to be part of the release from the former dry cleaner (solvent).
- **Benzene and toluene** - petroleum-related compounds in groundwater highest in the upgradient portion of the site and present in a few wells at low concentrations. These compounds are not associated with the release from the dry cleaning operations.

The Second Progress Report will include a summary of the delineation and remediation standards, as the City is considering calculating Type 4 RRS as the remediation standard for the Site.

Should you have any questions, or need clarification of anything presented in the attached proposal, please do not hesitate to call me at 678-987-5854.

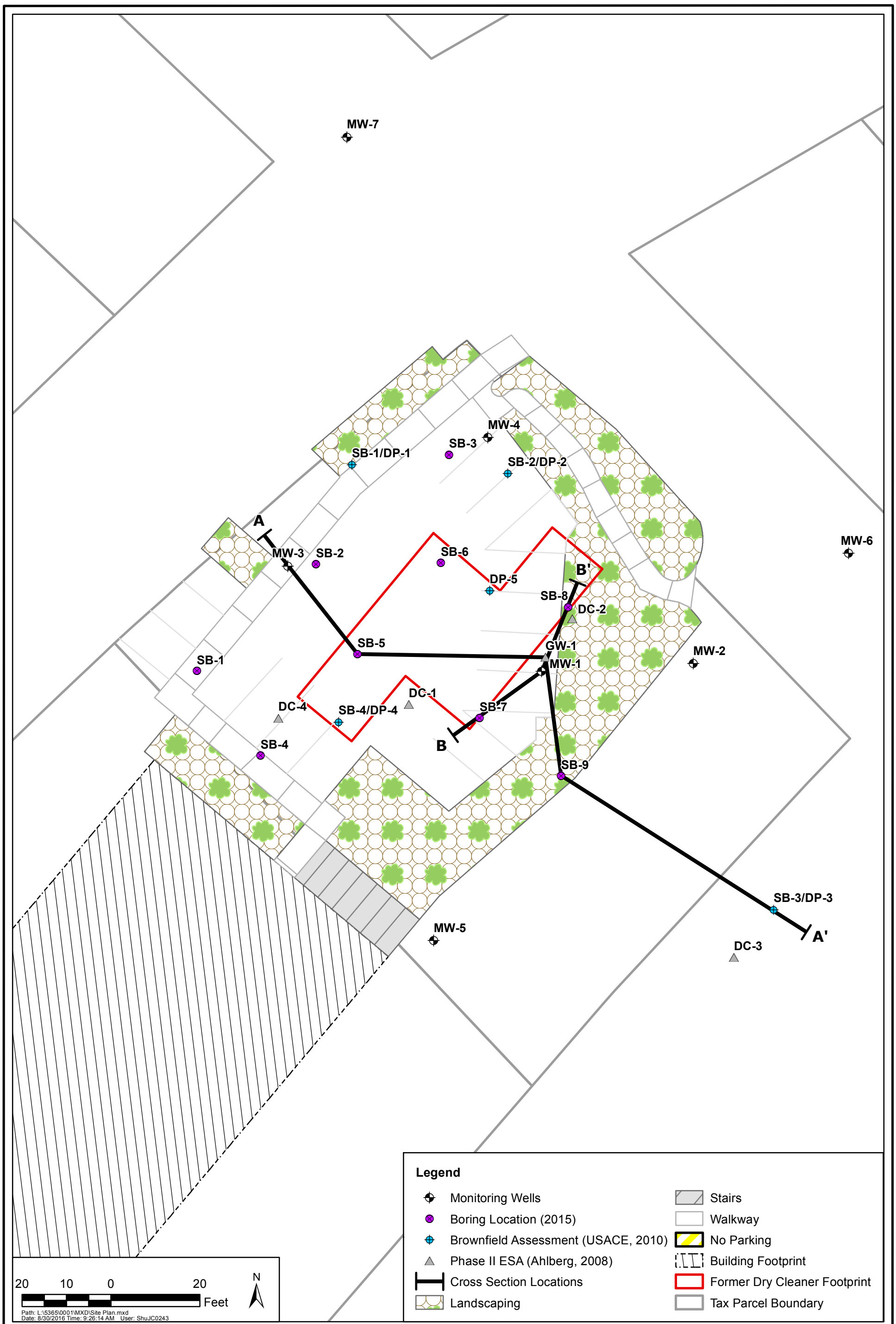
Sincerely,

Wenck Associates, Inc.

Katie Ross

Katie T. Ross, P.G.
Project Manager

enc: VIRP Figures 3, 8 and 9



CITY OF DULUTH

Site Plan

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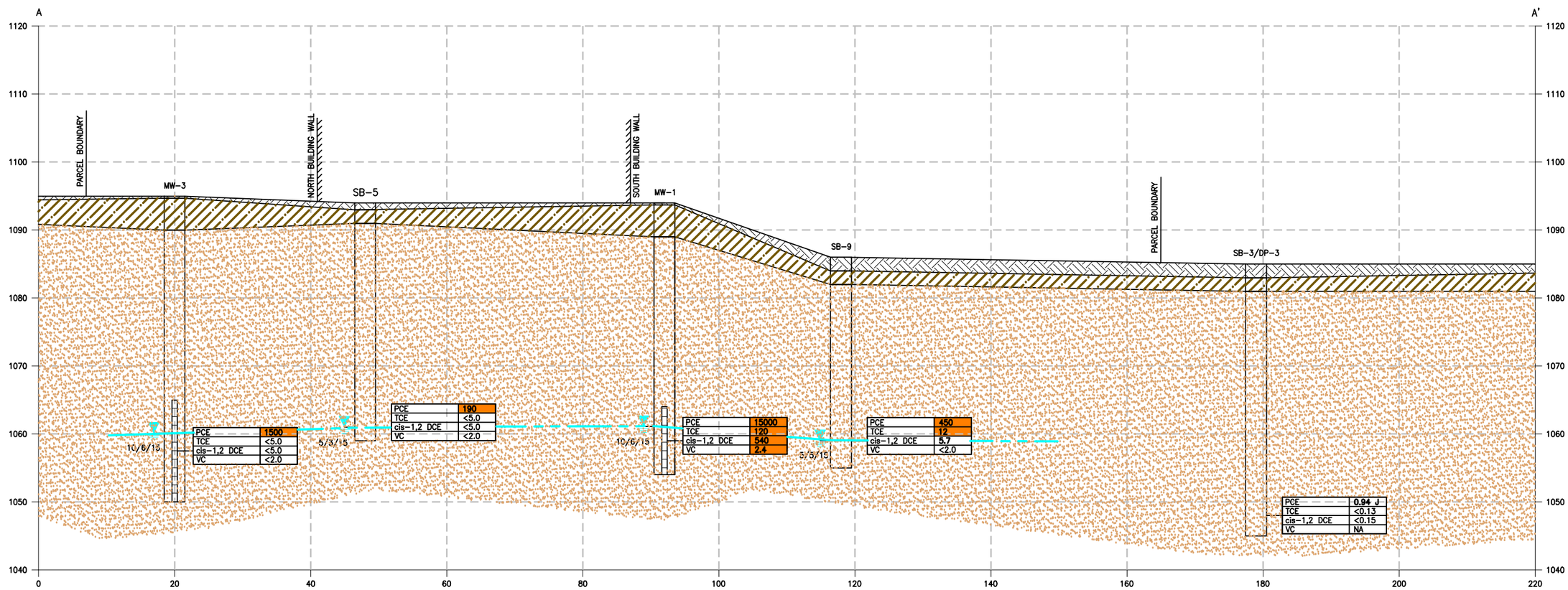
Figure 3



LEGEND

ASPHALT

CLAY

SILTY SAND

GROUNDWATER ELEVATION

WELL SCREEN

PCE	TETRACHLOROETHENE
TCE	TRICHLOROETHENE
Cis-1,2-DCE	cis-1,2-DICHLOROETHENE
VC	VINYL CHLORIDE

NOTES:

ALL RESULTS ARE MICROGRAMS PER KILOGRAMS (ug/L).

<1.0	= ANALYTE NOT DETECTED ABOVE THE LABORATORY DETECTION LIMIT.
5.7	= ANALYTE DETECTED ABOVE THE LABORATORY DETECTION LIMIT.
190	= EXCEEDS GEORGIA TYPE 3 RISK REDUCTION STANDARDS.
NA	= NOT ANALYZED.

J = ESTIMATED VALUE.

PRIME CONSULTANT

WENCK ASSOCIATES

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PROJECT TITLE

SUBSURFACE INVESTIGATION
MAIN STREET
PROJECT # 5365

CITY OF DULUTH

SHEET TITLE

NORTH – SOUTH CROSS SECTION

DWN BY	CHK'D	APP'D	DWG DATE	DEC. 2015
DNO	DL	DL	SCALE	AS NOTED

PROJECT NO.	SHEET NO.	REV NO.
5365-0001	FIGURE 8	

Plot Date & Time: 31 August 2016 5:49 PM

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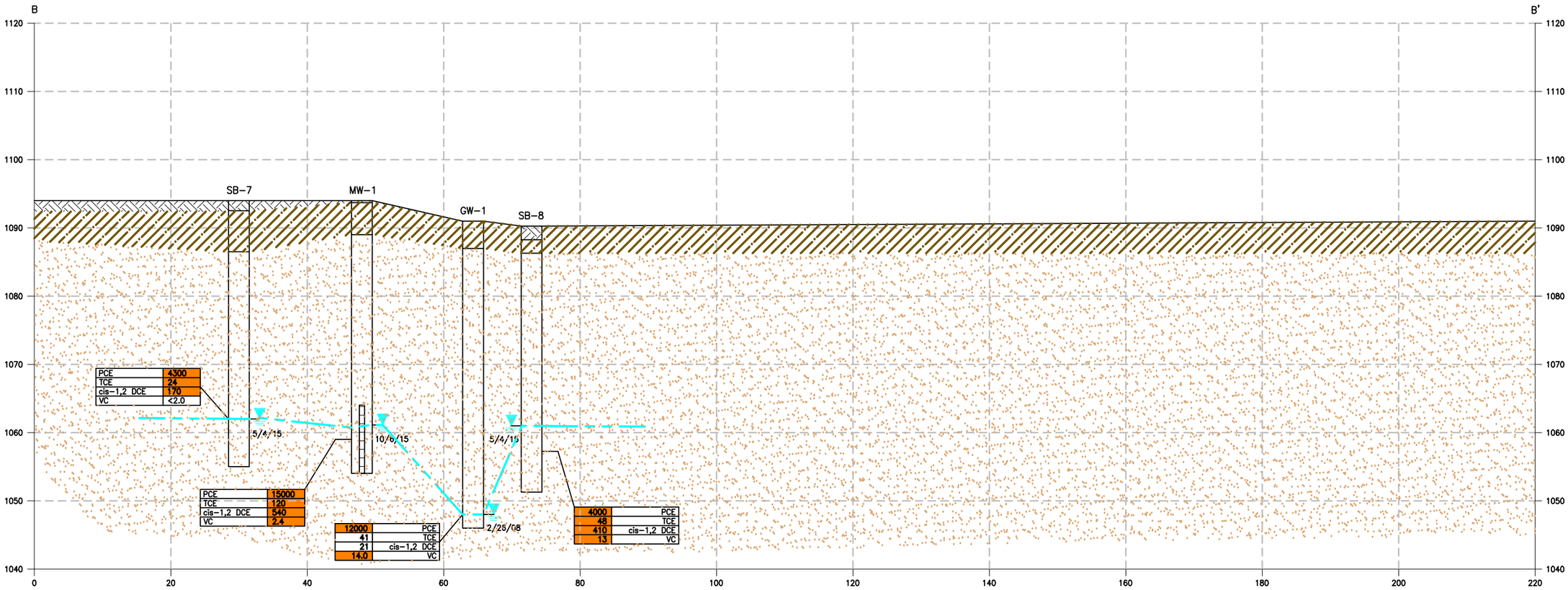

LEGEND

ASPHALT

CLAY

SILTY SAND

GROUNDWATER ELEVATION

WELL SCREEN

PCE	TETRACHLOROETHENE
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Cis-1,2-DCE	cis-1,2-DICHLOROETHENE
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NA	= NOT ANALYZED.

J = ESTIMATED VALUE.

PRIME CONSULTANT

WENCK ASSOCIATES

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PROJECT TITLE

SUBSURFACE INVESTIGATION
MAIN STREET
PROJECT # 5365

CITY OF DULUTH

SHEET TITLE

EAST – WEST CROSS SECTION

DWN BY	CHK'D	APP'D	DWG DATE	
DNO	DL	DL	DEC. 2015	
			SCALE	AS NOTED

PROJECT NO.	SHEET NO.	REV NO.
5365-0001	FIGURE 9	

Plot Date & Time: 31 August 2016 5:49 PM

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WENCK File #5365-0001
September 1, 2016

First VIRP Progress Report

Former Duluth Dry Cleaner Site
3146 Main Street
Duluth, GA
HSI # 10892

Prepared for:
City of Duluth

3167 Main Street
Duluth, GA 30096

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Exceptional outcomes.

Prepared by:

WENCK Associates, Inc.
1080 Holcomb Bridge Road
Building 100, Suite 190
Roswell, GA 30076
Phone: 678-987-5840
Fax: 678-987-5877

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B Monitoring Well Installation Logs
C Monitoring Well Sampling Logs
D Laboratory Reports and Chain-of Custody Documentation
E IDW Disposal Manifests

PG Certification

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

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."

Katie T. Ross

Katie T. Ross, P.G.
Project Manager

September 1, 2016

KATIE T. ROSS
GEORGIA REGISTERED PROFESSIONAL GEOLOGIST
No. 1776

Registration No. 1776
State of Georgia

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1.0 Introduction

Wenck Associates, Inc. (Wenck) was authorized by the City of Duluth to implement the Voluntary Investigation and Remediation Plan (VIRP), which was submitted in January 2016 and approved by the Georgia Environmental Protection Division (EPD) in a letter dated March 4, 2016. The site is currently owned by the City of Duluth. The site consists of one parcel located at the intersection of Main Street and Knox Drive in Duluth, Georgia (the Site). The location and topography features of the Site are presented on **Figure 1**. A Site Plan is presented as **Figure 2**.

This First VIRP Progress Report provides a summary of the activities conducted at the Site from January 2016 through August 2016.

1.1 SUMMARY OF SITE ACTIVITIES

The following scope of services performed by Wenck between July 2016 and August 2016:

- Cleared public and private utilities;
- Completed four (4) soil borings on and off-site to assess current soil and groundwater conditions;
- Observed soil recovered from the soil borings, created soil boring logs, and field-screened soil for the presence of volatile organics with a photoionization detector (PID);
- Installed four (4) monitoring wells (MW-5 through MW-8) to assess current groundwater conditions and created well installation logs;
- Performed development on monitoring wells MW-5 through MW-8;
- Collected a total of eight (8) groundwater samples in August for analysis of VOCs;
- Surveyed the new monitoring wells (MW-5 through MW-10); and
- Prepared this report.

In addition to the above Site Investigation work, a Phase II Enviornmental Site Assessment was performed by Piedmont Geotechnical on a site located northwest of the Site, commonly referred to as the Hill Street Property (the Hill Street Phase II ESA). The field investigation and results of the Hill Street Phase II ESA are being presented to EPD as part of this VIRP Progress Report, because the investigation and results provide supporting data and delineation of the Site plume to the northwest of the Site.

The Hill Street Phase II completed the following investigation scope of services in January 2016 that are incorporated into this VIRP Progress Report:

- Installed, developed, and sampled two (2) permanent monitoring wells (MW-9 and MW-10, see Figure 2) and three (3) temporary monitoring wells (see Appendix A) to evaluate environmental conditions.

2.0 Site Background

2.1 HISTORICAL ACTIVITIES

A dry cleaning business operated at the Site from 1975 to 1993. The dry cleaner closed in 1993, and the existing building was used to operate a woodworking shop from 1993 to 1998. As a result of the historic operation of a dry cleaner at the Site, a release of the dry cleaning solvent chlorinated volatile organic compounds (cVOCs), namely tetrachloroethene (PCE) and its daughter products, have impacted soil and groundwater. The cVOCs have impacted onsite soil and groundwater and are migrating down-gradient of the Site to the west north-west.

In 1998, the building was demolished and converted into a parking lot. In 2000, the City of Duluth purchased the Site. The Site was sold to EJT Downtown, LLC in 2007. The original discovery of the release occurred in 2008 during a Phase II Environmental Site Assessment (ESA) performed by Ahlberg Engineering, Inc., (AEI) which reported PCE and other compounds in soil and groundwater at the Site in the vicinity of the former dry cleaning building.

The EPD determined that a release exceeding a reportable quantity had occurred at the Site based upon information provided in the release notification dated April 4, 2008. The City of Duluth re-acquired the property in 2014 and is now the current owner of the Site. Following the listing on the HSI, limited sub-surface investigations were conducted in 2010 by the US Army Corps of Engineers (USACE) and in 2015 by Wenck. These activities, along with the 2008 Phase II, are summarized in the VIRP prepared and submitted by Wenck in January 2016, which was approved by the GA EPD in March 2016.

2.2 SITE GEOLOGY AND HYDROGEOLOGY

According to the 2010 Brownfields Assessment, the uppermost hydrologic unit in the area of the Site is an unconfined surficial aquifer which is comprised of a saprolite-bedrock aquifer. The saprolite-bedrock aquifer is recharged by rainfall and discharges into streams in valley bottoms. The saprolite stores and transmits water in the pore spaces between the soils (clays, silts, and sands) that comprise the saprolite. The saprolite has a much higher storage capacity but lower transmissivity than the underlying bedrock. The bedrock stores and transmits water through secondary porosity features (fractures, joints, and faults). The bedrock can be capable of transmitting very large volumes of water; the transmissivity depends on the density and orientation of the secondary porosity features. Based on the local topography in the area of the Site, shallow groundwater is expected to flow in a western direction.

Specific hydraulic characteristics of the Site have not been evaluated as part of these VIRP field activities; however, slug testing will be performed in the next reporting period to determine the hydraulic conductivity of the site. Based on the soil type at the Site, the hydraulic conductivity is expected to be between 10^{-3} to 10^{-5} cm/s.

3.0 Investigation Activities

During the reporting period, temporary and permanent monitoring wells were installed on property owned by the City of Duluth. Two monitoring wells and three temporary wells were installed on the Hill Street Property as part of a real estate transaction and reported in the Hill Street Phase II ESA, see **Appendix A**. Additionally, four monitoring wells were installed by Wenck near the former dry cleaner site to assist with off-site delineation of the shallow groundwater plume.

Well installation and groundwater sampling were performed in general accordance with the USEPA Region 4 FBQSTP procedures for well installation and groundwater sampling. Procedures for groundwater sampling activities followed Wenck's standard operating procedures. Standard operating procedures were adhered to with no deviations during the implementation of the work. Methods and procedures are described below.

3.1 GROUNDWATER

3.1.1 Hill Street Monitoring Well Installation

As part of a real estate transaction to sell the Hill Street property (**Figure 2**), a limited Phase II ESA was conducted in January 2016. On behalf of the purchaser, Piedmont Geotechnical Consultants, Inc., (PGC) installed two permanent and three temporary groundwater monitoring wells on the Hill Street property to evaluate if the Hill Street property had been impacted by the release to groundwater at the former dry cleaner property.

According to the PGC Limited Phase II ESA, a drill rig was mobilized to the Hill Street property to install the groundwater monitoring wells on January 11, 2016. The boreholes were drilled using a 3.25-inch inner diameter (ID) hollow-stem auger. The two permanent groundwater monitoring wells were designated MW-01 and MW-02 by PGC; however, these wells are being re-named as MW-9 and MW-10, respectively, for the purposes of this Semi-Annual Progress Report. The three temporary groundwater monitoring wells were designated TMW-03, TMW-04, and TMW-05. The locations of MW-9 and MW-10 are presented on **Figure 2**.

The groundwater monitoring wells were installed as threaded, two-inch diameter PVC wells with 10 feet of screen. Temporary wells TMW-03 and TMW-04 were installed at 15' below ground surface (bgs), and TMW-05 was installed at 20' bgs. MW-9 was installed at total depth of 25' bgs, and MW-10 was installed at a total depth of 16' bgs. The wells were developed by removing five to ten gallons of water from each well. The method used to develop the wells was not specified in the PGC report. A copy of the PGC Limited Phase II ESA with well installation detail is provided in **Appendix A**.

3.1.2 Hill Street Groundwater Sampling

According to the PGC Limited Phase II ESA, the Hill Street property wells were sampled using dedicated disposable bailers. The samples were analyzed for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) using EPA Method 8260B and 8270D, respectively. Groundwater sampling logs were not provided in the PGC Limited Phase II ESA.

3.1.3 Main Street Monitoring Well Installation and Development

Four monitoring wells (MW-5 through MW-8) were installed by Wenck from July 24 to July 25, 2016. The locations of these wells were selected based on site access and underground utilities. Due to underground power and water lines in the right-of-way along Main Street, MW-8 was located on a topographic high in the City green (**Figure 2**). Additionally, beyond the southern property boundary is the railroad right-of-way. Several underground powerlines are present in the City of Duluth's southern property boundary. Therefore, MW-5 provdes delineation on the southwestern portion of the Site.

The groundwater monitoring wells were installed as threaded, two-inch diameter PVC wells with 10 feet of screen. MW-5 and MW-6 were installed at 30' below ground surface (bgs), MW-07 was installed at 35' bgs, and MW-8 was installed at 64' bgs. MW-8 was temporarily installed at 45 feet, but groundwater recharge did not occur within an hour. Therefore, the boring was advanced until evidence of groundwater occurred (wet soils).

Each well was developed by purging no less than five well volumes from the well. Well installation and development logs are presented in **Appendix B.**

3.1.4 Main Street Groundwater Sampling

Groundwater sampling was completed from July 27 to August 1, 2016. Groundwater sampling was performed in general accordance with the USEPA Region 4 FBQSTP procedures for groundwater sampling. Groundwater was purged with generally no less than three well volumes being purged from each well. The samples were collected in laboratory supplied bottles, placed in a cooler with ice, and submitted under chain-of-custody control to Pace Analytical for laboratory analysis.

3.1.5 Decontamination and Disposal Activities

All investigation-derived waste (soil cuttings, development and purge water) was drummed for off-site disposal. Ten drums of soil cuttings and two drums of decontamination water were disposed off-site by EQ Industrial Services on August 3, 2016. Waste manifests documenting disposal are presented in **Appendix D**.

