Cabarrus County Sanitary Landfill - Units 2 and 3 Semi-Annual Sampling Report Facility Permit # 1302

(May 2016 Sampling Event)

Prepared July 2016

CDM Smith

DENR USE ONLY: ☐ Paper Report ☐ Electronic Data - Email CD (data loaded: Yes / No) Doc/Event #:

NC DENR
Division of Waste Management - Solid Waste

Environmental Monitoring Reporting Form

Notice: This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

Instructions:

- **Prepare one form for each individually monitored unit.**
- **Please type or print legibly.**
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i).
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

Solid Waste Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

Consultant - CDM Smith Inc.

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Mathew F. Colone Phone: 919-325-3500

E-mail: colonemf@cdmsmith.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Cabarrus County Landfill Units 2 and 3	4441 Irish Potato Rd Concord, North Carolina 28025	13-02	.1600	May 17-19, 2016

Environmental Status: (Check all that apply)

☐ Initial/Background Monitoring ☐ Detection Monitoring ☒ Assessment Monitoring ☒ Corrective Action

Type of data submitted: (Check all that apply)

☒ Groundwater monitoring data from monitoring wells
☐ Groundwater monitoring data from private water supply wells
☐ Leachate monitoring data
☒ Surface water monitoring data
☐ Methane gas monitoring data
☒ Corrective action data (specify) MNA Data
☐ Other(specify)

Notification attached?

☐ No. No groundwater or surface water standards were exceeded.
☒ Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
☐ Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

Mathew F. Colone — Consultant — (919) 325-3500

Facility Representative Name (Print) — Title — (Area Code) Telephone Number

Signature — 7/12/2016 — Date

Affix NC Licensed/ Professional Geologist Seal

NORTH CAROLINA LICENSED SEAL 1851 GEOLOGIST MATHEW F. COLONE

7/12/2016

5400 Glenwood Ave, Suite 400, Raleigh, NC 27612

Facility Representative Address

F-0412

NC PE Firm License Number (if applicable effective May 1, 2009)

Revised 6/2009

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July 12, 2016

Ms. Jaclynne Drummond
North Carolina Department of Environmental Quality
Division of Waste Management
Solid Waste Section
2090 U.S. 70 Highway
Swannanoa, North Carolina 28778

Subject: May 2016 Semi-Annual Sampling Report
Cabarrus County Landfill Units 2 and 3
Facility Permit No. 13-02

Dear Ms. Drummond:

CDM Smith Inc. (CDM Smith), on behalf of Cabarrus County, is submitting an electronic copy of the May 2016 semi-annual sampling event report. This letter report presents the results of the recently completed sampling at Units 2 and 3 of the Cabarrus County Landfill and constitutes the first semi-annual sampling event for 2016.

The approved groundwater monitoring network consists of the following wells: MW-1, -3, -3 deep, -A, -B, -C, -C Rep, -D, -E Rep, -E deep, -F, -G, -H, -H deep, -I, -J, -K, -L, -L deep, -M, -X, CD-6, assessment wells AMW-1s, -1d, -2s, and -2d, and background wells CD-1s and CD-1d. CD-4 Rep was installed in January 2009 as part of the proposed Phase I C&D Landfill expansion. Surface water sample locations include SW-1 and -2, which also monitor the Unit 1 Landfill. Assessment wells CD-4, -5, and -6 were added to the groundwater monitoring network in September 2006 during the Phase I C&D Landfill expansion. Assessment wells CD-4 and -5 were abandoned in July 2010 in preparation of the Phase II C&D Landfill expansion. Assessment wells AMW-1s, -1d, -2s, and -2d were added to the groundwater monitoring network in October 2009 as part of the Corrective Action Plan (CAP) implementation. Field activities, sampling results, and an evaluation of corrective action activities are discussed below.

Field Activities

Groundwater and surface water samples from Units 2 & 3 of the Cabarrus County Landfill were collected on May 17-19, 2016. Groundwater samples were collected from the monitoring wells by use of disposable, laboratory decontaminated Teflon™ bailers or a QED bladder pump system using low-flow sampling techniques. Monitoring well and surface water locations for Units 2 & 3 are provided on **Figure 1**. Construction details for each monitoring well are summarized in **Table 1**.