3.1.6 Surveying

The newly installed wells were surveyed by a Precision Planning, Inc., a licensed surveyor, and static groundwater elevations were recorded. A summary of water levels and elevations are presented on **Table 2**. Groundwater was measured to be towards the west across the City green and toward City Hall (**Figure 4**).

3.2 GROUNDWATER FLOW DIRECTION

Depth to groundwater at wells MW-1 through MW-8 was measured using a water level indicator. All measurements were recorded to the nearest 0.01 foot. Groundwater elevations were calculated using top of casing elevations presented in the VIRP and in this report. A summary of the depth to water and groundwater elevations are provided in **Table 2**. Based on the current data, groundwater appears to be flowing to the west. The gradient is 0.009 feet/foot. The potentiometric surface map is illustrated on **Figure 3**.

3.3 ANALYTICAL RESULTS

Groundwater sampling took place in January 2016 (MW-9 and MW-10) and in late July and early August 2016 (MW-5 through MW-8). Groundwater samples were collected and were

analyzed for VOCs (EPA Method 8260B). PCE was detected in monitoring wells MW-1 through MW-6 at concentrations above the Type 3 RRS of 5 ug/L. Concentrations at MW-1 and MW-2 exhibited the highest PCE and PCE daughter products (cis-1,2-dichloroethene and trans-1,2-dichloroethene). PCE was detected at the highest concentration at MW-1 at 14,000 ug/L and MW-2 at 2,200 ug/L and were generally consistent with previous PCE concentrations. MW-6 reported PCE at 7.5 ug/L, which is slightly above the Type 3 RRS. MW-5 reported PCE at 32 ug/L. MW-1 and MW-2 also reported the highest concentration of daughter products, such as trichloroethene (TCE), cis-1,2-dichloroethene, and trans-1,2 dichloroethene. Benzene, chloroform, and toluene were detected in MW-1 at concentrations similar to those detected in October 2015. Vinyl chloride was not reported in any groundwater samples. VOCs were not detected in nearby off-site wells located north of the property (MW-7, MW-8). Additionally, with the exception of chloroform (not related to Site contaminants of concern) at TMW-4, VOCs were not deteced in groundwater at the Hill Street Property (MW-9 or MW-10, TWM-3, TMW-4, and TMW-5).

Groundwater sample results are summarized in **Table 1**. Laboratory reports and supporting chain-of-custody documentation are included in **Appendix C**.

3.4 EXTENT OF IMPACTS

Based on the analytical results, PCE is delineated in shallow groundwater to the north. MW-8 was installed deeper than originally planned due to lack of groundwater recharge during well installation. However, based on the absence of PCE and daughter products in MW-7, MW-9, and MW-10, a shallow well is not recommended at that location. PCE is only slightly above the Type 3 RRS to the east at MW-6 with a concentration of 7.5 ug/L. MW-5 is located along the southwestern property boundary with a concentration of 32 ug/L. The vertical extent and western limit of the groundwater plume is currently unknown.

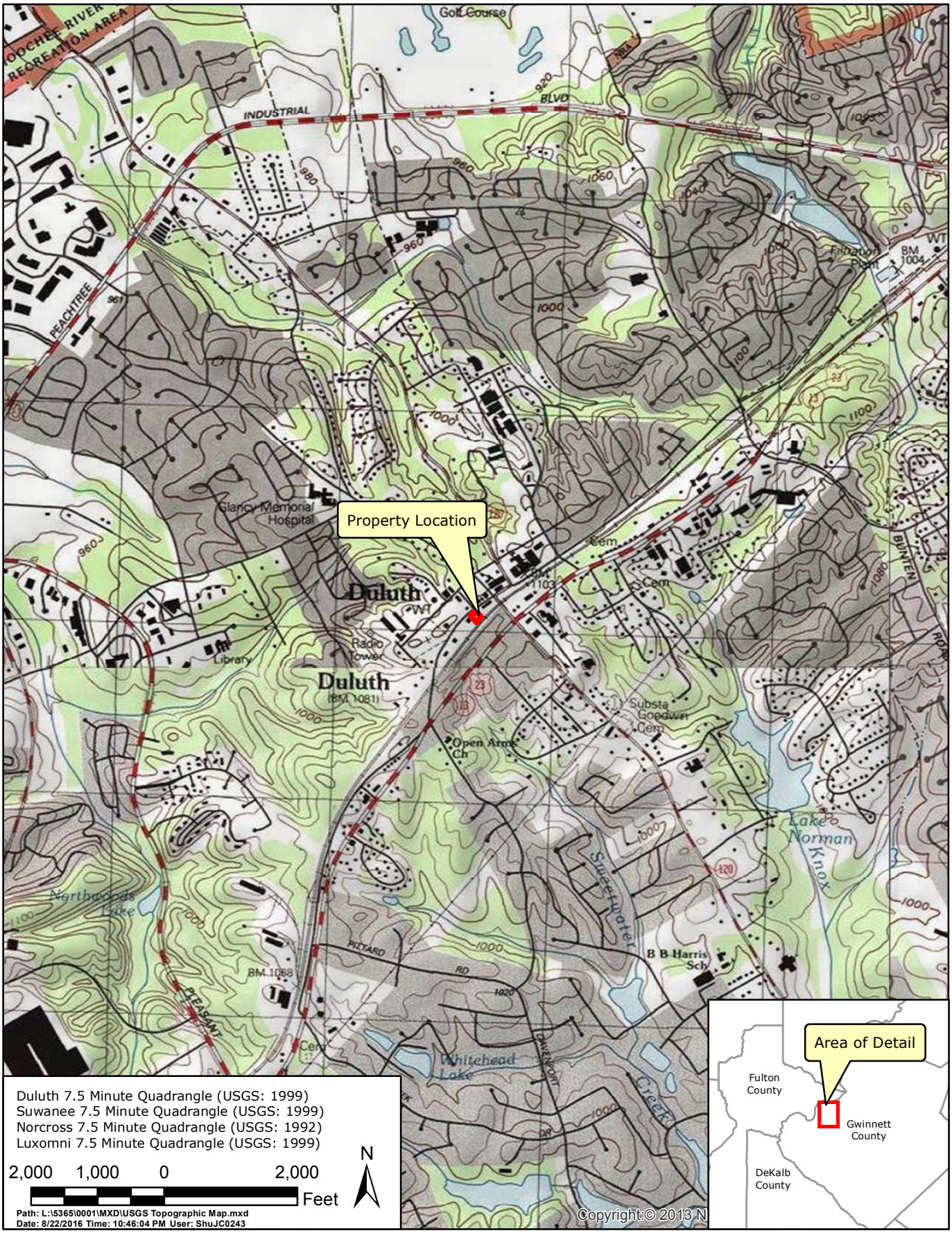
4.0 Recommendations and Schedule

Based on the most recent groundwater results, access limitations, and underground utilities, additional off-site delineation of the shallow groundwater plume is recommended to the west of the property. Additionally, additional onsite activities are planned. Activities planned for the next six-month reporting period (September 2016 through February 2017) include the following:

- Install one shallow well due west of the Site in the grass lot adjacent to the building to complete delineation of the shallow groundwater plume;
- Install one deep well clustered with MW-3 to determine the vertical extent;
- Perform slug tests and analysis to determine the hydraulic conductivity;
- Collect soil gas samples to evaluate the vapor intrusion pathway for the building west of the former dry cleaner site;
- Perform site-wide groundwater sampling for VOCs and geochemical parameters (MW-1 and MW-2) in February 2017;
- Survey the new monitoring wells (MW-11 through MW-12);
- Update the conceptual site model (CSM); and,
- Prepare the Second VIRP Progress Report.

The Second VIRP Progress Report will be submitted by March 2, 2017.

Figures



CITY OF DULUTH - FORMER DRYCLEANER	WENCK ASSOCIATES Responsive partner. Exceptional outcomes.	AUG 2016
USGS Topographic Map		Figure 1

CITY OF DULUTH - FORMER DRYCLEANER	WENCK ASSOCIATES Responsive partner. Exceptional outcomes.	AUG 2016
Site Detail Map		Figure 2

CITY OF DULUTH - FORMER DRYCLEANER

Potentiometric Map - August 2016

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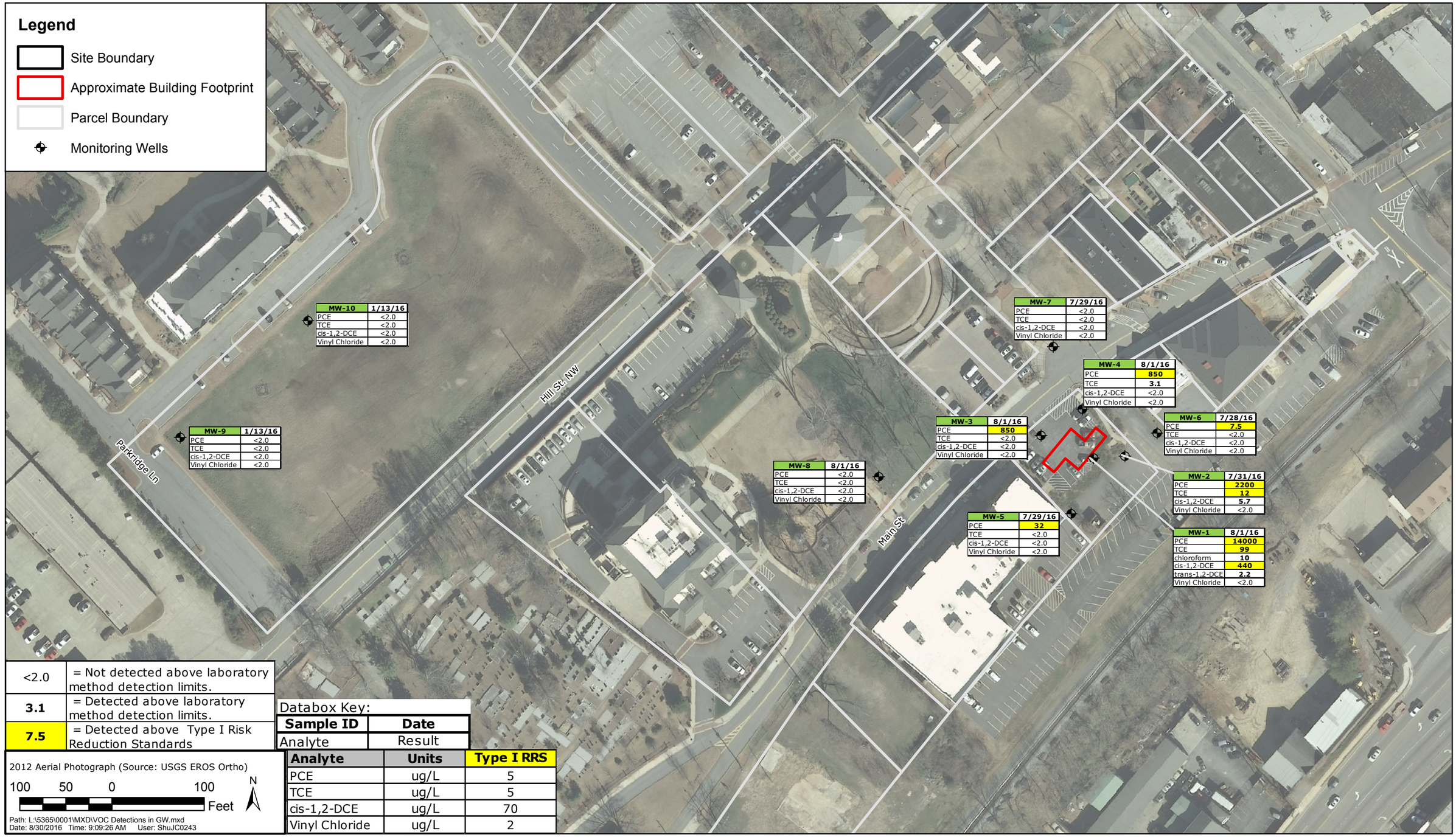
Figure 3



Analyte	Units	Type I RRS
PCE	ug/L	5
TCE	ug/L	5
cis-1,2-DCE	ug/L	70
Vinyl Chloride	ug/L	2

CITY OF DULUTH - FORMER DRYCLEANER

VOC Detections in Groundwater

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Figure 4

Tables

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Table 1 - Summary of Groundwater Analytical Results
3146 Main Street
Duluth, GA
Wenck File #B5365-0001

Wenck Associates, Inc.
1080 Holcomb Bridge Road
Bldg. 100, Ste 190
Roswell, Georgia 30076
(678) 987-5840

Sample Location			MW-1		MW-2		MW-3		MW-4			MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
Client Sample ID			**GW-MW-1**	**MW-1**	**GW-MW-2**	**MW-2**	**GW-MW-3**	**MW-3**	**GW-MW-4**	**MW-4**	**DUP**	**MW-5**	**MW-6**	**MW-7**	**MW-8**	**MW-9**	**MW-10**
Type			**Parent**	**Parent**	**Parent**	**Parent**	**Parent**	**Parent**	**Parent**	**Parent**	**Duplicate**	**Parent**	**Parent**	**Parent**	**Parent**	**Parent**	**Parent**
Collect Date			10/6/2015	8/1/2016	10/6/2015	7/31/2016	10/6/2015	8/1/2016	10/6/2015	8/1/2016	8/1/2016	7/29/2016	7/28/2016	7/29/2016	8/1/2016	1/13/2016	1/13/2016
Relative Elevation Static Water Elevation			1063.25'	1063.25'	1063.81'	1063.81'	1062.73'	1062.73'	1062.21'	1062.21'	1062.21'	1062.52'	1064.43'	1066.88'	1060.44'	1057.9'	1060.3'
Screen Interval or Sample Depth			30-40'	30-40'	20-30'	20-30'	30-45'	30-45'	30-40'	30-40'	30-40'	20-30'	20-30'	25-35'	50-65'	25-15'	16-6'
Parameter	**Units**	**Type I / III RRS**	**Volatile Organic Compounds (VOCs) - Detected Compounds Only**														
Tetrachloroethene	µg/L	5	**15,000**	**14,000**	**1,100**	**2,200**	**1,500**	**850**	**600**	**850**	**740**	**32**	**7.5**	<2.0	<2.0	<2.0	<2.0
Trichloroethene	µg/L	5	**120**	**99**	**7.6**	**12**	<5.0	<2.0	<5.0	**3.1**	**2.8**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
cis-1,2-Dichloroethene	µg/L	70	**540**	**440**	**8**	**5.7**	<5.0	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
trans-1,2-Dichloroethene	µg/L	100	<5.0	**2.2**	<5.0	<2.0	<5.0	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,1,2-Tetrachloroethane	µg/L	700	NA	**5.9**	NA	<2.0	NA	<2.0	NA	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Benzene	µg/L	5	**10**	**10**	**7.8**	<2.0	<5.0	<2.0	**12.0**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloroform	µg/L	80	**13**	**10**	<5.0	<2.0	<5.0	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	µg/L	1,000	**16**	**16**	**15**	<2.0	<5.0	<2.0	**23**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Vinyl Chloride	µg/L	2	**2.4**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0

Notes:

All results are micrograms per liter (µg/L).

MW-9 & MW-10 were previously identified as MW-1 & MW-2 in PGC Phase II ESA

<1.0	= Analyte not detected above the laboratory detection limit
5.7	= Analyte detected above the laboratory detection limit
190	= Exceeds Georgia Type I / III Risk Reduction Standards
NA	= Not Analyzed

Responsive partner. Exceptional outcomes.

Table 2 - Summary of Groundwater Elevations
3146 Main Street
Duluth, GA
Wenck File #B5365-0001

Wenck Associates, Inc.
1080 Holcomb Bridge Road
Bldg. 100, Ste 190
Roswell, Georgia 30076
(678) 987-5840

Well ID	Top of Casing Elevation (feet)	Screen Interval (feet)	Screen Interval Elevation (feet)	Date	Depth to Groundwater (feet)	Water Level Elevation (feet)
MW -1	1092.8	40.18-30.18	1053.23-1063.23	10/6/2015	31.75	1061.05
				10/5/2015	31.74	1061.06
				12/6/2015	30.19	1062.61
				8/1/2016	29.55	1063.25
MW-2	1086.01	29.55-19.55	1056.86-1066.86	10/6/2015	24.38	1061.63
				10/5/2015	24.16	1061.85
				12/6/2015	22.2	1063.81
				7/31/2016	22.2	1063.81
MW-3	1093.63	45.52-30.52	1048.61-1063.61	10/6/2015	33.57	1060.06
				10/5/2015	33.53	1060.1
				12/6/2015	32.55	1061.08
				8/1/2016	30.9	1062.73
MW-4	1092.91	39.64-29.64	1053.85-1043.85	10/6/2015	33.78	1059.13
				10/5/2015	31.66	1061.25
				12/6/2015	30.2	1062.71
				8/1/2016	30.7	1062.21
MW-5	1085.33	30.15-20.15	1055.18-1045.18	7/29/2016	22.81	1062.52
MW-6	1085.5	30.35-20.35	1055.15-1045.15	7/28/2016	21.07	1064.43
MW-7	1092.78	35.45-25.45	1057.33-1047.33	7/29/2016	25.9	1066.88
MW-8	1101.97	64.5-49.5	947.47-932.47	8/1/2016	41.53	1060.44
MW-9	1072.07	25-15	1047.07-1037.07	1/11/2016	13.1	1057.9
MW-10	1070.7	16-6	1054.7-1044.7	1/11/2016	7.7	1060.3

Notes:

MW-9 & MW-10 were previously identified as MW-1 & MW-2 in PGC Phase II ESA.

MW-9 & MW-10 depths to groundwater & water level elevations were measured from ground surface on 1/11/16 by PCG

Table 3 - Summary of Groundwater Field Parameters
3146 Main Street
Duluth, GA
Wenck File #B5365-0001

Wenck Associates, Inc.
1080 Holcomb Bridge Road
Bldg. 100, Ste 190
Roswell, Georgia 30076
(678) 987-5840

Sample Location	Temperature °C	pH	Dissolved Oxygen mg/L	ORP mV	Conductivity µs/cm	Turbidity NTU
October 2015						
MW -1	22.33	4.61	9.68	391	81	8.22
MW -2	22.71	5.21	21.05	267	89	379
MW -3	23.31	4.87	7.39	386	126	0.00
MW -4	23.69	5.23	7.35	257	41	822
January 2016						
MW-9	Field Parameters not included in PGC Phase II ESA Report dated January 25, 2016					
MW-10						
July - August 2016						
MW -1	22.77	4.08	1.33	422	92	18.70
MW -2	21.83	4.49	1.31	380	230	9.60
MW -3	35.12	4.26	2.23	435	62	9.60
MW -4	26.54	4.6	2.88	425	24	1.87
MW -5	22.2	5.15	4.3	335	89	0.36
MW -6	24.82	4.78	446	395	146	12.20
MW -7	25.65	5.18	4.73	370	79	0.00
MW -8	19.3	5.03	3.06	330	38	27

Notes

All measurements recorded with Horiba U53 meter.
MW-9 & MW-10 were previously identified as MW-1 & MW-2 in PGC Phase II ESA.
mg/L - milligrams per liter
mV - millivolts
µs/cm - microsiemens per centimeter
NTU - nephelometric turbidity units

Appendix A

PGC Limited Phase II ESA Results Report, January 2016

PIEDMONT
GEOTECHNICAL CONSULTANTS, INC.

P.O. BOX 1997 * ROSWELL, GA 30077
(770) 752-9205 * FAX (770) 752-0890

January 25, 2016

Pulte Homes Corporation
c/o Pulte Group, Inc.
2475 Northwinds Parkway, Suite 600
Alpharetta, GA 30009

Attention: Mr. Will Kelley

Subject: **Limited Phase II Environmental Site Assessment**
Hill Street Development
Hill Street and Ridgeway Road
Duluth, Gwinnett County, Georgia
PGC Project No. 115340

Dear Mr. Kelley:

Piedmont Geotechnical Consultants, Inc. (PGC) is pleased to provide this letter report summarizing the findings of the Limited Phase II Environmental Site Assessment (ESA) conducted for the above referenced project. The objective of the Limited Phase II ESA was to investigate the potential for impacts to groundwater beneath the subject property due to historical land uses of nearby commercial properties. The Limited Phase II activities were conducted in accordance with proposal number PE15102, dated December 22, 2015.

Project Information

The subject property is located immediately to the west of the intersection of Hill Street and Ridgeway Road in Duluth, Gwinnett County, Georgia. No address is listed for the subject property. The subject property consists of one parcel (Property ID: R6293-020) which has a reported area of 3.46 acres. The subject property generally consists of cleared grass covered land.

The northwest property line of the subject property is bordered by Ridge Towne Place. Multi-family residential structures are located further to the northwest. The northeast property line of the subject property is bordered by Ridgeway Road. A paved parking

area and wooded land are located further to the northeast. The southeast property line of the subject property is bordered by Hill Street. The Duluth City Hall and Duluth Cemetery are located further to the southeast. The southwest property line is bordered by Parkridge Lane. A commercial property including multiple businesses (listed in Section 5.0) is locate further to the southwest.

Phase I Environmental Site Assessment Findings

The Phase I ESA (PGC No. 115340, December 14, 2015) identified the following two off-site recognized environmental conditions (RECs):

- EDR"B6" – Duluth Drycleaners (RCRA-NonGen)
  EDR "B7" and "C9" – Former Duluth Drycleaners (US Brownfields, SHWS)

    - The Former Duluth Drycleaners site at 3146 Main Street is located approximately 400 feet to the east-southeast of the subject property.
    - From 1975 to 1993 the site reportedly operated as a dry cleaner. The dry cleaners closed in 1993 and the existing building was used to operate a woodworking shop from 1993 to 1998. In 1998, the woodworking operated ceased to operate and the building was demolished and converted into a parking lot.
    - The City of Duluth has purchased the site, retained a consultant (Wench Associates) and performed a limited site investigation. The results of the limited site investigation documented that tetrachloroethene (PCE) concentrations in groundwater range from 33 ug/L to 4,300 ug/L.
    - The most recent investigation at the Former Duluth Drycleaners was completed in October of 2015. Ms. Katie Ross with Wenck and Associates (the City of Duluth's environmental consultant) provided PGC with a Summary of Groundwater Analytical Results and a Potentiometric Surface Map.
    - Groundwater samples were collected from four temporary monitor wells. Tetrachloroethene (PCE) was detected in all of the wells and ranged in concentration from 600 ug/L to 15,000 ug/L. In addition, benzene was detected in three of the four wells and ranged from 7.8 ug/L to 12 ug/L.
    - The Potentiometric Surface Map indicates groundwater flow direction is to the west, which is toward the subject property.

    Based on the distance from the subject property, reported groundwater flow direction, ongoing groundwater assessments, and significant reported impacts to groundwater with chlorinated solvents, it is PGC's professional opinion that the Former Duluth Drycleaners site represents a recognized environmental condition (REC).

- EDR "D19" – Proctor Square and Duluth Corners Shopping Center (Brownfields)

    - The Proctor Square and Duluth Corners Shopping Center site at 3106 Buford Highway is located approximately 1,200 feet to the southeast of the subject property.
    - In May 2006 a prospective purchaser/lender retained Environmental Technology Resources, Inc. (ETRI) to complete a Phase II ESA on the property. Two groundwater samples were collected for laboratory analysis. The maximum concentration of tetrachloroethene (PCE) was reportedly detected at 250 ug/L, which is above the EPA MCL of 5 ug/L.
    - On July 13, 2007, three additional groundwater wells were installed and samples were collected for laboratory analysis. The maximum concentration of PCE was reportedly detected at 7,600 ug/L and the determination was made that groundwater flows to the north-northwest (which is toward the subject property).
    - The EPD recommended the Proctor Square and Duluth Corners Shopping Center be placed on the Hazardous Site Inventory list.

    Based on the reported groundwater flow direction and impacts to groundwater with a chlorinated solvent, it is PGC's professional opinion that the Proctor Square and Duluth Corners Shopping Center site represents a REC.

Field Investigation/Installation of Groundwater Monitor Wells

PGC recommended the installation of five groundwater monitor wells on the hill Street site to investigate potential impacts to groundwater with chlorinated solvents (dissolved phase) beneath the subject property. The City of Duluth, which owns both the subject property and the Former Duluth Drycleaners site, requested two of the five proposed groundwater monitor wells be permanently installed so additional data can be collected in the future.

On January 11, 2016, a drill rig was mobilized to the site to install the groundwater monitor wells. Prior to mobilizing to the site, the drilling equipment was pressure washed. The boreholes were drilled using a 3.25-inch inner diameter (ID) hollow-stem auger. A PGC representative observed the installation of the temporary monitor wells. The two permanent groundwater monitor wells are designated MW-01 and MW-02. The three temporary groundwater monitor wells are designated TMW-03, TMW-04, and TMW-05. The locations of the five groundwater monitor wells are presented on the attached Sample Location Map.

The groundwater monitor wells were installed with the bottom of the slotted well screen section placed 7 to 9 feet beneath the depth at which groundwater was encountered at the time of drilling. The monitor wells were constructed of threaded two-inch diameter PVC

slotted well screen and casing. Ten-foot sections of well screen were used to construct each temporary well. No PVC glues were used for the construction of these temporary wells. Boring depths and groundwater elevations (in feet) are summarized in the following Table.

	MW-01	**MW-02**	**TMW-03**	**TMW-04**	**TMW-05**
Ground Surface Elevation*	1071	1068	1065	1065.5	1065.5
Bottom of Well Elevation*	1046	1052	1050	1050.5	1045.5
Bottom of Well Depth**	25	16	15	15	20
Groundwater Elevation*	1057.9	1060.3	1064.5	1062.5	1060.5
Groundwater Depth**	13.1	7.7	0.5	3	5

* Elevations obtained from 2014 USGS Topographic Maps are approximate; measured in feet above sea level.
** Depths measured in feet below ground surface.

Five to ten gallons of water were removed using dedicated disposable bailers to develop each of the groundwater monitor wells. The two permanent groundwater monitor wells (MW-01 and MW-02) were fitted with an above-grade steel casing and padlock.

The five groundwater monitor wells were sampled using dedicated disposable bailers. The groundwater samples, designated MW-01, MW-03, TMW-03, TMW-04, and TMW-05, were transferred to sample containers provided by the analytical laboratory. The samples were placed in coolers and packed with ice to preserve the samples.

On January 13 2016, a PGC representative transported the five groundwater samples under chain of custody to Analytical Services, Inc. located in Norcross, Georgia. The five groundwater samples were analyzed for volatile organic compounds (VOCs) and semi- volatile organic compounds (SVOCs) using EPA Method 8260B and 8270D, respectively.

Analytical Results

Chloroform was detected in groundwater sample TMW-04 at a concentration of 4.8 ug/L. The Primary Maximum Contaminant Levels (MCL) for Drinking Water (Rule 391-3-5-.18) for chloroform is 470.8 ug/L.

No other VOCs or SVOCs were detected in the groundwater samples. The analytical results for the five groundwater samples are provided as an attachment.

No other analytes were detected in the groundwater samples collected from the five groundwater monitor wells.

Groundwater Flow

Groundwater elevation data recorded during our investigation was used to calculate an approximate groundwater flow direction at the subject property. The groundwater flow direction was determined to be in a westerly direction. A Potentiometric Surface Map is provided as an attachment.

Conclusions

The concentration of chloroform detected in the groundwater sample collected from TMW-04 (4.8 ug/L) is well below the listed Maximum Contaminant Level (470.8 ug/L). PGC has no further recommendations for additional Phase II activities.

PGC appreciates the opportunity to work with you on this project. Please feel free to contact us if you have any questions regarding our report or if we can be of additional service.

Sincerely,
Piedmont Geotechnical Consultants, Inc.

Jeff A. Petersohn, P.E.
Senior Project Engineer

W. Michael Ballard, P.E.
Senior Registered Engineer

Attachments: Sample Location Map
Potentiometric Surface Map
Analytical Results

FIGURES

APPROXIMATE SAMPLE LOCATION MAP

LEGEND:

PERMANENT MONITOR WELL

TEMPORARY MONITOR WELL

SCALE: NTS

PIEDMONT
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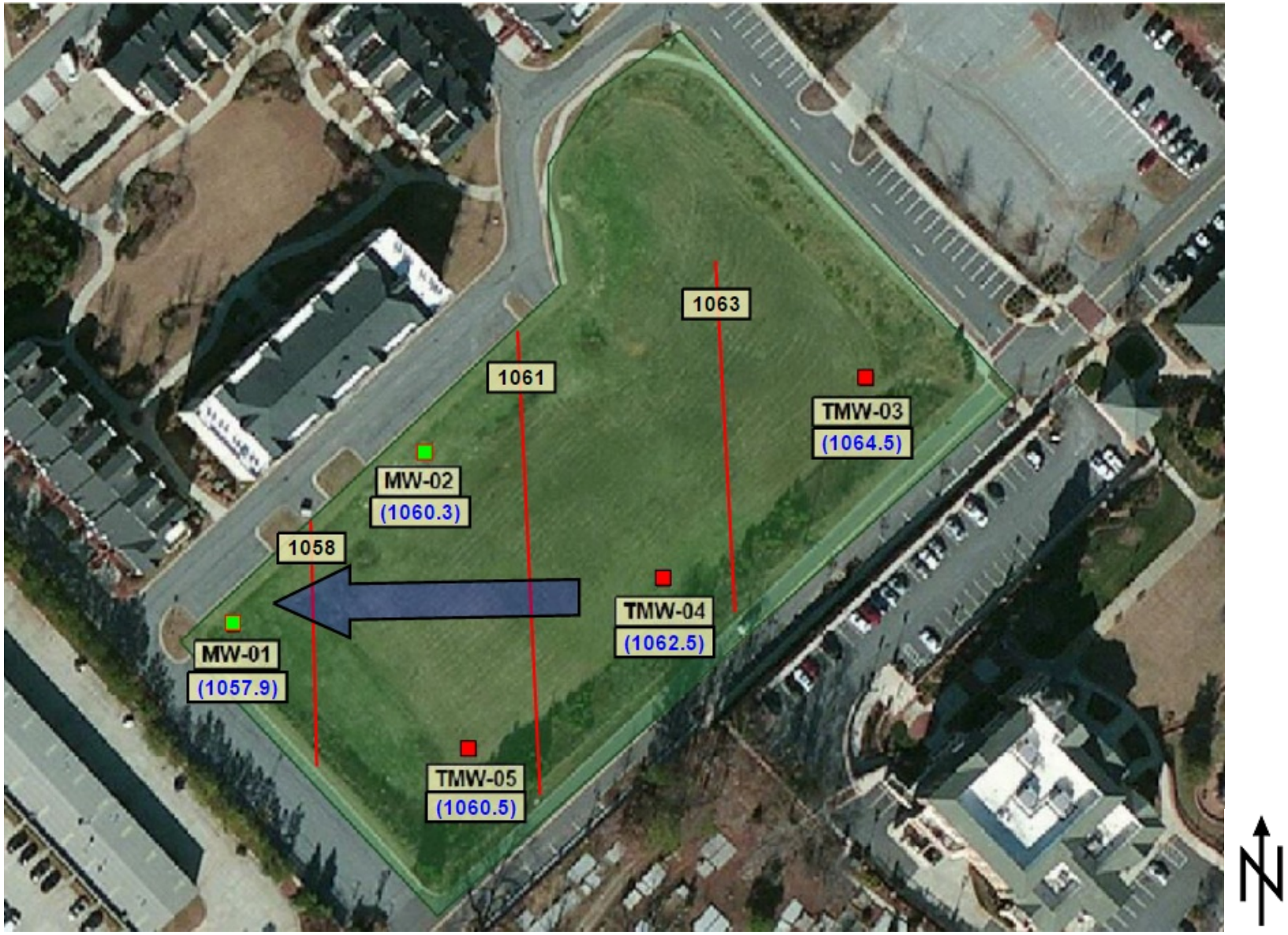
HILL STREET DEVELOPMENT
DULUTH, GEORGIA
PGC PROJECT NO. 115340



POTENTIOMETRIC SURFACE MAP

LEGEND:

GROUNDWATER FLOW DIRECTION
(ELEVATIONS IN FEET ABOVE SEA LEVEL)

SCALE: NTS

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HILL STREET DEVELOPMENT
DULUTH, GEORGIA
PGC PROJECT NO. 115340

ANALYTICAL RESULTS

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

Piedmont Geotechnical Consultants, Inc.
3000 Northfield Place Suite 1100
Roswell, GA 30076

Attention: Mr. Kyle McKinney

Report Number: AZA0273
January 22, 2016
Project: Hill
Project #:115340

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

Nicole Crump
Project Manager

This report may not be reproduced, except in full, without written approval from Analytical Services, Inc.
Analytical Services, Inc. certifies that the following analytical results meet all requirements of the National Environmental Laboratory Accreditation Conference(NELAC).
All test results relate only to the samples analyzed.

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Piedmont Geotechnical Consultants, Inc
3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-01	AZA0273-01	Ground Water	01/13/16 12:00	01/13/16 15:05
MW-02	AZA0273-02	Ground Water	01/13/16 12:30	01/13/16 15:05
TMW-03	AZA0273-03	Ground Water	01/13/16 13:00	01/13/16 15:05
TMW-04	AZA0273-04	Ground Water	01/13/16 13:30	01/13/16 15:05
TMW-05	AZA0273-05	Ground Water	01/13/16 14:00	01/13/16 15:05

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Piedmont Geotechnical Consultants, Inc
3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: MW-01
Date/Time Sampled: 1/13/2016 12:00:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-01
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Acetone	ND	100	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Acrolein	ND	50	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Benzene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Bromobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Bromoform	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Bromomethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Chloroform	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Chloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Dibromomethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
cis-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN

ASI

ANALYTICAL SERVICES, INC.

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(770) 734-4200 FAX (770) 734-4201

Piedmont Geotechnical Consultants, Inc
3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: MW-01
Date/Time Sampled: 1/13/2016 12:00:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-01
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Iodomethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Naphthalene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Styrene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Tetrachloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Tetrahydrofuran	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Toluene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Trichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Piedmont Geotechnical Consultants, Inc
3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: MW-01
Date/Time Sampled: 1/13/2016 12:00:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-01
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Vinyl Chloride	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 12:45	6010324	GCN
Surrogate: Dibromofluoromethane	*97 %*	*80-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 12:45*	*6010324*	
Surrogate: 1,2-Dichloroethane-d4	*92 %*	*78-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 12:45*	*6010324*	
Surrogate: Toluene-d8	*92 %*	*80-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 12:45*	*6010324*	
Surrogate: 4-Bromofluorobenzene	*101 %*	*80-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 12:45*	*6010324*	
Semivolatile Organic Compounds by EPA 8270										
Acenaphthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Acenaphthylene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Aniline	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Anthracene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Benzidine	ND	80	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Benzo(a)anthracene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Benzo(a)pyrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Benzo(b)fluoranthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Benzo(ghi)perylene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Benzo(k)fluoranthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Benzoic acid	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Benzyl alcohol	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Benzyl butyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
4-Bromophenyl phenyl ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Di-n-butyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Carbazole	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
4-Chloroaniline	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Bis(2-chloroethoxy)methane	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Bis(2-chloroethyl)ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Bis(2-chloroisopropyl)ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
4-Chloro-3-methylphenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS

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(770) 734-4200 FAX (770) 734-4201

Piedmont Geotechnical Consultants, Inc
3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: MW-01
Date/Time Sampled: 1/13/2016 12:00:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-01
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Semivolatile Organic Compounds by EPA 8270										
2-Chloronaphthalene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
2-Chlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
4-Chlorophenyl phenyl ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Chrysene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Dibenzo(a,h)anthracene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Dibenzofuran	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
3,3´-Dichlorobenzidine	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
2,4-Dichlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Diethyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
2,4-Dimethylphenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Dimethyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
4,6-Dinitro-2-methylphenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
2,4-Dinitrophenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
2,4-Dinitrotoluene	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
2,6-Dinitrotoluene	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
1,2-Diphenylhydrazine as azobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Bis(2-ethylhexyl)phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Fluoranthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Fluorene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Hexachlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Hexachlorobutadiene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Hexachlorocyclopentadiene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Hexachloroethane	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Isophorone	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
2-Methylnaphthalene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
2-Methylphenol (o-cresol)	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
3+4-Methylphenol (m+p-cresol)	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Naphthalene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
2-Nitroaniline	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
3-Nitroaniline	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
4-Nitroaniline	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Nitrobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS

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Piedmont Geotechnical Consultants, Inc
3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: MW-01
Date/Time Sampled: 1/13/2016 12:00:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-01
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Semivolatile Organic Compounds by EPA 8270										
2-Nitrophenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
4-Nitrophenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
N-Nitrosodimethylamine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
N-Nitrosodiphenylamine/Diphenylamine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
N-Nitrosodi-n-propylamine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Di-n-octyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Pentachlorophenol	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Phenanthrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Phenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Pyrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Pyridine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
1,2,4,5-Tetrachlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
2,4,5-Trichlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
2,4,6-Trichlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:36	6010327	JRS
Surrogate: 2-Fluorophenol	*34 %*	*11-120*		*EPA 8270D*			*1/18/16 14:00*	*1/18/16 23:36*	*6010327*	
Surrogate: Phenol-d6	*23 %*	*10-120*		*EPA 8270D*			*1/18/16 14:00*	*1/18/16 23:36*	*6010327*	
Surrogate: Nitrobenzene-d5	*56 %*	*15-120*		*EPA 8270D*			*1/18/16 14:00*	*1/18/16 23:36*	*6010327*	
Surrogate: 2-Fluorobiphenyl	*68 %*	*23-120*		*EPA 8270D*			*1/18/16 14:00*	*1/18/16 23:36*	*6010327*	
Surrogate: 2,4,6-Tribromophenol	*94 %*	*36-120*		*EPA 8270D*			*1/18/16 14:00*	*1/18/16 23:36*	*6010327*	
Surrogate: p-Terphenyl-dl4	*89 %*	*53-121*		*EPA 8270D*			*1/18/16 14:00*	*1/18/16 23:36*	*6010327*	

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Piedmont Geotechnical Consultants, Inc
3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: MW-02
Date/Time Sampled: 1/13/2016 12:30:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-02
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Acetone	ND	100	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Acrolein	ND	50	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Benzene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Bromobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Bromoform	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Bromomethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Chloroform	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Chloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Dibromomethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
cis-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
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Piedmont Geotechnical Consultants, Inc
3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: MW-02
Date/Time Sampled: 1/13/2016 12:30:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-02
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Iodomethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Naphthalene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Styrene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Tetrachloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Tetrahydrofuran	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Toluene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Trichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN

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Piedmont Geotechnical Consultants, Inc
3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: MW-02
Date/Time Sampled: 1/13/2016 12:30:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-02
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Vinyl Chloride	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:15	6010324	GCN
Surrogate: Dibromofluoromethane	*97 %*	*80-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 13:15*	*6010324*	
Surrogate: 1,2-Dichloroethane-d4	*93 %*	*78-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 13:15*	*6010324*	
Surrogate: Toluene-d8	*94 %*	*80-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 13:15*	*6010324*	
Surrogate: 4-Bromofluorobenzene	*103 %*	*80-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 13:15*	*6010324*	
Semivolatile Organic Compounds by EPA 8270										
Acenaphthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Acenaphthylene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Aniline	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Anthracene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Benzidine	ND	80	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Benzo(a)anthracene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Benzo(a)pyrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Benzo(b)fluoranthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Benzo(ghi)perylene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Benzo(k)fluoranthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Benzoic acid	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Benzyl alcohol	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Benzyl butyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
4-Bromophenyl phenyl ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Di-n-butyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Carbazole	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
4-Chloroaniline	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Bis(2-chloroethoxy)methane	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Bis(2-chloroethyl)ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Bis(2-chloroisopropyl)ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
4-Chloro-3-methylphenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS

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3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: MW-02
Date/Time Sampled: 1/13/2016 12:30:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-02
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Semivolatile Organic Compounds by EPA 8270										
2-Chloronaphthalene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
2-Chlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
4-Chlorophenyl phenyl ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Chrysene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Dibenzo(a,h)anthracene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Dibenzofuran	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
3,3´-Dichlorobenzidine	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
2,4-Dichlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Diethyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
2,4-Dimethylphenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Dimethyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
4,6-Dinitro-2-methylphenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
2,4-Dinitrophenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
2,4-Dinitrotoluene	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
2,6-Dinitrotoluene	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
1,2-Diphenylhydrazine as azobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Bis(2-ethylhexyl)phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Fluoranthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Fluorene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Hexachlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Hexachlorobutadiene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Hexachlorocyclopentadiene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Hexachloroethane	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Isophorone	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
2-Methylnaphthalene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
2-Methylphenol (o-cresol)	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
3+4-Methylphenol (m+p-cresol)	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Naphthalene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
2-Nitroaniline	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
3-Nitroaniline	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
4-Nitroaniline	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Nitrobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS

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Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: MW-02
Date/Time Sampled: 1/13/2016 12:30:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-02
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Semivolatile Organic Compounds by EPA 8270										
2-Nitrophenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
4-Nitrophenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
N-Nitrosodimethylamine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
N-Nitrosodiphenylamine/Diphenylamine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
N-Nitrosodi-n-propylamine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Di-n-octyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Pentachlorophenol	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Phenanthrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Phenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Pyrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Pyridine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
1,2,4,5-Tetrachlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
2,4,5-Trichlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
2,4,6-Trichlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 2:12	6010327	JRS
Surrogate: 2-Fluorophenol	*34 %*	*11-120*		*EPA 8270D*			*1/18/16 14:00*	*1/19/16 2:12*	*6010327*	
Surrogate: Phenol-d6	*27 %*	*10-120*		*EPA 8270D*			*1/18/16 14:00*	*1/19/16 2:12*	*6010327*	
Surrogate: Nitrobenzene-d5	*55 %*	*15-120*		*EPA 8270D*			*1/18/16 14:00*	*1/19/16 2:12*	*6010327*	
Surrogate: 2-Fluorobiphenyl	*62 %*	*23-120*		*EPA 8270D*			*1/18/16 14:00*	*1/19/16 2:12*	*6010327*	
Surrogate: 2,4,6-Tribromophenol	*87 %*	*36-120*		*EPA 8270D*			*1/18/16 14:00*	*1/19/16 2:12*	*6010327*	
Surrogate: p-Terphenyl-dl4	*41 %*	*53-121*		*EPA 8270D*	*S-04*		*1/18/16 14:00*	*1/19/16 2:12*	*6010327*	

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Piedmont Geotechnical Consultants, Inc
3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: TMW-03
Date/Time Sampled: 1/13/2016 1:00:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-03
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Acetone	ND	100	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Acrolein	ND	50	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Benzene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Bromobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Bromoform	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Bromomethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Chloroform	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Chloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Dibromomethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
cis-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN

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3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: TMW-03
Date/Time Sampled: 1/13/2016 1:00:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-03
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Iodomethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Naphthalene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Styrene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Tetrachloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Tetrahydrofuran	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Toluene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Trichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN

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3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: TMW-03
Date/Time Sampled: 1/13/2016 1:00:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-03
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Vinyl Chloride	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 13:43	6010324	GCN
Surrogate: Dibromofluoromethane	*96 %*	*80-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 13:43*	*6010324*	
Surrogate: 1,2-Dichloroethane-d4	*91 %*	*78-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 13:43*	*6010324*	
Surrogate: Toluene-d8	*94 %*	*80-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 13:43*	*6010324*	
Surrogate: 4-Bromofluorobenzene	*102 %*	*80-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 13:43*	*6010324*	
Semivolatile Organic Compounds by EPA 8270										
Acenaphthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Acenaphthylene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Aniline	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Anthracene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Benzidine	ND	80	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Benzo(a)anthracene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Benzo(a)pyrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Benzo(b)fluoranthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Benzo(ghi)perylene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Benzo(k)fluoranthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Benzoic acid	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Benzyl alcohol	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Benzyl butyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
4-Bromophenyl phenyl ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Di-n-butyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Carbazole	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
4-Chloroaniline	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Bis(2-chloroethoxy)methane	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Bis(2-chloroethyl)ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Bis(2-chloroisopropyl)ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
4-Chloro-3-methylphenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS

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January 22, 2016

Report No.: AZA0273
Client ID: TMW-03
Date/Time Sampled: 1/13/2016 1:00:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-03
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Semivolatile Organic Compounds by EPA 8270										
2-Chloronaphthalene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
2-Chlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
4-Chlorophenyl phenyl ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Chrysene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Dibenzo(a,h)anthracene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Dibenzofuran	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
3,3´-Dichlorobenzidine	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
2,4-Dichlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Diethyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
2,4-Dimethylphenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Dimethyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
4,6-Dinitro-2-methylphenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
2,4-Dinitrophenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
2,4-Dinitrotoluene	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
2,6-Dinitrotoluene	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
1,2-Diphenylhydrazine as azobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Bis(2-ethylhexyl)phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Fluoranthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Fluorene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Hexachlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Hexachlorobutadiene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Hexachlorocyclopentadiene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Hexachloroethane	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Isophorone	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
2-Methylnaphthalene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
2-Methylphenol (o-cresol)	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
3+4-Methylphenol (m+p-cresol)	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Naphthalene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
2-Nitroaniline	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
3-Nitroaniline	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
4-Nitroaniline	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Nitrobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Piedmont Geotechnical Consultants, Inc
3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: TMW-03
Date/Time Sampled: 1/13/2016 1:00:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-03
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Semivolatile Organic Compounds by EPA 8270										
2-Nitrophenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
4-Nitrophenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
N-Nitrosodimethylamine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
N-Nitrosodiphenylamine/Diphenylamine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
N-Nitrosodi-n-propylamine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Di-n-octyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Pentachlorophenol	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Phenanthrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Phenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Pyrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Pyridine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
1,2,4,5-Tetrachlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
2,4,5-Trichlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
2,4,6-Trichlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/18/16 23:59	6010327	JRS
Surrogate: 2-Fluorophenol	*32 %*	*11-120*		*EPA 8270D*			*1/18/16 14:00*	*1/18/16 23:59*	*6010327*	
Surrogate: Phenol-d6	*22 %*	*10-120*		*EPA 8270D*			*1/18/16 14:00*	*1/18/16 23:59*	*6010327*	
Surrogate: Nitrobenzene-d5	*49 %*	*15-120*		*EPA 8270D*			*1/18/16 14:00*	*1/18/16 23:59*	*6010327*	
Surrogate: 2-Fluorobiphenyl	*60 %*	*23-120*		*EPA 8270D*			*1/18/16 14:00*	*1/18/16 23:59*	*6010327*	
Surrogate: 2,4,6-Tribromophenol	*80 %*	*36-120*		*EPA 8270D*			*1/18/16 14:00*	*1/18/16 23:59*	*6010327*	
Surrogate: p-Terphenyl-dl4	*79 %*	*53-121*		*EPA 8270D*			*1/18/16 14:00*	*1/18/16 23:59*	*6010327*	

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Piedmont Geotechnical Consultants, Inc
3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: TMW-04
Date/Time Sampled: 1/13/2016 1:30:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-04
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Acetone	ND	100	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Acrolein	ND	50	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Benzene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Bromobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Bromoform	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Bromomethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Chloroform	4.8	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Chloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Dibromomethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
cis-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN

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Piedmont Geotechnical Consultants, Inc
3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: TMW-04
Date/Time Sampled: 1/13/2016 1:30:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-04
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Iodomethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Naphthalene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Styrene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Tetrachloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Tetrahydrofuran	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Toluene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Trichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN

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3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: TMW-04
Date/Time Sampled: 1/13/2016 1:30:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-04
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Vinyl Chloride	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 14:43	6010324	GCN
Surrogate: Dibromofluoromethane	*100 %*	*80-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 14:43*	*6010324*	
Surrogate: 1,2-Dichloroethane-d4	*93 %*	*78-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 14:43*	*6010324*	
Surrogate: Toluene-d8	*93 %*	*80-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 14:43*	*6010324*	
Surrogate: 4-Bromofluorobenzene	*104 %*	*80-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 14:43*	*6010324*	
Semivolatile Organic Compounds by EPA 8270										
Acenaphthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Acenaphthylene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Aniline	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Anthracene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Benzidine	ND	80	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Benzo(a)anthracene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Benzo(a)pyrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Benzo(b)fluoranthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Benzo(ghi)perylene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Benzo(k)fluoranthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Benzoic acid	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Benzyl alcohol	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Benzyl butyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
4-Bromophenyl phenyl ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Di-n-butyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Carbazole	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
4-Chloroaniline	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Bis(2-chloroethoxy)methane	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Bis(2-chloroethyl)ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Bis(2-chloroisopropyl)ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
4-Chloro-3-methylphenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Piedmont Geotechnical Consultants, Inc
3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: TMW-04
Date/Time Sampled: 1/13/2016 1:30:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-04
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Semivolatile Organic Compounds by EPA 8270										
2-Chloronaphthalene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
2-Chlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
4-Chlorophenyl phenyl ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Chrysene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Dibenzo(a,h)anthracene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Dibenzofuran	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
3,3´-Dichlorobenzidine	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
2,4-Dichlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Diethyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
2,4-Dimethylphenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Dimethyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
4,6-Dinitro-2-methylphenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
2,4-Dinitrophenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
2,4-Dinitrotoluene	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
2,6-Dinitrotoluene	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
1,2-Diphenylhydrazine as azobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Bis(2-ethylhexyl)phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Fluoranthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Fluorene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Hexachlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Hexachlorobutadiene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Hexachlorocyclopentadiene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Hexachloroethane	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Isophorone	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
2-Methylnaphthalene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
2-Methylphenol (o-cresol)	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
3+4-Methylphenol (m+p-cresol)	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Naphthalene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
2-Nitroaniline	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
3-Nitroaniline	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
4-Nitroaniline	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Nitrobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS

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Piedmont Geotechnical Consultants, Inc
3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: TMW-04
Date/Time Sampled: 1/13/2016 1:30:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-04
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Semivolatile Organic Compounds by EPA 8270										
2-Nitrophenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
4-Nitrophenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
N-Nitrosodimethylamine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
N-Nitrosodiphenylamine/Diphenylamine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
N-Nitrosodi-n-propylamine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Di-n-octyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Pentachlorophenol	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Phenanthrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Phenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Pyrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Pyridine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
1,2,4,5-Tetrachlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
2,4,5-Trichlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
2,4,6-Trichlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:21	6010327	JRS
Surrogate: 2-Fluorophenol	*32 %*	*11-120*		*EPA 8270D*			*1/18/16 14:00*	*1/19/16 0:21*	*6010327*	
Surrogate: Phenol-d6	*22 %*	*10-120*		*EPA 8270D*			*1/18/16 14:00*	*1/19/16 0:21*	*6010327*	
Surrogate: Nitrobenzene-d5	*58 %*	*15-120*		*EPA 8270D*			*1/18/16 14:00*	*1/19/16 0:21*	*6010327*	
Surrogate: 2-Fluorobiphenyl	*71 %*	*23-120*		*EPA 8270D*			*1/18/16 14:00*	*1/19/16 0:21*	*6010327*	
Surrogate: 2,4,6-Tribromophenol	*98 %*	*36-120*		*EPA 8270D*			*1/18/16 14:00*	*1/19/16 0:21*	*6010327*	
Surrogate: p-Terphenyl-dl4	*97 %*	*53-121*		*EPA 8270D*			*1/18/16 14:00*	*1/19/16 0:21*	*6010327*	

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Piedmont Geotechnical Consultants, Inc
3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: TMW-05
Date/Time Sampled: 1/13/2016 2:00:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-05
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Acetone	ND	100	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Acrolein	ND	50	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Benzene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Bromobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Bromoform	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Bromomethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Chloroform	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Chloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Dibromomethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
cis-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN

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3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: TMW-05
Date/Time Sampled: 1/13/2016 2:00:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-05
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Iodomethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Naphthalene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Styrene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Tetrachloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Tetrahydrofuran	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Toluene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Trichloroethene	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN

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ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Piedmont Geotechnical Consultants, Inc
3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: TMW-05
Date/Time Sampled: 1/13/2016 2:00:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-05
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Vinyl Chloride	ND	2.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	1/18/16 11:00	1/18/16 15:12	6010324	GCN
Surrogate: Dibromofluoromethane	*99 %*	*80-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 15:12*	*6010324*	
Surrogate: 1,2-Dichloroethane-d4	*94 %*	*78-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 15:12*	*6010324*	
Surrogate: Toluene-d8	*91 %*	*80-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 15:12*	*6010324*	
Surrogate: 4-Bromofluorobenzene	*100 %*	*80-120*		*EPA 8260B*			*1/18/16 11:00*	*1/18/16 15:12*	*6010324*	
Semivolatile Organic Compounds by EPA 8270										
Acenaphthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Acenaphthylene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Aniline	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Anthracene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Benzidine	ND	80	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Benzo(a)anthracene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Benzo(a)pyrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Benzo(b)fluoranthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Benzo(ghi)perylene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Benzo(k)fluoranthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Benzoic acid	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Benzyl alcohol	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Benzyl butyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
4-Bromophenyl phenyl ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Di-n-butyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Carbazole	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
4-Chloroaniline	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Bis(2-chloroethoxy)methane	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Bis(2-chloroethyl)ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Bis(2-chloroisopropyl)ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
4-Chloro-3-methylphenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS

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Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273
Client ID: TMW-05
Date/Time Sampled: 1/13/2016 2:00:00PM
Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-05
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Semivolatile Organic Compounds by EPA 8270										
2-Chloronaphthalene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
2-Chlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
4-Chlorophenyl phenyl ether	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Chrysene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Dibenzo(a,h)anthracene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Dibenzofuran	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
3,3´-Dichlorobenzidine	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
2,4-Dichlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Diethyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
2,4-Dimethylphenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Dimethyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
4,6-Dinitro-2-methylphenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
2,4-Dinitrophenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
2,4-Dinitrotoluene	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
2,6-Dinitrotoluene	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
1,2-Diphenylhydrazine as azobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Bis(2-ethylhexyl)phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Fluoranthene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Fluorene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Hexachlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Hexachlorobutadiene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Hexachlorocyclopentadiene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Hexachloroethane	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Isophorone	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
2-Methylnaphthalene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
2-Methylphenol (o-cresol)	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
3+4-Methylphenol (m+p-cresol)	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Naphthalene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
2-Nitroaniline	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
3-Nitroaniline	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
4-Nitroaniline	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Nitrobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS

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Matrix: Ground Water

Project: Hill
Lab Number ID: AZA0273-05
Date/Time Received: 1/13/2016 3:05:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Semivolatile Organic Compounds by EPA 8270										
2-Nitrophenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
4-Nitrophenol	ND	50	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
N-Nitrosodimethylamine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
N-Nitrosodiphenylamine/Diphenylamine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
N-Nitrosodi-n-propylamine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Di-n-octyl phthalate	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Pentachlorophenol	ND	20	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Phenanthrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Phenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Pyrene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Pyridine	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
1,2,4,5-Tetrachlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
2,4,5-Trichlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
2,4,6-Trichlorophenol	ND	10	ug/L	EPA 8270D		1	1/18/16 14:00	1/19/16 0:44	6010327	JRS
Surrogate: 2-Fluorophenol	*38 %*	*11-120*		*EPA 8270D*			*1/18/16 14:00*	*1/19/16 0:44*	*6010327*	
Surrogate: Phenol-d6	*24 %*	*10-120*		*EPA 8270D*			*1/18/16 14:00*	*1/19/16 0:44*	*6010327*	
Surrogate: Nitrobenzene-d5	*68 %*	*15-120*		*EPA 8270D*			*1/18/16 14:00*	*1/19/16 0:44*	*6010327*	
Surrogate: 2-Fluorobiphenyl	*83 %*	*23-120*		*EPA 8270D*			*1/18/16 14:00*	*1/19/16 0:44*	*6010327*	
Surrogate: 2,4,6-Tribromophenol	*106 %*	*36-120*		*EPA 8270D*			*1/18/16 14:00*	*1/19/16 0:44*	*6010327*	
Surrogate: p-Terphenyl-dl4	*103 %*	*53-121*		*EPA 8270D*			*1/18/16 14:00*	*1/19/16 0:44*	*6010327*	

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Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6010324 - EPA 5030B										
Blank (6010324-BLK1)					Prepared & Analyzed: 01/18/16					
Acetone	ND	100	ug/L							
Acrolein	ND	50	ug/L							
Acrylonitrile	ND	50	ug/L							
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L							
Benzene	ND	2.0	ug/L							
Bromobenzene	ND	10	ug/L							
Bromochloromethane	ND	10	ug/L							
Bromodichloromethane	ND	10	ug/L							
Bromoform	ND	10	ug/L							
Bromomethane	ND	10	ug/L							
n-Butylbenzene	ND	10	ug/L							
sec-Butylbenzene	ND	10	ug/L							
tert-Butylbenzene	ND	10	ug/L							
Carbon Disulfide	ND	10	ug/L							
Carbon Tetrachloride	ND	2.0	ug/L							
Chlorobenzene	ND	10	ug/L							
1-Chlorobutane	ND	10	ug/L							
Chloroethane	ND	5.0	ug/L							
Chloroform	ND	2.0	ug/L							
Chloromethane	ND	10	ug/L							
2-Chlorotoluene	ND	10	ug/L							
4-Chlorotoluene	ND	10	ug/L							
Dibromochloromethane	ND	10	ug/L							
1,2-Dibromo-3-chloropropane	ND	10	ug/L							
1,2-Dibromoethane	ND	10	ug/L							
Dibromomethane	ND	10	ug/L							
1,2-Dichlorobenzene	ND	10	ug/L							
1,3-Dichlorobenzene	ND	10	ug/L							
1,4-Dichlorobenzene	ND	10	ug/L							
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L							
Dichlorodifluoromethane	ND	10	ug/L							
1,1-Dichloroethane	ND	2.0	ug/L							
1,2-Dichloroethane	ND	2.0	ug/L							
1,1-Dichloroethene	ND	2.0	ug/L							
cis-1,2-Dichloroethene	ND	1.0	ug/L							
trans-1,2-Dichloroethene	ND	2.0	ug/L							
1,2-Dichloroethene (total)	ND	2.0	ug/L							
1,2-Dichloropropane	ND	2.0	ug/L							
1,3-Dichloropropane	ND	2.0	ug/L							
2,2-Dichloropropane	ND	10	ug/L							
1,1-Dichloropropene	ND	10	ug/L							

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Report No.: AZA0273

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6010324 - EPA 5030B										
Blank (6010324-BLK1)					Prepared & Analyzed: 01/18/16					
cis-1,3-Dichloropropene	ND	2.0	ug/L							
trans-1,3-Dichloropropene	ND	2.0	ug/L							
Ethylbenzene	ND	2.0	ug/L							
Ethyl Methacrylate	ND	10	ug/L							
Hexachlorobutadiene	ND	10	ug/L							
p-Isopropyltoluene	ND	10	ug/L							
Hexachloroethane	ND	10	ug/L							
Iodomethane	ND	10	ug/L							
Isopropylbenzene	ND	10	ug/L							
Methacrylonitrile	ND	10	ug/L							
Methyl Acrylate	ND	10	ug/L							
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L							
Methylene Chloride	ND	5.0	ug/L							
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L							
Methyl Methacrylate	ND	10	ug/L							
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L							
Methyl-tert-Butyl Ether	ND	10	ug/L							
Naphthalene	ND	10	ug/L							
2-Nitropropane	ND	10	ug/L							
Propionitrile (Ethyl Cyanide)	ND	20	ug/L							
n-Propylbenzene	ND	10	ug/L							
Styrene	ND	5.0	ug/L							
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L							
Tetrachloroethene	ND	1.0	ug/L							
Tetrahydrofuran	ND	10	ug/L							
Toluene	ND	2.0	ug/L							
1,2,3-Trichlorobenzene	ND	10	ug/L							
1,2,4-Trichlorobenzene	ND	10	ug/L							
1,1,1-Trichloroethane	ND	2.0	ug/L							
1,1,2-Trichloroethane	ND	2.0	ug/L							
Trichloroethene	ND	1.0	ug/L							
Trichlorofluoromethane	ND	10	ug/L							
1,2,3-Trichloropropane	ND	10	ug/L							
1,2,4-Trimethylbenzene	ND	10	ug/L							
1,3,5-Trimethylbenzene	ND	10	ug/L							
Vinyl Acetate	ND	10	ug/L							
Vinyl Chloride	ND	2.0	ug/L							
m+p-Xylene	ND	5.0	ug/L							
o-Xylene	ND	5.0	ug/L							
Xylenes, total	ND	5.0	ug/L							

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January 22, 2016

Report No.: AZA0273

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6010324 - EPA 5030B										
Blank (6010324-BLK1)					Prepared & Analyzed: 01/18/16					
Surrogate: Dibromofluoromethane	*48*		*ug/L*	*50.000*		*97*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*45*		*ug/L*	*50.000*		*90*	*78-120*			
Surrogate: Toluene-d8	*45*		*ug/L*	*50.000*		*91*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*50*		*ug/L*	*50.000*		*100*	*80-120*			
Blank (6010324-BLK2)					Prepared & Analyzed: 01/19/16					
Acetone	ND	100	ug/L							
Acrolein	ND	50	ug/L							
Acrylonitrile	ND	50	ug/L							
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L							
Benzene	ND	2.0	ug/L							
Bromobenzene	ND	10	ug/L							
Bromochloromethane	ND	10	ug/L							
Bromodichloromethane	ND	10	ug/L							
Bromoform	ND	10	ug/L							
Bromomethane	ND	10	ug/L							
n-Butylbenzene	ND	10	ug/L							
sec-Butylbenzene	ND	10	ug/L							
tert-Butylbenzene	ND	10	ug/L							
Carbon Disulfide	ND	10	ug/L							
Carbon Tetrachloride	ND	2.0	ug/L							
Chlorobenzene	ND	10	ug/L							
1-Chlorobutane	ND	10	ug/L							
Chloroethane	ND	5.0	ug/L							
Chloroform	ND	2.0	ug/L							
Chloromethane	ND	10	ug/L							
2-Chlorotoluene	ND	10	ug/L							
4-Chlorotoluene	ND	10	ug/L							
Dibromochloromethane	ND	10	ug/L							
1,2-Dibromo-3-chloropropane	ND	10	ug/L							
1,2-Dibromoethane	ND	10	ug/L							
Dibromomethane	ND	10	ug/L							
1,2-Dichlorobenzene	ND	10	ug/L							
1,3-Dichlorobenzene	ND	10	ug/L							
1,4-Dichlorobenzene	ND	10	ug/L							
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L							
Dichlorodifluoromethane	ND	10	ug/L							
1,1-Dichloroethane	ND	2.0	ug/L							
1,2-Dichloroethane	ND	2.0	ug/L							
1,1-Dichloroethene	ND	2.0	ug/L							
cis-1,2-Dichloroethene	ND	1.0	ug/L							
trans-1,2-Dichloroethene	ND	2.0	ug/L							

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3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

Report No.: AZA0273

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6010324 - EPA 5030B										
Blank (6010324-BLK2)					Prepared & Analyzed: 01/19/16					
1,2-Dichloroethene (total)	ND	2.0	ug/L							
1,2-Dichloropropane	ND	2.0	ug/L							
1,3-Dichloropropane	ND	2.0	ug/L							
2,2-Dichloropropane	ND	10	ug/L							
1,1-Dichloropropene	ND	10	ug/L							
cis-1,3-Dichloropropene	ND	2.0	ug/L							
trans-1,3-Dichloropropene	ND	2.0	ug/L							
Ethylbenzene	ND	2.0	ug/L							
Ethyl Methacrylate	ND	10	ug/L							
Hexachlorobutadiene	ND	10	ug/L							
p-Isopropyltoluene	ND	10	ug/L							
Hexachloroethane	ND	10	ug/L							
Iodomethane	ND	10	ug/L							
Isopropylbenzene	ND	10	ug/L							
Methacrylonitrile	ND	10	ug/L							
Methyl Acrylate	ND	10	ug/L							
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L							
Methylene Chloride	ND	5.0	ug/L							
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L							
Methyl Methacrylate	ND	10	ug/L							
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L							
Methyl-tert-Butyl Ether	ND	10	ug/L							
Naphthalene	ND	10	ug/L							
2-Nitropropane	ND	10	ug/L							
Propionitrile (Ethyl Cyanide)	ND	20	ug/L							
n-Propylbenzene	ND	10	ug/L							
Styrene	ND	5.0	ug/L							
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L							
Tetrachloroethene	ND	1.0	ug/L							
Tetrahydrofuran	ND	10	ug/L							
Toluene	ND	2.0	ug/L							
1,2,3-Trichlorobenzene	ND	10	ug/L							
1,2,4-Trichlorobenzene	ND	10	ug/L							
1,1,1-Trichloroethane	ND	2.0	ug/L							
1,1,2-Trichloroethane	ND	2.0	ug/L							
Trichloroethene	ND	1.0	ug/L							
Trichlorofluoromethane	ND	10	ug/L							
1,2,3-Trichloropropane	ND	10	ug/L							
1,2,4-Trimethylbenzene	ND	10	ug/L							
1,3,5-Trimethylbenzene	ND	10	ug/L							

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Report No.: AZA0273

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6010324 - EPA 5030B										
Blank (6010324-BLK2)					Prepared & Analyzed: 01/19/16					
Vinyl Acetate	ND	10	ug/L							
Vinyl Chloride	ND	2.0	ug/L							
m+p-Xylene	ND	5.0	ug/L							
o-Xylene	ND	5.0	ug/L							
Xylenes, total	ND	5.0	ug/L							
Surrogate: Dibromofluoromethane	*48*		*ug/L*	*50.000*		*96*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*46*		*ug/L*	*50.000*		*92*	*78-120*			
Surrogate: Toluene-d8	*46*		*ug/L*	*50.000*		*92*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*50*		*ug/L*	*50.000*		*101*	*80-120*			
LCS (6010324-BS1)					Prepared & Analyzed: 01/18/16					
Benzene	50		ug/L	50.000		100	67-134			
Chlorobenzene	47		ug/L	50.000		95	69-122			
1,1-Dichloroethene	44		ug/L	50.000		88	58-142			
Toluene	49		ug/L	50.000		98	68-127			
Trichloroethene	49		ug/L	50.000		98	72-132			
Surrogate: Dibromofluoromethane	*52*		*ug/L*	*50.000*		*104*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*46*		*ug/L*	*50.000*		*92*	*78-120*			
Surrogate: Toluene-d8	*46*		*ug/L*	*50.000*		*93*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*46*		*ug/L*	*50.000*		*92*	*80-120*			
Matrix Spike (6010324-MS1)	**Source: AZA0339-01**				Prepared & Analyzed: 01/18/16					
Benzene	48		ug/L	50.000	ND	96	67-134			
Chlorobenzene	51		ug/L	50.000	ND	103	69-122			
1,1-Dichloroethene	46		ug/L	50.000	ND	91	58-142			
Toluene	49		ug/L	50.000	ND	98	68-127			
Trichloroethene	47		ug/L	50.000	ND	93	72-132			
Surrogate: Dibromofluoromethane	*49*		*ug/L*	*50.000*		*98*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*49*		*ug/L*	*50.000*		*98*	*78-120*			
Surrogate: Toluene-d8	*46*		*ug/L*	*50.000*		*93*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*48*		*ug/L*	*50.000*		*97*	*80-120*			