Groundwater elevations were measured at each well prior to sampling and are presented in **Table 2**. These groundwater elevations were used to construct potentiometric contours for this sampling event

and are presented on Figure 1. The groundwater elevations and potentiometric contours were used to estimate groundwater velocities at each well, which are presented in **Table 3**. After depth to groundwater was measured, three well volumes of water were removed from each well prior to sampling to provide fresh formation water within the well water column. Low-flow sampling techniques were used to purge and sample wells used to monitor natural attenuation. Each well volume was measured in the field for pH, conductivity, turbidity, temperature, dissolved oxygen (DO), and oxidation-reduction potential (ORP) using a YSI-556 multi-parameter water quality meter and Oakton T100 and Lamonte 2020 turbidity meters. Wells with elevated turbidity were allowed to settle prior to sampling. The water quality parameters at the time of sampling are presented in **Table 4**.

The headspace of each monitoring well was screened for methane gas using a RKI Eagle multi-gas monitor. Screening results are provided in **Appendix A**.

Sampling Results

Analytical Services, Inc., located in Norcross, Georgia, analyzed the groundwater and surface water samples for North Carolina Appendix I volatile organic compounds (VOCs) and metals. Samples for the North Carolina Appendix II constituent, bis (2-ethylhexyl) phthalate, are collected annually during the spring sampling event. Additional groundwater samples were collected to evaluate the effectiveness of natural attenuation and the Phase II injection event and are discussed in the *Corrective Action Evaluation* section of this letter report.

In accordance with the North Carolina Department of Environmental Quality's Solid Waste Section (SWS) guidelines the analytical results were reported to the laboratory specific method detection limit (MDL) and are quantifiable at or below SWS Limits (SWSLs). All monitoring wells for Units 2 and 3 with detections of analytes above the MDL but below the SWSL were qualified as estimated or "J" flags. "B" and "B-01" flags, which indicate an analyte was detected in the method blank, were also reported.

The following list indicates the analytes detected above the laboratory specific MDL at each sampling location. No "J" flag or general chemistry detections are provided. Underlined analytes exceeded the 15A NCAC 02L .020 (NC 2L) Groundwater Quality Standard, Groundwater Protection Standard, or the 15A NCAC 02B (NC 2B) Surface Water Quality Standard for Class C Waters.

CD-1s (Background)

Metals:	<u>Iron</u>
Volatile Organic Compounds:	None Detected

CD-1d (Background)

Metals:	Copper, <u>Iron</u>, <u>Manganese</u>, <u>Vanadium</u>, Zinc
Volatile Organic Compounds:	None Detected

CD-4 Rep

Metals:	None Detected
Volatile Organic Compounds:	None Detected

CD-6

Metals:	Cobalt
Volatile Organic Compounds:	None Detected

AMW-1s

Metals:	Beryllium
Volatile Organic Compounds:	1,1-Dichloroethane, cis-1,2-Dichloroethene, Tetrachloroethene (PCE), Trichloroethene (TCE)

AMW-1d

Metals:	Barium
Volatile Organic Compounds:	Benzene, 1,1-Dichloroethane, cis-1,2-Dichloroethene, TCE, Vinyl Chloride

AMW-2s

Metals:	None Detected
Volatile Organic Compounds:	1,1-Dichloroethane, cis-1,2-Dichloroethene, PCE, TCE

AMW-2d

Metals:	None Detected
Volatile Organic Compounds:	1,1-Dichloroethane, cis-1,2-Dichloroethene, Methylene Chloride, PCE, TCE

MW-1

Metals:	Barium, Cobalt, Copper
Volatile Organic Compounds:	None Detected

MW-3

Metals:	None Detected
Volatile Organic Compounds:	1,1-Dichloroethane, PCE, TCE

MW-3 deep

Metals:	None Detected
Volatile Organic Compounds:	None Detected

MW-A

Metals: None Detected

Volatile Organic Compounds: Benzene, 1,4-Dichlorobenzene, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,2-Dichloropropane, cis-1,2-Dichloroethene, Ethylbenzene, Methylene Chloride, PCE, Total Xylenes, TCE

MW-B

Metals: Barium, Cobalt

Volatile Organic Compounds: None Detected

MW-C

Metals: None Detected

Volatile Organic Compounds: None Detected

MW-D

Metals: Barium, Cobalt

Volatile Organic Compounds: Benzene, 1,4-Dichlorobenzene, cis-1,2-Dichloroethene, TCE

MW-E Rep

Metals: Barium, Cobalt

Volatile Organic Compounds: 1,1-Dichloroethane, cis-1,2-Dichloroethene, Vinyl Chloride