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Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6010324 - EPA 5030B										
Matrix Spike Dup (6010324-MSD1)		**Source: AZA0339-01**			Prepared & Analyzed: 01/18/16					
Benzene	54		ug/L	50.000	ND	108	67-134	11	9	QR-02
Chlorobenzene	53		ug/L	50.000	ND	106	69-122	3	13	
1,1-Dichloroethene	54		ug/L	50.000	ND	107	58-142	16	9	QR-02
Toluene	53		ug/L	50.000	ND	106	68-127	8	9	
Trichloroethene	53		ug/L	50.000	ND	105	72-132	12	11	QR-02
Surrogate: Dibromofluoromethane	*48*		*ug/L*	*50.000*		*95*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*50*		*ug/L*	*50.000*		*99*	*78-120*			
Surrogate: Toluene-d8	*46*		*ug/L*	*50.000*		*93*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*48*		*ug/L*	*50.000*		*96*	*80-120*			

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Report No.: AZA0273

Semivolatile Organic Compounds by EPA 8270 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6010327 - EPA 3510C										
Blank (6010327-BLK1)					Prepared & Analyzed: 01/18/16					
Acenaphthene	ND	10	ug/L							
Acenaphthylene	ND	10	ug/L							
Aniline	ND	10	ug/L							
Anthracene	ND	10	ug/L							
Benzidine	ND	80	ug/L							
Benzo(a)anthracene	ND	10	ug/L							
Benzo(a)pyrene	ND	10	ug/L							
Benzo(b)fluoranthene	ND	10	ug/L							
Benzo(ghi)perylene	ND	10	ug/L							
Benzo(k)fluoranthene	ND	10	ug/L							
Benzoic acid	ND	50	ug/L							
Benzyl alcohol	ND	20	ug/L							
Benzyl butyl phthalate	ND	10	ug/L							
4-Bromophenyl phenyl ether	ND	10	ug/L							
Di-n-butyl phthalate	ND	10	ug/L							
Carbazole	ND	10	ug/L							
4-Chloroaniline	ND	20	ug/L							
Bis(2-chloroethoxy)methane	ND	10	ug/L							
Bis(2-chloroethyl)ether	ND	10	ug/L							
Bis(2-chloroisopropyl)ether	ND	10	ug/L							
4-Chloro-3-methylphenol	ND	10	ug/L							
2-Chloronaphthalene	ND	10	ug/L							
2-Chlorophenol	ND	10	ug/L							
4-Chlorophenyl phenyl ether	ND	10	ug/L							
Chrysene	ND	10	ug/L							
Dibenzo(a,h)anthracene	ND	10	ug/L							
Dibenzofuran	ND	10	ug/L							
1,2-Dichlorobenzene	ND	10	ug/L							
1,3-Dichlorobenzene	ND	10	ug/L							
1,4-Dichlorobenzene	ND	10	ug/L							
3,3´-Dichlorobenzidine	ND	20	ug/L							
2,4-Dichlorophenol	ND	10	ug/L							
Diethyl phthalate	ND	10	ug/L							
2,4-Dimethylphenol	ND	10	ug/L							
Dimethyl phthalate	ND	10	ug/L							
4,6-Dinitro-2-methylphenol	ND	50	ug/L							
2,4-Dinitrophenol	ND	50	ug/L							
2,4-Dinitrotoluene	ND	20	ug/L							
2,6-Dinitrotoluene	ND	20	ug/L							
1,2-Diphenylhydrazine as azobenzene	ND	10	ug/L							
Bis(2-ethylhexyl)phthalate	ND	10	ug/L							

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January 22, 2016

Report No.: AZA0273

Semivolatile Organic Compounds by EPA 8270 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6010327 - EPA 3510C										
Blank (6010327-BLK1)					Prepared & Analyzed: 01/18/16					
Fluoranthene	ND	10	ug/L							
Fluorene	ND	10	ug/L							
Hexachlorobenzene	ND	10	ug/L							
Hexachlorobutadiene	ND	10	ug/L							
Hexachlorocyclopentadiene	ND	10	ug/L							
Hexachloroethane	ND	10	ug/L							
Indeno(1,2,3-cd)pyrene	ND	10	ug/L							
Isophorone	ND	10	ug/L							
2-Methylnaphthalene	ND	10	ug/L							
2-Methylphenol (o-cresol)	ND	10	ug/L							
3+4-Methylphenol (m+p-cresol)	ND	10	ug/L							
Naphthalene	ND	10	ug/L							
2-Nitroaniline	ND	50	ug/L							
3-Nitroaniline	ND	50	ug/L							
2,3,4,6+2,3,4,5-Tetrachlorophenol	ND	20	ug/L							
4-Nitroaniline	ND	50	ug/L							
Nitrobenzene	ND	10	ug/L							
2-Nitrophenol	ND	50	ug/L							
4-Nitrophenol	ND	50	ug/L							
N-Nitrosodimethylamine	ND	10	ug/L							
N-Nitrosodiphenylamine/Diphenylamine	ND	10	ug/L							
N-Nitrosodi-n-propylamine	ND	10	ug/L							
Di-n-octyl phthalate	ND	10	ug/L							
Pentachlorophenol	ND	20	ug/L							
Phenanthrene	ND	10	ug/L							
Phenol	ND	10	ug/L							
Pyrene	ND	10	ug/L							
Pyridine	ND	10	ug/L							
1,2,4,5-Tetrachlorobenzene	ND	10	ug/L							
1,2,4-Trichlorobenzene	ND	10	ug/L							
2,4,5-Trichlorophenol	ND	10	ug/L							
2,4,6-Trichlorophenol	ND	10	ug/L							
Surrogate: 2-Fluorophenol	*42*		*ug/L*	*100.00*		*42*	*11-120*			
Surrogate: Phenol-d6	*27*		*ug/L*	*100.00*		*27*	*10-120*			
Surrogate: Nitrobenzene-d5	*33*		*ug/L*	*50.000*		*67*	*15-120*			
Surrogate: 2-Fluorobiphenyl	*38*		*ug/L*	*50.000*		*76*	*23-120*			
Surrogate: 2,4,6-Tribromophenol	*89*		*ug/L*	*100.00*		*89*	*36-120*			
Surrogate: p-Terphenyl-dl4	*50*		*ug/L*	*50.000*		*100*	*53-121*			

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Semivolatile Organic Compounds by EPA 8270 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6010327 - EPA 3510C										
LCS (6010327-BS1)					Prepared & Analyzed: 01/18/16					
Acenaphthene	48	10	ug/L	50.000		96	47-120			
4-Chloro-3-methylphenol	87	10	ug/L	100.00		87	43-120			
2-Chlorophenol	73	10	ug/L	100.00		73	30-120			
1,4-Dichlorobenzene	33	10	ug/L	50.000		66	25-120			
2,4-Dinitrotoluene	53	20	ug/L	50.000		106	55-120			
4-Nitrophenol	28	50	ug/L	100.00		28	14-120			
N-Nitrosodi-n-propylamine	40	10	ug/L	50.000		81	38-120			
Pentachlorophenol	90	20	ug/L	100.00		90	47-120			
Phenol	28	10	ug/L	100.00		28	12-120			
Pyrene	52	10	ug/L	50.000		104	53-120			
1,2,4-Trichlorobenzene	36	10	ug/L	50.000		71	29-120			
Surrogate: 2-Fluorophenol	*41*		*ug/L*	*100.00*		*41*	*11-120*			
Surrogate: Phenol-d6	*27*		*ug/L*	*100.00*		*27*	*10-120*			
Surrogate: Nitrobenzene-d5	*34*		*ug/L*	*50.000*		*67*	*15-120*			
Surrogate: 2-Fluorobiphenyl	*40*		*ug/L*	*50.000*		*81*	*23-120*			
Surrogate: 2,4,6-Tribromophenol	*100*		*ug/L*	*100.00*		*101*	*36-120*			
Surrogate: p-Terphenyl-dl4	*55*		*ug/L*	*50.000*		*109*	*53-121*			
Matrix Spike (6010327-MS1)		**Source: AZA0273-04**			Prepared & Analyzed: 01/18/16					
Acenaphthene	41	10	ug/L	50.000	ND	83	40-120			
4-Chloro-3-methylphenol	81	10	ug/L	100.00	ND	81	45-120			
2-Chlorophenol	63	10	ug/L	100.00	ND	63	33-120			
1,4-Dichlorobenzene	28	10	ug/L	50.000	ND	57	10-120			
2,4-Dinitrotoluene	46	20	ug/L	50.000	ND	92	46-122			
4-Nitrophenol	42	50	ug/L	100.00	ND	42	15-120			
N-Nitrosodi-n-propylamine	36	10	ug/L	50.000	ND	72	35-120			
Pentachlorophenol	86	20	ug/L	100.00	ND	86	40-120			
Phenol	37	10	ug/L	100.00	ND	37	12-120			
Pyrene	51	10	ug/L	50.000	ND	101	54-120			
1,2,4-Trichlorobenzene	31	10	ug/L	50.000	ND	62	12-120			
Surrogate: 2-Fluorophenol	*44*		*ug/L*	*100.00*		*44*	*11-120*			
Surrogate: Phenol-d6	*36*		*ug/L*	*100.00*		*36*	*10-120*			
Surrogate: Nitrobenzene-d5	*28*		*ug/L*	*50.000*		*56*	*15-120*			
Surrogate: 2-Fluorobiphenyl	*34*		*ug/L*	*50.000*		*69*	*23-120*			
Surrogate: 2,4,6-Tribromophenol	*100*		*ug/L*	*100.00*		*100*	*36-120*			
Surrogate: p-Terphenyl-dl4	*52*		*ug/L*	*50.000*		*103*	*53-121*			

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Semivolatile Organic Compounds by EPA 8270 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6010327 - EPA 3510C										
Matrix Spike Dup (6010327-MSD1)	**Source: AZA0273-04**			Prepared & Analyzed: 01/18/16						
Acenaphthene	39	10	ug/L	50.000	ND	78	40-120	5	29	
4-Chloro-3-methylphenol	79	10	ug/L	100.00	ND	79	45-120	2	29	
2-Chlorophenol	58	10	ug/L	100.00	ND	58	33-120	8	32	
1,4-Dichlorobenzene	26	10	ug/L	50.000	ND	52	10-120	9	31	
2,4-Dinitrotoluene	47	20	ug/L	50.000	ND	95	46-122	2	26	
4-Nitrophenol	44	50	ug/L	100.00	ND	44	15-120	6	35	
N-Nitrosodi-n-propylamine	36	10	ug/L	50.000	ND	71	35-120	0.5	28	
Pentachlorophenol	90	20	ug/L	100.00	ND	90	40-120	5	27	
Phenol	34	10	ug/L	100.00	ND	34	12-120	8	30	
Pyrene	48	10	ug/L	50.000	ND	96	54-120	5	21	
1,2,4-Trichlorobenzene	28	10	ug/L	50.000	ND	55	12-120	12	32	
Surrogate: 2-Fluorophenol	*38*		*ug/L*	*100.00*		*38*	*11-120*			
Surrogate: Phenol-d6	*34*		*ug/L*	*100.00*		*34*	*10-120*			
Surrogate: Nitrobenzene-d5	*24*		*ug/L*	*50.000*		*49*	*15-120*			
Surrogate: 2-Fluorobiphenyl	*31*		*ug/L*	*50.000*		*62*	*23-120*			
Surrogate: 2,4,6-Tribromophenol	*91*		*ug/L*	*100.00*		*91*	*36-120*			
Surrogate: p-Terphenyl-dl4	*48*		*ug/L*	*50.000*		*96*	*53-121*			

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Laboratory Certifications

Code	Description	Number	Expires
LA	Louisiana	02069	06/30/2016
NC	North Carolina	381	12/31/2016
NELAC	FL DOH (Non-Pot. Water, Solids) Eff:: 07/01/2015	E87315	06/30/2016
SC	South Carolina	98011001	06/30/2016
TX	Texas	T104704397-08-TX	03/31/2016
VA	Virginia	1340	12/14/2016

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Legend

Definition of Laboratory Terms

ND - None Detected at the Reporting Limit
TIC - Tentatively Identified Compound
CFU - Colony Forming Units
SOP - Method run per ASI Standard Operating Procedure
RL - Reporting Limit
DF - Dilution Factor
***** - Analyte not included in the NELAC list of certified analytes.

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrososdiphenylamine. ASI is not NELAC certified for diphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

S-04 The surrogate recovery for this sample is outside of established control limits due to a suspected sample matrix effect.

QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries.

Note: Unless otherwise noted, all results are reported on an as received basis.

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110 Technology Parkway, Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

Piedmont Geotechnical Consultants, Inc
3000 Northfield Place Suite 1100
Roswell GA, 30076
Attention: Mr. Kyle McKinney

January 22, 2016

248676

CHAIN OF CUSTODY RECORD

ANALYTICAL SERVICES, INC.
ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS
110 TECHNOLOGY PARKWAY, PEACHTREE CORNERS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

PAGE: ____ OF ____

CLIENT NAME: Piedmont Geotechnical Consultants
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 3000 Northfield Place Roswell, GA 30076
REPORT TO: Kyle McKinney CC:
REQUESTED COMPLETION DATE: Standard PO #: 115340
PROJECT NAME/STATE: Hill / GA
PROJECT #: 115340

ANALYSIS REQUESTED

DATE	TIME	MATRIX CODE*	# of CONTAINERS	SAMPLE IDENTIFICATION	VOC	SVOC	
1/13/16	12pm	GW	5	MW-01	X	X	1
	12:30pm		5	MW-02	X	X	2
	1pm		5	MW-03	X	X	3
	1:30pm		5	MW-04	X	X	4
	2pm		5	MW-05	X	X	

CONTAINER TYPE: P - PLASTIC, A - AMBER GLASS, G - CLEAR GLASS, V - VOA VIAL, S - STERILE, O - OTHER

PRESERVATION: 1 - HCl, ≤6°C; 2 - H_2SO_4, ≤6°C; 3 - HNO_3; 4 - NaOH, ≤6°C; 5 - NaOH/ZnAc, ≤6°C; 6 - $Na_2S_2O_3$, ≤6°C; 7 - ≤6°C not frozen

*MATRIX CODES: DW - DRINKING WATER, WW - WASTEWATER, GW - GROUNDWATER, SW - SURFACE WATER, ST - STORM WATER, W - WATER, S - SOIL, SL - SLUDGE, SD - SOLID, A - AIR, L - LIQUID, P - PRODUCT

REMARKS/ADDITIONAL INFORMATION

SAMPLED BY AND TITLE: Kyle McKinney, Staff Geologist DATE/TIME: 1/13/16 12pm
RECEIVED BY: DATE/TIME:
RELINQUISHED BY: Kyle McKinney DATE/TIME: 1/13/16 15:05
RELINQUISHED BY: DATE/TIME:
RECEIVED BY: DATE/TIME: 1/13/16 1505
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER
Cooler ID: # of Coolers:
Custody Seal: Intact Broken Not Present
Temperature: 6°C
Chilled: Yes No NA
Preserved: Yes No NA

FOR LAB USE ONLY
LAB #: AZA0273
Entered into LIMS: MR

Revised 2015-11-09

ASI

ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Norcross, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST **Printed: 1/22/2016 3:20:44PM**

Attn: Mr. Kyle McKinney

Client: Piedmont Geotechnical Consultants, Inc.
Project: Hill
Date Received: 01/13/16 15:05
Work Order: AZA0273
Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 5 **#Containers:** 25

Minimum Temp(C): 6.0 **Maximum Temp(C):** 6.0 **Custody Seal(s) Used:** Yes

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	YES
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:

Appendix B

Monitoring Well Installation Logs

WENCK ASSOCIATES

Responsive partner. Exceptional outcomes.

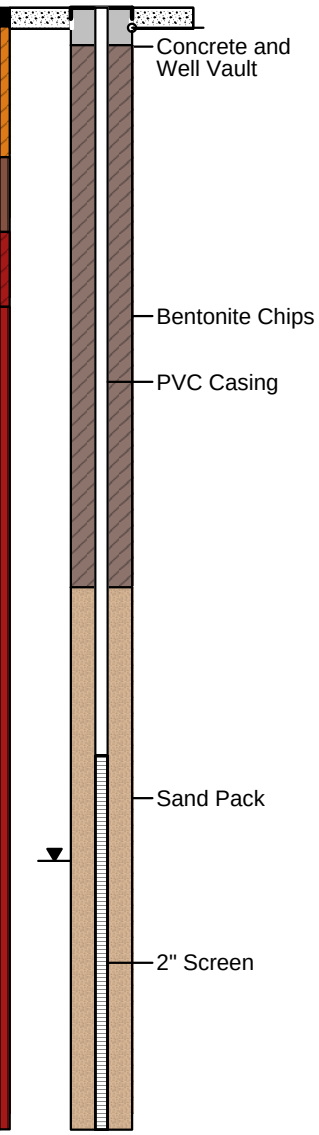
LOG OF BORING MW-5

City of Duluth
Main St.
Project # 5365

Date Started	: 7/24/2016	Drilling Contractor	: Atlas Geo
Date Completed	: 7/25/2016	Driller	: David, Penny, Josh
Hole Diameter	: 8 inch	Logged By	: LM
Drilling Method	: HSA 4x8		
Sampling Method	: Dual Tube (4')		

Depth in Feet	Approx Surf Elev	USCS	GRAPHIC	DESCRIPTION	PID (PPM)
0				Asphalt (new)	
		CL		dry, tan-orange, fine, SANDY CLAY, some silt	0.0
4		ML		dry to slightly moist, crumbly, med. stiff, brown, SANDY SILT, some clay, trace quartz, black striations	
		CL		dry to slightly moist, crumbly, fine, med. stiff, red, SILTY CLAY, trace mica, white/tan striations	0.0
8		ML		slightly moist, fine, med. stiff, red, CLAYEY SILT, little sand, trace mica, trace quartz, white/tan/black striations	0.0
12					0.0
16					0.0
20					0.0
24					0.0
28				EOB @ 30'	
32					

Well: MW-5
TOC Elev.: 1085.33'



Notes:
hand auger to 4'
10ft screen
Water level (22.81') measured from TOC on 08/01/16.
Total Depth (30.15') measured from TOC on 08/01/16

WENCK ASSOCIATES

Responsive partner. Exceptional outcomes.

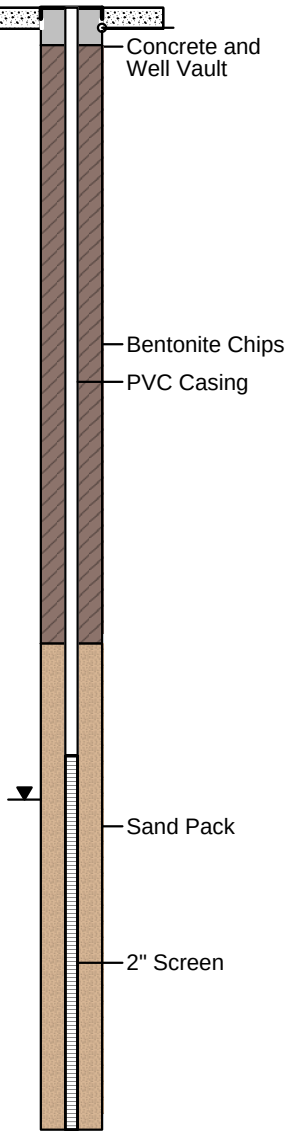
LOG OF BORING MW-6

City of Duluth
Main St.
Project # 5365

Date Started	: 7/24/2016	Drilling Contractor	: Atlas Geo
Date Completed	: 7/25/2016	Driller	: David, Penny, Josh
Hole Diameter	: 8 inch	Logged By	: LM
Drilling Method	: HSA 4x8		
Sampling Method	: Dual Tube (4')		

Well: MW-6
TOC Elev.: 1085.50'

Depth in Feet	Approx Surf Elev	USCS	GRAPHIC	DESCRIPTION	PID (PPM)
0				Asphalt (new)	
		FILL		dry, fine, red-orange, SANDY CLAY, some silt, FILL	5.7
4		CL		moist, crumbly, fine, med. stiff, red-orange, SILTY CLAY, trace mica, trace quartz, black straiations	2.8
8		CL		moist, crumbly, med. stiff, fine, tan-orange, SILTY CLAY some sand, trace mica, trace quartz, black/white striations	2.5
12		SM		moist, crumbly, med. stiff, fine, tan-orange, SILTY SAND some clay, trace mica, trace quartz, black/white/tan striations	3.3
16					3.4
20				wet @ 22'	3.6
24					3.6
28				EOB @ 30'	
32					



Notes:
Hand Auger to 4'
10ft screen
Water level (21.17') measured from TOC on 08/01/16.
Total Depth (30.35') measured from TOC on 08/01/16

WENCK ASSOCIATES

Responsive partner. Exceptional outcomes.

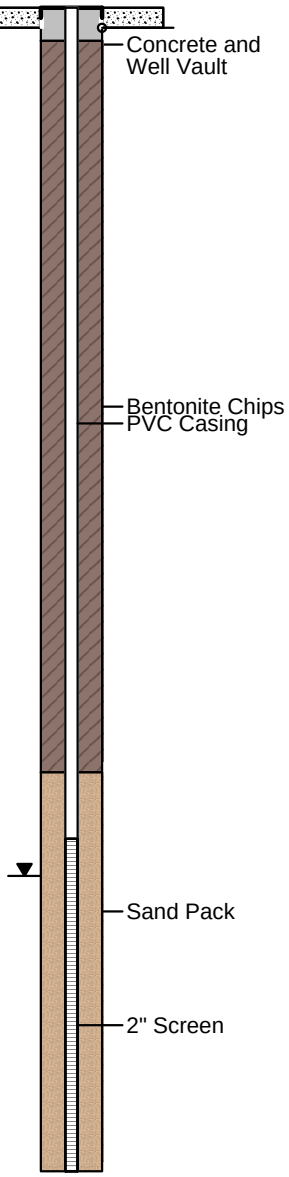
LOG OF BORING MW-7

City of Duluth
Main St.
Project # 5365

Date Started	: 7/24/2016	Drilling Contractor	: Atlas Geo
Date Completed	: 7/25/2016	Driller	: David, Penny, Josh
Hole Diameter	: 8 inch	Logged By	: LM
Drilling Method	: HSA 4x8		
Sampling Method	: Dual Tube (4')		

Depth in Feet	Approx Surf Elev	USCS	GRAPHIC	DESCRIPTION	PID (PPM)
0				Asphalt (new)	
		FILL		slightly moist, fine, red-orange, SILTY CLAY, FILL	0.0
4					
		CL		slightly moist, med. stiff, fine, tan-orange, SILTY CLAY, trace quartz, tan/white striations	0.8
8		CL		moist, med. stiff, fine, tan-orange, SILTY CLAY, trace mica, trace quartz, vertical black/white/red striations	0.4
12					0.6
16					0.6
20					1.0
24					1.1
28					1.1
32				Dual tube refusal @ 31' - HSA to 35'	
				EOB @ 35'	
36					

Well: MW-7
TOC Elev.: 1092.78'



Notes:
Hand Auger to 4'
10ft screen
Water level (26.12') measured from TOC on 08/01/16.
Total Depth (35.45') measured from TOC on 08/01/16

WENCK ASSOCIATES

Responsive partner. Exceptional outcomes.

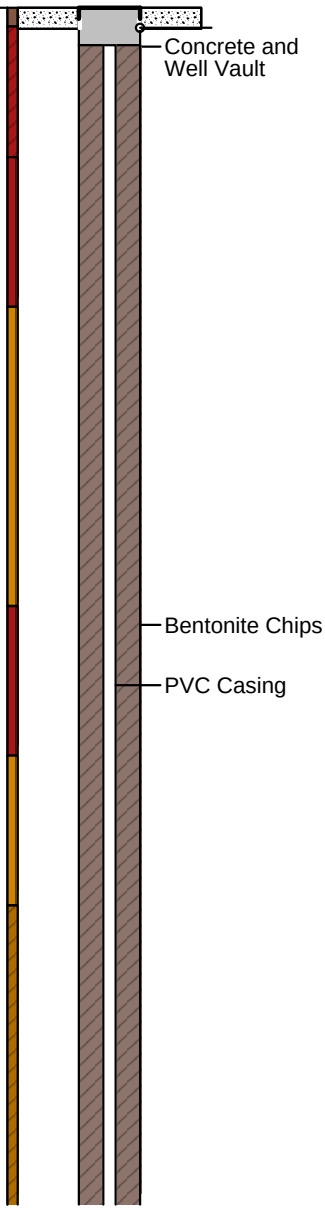
LOG OF BORING MW-8

City of Duluth
Main St.
Project # 5365

Date Started	: 7/24/2016	Drilling Contractor	: Atlas Geo
Date Completed	: 7/25/2016	Driller	: David, Penny, Josh
Hole Diameter	: 8 inch	Logged By	: LM
Drilling Method	: HSA 4x8		
Sampling Method	: Dual Tube (4')		

Well: MW-8
TOC Elev.: 1101.97'

Depth in Feet	Approx Surf Elev	USCS	GRAPHIC	DESCRIPTION	PID (PPM)
0				mulch & pine straw	
		CL		dry, med. stiff/dense, fine, red, SILTY CLAY, some sand	1.0
4		ML		dry & crumbly, fine, med. stiff, red, CLAYEY SILT, and sand, trace quartz, yellow/black/white striations	1.0
8		ML		dry & crumbly, fine, med. stiff, gold, CLAYEY SILT, and sand, trace quartz, red/white/black striations	2.2
12					2.5
16		ML		dry & crumbly, fine, med. stiff, red, CLAYEY SILT, and sand, trace quartz, yellow/black/white striations	2.5
20		ML		dry & crumbly, fine, med. stiff, gold, CLAYEY SILT, and sand, trace quartz, red/white/black striations	2.9
24		CL		dry, fine, yellow-brown, SILTY CLAY, some sand Dual tube refusal @ 24' - HSA to 65'	3.1
28					3.3
32					



Notes:
Hand Auger to 4'
15ft screen
Water level (41.53') measured from TOC on 08/01/16.
Total Depth (64.50') measured from TOC on 08/01/16

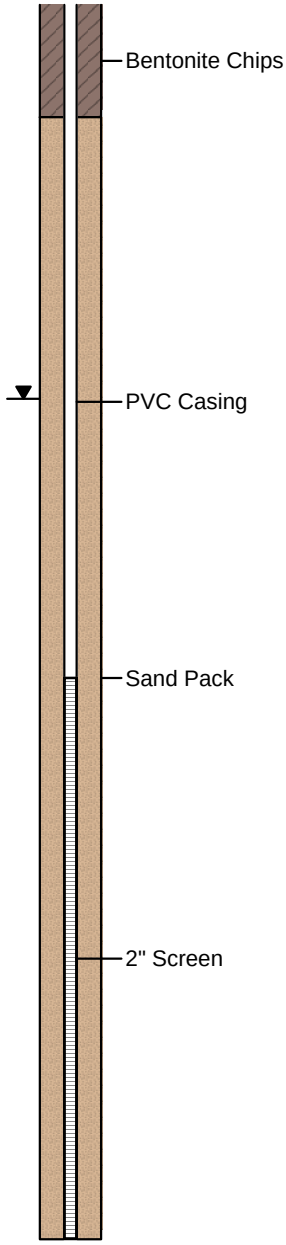
WENCK ASSOCIATES

Responsive partner. Exceptional outcomes.

LOG OF BORING MW-8

Depth in Feet	Approx Surf Elev	USCS	GRAPHIC	DESCRIPTION	PID (PPM)
32					3.3
36					2.8
40					3.5
44					
48		CL			4.1
52					6.2
56					4.3
60					3.6
64				wet-soup at 63' EOB at 65'	
68					

Well: MW-8
TOC Elev.: 1101.97'



Notes:
Hand Auger to 4'
15ft screen
Water level (41.53') measured from TOC on 08/01/16.
Total Depth (64.50') measured from TOC on 08/01/16

WENCK ASSOCIATES

Responsive partner. Exceptional outcomes.

Well Development Record

Project Name: Former Duluth Dry Cleaner **Date:** 7/27/16

Address: City of Duluth - Main street

Weather Conditions: overcast 85

Field Technician(s): L McCullen

Well ID: MW-5			
Unique Well ID		Average Purging Rate (g/m)	
Casing Diameter (inches)	2	Volume Purged (gals.)	5
Top of Casing Elev. (feet)		Purged Dry (Y/N)	N
Depth to Water from TOC (feet)	22.76	~~Sampling Device~~ 5 well vol	5.982
Groundwater Elev. (feet)		~~Time Sample Collected~~	
Depth to Bottom of Well from TOC (feet)	30.10	Color red ish - clear	
Volume of Water in Well (gals.)	1.196	Odor	—
3 Well Volumes (gals.)	3.589	Well Capped & Locked (Y/N)	cap
Purging Device Water spout	II	Lock Key #	
Purging Start Time	9:53	Damage to Well? (Y/N)	N
Purging Stop Time	10:10	Free Product Present? (Y/N)	N

Volume Purged (gallons)	initial	1 gal	2 gal	3 gal	4 gal		5 gal
Stabilization Readings							
Time	9:53	9:57	10:00	10:03	10:06		10:10
Temperature (°C)	20.22	19.93	20.38	20.97	21.48		22.11
Specific Conductance (mS/cm) 0.15	~~5.63~~	0.111	0.105	0.097	0.095		0.096
pH	5.63	5.42	5.40	5.30	5.28		5.27
ORP (mV)	344	290	266	297	295		295
Dissolved Oxygen (mg/L)	10.49	9.80	7.82	7.30	6.96		6.94
Turbidity (NTU)	224	454	342	116	42.1		41.3

Comments:
One well volume = Water column in feet x 0.163 gallons/foot
Well development = purge 10 well volumes and turbidity is less then 50 NTU
Well purging before sampling = 3 to 5 well volumes

horiba cal

WENCK ASSOCIATES

Responsive partner.
Exceptional outcomes.

Well Development Record

Project Name: Former Duluth Dry Cleaner **Date:** 7/26/16
Address: City of Duluth - Main street
Weather Conditions: SUNNY 90s
Field Technician(s): L McCullen

Well ID: MW-16			
Unique Well ID		Average Purging Rate (g/m)	
Casing Diameter (inches)	2	Volume Purged (gals.)	7
Top of Casing Elev. (feet)		Purged Dry (Y/N)	Y
Depth to Water from TOC (feet)	21.10	~~Sampling Device~~ 5 well vol	7.335
Groundwater Elev. (feet)		~~Time Sample Collected~~	
Depth to Bottom of Well from TOC (feet)	30.10	Color redish	
Volume of Water in Well (gals.)	1.467	Odor	—
3 Well Volumes (gals.)	4.401	Well Capped & Locked (Y/N) flushmount	
Purging Device water spout II		Lock Key # capped	
Purging Start Time	11:35	Damage to Well? (Y/N) N	
Purging Stop Time	12:05	Free Product Present? (Y/N) N	

Volume Purged (gallons)	initial	1 gal	3 gal	~~5 gal~~ 4 gal	6 gal		7 gal
Stabilization Readings							
Time	11:35	11:39	11:50	11:52	11:59		12:04
Temperature (°C)	23.45	22.92	20.81	20.82	20.76		20.52
Specific Conductance (mS/cm)	0.100	0.053	~~1.169~~ 1.124	0.165	0.171		0.098
pH	5.29	5.22	4.89	4.62	4.66		5.31
ORP (mV)	366	373	410	416	418		427
Dissolved Oxygen (mg/L)	10.01	9.82	8.01	7.42	8.51		9.68
Turbidity (NTU)	122	630	462	266	233		468

DRY

Comments:
One well volume = Water column in feet x 0.163 gallons/foot
Well development = purge 10 well volumes and turbidity is less then 50 NTU
Well purging before sampling = 3 to 5 well volumes

Horriba cal
pH 4.01
ms/cm 4.51
NTU 0.00
mg/L 008.29

WENCK ASSOCIATES

Responsive partner. Exceptional outcomes.

Well Development Record

Project Name: Former Duluth Dry Cleaner **Date:** 7/26/16

Address: City of Duluth Main Street

Weather Conditions: SUNNY 90s

Field Technician(s): L McCullen

Well ID: MW-7			
Unique Well ID		Average Purging Rate (g/m)	
Casing Diameter (inches)	2	Volume Purged (gals.)	~7
Top of Casing Elev. (feet)		Purged Dry (Y/N)	Y
Depth to Water from TOC (feet)	25.85	~~Sampling Device~~ 5 Well vol	7.62
Groundwater Elev. (feet)	~~35.7~~	~~Time Sample Collected~~	
Depth to Bottom of Well from TOC (feet)	35.20	Color reddish	
Volume of Water in Well (gals.)	1.524	Odor —	
3 Well Volumes (gals.)	4.572	Well Capped & Locked (Y/N)	Y
Purging Device Water spout II	18:17	Lock Key #	cap
Purging Start Time		Damage to Well? (Y/N)	N
Purging Stop Time	18:45	Free Product Present? (Y/N)	N

Volume Purged (gallons)	initial	2 gal	4 gal	5 gal	6 gal		7 gal
Stabilization Readings							
Time	18:17	18:26	18:31	18:35	18:39		18:45
Temperature (°C)	25.98	20.25	20.28	21.30	21.39		21.97
Specific Conductance (mS/cm)	0.000	0.099	0.103	0.127	0.099		0.100
pH	5.95	5.22	5.33	5.88	5.28		5.34
ORP (mV)	364	323	321	351	369		364
Dissolved Oxygen (mg/L)	9.01	8.63	8.84	9.92	8.21		6.37
Turbidity (NTU)	433	773	560	381	107		1000

DRY

Comments:
One well volume = Water column in feet x 0.163 gallons/foot
Well development = purge 10 well volumes and turbidity is less then 50 NTU
Well purging before sampling = 3 to 5 well volumes

WENCK ASSOCIATES

Responsive partner.
Exceptional outcomes.

Well Development Record

Project Name: Former Duluth Dry cleaner **Date:** 7/27/16
Address: City of Duluth - Main street
Weather Conditions: SUNNY 90s
Field Technician(s): L McCullen

Well ID: MW-8			
Unique Well ID		Average Purging Rate (g/m)	
Casing Diameter (inches)		Volume Purged (gals.)	
Top of Casing Elev. (feet)		Purged Dry (Y/N)	
Depth to Water from TOC (feet)	41.25	~~Sampling Device~~ 5 well vol	18.623
Groundwater Elev. (feet)		~~Time Sample Collected~~ 7 well vol	26.075
Depth to Bottom of Well from TOC (feet)	64.10	Color brown to yellow	
Volume of Water in Well (gals.)	3725	Odor	
3 Well Volumes (gals.)	11.174	Well Capped & Locked (Y/N)	Y
Purging Device Water spout II		Lock Key # cap	
Purging Start Time	11:25	Damage to Well? (Y/N)	N
Purging Stop Time	12:32	Free Product Present? (Y/N)	N

Volume Purged (gallons)	initial	3gal	6gal	12gal	18gal		26gal
Stabilization Readings							
Time	11:25	11:33	11:41	11:58	12:16		12:32
Temperature (°C)	25.61	18.31	18.57	18.96	18.61		18.40
Specific Conductance (mS/cm)	.038	.059	.059	.054	.060		.059
pH	7.51	4.99	5.13	5.05	4.98		4.96
ORP (mV)	312	274	275	359	295		278
Dissolved Oxygen (mg/L)	8.12	3.86	3.77	4.59	4.13		3.91
Turbidity (NTU)	—	—	—	—	—		—

chocolate milk → apple juice

Comments:
One well volume = Water column in feet x 0.163 gallons/foot
Well development = purge 10 well volumes and turbidity is less then 50 NTU
Well purging before sampling = 3 to 5 well volumes

Appendix C

Monitoring Well Sampling Logs

WENCK ASSOCIATES

Responsive partner. Exceptional outcomes.

GROUNDWATER SAMPLING LOG

Project: City of Duluth	Project Number: 5365	
Location: Former Dry cleaner	Well ID: MW-1	
Date: 8/01/16	Start Time at Well: 6:40	End Time at Well: 9:45
Sampler: L McCullen	Weather: Part cloud 75	Comments:

WELL CHARACTERISTICS

Well Diameter (in): 2	Well Screen Depth Interval: 40 (ft) to 30 (ft)		Initial Depth to Water (ft): 29.55
Total Well Depth (ft): 40.60	Well Capacity (gallons per foot): 11.05 × .163	1 Well Volume (gallons): 1.801	3 Well Vol. (gal): 5.403
			Total Vol. Purged (gal): 5.5 gal

Well capacity (gallons per foot): **0.75"** = 0.02; **1"** = 0.04; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88

PURGING DATA

Initial Depth of Tubing (ft): 33	Final Depth of Tubing (ft): 33	Total Purge Time: 2hr 15min	Purge Equipment (circle one): Bailer Bladder Pump Electric Submersible Pump Peristaltic Pump Other (specify)_____
Initial Purge Rate (gpm): 126 ml/min	Final Purge Rate (gpm): 189 ml/min	Purge Method (circle one): Low Flow-Low Stress Micro-purge	Meter(s) used (circle one): YSI 556 Lamotte 2020 Horiba U53

Reading Time	Total Volume Purged (gal)	Depth to Water (ft)	Temperature (°C)	Ph SU	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTUs)	Color/ Odor	ORP (mV)
7:03	1	29.55	23.72	4.27	99	3.33	105	clear	464
7:24	.75	30.20	22.14	4.11	100	1.75	64	clear	467
7:31	1	30.30	22.12	4.11	100	1.75	52.6	clear	463
7:54	1.5	30.40	22.19	4.09	98	1.62	49.7	clear	458
8:12	2	30.40	22.42	4.09	96	1.49	40.3	clear	442
8:23	2.5	30.50	22.49	4.08	96	1.43	31.0	clear	439
8:35	3	30.60	22.57	4.07	97	1.47	23.1	clear	434
8:46	3.5	30.65	22.57	4.08	95	1.48	4.8	clear	423
8:57	4	30.75	22.63	4.09	93	1.38	18.9	clear	423
9:10	5	30.75	22.70	4.08	91	1.30	19.7	clear	423
9:20	5.5	30.75	22.77	4.08	92	1.33	18.7	clear	422

Stabilization: Temperature - ± 0.1°; **pH** - ± 0.1; **Conductivity** - ± 5%; **Dissolved Oxygen** - ± 0.2 mg/L (or 10% saturation); **Turbidity** - ≤ 10 NTUs (or stable)

SAMPLING

Sampled by (print): L McCullen	Collection Method (circle one): Bailer Straw method Vacuum Jug Other	Time Sampling Initiated: 9:23	Time Sampling Completed: 9:27

Sample ID	Sample Time	Number of Containers	Volume	Preservative	Analysis/ EPA Method	Sample Type (G - Grab, C - Composite, Other (specify))
MW-1	9:23	3	40mL	HCl	VOCs	G

Notes:

WENCK ASSOCIATES

Responsive partner. Exceptional outcomes.

GROUNDWATER SAMPLING LOG

Project: City of Duluth		Project Number: 5365	
Location: Former Dry cleaner		Well ID: MW-2	
Date: 7/31/16	Start Time at Well: 5:30 pm		End Time at Well: 20:15
Sampler: L McCullen	Weather: Overcast 90s		Comments: 1-T storms

WELL CHARACTERISTICS

Well Diameter (in): 2	Well Screen Depth Interval: 30 (ft) to 20 (ft)		Initial Depth to Water (ft): 22.20
Total Well Depth (ft): 29.30	Well Capacity (gallons per foot): 7.1 x .163	1 Well Volume (gallons): 1.157	3 Well Vol. (gal): 3.472
			Total Vol. Purged (gal): 3.5 gal

Well capacity (gallons per foot): **0.75"** = 0.02; **1"** = 0.04; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88

PURGING DATA

Initial Depth of Tubing (ft): 25	Final Depth of Tubing (ft): 27	Total Purge Time: 1hr 42min	Purge Equipment (circle one): Bailer Bladder Pump Electric Submersible Pump Peristaltic Pump Other (specify)_____
Initial Purge Rate (gpm): 189 ml/min	Final Purge Rate (gpm): 189 ml/min	Purge Method (circle one): Low Flow-Low Stress Micro-purge	Meter(s) used (circle one): YSI 556 Lamotte 2020 Horiba U53

Reading Time	Total Volume Purged (gal)	Depth to Water (ft)	Temperature (°C)	Ph SU	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTUs)	Color/ Odor	ORP (mV)
1814	1	22.20	24.08	4.35	301	3.09	25.3	clear	361
18:24	.5	24.10	23.02	4.37	231	1.57	14.3	clear	383
18:34	1	24.40	23.06	4.44	217	1.39	12.4	clear	383
18:50	1.5	24.70	22.05	4.45	231	1.50	13.1	clear	385
19:03	2	24.90	21.35	4.51	230	1.34	8.40	clear	382
19:19	2.5	25.20	21.85	4.50	231	1.32	14.9	clear	381
19:39	3	25.38	21.90	4.51	231	1.33	12.4	clear	381
19:54	3.5	25.85	21.83	4.49	230	1.31	9.6	clear	380

Stabilization: Temperature - ± 0.1°; **pH** - ± 0.1; **Conductivity** - ± 5%; **Dissolved Oxygen** - ± 0.2 mg/L (or 10% saturation); **Turbidity** - ≤ 10 NTUs (or stable)

SAMPLING

Sampled by (print): L McCullen	Collection Method (circle one): Bailer Straw method Vacuum Jug Other	Time Sampling Initiated: 19:57	Time Sampling Completed: 20:01

Sample ID	Sample Time	Number of Containers	Volume	Preservative	Analysis/ EPA Method	Sample Type (G - Grab, C - Composite, Other (specify))
MW-2	19:57	3	40 mL	HCl	VOCs	G

Notes:

horiba cal
4.02
4.55
0.00
8.41

WENCK ASSOCIATES

Responsive partner. Exceptional outcomes.

GROUNDWATER SAMPLING LOG

Project: City of Duluth	Project Number: 5365	
Location: Main Street	Well ID: MW-3	
Date: 8/01/16	Start Time at Well: 13:00	End Time at Well: 15:33
Sampler: L McCullen	Weather: SUNNY 90s	Comments:

WELL CHARACTERISTICS

Well Diameter (in): 2	Well Screen Depth Interval: 45 (ft) to 30 (ft)		Initial Depth to Water (ft): 30.90
Total Well Depth (ft): 45.30	Well Capacity (gallons per foot): 14.11 x .163	1 Well Volume (gallons): 2.347	3 Well Vol. (gal): 7.041
			Total Vol. Purged (gal): ~7 gal

Well capacity (gallons per foot): **0.75"** = 0.02; **1"** = 0.04; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88

PURGING DATA

Initial Depth of Tubing (ft): 33	Final Depth of Tubing (ft): 35	Total Purge Time: 2hr 20min	Purge Equipment (circle one): ~~Bailer~~ Bladder Pump Electric Submersible Pump Peristaltic Pump Other (specify)_____
Initial Purge Rate ~~(gpm)~~: 172 mL/min	Final Purge Rate (gpm): 189 mL/min	~~Purge Method (circle one)~~: Low Flow-Low Stress Micro-purge	Meter(s) used (circle one): YSI 556 Lamotte 2020 Horiba U53

Reading Time	Total Volume Purged (gal)	Depth to Water (ft)	Temperature (°C)	Ph SU	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTUs)	Color/ Odor	ORP (mV)
13:03	1	30.90	34.29	3.84	57	5.85	106	clear	452
13:25	1	31.30	34.01	4.08	64	2.14	73.6	clear	471
13:45	2	31.50	34.55	4.01	59	1.95	51.4	clear	464
14:03	3	31.90	34.78	3.99	59	1.93	40.8	clear	459
14:28	4	32.40	35.12	4.06	59	2.05	28.3	clear	453
14:52	5	32.80	34.96	4.27	63	2.17	24.0	clear	444
15:03 three	6	33.20	35.57	4.28	62	2.21	13.3	clear	438
15:23 three	7	33.50	35.12	4.26	62	2.23	9.6	clear	435

Stabilization: Temperature - ± 0.1°; **pH** - ± 0.1; **Conductivity** - ± 5%; **Dissolved Oxygen** - ± 0.2 mg/L (or 10% saturation); **Turbidity** - ≤ 10 NTUs (or stable)

SAMPLING

Sampled by (print): L McCullen		Collection Method (circle one): Bailer Straw method Vacuum Jug Other			Time Sampling Initiated: 15:25	Time Sampling Completed: 15:31
Sample ID	Sample Time	Number of Containers	Volume	Preservative	Analysis/ EPA Method	Sample Type (G - Grab, C - Composite, Other (specify))
MW-3	15:25	3	40mL	HCl	VOCs	G

Notes:

WENCK ASSOCIATES

Responsive partner. Exceptional outcomes.