MW-E deep

Metals: Barium, Cobalt, Lead, Zinc

Volatile Organic Compounds: Chloroethane, 1,4-Dichlorobenzene

MW-F

Metals: Barium

Volatile Organic Compounds: None Detected

MW-G

Metals: Barium

Volatile Organic Compounds: 1,4-Dichlorobenzene

MW-H

Metals: None Detected

Volatile Organic Compounds: None Detected

MW-H deep

Metals: None Detected

Volatile Organic Compounds: None Detected

MW-I
Metals: None Detected
Volatile Organic Compounds: PCE, TCE

MW-J
Metals: None Detected
Volatile Organic Compounds: None Detected

MW-K
Metals: None Detected
Volatile Organic Compounds: None Detected

MW-L
Metals: None Detected
Volatile Organic Compounds: None Detected

MW-L deep
Metals: Zinc
Volatile Organic Compounds: PCE

MW-M
Metals: None Detected
Volatile Organic Compounds: None Detected

MW-X
Metals: None Detected
Volatile Organic Compounds: None Detected

SW-1
Metals: Barium, Beryllium, Chromium, Cobalt, Copper, Lead, Vanadium, Zinc
Volatile Organic Compounds: None Detected

SW-2
Metals: Chromium, Copper, Vanadium, Zinc
Volatile Organic Compounds: None Detected

"J" flags were not included in the previous list, but several locations had "J" flag detections that exceeded the standards. These constituents along with their location are listed below.

Antimony: AMW-2s and MW-H Deep
Cobalt: CD-1d, -4 Rep, AMW-1d, MW-A, -C, -F, -G, -H, -J, and SW-2

Lead:	SW-2
Nickel:	SW-1
Selenium:	SW-1
Vanadium:	CD-1s, -4 Rep, -6, AMW-1s, -1d, -2s, MW-1, -3, -3 Deep, -A, -B, -C, -D, -E Rep, -E Deep, -G, -H, -H Deep, -I, -J, -K, -L, -L Deep, -M, and -X
1,2-Dichloroethane:	MW-E Rep and -E Deep
1,2-Dichloropropane:	MW-E Rep
Vinyl Chloride:	MW-A

The duplicate sample, identified as Duplicate, was collected from MW-G and had similar concentrations of all compounds detected in the primary sample. No analytes were detected in the trip blank. Barium, copper, and methylene chloride were detected as estimated concentrations below the NC 2L Standard in the equipment blank. Metals detected above the standards are likely natural occurring based on concentrations in the background monitoring wells or are from elevated turbidity at the time of sample collection. A summary of detected constituents for the May 2016 sampling event is presented in **Table 5**. Laboratory analytical reports are provided in Appendix A.

Corrective Action Evaluation

In December 2008, CDM Smith, on behalf of the County, submitted an Assessment of Corrective Measures Report to the SWS for the closed landfill Units 2 and 3 in accordance with North Carolina Solid Waste Management Rule 15 NCAC 13B .1635. Monitored natural attenuation and institutional controls paired with in situ remediation by enhanced bioremediation was selected as the remedy to address groundwater contamination by select VOCs at the facility. In situ remediation efforts were to be focused on the bedrock contamination near monitoring wells MW-E Rep and -E deep. Groundwater contamination in the area of MW-E deep is caused by migration of leachate from the closed landfill Units 2 and 3 downward into the shallow fractured bedrock, thereby allowing low-level VOCs to migrate into this area prior to being attenuated below NC 2L Standards.

Following approval of the CAP in September 2009 and the Phase I injection permit, six injection wells were installed upgradient of the MW-E cluster in October 2009 as shown on **Figure 2**. A 3% solution of potable water and EOS® 450, which is an emulsion of soybean oil and water, was injected simultaneously into the injection wells from November 2-6, 2009. A total of 38,100 gallons of the solution were injected with each well receiving approximately 6,350 gallons.

The initial injection of EOS® 450 successfully degraded PCE and TCE to daughter products in the injection area and neither compound has been detected above the NC 2L Standards in MW-E deep since the Phase I injection in November 2009. It was assumed that the EOS® 450 would be viable for a period of 3 to 5 years. However, samples collected from the MW-E cluster and wells downgradient of the injection area during the November 2013 sampling event showed that groundwater contaminant concentrations

had increased and levels exceeding the applicable NC 2L Standards had been detected in monitoring wells near the property line. Due to the increasing downgradient contaminant concentrations and NC 2L exceedances near the property line the groundwater conditions were re-evaluated in accordance with the CAP and a Phase II injection was implemented.