GROUNDWATER SAMPLING LOG

Project: city of Duluth		Project Number: 53665	
Location: Main st		Well ID: MW-4	
Date: 8/01/16	Start Time at Well: 1000 1015		End Time at Well: 12:30
Sampler: L McCullen	Weather: Overcast 85		Comments:

WELL CHARACTERISTICS

Well Diameter (in): 2	Well Screen Depth Interval: 40 (ft) to _____ (ft)		Initial Depth to Water (ft): 30.70
Total Well Depth (ft): 39.90	Well Capacity (gallons per foot): 9.2 x .163	1 Well Volume (gallons): 1.499	3 Well Vol. (gal): 4.498
			Total Vol. Purged (gal): 4.5 gal

Well capacity (gallons per foot): **0.75"** = 0.02; **1"** = 0.04; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88

PURGING DATA

Initial Depth of Tubing (ft): 34	Final Depth of Tubing (ft): 32	Total Purge Time: 2 hr	Purge Equipment (circle one): Bailer Bladder Pump Electric Submersible Pump Peristaltic Pump Other (specify)_____
Initial Purge Rate (gpm): 172 mL/min	Final Purge Rate (gpm): 172 mL/min	Purge Method (circle one): Low Flow-Low Stress Micro-purge	Meter(s) used (circle one): YSI 556 Lamotte 2020 Horiba U53

Reading Time	Total Volume Purged (gal)	Depth to Water (ft)	Temperature (°C)	Ph SU	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTUs)	Color/ Odor	ORP (mV)
10 19	1	30.70	25.68	4.63	28	3.59	37.8	clear	436
10 30	.5	30.70	24.12	4.56	28	2.64	18.1	clear	437
10:45	1	30.75	24.97	4.57	27	2.65	3.10	clear	429
10:57	1.5	30.75	25.66	4.52	26	2.33	2.27	clear	426
11:08	2	30.80	25.89	4.58	27	2.18	1.18	clear	423
11:30	2.5	30.80	25.98	4.59	26	2.68	0.00	clear	457
11:41	3	30.85	26.90	4.60	26	2.60	0.84	clear	460
11:53	3.5	30.85	28.05	4.60	26	2.33	0.00	clear	410
12:05	4	30.85	28.88	4.65	25	2.95	4.85	clear	424
12:16	4.5	30.85	26.54	4.60	24	2.88	1.87	clear	425

Stabilization: Temperature - ± 0.1°; **pH** - ± 0.1; **Conductivity** - ± 5%; **Dissolved Oxygen** - ± 0.2 mg/L (or 10% saturation); **Turbidity** - ≤ 10 NTUs (or stable)

SAMPLING

Sampled by (print): L McCullen	Collection Method (circle one): Bailer Straw method Vacuum Jug Other	Time Sampling Initiated: 12:18	Time Sampling Completed: 12:21

Sample ID	Sample Time	Number of Containers	Volume	Preservative	Analysis/ EPA Method	Sample Type (G - Grab, C - Composite, Other (specify))
MW-4	12:18	3	40mL	HCl	VOCs	G

Notes:

WENCK ASSOCIATES

Responsive partner. Exceptional outcomes.

Page _____ of _____

GROUNDWATER SAMPLING LOG

Project: Former Duluth Dry Cleaner		Project Number: 53665	
Location: Main Street		Well ID: MW-5	
Date: 7/29/16	Start Time at Well: 11:45		End Time at Well: 13:40
Sampler: LMcCullen	Weather: SUNNY 90s		Comments:

WELL CHARACTERISTICS

Well Diameter (in): 2	Well Screen Depth Interval: 30 (ft) to 20 (ft)		Initial Depth to Water (ft): 22.81
Total Well Depth (ft): 30.15	Well Capacity (gallons per foot): 7.34 x .163	1 Well Volume (gallons): 1.196	3 Well Vol. (gal): 3.589
			Total Vol. Purged (gal): 4 gal

Well capacity (gallons per foot): **0.75"** = 0.02; **1"** = 0.04; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88

PURGING DATA

Initial Depth of Tubing (ft): 26	Final Depth of Tubing (ft): 27	Total Purge Time: 1hr 13min	Purge Equipment (circle one): Bailer Bladder Pump Electric Submersible Pump Peristaltic Pump Other (specify)_____
Initial Purge Rate (gpm): 252 ml/min	Final Purge Rate (gpm): 189 ml/min	Purge Method (circle one): Low Flow-Low Stress Micro-purge	Meter(s) used (circle one): YSI 556 Lamotte 2020 Horiba U53

Reading Time	Total Volume Purged (gal)	Depth to Water (ft)	Temperature (°C)	Ph SU	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTUs)	Color/ Odor	ORP (mV)
12:05	1	22.81	21.01	5.32	81	5.62	83.0	clear	427
12:20	1 gal	24.20	22.30	5.32	85	4.91	68.1	clear	356
12:38	2.0	24.75	22.63	5.20	90	5.06	35.2	clear	343
12:58	3.15	24.85	23.09	5.17	89	5.18	18.6	clear	332
13:18	4.00	25.25	22.20	5.15	89	4.30	0.36	clear	335

Stabilization: Temperature - ± 0.1°; **pH** - ± 0.1; **Conductivity** - ± 5%; **Dissolved Oxygen** - ± 0.2 mg/L (or 10% saturation); **Turbidity** - ≤ 10 NTUs (or stable)

SAMPLING

Sampled by (print): LMcCullen	Collection Method (circle one): Bailer Straw method Vacuum Jug Other	Time Sampling Initiated: 13:21	Time Sampling Completed: 13:25

Sample ID	Sample Time	Number of Containers	Volume	Preservative	Analysis/ EPA Method	Sample Type (G - Grab, C - Composite, Other (specify))
MW-5	13:21	3	40mL	HCl	VOCs	G

Notes:

WENCK ASSOCIATES

Responsive partner. Exceptional outcomes.

GROUNDWATER SAMPLING LOG

Project: Former Duluth Dry Cleaner		Project Number: 53605	
Location: City of Duluth Main Street		Well ID: MW-6	
Date: 7/28/16	Start Time at Well: 10:30		End Time at Well: 14:15
Sampler: L McCullen	Weather: Partly cloudy 90s		Comments:

WELL CHARACTERISTICS

Well Diameter (in): 2	Well Screen Depth Interval: 30 (ft) to 20 (ft)		Initial Depth to Water (ft): 21.07
Total Well Depth (ft): 30.35	Well Capacity (gallons per foot): 9.28 x (.163)	1 Well Volume (gallons): 1.513	3 Well Vol. (gal): 4.538
			Total Vol. Purged (gal): 5 gal

Well capacity (gallons per foot): **0.75"** = 0.02; **1"** = 0.04; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88

PURGING DATA

Initial Depth of Tubing (ft): 25	Final Depth of Tubing (ft): 25	Total Purge Time: 2hr 49min	Purge Equipment (circle one): Bailer Bladder Pump Electric Submersible Pump Peristaltic Pump Other (specify)_____
Initial Purge Rate (gpm): 252 mL/min	Final Purge Rate (gpm): 126 mL/min	Purge Method (circle one): Low Flow-Low Stress Micro-purge	Meter(s) used (circle one): YSI 556 Lamotte 2020 Horiba U53

Reading Time	Total Volume Purged (gal)	Depth to Water (ft)	Temperature (°C)	Ph SU	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTUs)	Color/ Odor	ORP (mV)
11:01	1	21.07	26.25	4.71	186	6.94	34.0	clear	412
11:16	1 gal	21.58	23.73	4.81	153	4.46	37.9	clear	389
11:47	1.5	21.90	24.67	4.88	146	4.51	42.9	clear	392
12:13	2	21.95	25.46	4.84	147	4.59	29.2	clear	394
12:40	~~2.5~~ 3.0	22.00	25.96	4.85	146	4.44	20.8	clear	394
12:58	~~3.5~~ 3.5	22.10	25.92	4.83	146	4.75	18.2	clear	392
13:15	4	22.61	24.98	4.85	145	4.54	14.8	clear	391
13:35	4.5	22.80	24.53	4.85	145	4.40	12.5	clear	392
13:50	5	23.00	24.82	4.78	146	4.46	12.2	clear	395

Stabilization: Temperature - ± 0.1°; **pH** - ± 0.1; **Conductivity** - ± 5%; **Dissolved Oxygen** - ± 0.2 mg/L (or 10% saturation); **Turbidity** - ≤ 10 NTUs (or stable)

SAMPLING

Sampled by (print): L McCullen	Collection Method (circle one): Bailer Straw method Vacuum Jug Other	Time Sampling Initiated: 13:53	Time Sampling Completed: 13:57

Sample ID	Sample Time	Number of Containers	Volume	Preservative	Analysis/ EPA Method	Sample Type (G - Grab, C - Composite, Other (specify))
MW-6	13:53	3	40mL	HCl	VOCs	G

Notes:
active construction / remodeling / painting happening adjacent to well

WENCK ASSOCIATES

Responsive partner. Exceptional outcomes.

GROUNDWATER SAMPLING LOG

Project:		Project Number: 53605	
Location: City of Duluth Maint		Well ID: MW-7	
Date: 7/29/16	Start Time at Well: ~~8:15~~ 9:00 pump	End Time at Well: 11:40 11:23 pump	
Sampler: LMcCullen	Weather: SUNNY 90s	Comments:	

WELL CHARACTERISTICS

Well Diameter (in): 2	Well Screen Depth Interval: 35 (ft) to 25 (ft)		Initial Depth to Water (ft): 25.90
Total Well Depth (ft): 35.45	Well Capacity (gallons per foot): 9.55 x .163	1 Well Volume (gallons): 1.556	3 Well Vol. (gal): 4.670
			Total Vol. Purged (gal): 5.991

Well capacity (gallons per foot): **0.75"** = 0.02; **1"** = 0.04; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88

PURGING DATA

Initial Depth of Tubing (ft): 29	Final Depth of Tubing (ft): 31	Total Purge Time: 2hr 15min	Purge Equipment (circle one): ~~Bailer~~ Bladder Pump Electric Submersible Pump Peristaltic Pump Other (specify)_____
Initial Purge Rate (gpm): 315 mL/min	Final Purge Rate (gpm): 105 mL/min	Purge Method (circle one): Low Flow-Low Stress Micro-purge	Meter(s) used (circle one): YSI 556 Lamotte 2020 Horiba U53

Reading Time	Total Volume Purged (gal)	Depth to Water (ft)	Temperature (°C)	Ph SU	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTUs)	Color/ Odor	ORP (mV)
9:04	1	25.90	26.04	4.94	93	5.14	353	clear	313
9:11	.5	26.60	23.73	5.22	89	4.94	2.48	clear	350
9:20	.75	27.10	23.52	5.22	87	4.82	0.90	clear	360
9:29	1	27.30	24.10	5.19	83	4.72	0.00	clear	367
9:42	1.5	27.80	24.60	5.13	79	4.71	0.00	clear	376
10:05	2.5	27.95	25.58	5.13	78	4.86	0.00	clear	374
10:35	3.5	28.20	24.85	5.13	79	4.81	0.00	clear	373
11:02	4.5	28.86	25.19	5.18	79	4.84	0.00	clear	371
11:20	5	29.10	25.65	5.18	79	4.73	0.00	clear	370

Stabilization: Temperature - ± 0.1°; **pH** - ± 0.1; **Conductivity** - ± 5%; **Dissolved Oxygen** - ± 0.2 mg/L (or 10% saturation); **Turbidity** - ≤ 10 NTUs (or stable)

SAMPLING

Sampled by (print): LMcCullen	Collection Method (circle one): Bailer Straw method Vacuum Jug Other	Time Sampling Initiated: 11:23	Time Sampling Completed: 11:27

Sample ID	Sample Time	Number of Containers	Volume	Preservative	Analysis/ EPA Method	Sample Type (G - Grab, C - Composite, Other (specify))
MW-7	11:23	3	40mL	HCl	VOCs	G

Notes: horiba cal 4.00

WENCK ASSOCIATES

Responsive partner. Exceptional outcomes.

GROUNDWATER SAMPLING LOG

Project: City of Duluth	Project Number: 05365	
Location: Main St. Duluth GA	Well ID: MW-8	
Date: 8/1/14	Start Time at Well: 9:50	End Time at Well: 13:20
Sampler: C. Mayo	Weather: Overcast	Comments: battery probs - see below.

WELL CHARACTERISTICS

Well Diameter (in): 2	Well Screen Depth Interval: 64.5 (ft) to ~~54.5~~ 54 (ft)		Initial Depth to Water (ft): 41.53
Total Well Depth (ft): 64.5'	Well Capacity (gallons per foot): 0.14	1 Well Volume (gallons): 3.67 49.5	3 Well Vol. (gal): 11.03
			Total Vol. Purged (gal): 14 gal

Well capacity (gallons per foot): **0.75"** = 0.02; **1"** = 0.04; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88

PURGING DATA

Initial Depth of Tubing (ft): ~~56~~ 52'	Final Depth of Tubing (ft): ~~56~~ 52'	Total Purge Time:	Purge Equipment (circle one): Bailer Bladder Pump Electric Submersible Pump Peristaltic Pump Other (specify) Mega Monsoon
Initial Purge Rate (gpm): 1.5 L/min	Final Purge Rate (gpm):	Purge Method (circle one): Low Flow-Low Stress Micro-purge	Meter(s) used (circle one): YSI 556 Lamotte 2020 Horiba U53 Cal: pH=3.99 cond=4.51 turb=0.00

Reading Time	Total Volume Purged (gal)	Depth to Water (ft)	Temperature (°C)	Ph SU	Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	Turbidity (NTUs)	Color/ Odor	ORP (mV)
10:40	2.5	45.15	18.71	4.75	0.034	2.66	*HIGH	H brwn	310
10:48	3.5	44.08	18.92	4.75	0.035	2.75	*HIGH	H. brwn	336
10:55	7.0	44.15	18.65	4.71	0.036	2.96	19.0	lt. brwn	341
12:38	7.5	45.15	19.30	4.93	0.036	3.28	*HIGH	H. brwn	327
12:42	11.0	44.43	19.32	5.05	0.036	2.87	629	"	325
12:50	14.0	44.50	19.30	5.03	0.038	3.06	27.0	clearish	330

Stabilization: Temperature - ± 0.1°; **pH** - ± 0.1; **Conductivity** - ± 5%; **Dissolved Oxygen** - ± 0.2 mg/L (or 10% saturation); **Turbidity** - ≤ 10 NTUs (or stable)

SAMPLING

Sampled by (print): C. Mayo	Collection Method (circle one): Bailer Straw method Vacuum Jug Other	Time Sampling Initiated: 12:50	Time Sampling Completed: 12:55

Sample ID	Sample Time	Number of Containers	Volume	Preservative	Analysis/ EPA Method	Sample Type (G - Grab, C - Composite, Other (specify))
MW-8	12:55	3	40 mL	HCl	VOC	G

Notes:

Begin pumping @ 10:33. Initial turb. is high - cloudy grey/orange., Turb during readings was "0.00" flashing. Visual of actual water is that NTU is high. Color is very cloudy. Purge container full @ 7. gal. go empty. Back at well and pump is not working. replace monsoon motor. Call MR because controller will not pump. Begins pumping. Put pump back in well. controller stops again. 11:30. over. →

11:35 Call AIR. They're going to bring a couple replacement batteries.
So I can purge the last volume (3 gal.)

12:34 AIR onsite w/ 2 new batteries.

12:35 begin pumping 3rd well volume

Appendix D

Laboratory Reports and Chain-of-Custody Documentation

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

Laboratory Report

Prepared For:

WENCK Associates
1080 Holcomb Bridge Road, Building 100, Suite 190
Roswell, GA 30076

Attention: **Ms. Katie Ross**

Report Number: **AZH0013**
August 08, 2016

Project: Duluth, City of

Project #:5365

We appreciate the opportunity to provide the analytical support for your project. The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Approved:

Signature

This report may not be reproduced, except in full, without written approval from Pace Analytical Services, Inc.
Pace Analytical Services, Inc. certifies that the following analytical results meet all requirements of the National Environmental Laboratory Accreditation Conference(NELAC).
All test results relate only to the samples analyzed.

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

WENCK Associates
1080 Holcomb Bridge Road, Building 100, S
Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-6	AZH0013-01	Water	07/28/16 13:53	08/01/16 15:45
MW-7	AZH0013-02	Water	07/29/16 11:23	08/01/16 15:45
MW-5	AZH0013-03	Water	07/29/16 13:21	08/01/16 15:45
MW-2	AZH0013-04	Water	07/31/16 19:57	08/01/16 15:45
MW-1	AZH0013-05	Water	08/01/16 09:23	08/01/16 15:45
MW-4	AZH0013-06	Water	08/01/16 12:18	08/01/16 15:45
MW-8	AZH0013-07	Water	08/01/16 12:55	08/01/16 15:45
MW-3	AZH0013-08	Water	08/01/16 15:25	08/01/16 15:45
Dup	AZH0013-09	Water	08/01/16 00:00	08/01/16 15:45

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

WENCK Associates
1080 Holcomb Bridge Road, Building 100, S
Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-6
Date/Time Sampled: 7/28/2016 1:53:00PM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-01
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Acetone	ND	100	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Acrolein	ND	50	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Benzene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Bromobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Bromoform	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Bromomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Chloroform	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Chloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Dibromomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
cis-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

WENCK Associates
1080 Holcomb Bridge Road, Building 100, S
Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-6
Date/Time Sampled: 7/28/2016 1:53:00PM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-01
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Iodomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Naphthalene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Styrene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Tetrachloroethene	7.5	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Tetrahydrofuran	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Toluene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Trichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
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(770) 734-4200 FAX (770) 734-4201

WENCK Associates
1080 Holcomb Bridge Road, Building 100, S
Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-6
Date/Time Sampled: 7/28/2016 1:53:00PM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-01
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Vinyl Chloride	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:26	6080108	ART
Surrogate: Dibromofluoromethane	*103 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 7:26*	*6080108*	
Surrogate: 1,2-Dichloroethane-d4	*104 %*	*78-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 7:26*	*6080108*	
Surrogate: Toluene-d8	*103 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 7:26*	*6080108*	
Surrogate: 4-Bromofluorobenzene	*99 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 7:26*	*6080108*	

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WENCK Associates
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Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-7
Date/Time Sampled: 7/29/2016 11:23:00AM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-02
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Acetone	ND	100	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Acrolein	ND	50	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Benzene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Bromobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Bromoform	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Bromomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Chloroform	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Chloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Dibromomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
cis-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART

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August 08, 2016

Report No.: AZH0013
Client ID: MW-7
Date/Time Sampled: 7/29/2016 11:23:00AM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-02
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Iodomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Naphthalene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Styrene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Tetrachloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Tetrahydrofuran	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Toluene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Trichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

WENCK Associates
1080 Holcomb Bridge Road, Building 100, S
Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-7
Date/Time Sampled: 7/29/2016 11:23:00AM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-02
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Vinyl Chloride	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 7:51	6080108	ART
Surrogate: Dibromofluoromethane	*103 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 7:51*	*6080108*	
Surrogate: 1,2-Dichloroethane-d4	*104 %*	*78-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 7:51*	*6080108*	
Surrogate: Toluene-d8	*104 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 7:51*	*6080108*	
Surrogate: 4-Bromofluorobenzene	*100 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 7:51*	*6080108*	

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
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WENCK Associates
1080 Holcomb Bridge Road, Building 100, S
Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-5
Date/Time Sampled: 7/29/2016 1:21:00PM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-03
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Acetone	ND	100	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Acrolein	ND	50	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Benzene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Bromobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Bromoform	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Bromomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Chloroform	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Chloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Dibromomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
cis-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

WENCK Associates
1080 Holcomb Bridge Road, Building 100, S
Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-5
Date/Time Sampled: 7/29/2016 1:21:00PM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-03
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Iodomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Naphthalene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Styrene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Tetrachloroethene	32	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Tetrahydrofuran	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Toluene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Trichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

WENCK Associates
1080 Holcomb Bridge Road, Building 100, S
Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-5
Date/Time Sampled: 7/29/2016 1:21:00PM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-03
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Vinyl Chloride	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:17	6080108	ART
Surrogate: Dibromofluoromethane	*100 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 8:17*	*6080108*	
Surrogate: 1,2-Dichloroethane-d4	*108 %*	*78-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 8:17*	*6080108*	
Surrogate: Toluene-d8	*103 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 8:17*	*6080108*	
Surrogate: 4-Bromofluorobenzene	*98 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 8:17*	*6080108*	

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

WENCK Associates
1080 Holcomb Bridge Road, Building 100, S
Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-2
Date/Time Sampled: 7/31/2016 7:57:00PM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-04
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Acetone	ND	100	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Acrolein	ND	50	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Benzene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Bromobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Bromoform	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Bromomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Chloroform	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Chloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Dibromomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
cis-1,2-Dichloroethene	5.7	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

WENCK Associates
1080 Holcomb Bridge Road, Building 100, S
Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-2
Date/Time Sampled: 7/31/2016 7:57:00PM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-04
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Iodomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Naphthalene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Styrene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Tetrachloroethene	2200	100	ug/L	EPA 8260B		50	8/03/16 10:30	8/03/16 11:39	6080108	ART
Tetrahydrofuran	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Toluene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Trichloroethene	12	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART

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Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-2
Date/Time Sampled: 7/31/2016 7:57:00PM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-04
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Vinyl Chloride	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 8:42	6080108	ART
Surrogate: Dibromofluoromethane	*102 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 8:42*	*6080108*	
Surrogate: Dibromofluoromethane	*103 %*	*80-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 11:39*	*6080108*	
Surrogate: 1,2-Dichloroethane-d4	*108 %*	*78-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 11:39*	*6080108*	
Surrogate: 1,2-Dichloroethane-d4	*106 %*	*78-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 8:42*	*6080108*	
Surrogate: Toluene-d8	*103 %*	*80-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 11:39*	*6080108*	
Surrogate: Toluene-d8	*103 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 8:42*	*6080108*	
Surrogate: 4-Bromofluorobenzene	*97 %*	*80-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 11:39*	*6080108*	
Surrogate: 4-Bromofluorobenzene	*100 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 8:42*	*6080108*	

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Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-1
Date/Time Sampled: 8/1/2016 9:23:00AM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-05
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Acetone	ND	100	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Acrolein	ND	50	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Benzene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Bromobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Bromoform	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Bromomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Chloroform	10	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Chloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Dibromomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
cis-1,2-Dichloroethene	440	200	ug/L	EPA 8260B		100	8/03/16 10:30	8/03/16 11:14	6080108	ART
trans-1,2-Dichloroethene	2.2	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART

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August 08, 2016

Report No.: AZH0013
Client ID: MW-1
Date/Time Sampled: 8/1/2016 9:23:00AM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-05
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Iodomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Naphthalene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Styrene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1,1,1,2-Tetrachloroethane	5.9	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Tetrachloroethene	14000	200	ug/L	EPA 8260B		100	8/03/16 10:30	8/03/16 11:14	6080108	ART
Tetrahydrofuran	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Toluene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Trichloroethene	99	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART

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August 08, 2016

Report No.: AZH0013
Client ID: MW-1
Date/Time Sampled: 8/1/2016 9:23:00AM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-05
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Vinyl Chloride	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:08	6080108	ART
Surrogate: Dibromofluoromethane	*104 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 9:08*	*6080108*	
Surrogate: Dibromofluoromethane	*104 %*	*80-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 11:14*	*6080108*	
Surrogate: 1,2-Dichloroethane-d4	*105 %*	*78-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 9:08*	*6080108*	
Surrogate: 1,2-Dichloroethane-d4	*107 %*	*78-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 11:14*	*6080108*	
Surrogate: Toluene-d8	*105 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 9:08*	*6080108*	
Surrogate: Toluene-d8	*103 %*	*80-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 11:14*	*6080108*	
Surrogate: 4-Bromofluorobenzene	*101 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 9:08*	*6080108*	
Surrogate: 4-Bromofluorobenzene	*99 %*	*80-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 11:14*	*6080108*	

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

WENCK Associates
1080 Holcomb Bridge Road, Building 100, S
Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-4
Date/Time Sampled: 8/1/2016 12:18:00PM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-06
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Acetone	ND	100	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Acrolein	ND	50	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Benzene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Bromobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Bromoform	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Bromomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Chloroform	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Chloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Dibromomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
cis-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART

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WENCK Associates
1080 Holcomb Bridge Road, Building 100, S
Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-4
Date/Time Sampled: 8/1/2016 12:18:00PM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-06
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Iodomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Naphthalene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Styrene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Tetrachloroethene	850	50	ug/L	EPA 8260B		25	8/03/16 10:30	8/03/16 12:05	6080108	ART
Tetrahydrofuran	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Toluene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Trichloroethene	3.1	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
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WENCK Associates
1080 Holcomb Bridge Road, Building 100, S
Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-4
Date/Time Sampled: 8/1/2016 12:18:00PM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-06
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Vinyl Chloride	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 9:33	6080108	ART
Surrogate: Dibromofluoromethane	*105 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 9:33*	*6080108*	
Surrogate: Dibromofluoromethane	*102 %*	*80-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 12:05*	*6080108*	
Surrogate: 1,2-Dichloroethane-d4	*107 %*	*78-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 12:05*	*6080108*	
Surrogate: 1,2-Dichloroethane-d4	*105 %*	*78-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 9:33*	*6080108*	
Surrogate: Toluene-d8	*102 %*	*80-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 12:05*	*6080108*	
Surrogate: Toluene-d8	*104 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 9:33*	*6080108*	
Surrogate: 4-Bromofluorobenzene	*98 %*	*80-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 12:05*	*6080108*	
Surrogate: 4-Bromofluorobenzene	*101 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 9:33*	*6080108*	

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WENCK Associates
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Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-8
Date/Time Sampled: 8/1/2016 12:55:00PM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-07
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Acetone	ND	100	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Acrolein	ND	50	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Benzene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Bromobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Bromoform	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Bromomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Chloroform	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Chloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Dibromomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
cis-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART

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Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-8
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Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-07
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Iodomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Naphthalene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Styrene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Tetrachloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Tetrahydrofuran	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Toluene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Trichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

WENCK Associates
1080 Holcomb Bridge Road, Building 100, S
Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-8
Date/Time Sampled: 8/1/2016 12:55:00PM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-07
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Vinyl Chloride	ND	2.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	8/03/16 10:30	8/03/16 13:21	6080108	ART
Surrogate: Dibromofluoromethane	*104 %*	*80-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 13:21*	*6080108*	
Surrogate: 1,2-Dichloroethane-d4	*108 %*	*78-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 13:21*	*6080108*	
Surrogate: Toluene-d8	*102 %*	*80-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 13:21*	*6080108*	
Surrogate: 4-Bromofluorobenzene	*100 %*	*80-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 13:21*	*6080108*	

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WENCK Associates
1080 Holcomb Bridge Road, Building 100, S
Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-3
Date/Time Sampled: 8/1/2016 3:25:00PM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-08
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Acetone	ND	100	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Acrolein	ND	50	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Benzene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Bromobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Bromoform	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Bromomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Chloroform	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Chloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Dibromomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
cis-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART

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WENCK Associates
1080 Holcomb Bridge Road, Building 100, S
Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-3
Date/Time Sampled: 8/1/2016 3:25:00PM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-08
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Iodomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Naphthalene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Styrene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Tetrachloroethene	850	50	ug/L	EPA 8260B		25	8/03/16 10:30	8/03/16 12:30	6080108	ART
Tetrahydrofuran	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Toluene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Trichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
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WENCK Associates
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Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: MW-3
Date/Time Sampled: 8/1/2016 3:25:00PM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-08
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Vinyl Chloride	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:23	6080108	ART
Surrogate: Dibromofluoromethane	*103 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 10:23*	*6080108*	
Surrogate: Dibromofluoromethane	*102 %*	*80-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 12:30*	*6080108*	
Surrogate: 1,2-Dichloroethane-d4	*107 %*	*78-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 12:30*	*6080108*	
Surrogate: 1,2-Dichloroethane-d4	*106 %*	*78-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 10:23*	*6080108*	
Surrogate: Toluene-d8	*103 %*	*80-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 12:30*	*6080108*	
Surrogate: Toluene-d8	*103 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 10:23*	*6080108*	
Surrogate: 4-Bromofluorobenzene	*99 %*	*80-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 12:30*	*6080108*	
Surrogate: 4-Bromofluorobenzene	*100 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 10:23*	*6080108*	

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

WENCK Associates
1080 Holcomb Bridge Road, Building 100, S
Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

Report No.: AZH0013
Client ID: Dup
Date/Time Sampled: 8/1/2016 12:00:00AM
Matrix: Water

Project: Duluth, City of
Lab Number ID: AZH0013-09
Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Acetone	ND	100	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Acrolein	ND	50	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Acrylonitrile	ND	50	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Benzene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Bromobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Bromochloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Bromodichloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Bromoform	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Bromomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
n-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
sec-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
tert-Butylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Carbon Disulfide	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Carbon Tetrachloride	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Chlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1-Chlorobutane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Chloroethane	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Chloroform	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Chloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
2-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
4-Chlorotoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Dibromochloromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1,2-Dibromo-3-chloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1,2-Dibromoethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Dibromomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1,2-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1,3-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1,4-Dichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Dichlorodifluoromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1,1-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1,2-Dichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1,1-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
cis-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
trans-1,2-Dichloroethene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART

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Matrix: Water

Project: Duluth, City of
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Date/Time Received: 8/1/2016 3:45:00PM

Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
1,2-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1,3-Dichloropropane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
2,2-Dichloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1,1-Dichloropropene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
cis-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
trans-1,3-Dichloropropene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Ethylbenzene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Ethyl Methacrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Hexachlorobutadiene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
p-Isopropyltoluene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Hexachloroethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Iodomethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Isopropylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Methacrylonitrile	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Methyl Acrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Methylene Chloride	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Methyl Methacrylate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Methyl-tert-Butyl Ether	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Naphthalene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
2-Nitropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Propionitrile (Ethyl Cyanide)	ND	20	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
n-Propylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Styrene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Tetrachloroethene	740	50	ug/L	EPA 8260B		25	8/03/16 10:30	8/03/16 12:56	6080108	ART
Tetrahydrofuran	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Toluene	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1,2,3-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1,2,4-Trichlorobenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1,1,1-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1,1,2-Trichloroethane	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Trichloroethene	2.8	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART

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Analyte	Result	RL	Units	Method	Qual.	DF	Preparation Date	Analytical Date	Batch	Init.
Volatile Organic Compounds by EPA 8260										
Trichlorofluoromethane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1,2,3-Trichloropropane	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1,2,4-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
1,3,5-Trimethylbenzene	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Vinyl Acetate	ND	10	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Vinyl Chloride	ND	2.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
m+p-Xylene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
o-Xylene	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Xylenes, total	ND	5.0	ug/L	EPA 8260B		1	8/03/16 5:00	8/03/16 10:49	6080108	ART
Surrogate: Dibromofluoromethane	*103 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 10:49*	*6080108*	
Surrogate: Dibromofluoromethane	*104 %*	*80-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 12:56*	*6080108*	
Surrogate: 1,2-Dichloroethane-d4	*107 %*	*78-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 12:56*	*6080108*	
Surrogate: 1,2-Dichloroethane-d4	*105 %*	*78-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 10:49*	*6080108*	
Surrogate: Toluene-d8	*104 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 10:49*	*6080108*	
Surrogate: Toluene-d8	*103 %*	*80-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 12:56*	*6080108*	
Surrogate: 4-Bromofluorobenzene	*99 %*	*80-120*		*EPA 8260B*			*8/03/16 10:30*	*8/3/16 12:56*	*6080108*	
Surrogate: 4-Bromofluorobenzene	*102 %*	*80-120*		*EPA 8260B*			*8/03/16 5:00*	*8/3/16 10:49*	*6080108*	

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Report No.: AZH0013

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6080108 - EPA 5030B										
Blank (6080108-BLK1)					Prepared & Analyzed: 08/03/16					
Acetone	ND	100	ug/L							
Acrolein	ND	50	ug/L							
Acrylonitrile	ND	50	ug/L							
Allyl Chloride (3-Chloropropylene)	ND	10	ug/L							
Benzene	ND	2.0	ug/L							
Bromobenzene	ND	10	ug/L							
Bromochloromethane	ND	10	ug/L							
Bromodichloromethane	ND	10	ug/L							
Bromoform	ND	10	ug/L							
Bromomethane	ND	10	ug/L							
n-Butylbenzene	ND	10	ug/L							
sec-Butylbenzene	ND	10	ug/L							
tert-Butylbenzene	ND	10	ug/L							
Carbon Disulfide	ND	10	ug/L							
Carbon Tetrachloride	ND	2.0	ug/L							
Chlorobenzene	ND	10	ug/L							
1-Chlorobutane	ND	10	ug/L							
Chloroethane	ND	5.0	ug/L							
Chloroform	ND	2.0	ug/L							
Chloromethane	ND	10	ug/L							
2-Chlorotoluene	ND	10	ug/L							
4-Chlorotoluene	ND	10	ug/L							
Dibromochloromethane	ND	10	ug/L							
1,2-Dibromo-3-chloropropane	ND	10	ug/L							
1,2-Dibromoethane	ND	10	ug/L							
Dibromomethane	ND	10	ug/L							
1,2-Dichlorobenzene	ND	10	ug/L							
1,3-Dichlorobenzene	ND	10	ug/L							
1,4-Dichlorobenzene	ND	10	ug/L							
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L							
Dichlorodifluoromethane	ND	10	ug/L							
1,1-Dichloroethane	ND	2.0	ug/L							
1,2-Dichloroethane	ND	2.0	ug/L							
1,1-Dichloroethene	ND	2.0	ug/L							
cis-1,2-Dichloroethene	ND	2.0	ug/L							
trans-1,2-Dichloroethene	ND	2.0	ug/L							
1,2-Dichloropropane	ND	2.0	ug/L							
1,3-Dichloropropane	ND	2.0	ug/L							
2,2-Dichloropropane	ND	10	ug/L							
1,1-Dichloropropene	ND	10	ug/L							
cis-1,3-Dichloropropene	ND	2.0	ug/L							

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Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6080108 - EPA 5030B										
Blank (6080108-BLK1)					Prepared & Analyzed: 08/03/16					
trans-1,3-Dichloropropene	ND	2.0	ug/L							
Ethylbenzene	ND	2.0	ug/L							
Ethyl Methacrylate	ND	10	ug/L							
Hexachlorobutadiene	ND	10	ug/L							
p-Isopropyltoluene	ND	10	ug/L							
Hexachloroethane	ND	10	ug/L							
Iodomethane	ND	10	ug/L							
Isopropylbenzene	ND	10	ug/L							
Methacrylonitrile	ND	10	ug/L							
Methyl Acrylate	ND	10	ug/L							
Methyl Butyl Ketone (2-Hexanone)	ND	10	ug/L							
Methylene Chloride	ND	5.0	ug/L							
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L							
Methyl Methacrylate	ND	10	ug/L							
4-Methyl-2-pentanone (MIBK)	ND	10	ug/L							
Methyl-tert-Butyl Ether	ND	10	ug/L							
Naphthalene	ND	10	ug/L							
2-Nitropropane	ND	10	ug/L							
Propionitrile (Ethyl Cyanide)	ND	20	ug/L							
n-Propylbenzene	ND	10	ug/L							
Styrene	ND	5.0	ug/L							
1,1,1,2-Tetrachloroethane	ND	2.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	2.0	ug/L							
Tetrachloroethene	ND	2.0	ug/L							
Tetrahydrofuran	ND	10	ug/L							
Toluene	ND	2.0	ug/L							
1,2,3-Trichlorobenzene	ND	10	ug/L							
1,2,4-Trichlorobenzene	ND	10	ug/L							
1,1,1-Trichloroethane	ND	2.0	ug/L							
1,1,2-Trichloroethane	ND	2.0	ug/L							
Trichloroethene	ND	2.0	ug/L							
Trichlorofluoromethane	ND	10	ug/L							
1,2,3-Trichloropropane	ND	10	ug/L							
1,2,4-Trimethylbenzene	ND	10	ug/L							
1,3,5-Trimethylbenzene	ND	10	ug/L							
Vinyl Acetate	ND	10	ug/L							
Vinyl Chloride	ND	2.0	ug/L							
m+p-Xylene	ND	5.0	ug/L							
o-Xylene	ND	5.0	ug/L							
Xylenes, total	ND	5.0	ug/L							
Surrogate: Dibromofluoromethane	*51*		*ug/L*	*50.000*		*102*	*80-120*			

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August 08, 2016

Report No.: AZH0013

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6080108 - EPA 5030B										
Blank (6080108-BLK1)					Prepared & Analyzed: 08/03/16					
Surrogate: 1,2-Dichloroethane-d4	*51*		*ug/L*	*50.000*		*103*	*78-120*			
Surrogate: Toluene-d8	*52*		*ug/L*	*50.000*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*51*		*ug/L*	*50.000*		*103*	*80-120*			
LCS (6080108-BS1)					Prepared & Analyzed: 08/03/16					
Benzene	48		ug/L	50.000		96	67-134			
Chlorobenzene	52		ug/L	50.000		103	69-122			
1,1-Dichloroethene	56		ug/L	50.000		112	58-142			
Toluene	48		ug/L	50.000		96	68-127			
Trichloroethene	52		ug/L	50.000		104	72-132			
Surrogate: Dibromofluoromethane	*50*		*ug/L*	*50.000*		*101*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*51*		*ug/L*	*50.000*		*102*	*78-120*			
Surrogate: Toluene-d8	*51*		*ug/L*	*50.000*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*49*		*ug/L*	*50.000*		*99*	*80-120*			
Matrix Spike (6080108-MS1)	**Source: AZH0013-02**				Prepared & Analyzed: 08/03/16					
Benzene	49		ug/L	50.000	ND	97	67-134			
Chlorobenzene	51		ug/L	50.000	ND	102	69-122			
1,1-Dichloroethene	56		ug/L	50.000	ND	112	58-142			
Toluene	49		ug/L	50.000	ND	97	68-127			
Trichloroethene	52		ug/L	50.000	ND	105	72-132			
Surrogate: Dibromofluoromethane	*52*		*ug/L*	*50.000*		*105*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*54*		*ug/L*	*50.000*		*107*	*78-120*			
Surrogate: Toluene-d8	*51*		*ug/L*	*50.000*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*49*		*ug/L*	*50.000*		*97*	*80-120*			
Matrix Spike Dup (6080108-MSD1)	**Source: AZH0013-02**				Prepared & Analyzed: 08/03/16					
Benzene	47		ug/L	50.000	ND	93	67-134	4	9	
Chlorobenzene	49		ug/L	50.000	ND	98	69-122	4	13	
1,1-Dichloroethene	54		ug/L	50.000	ND	109	58-142	3	9	
Toluene	46		ug/L	50.000	ND	93	68-127	5	9	
Trichloroethene	50		ug/L	50.000	ND	101	72-132	4	11	
Surrogate: Dibromofluoromethane	*52*		*ug/L*	*50.000*		*105*	*80-120*			
Surrogate: 1,2-Dichloroethane-d4	*54*		*ug/L*	*50.000*		*107*	*78-120*			
Surrogate: Toluene-d8	*52*		*ug/L*	*50.000*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*51*		*ug/L*	*50.000*		*101*	*80-120*			

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

WENCK Associates
1080 Holcomb Bridge Road, Building 100, S
Roswell GA, 30076
Attention: Ms. Katie Ross

August 08, 2016

Laboratory Certifications

Code	Description	Number	Expires
NC	North Carolina	381	12/31/2016
NELAC	FL DOH (Non-Pot. Water, Solids) Eff:: 07/01/2016	E87315	06/30/2017
TX	Texas	T104704397-08-TX	03/31/2017
VA	Virginia	1340	12/14/2016

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Attention: Ms. Katie Ross

August 08, 2016

Legend

Definition of Laboratory Terms

ND - None Detected at the Reporting Limit
TIC - Tentatively Identified Compound
CFU - Colony Forming Units
SOP - Method run per Pace Standard Operating Procedure
RL - Reporting Limit
DF - Dilution Factor
***** - Analyte not included in the NELAC list of certified analytes.

Sample Information

N-Nitrosodiphenylamine breaks down to diphenylamine in the GCMS; both analytes are reported as N-Nitrososdiphenylamine. Pace is not NELAC certified for diphenylamine.

Phthalic acid and phthalic anhydride are reported as dimethyl phthalate

Maleic acid and maleic anhydride are reported as dimethyl malate

1,2-Diphenylhydrazine breaks down to azobenzene in the GCMS; both analytes are reported as azobenzene

Definition of Qualifiers

Note: Unless otherwise noted, all results are reported on an as received basis.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: of

1997684

Section A Required Client Information:

Company: Wenck
Address: Roswell, GA
Email To: kross@wenck.com
Phone: Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Katie Ross
Copy To:
Purchase Order No.:
Project Name: City of Duluth
Project Number: 5365

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: GA

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N): VOC	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-10	WT	G			7/28/16	13:53		3				X					X		1
2	MW-7	WT	G		7/29/16		11:23		3				X					X		2
3	MW-5	WT	G		7/29/16		13:21		3				X					X		3
4	MW-2	WT	G		7/31/16		19:57		3				X					X		4
5	MW-1	WT	G		8/01/16		9:23		3				X					X		5
6	MW-4	WT	G		8/01/16		12:18		3				X					X		6
7	MW-8	WT	G		8/01/16		12:55		3				X					X		7
8	MW-3	WT	G		8/01/16		15:25		3				X					X		8
9	DUP	WT			8/01/16				3				X					X		9
10																				
11																				
12																				

AZH0013

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	EMM	8/01/16	15:45	Charles Hardy	8/1/16	1545	6°C	Y	N	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: E McCullen

SIGNATURE of SAMPLER: EMM

DATE Signed (MM/DD/YY): 8/01/16

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092
(770) 734-4200 FAX (770) 734-4201

LOG-IN CHECKLIST **Printed: 8/8/2016 6:38:41PM**

Attn: Ms. Katie Ross

Client: WENCK Associates
Project: Duluth, City of
Date Received: 08/01/16 15:45

Work Order: AZH0013
Logged In By: Charles Hawks

OBSERVATIONS

#Samples: 9 **#Containers:** 27

Minimum Temp(C): 6.0 **Maximum Temp(C):** 6.0 **Custody Seal(s) Used:** No

CHECKLIST ITEMS

COC included with Samples	YES
Sample Container(s) Intact	YES
Chain of Custody Complete	YES
Sample Container(s) Match COC	YES
Custody seal Intact	NO
Temperature in Compliance	YES
Sufficient Sample Volume for Analysis	YES
Zero Headspace Maintained for VOA Analyses	YES
Samples labeled preserved (If Applicable)	YES
Samples received within Allowable Hold Times	YES
Samples Received on Ice	YES
Preservation Confirmed	YES

Comments:

Appendix E

IDW Disposal Manifests

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number CES QG	2. Page 1 of 1	3. Emergency Response Phone	4. Waste Tracking Number 112269

5. Generator's Name and Mailing Address CITY OF DULUTH
3146 MAIN STREET
DULUTH, GA 30096
Generator's Phone:

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: EQ INDUSTRIAL SERVICES
U.S. EPA ID Number: MIK 435 642 742

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address EQIS ATLANTA TRANSFER & PROCESSIN
5600 FULTON INDUSTRIAL BLVD,SW
ATLANTA, GA 30336
(404) 494-3520
Facility's Phone:
U.S. EPA ID Number: GAR 000 039 776

9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1. NON-HAZARDOUS, NON-DOT REGULATED MATERIAL (SOIL)	10	DM	6000	P	
2. NON-HAZARDOUS, NON-DOT REGULATED MATERIAL (WATER)	2	DM	110	G	
3.					
4.					

13. Special Handling Instructions and Additional Information
1. G151643EQATL / IDW SOIL 2. G150854EQATL / DECON WATER

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: James Baker
Signature:
Month 8 Day 3 Year 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Lavonis Checks
Signature:
Month 8 Day 3 Year 16

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

NONE LIW

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name
Signature
Month Day Year

EQ The Environmental Quality Company 1-800-592-5489 www.eqonline.com

GENERATOR'S/SHIPPER'S INITIAL COPY

WENCK ASSOCIATES

Responsive partner.
Exceptional outcomes.

Toll Free: 800-472-2232 **Email: wenckmp@wenck.com** **Web: wenck.com**

MINNESOTA
Maple Plain 763-479-4200
Golden Valley 763-252-6800
New Hope 800-368-8831
Windom 507-831-2703
Woodbury 651-294-4580

COLORADO
Denver 800-472-2232
Fort Collins 970-223-4705

GEORGIA
Roswell 678-987-5840

NORTH DAKOTA
Fargo 701-297-9600
Mandan 701-751-3370
Dickinson 800-472-2232

WYOMING
Cheyenne 307-634-7848
Sheridan 307-675-1148