In order to assess the biological conditions in the injection area prior to initiating the Phase II injection, groundwater samples were collected from MW-E Rep, -E deep, AMW-1s, -1d, -2s, and -2d in January 2014 and analyzed for *Dehalococcoides spp* (DHC), the bacteria responsible for degrading the chlorinated ethene species of VOCs. The specific genes of the bacteria that promote dechlorination were also analyzed. Analytical results for the DHC analyses are summarized in **Table 7** and show that a sufficient population exists at monitoring wells MW-E, -E deep, and assessment monitoring well AMW-2s for reductive dechlorination by enhanced anaerobic bioremediation. DHC was detected at low concentrations in assessment monitoring wells AMW-1d and -2d and was not detected at AMW-1s. The absence of DHC at AMW-1s is likely associated with relatively low VOC concentrations.

Following approval of the injection permit in January 2014, the Phase II injection was completed from February 10-18, 2014, using potable water and a 10% solution of 60% SRS®-FR large droplet emulsified vegetable oil substrate. SRS®-FR is specifically designed for use in fractured bedrock environments and is a mixture of 60% emulsified vegetable oil, 20% water, 5-15% of proprietary emulsifiers and nutrients, and 5% sodium lactate. The nutrient component of SRS®-FR further enhances the microbial population growth. A total of 9,966 gallons of the solution were injected during the Phase II event with each well receiving approximately 1,661 gallons.

In order to monitor the progress of the Phase II injection and the geochemical and biological response of the aquifer, groundwater samples were collected quarterly from monitoring wells MW-E Rep and -E deep and assessment wells AMW-1s, -1d, -2s, and -2d. The first and third quarterly sampling events were completed in conjunction with the May and November 2014 semi-annual sampling events respectively. The second quarterly sampling event was completed in August 2014 and the fourth quarterly sampling event was completed in March 2015. A 15 month post-injection sampling event was completed in May 2015.

Water quality measurements of pH, temperature, ORP, DO, conductivity, turbidity, and ferrous iron were collected during each sampling event. In addition, the quarterly samples were submitted to an analytical laboratory for analysis of nitrate, sulfate, alkalinity, chloride, chemical oxygen demand (COD), VOCs, dissolved gases (i.e. methane, ethane, ethene, carbon dioxide), and metabolic acids (i.e. acetic acid, butyric acid, lactic acid, propionic acid, and pyruvic acid). North Carolina Appendix I metals were collected during events that corresponded with the semi-annual sampling program.

Additional samples were collected during the fourth quarterly sampling event (March 2015) from monitoring wells MW-E Rep and -E deep and assessment wells AMW-1s, -1d, -2s, and -2d and analyzed

for DHC to assess the biological conditions in the injection area after initiating the Phase II injection. A sufficient population of DHC existed at assessment monitoring well AMW-1d for reductive dechlorination by enhanced anaerobic bioremediation and DHC was detected at low concentrations in monitoring well MW-E deep. Detections of DHC in AMW-1d indicated a healthy population of DHC in the primary bedrock treatment zone surrounding the injection wells. DHC detections in MW-E deep was an indication that active treatment in bedrock was also occurring downgradient. DHC was not detected at MW-E Rep, AMW-1s, -2s, or -2d and was likely due to reduced VOC concentrations from upgradient treatment. Analytical results for the DHC analyses are summarized in Table 7.

On September 28, 2015, a report summarizing the results of the Phase II injection was submitted to the SWS. The report stated that the Phase II injection of emulsified vegetable oil replenished the carbon source and complete reductive dechlorination is occurring at MW-E, -E Deep, and AMW-1d. The presence of DHC populations and functional genes in MW-E Deep and AMW-1d demonstrate that the treatment process is capable of achieving complete chlorinated VOC degradation as long as a sufficient carbon donor is present.

As part of the semi-annual monitoring program, additional groundwater samples were collected from the background well CD-1s; monitoring wells MW-A, -E Rep, -E deep, -L, and -3; and assessment wells AMW-1s, -1d, -2s, and -2d. Samples were analyzed for alkalinity, biochemical oxygen demand, COD, carbon dioxide, chloride, dissolved hydrogen, ethane, ethene, volatile fatty acids (i.e. acetic, butyric, hexanoic, lactic, pentanoic, propionic, and pyruvic), ferrous iron, methane, nitrate, sulfate, sulfide, and total organic carbon. Note that ferrous iron was analyzed in the field using a Hach test kit due to the short hold time of 15 minutes. These additional samples were collected to evaluate natural attenuation and the effectiveness of the Phase II injection as part of the CAP. A complete summary of the geochemical results is provided in Table 5.

Contaminant concentration trends for MW-A, -3, -E Rep, -E deep, AMW-1s, -1d, -2s, and -2d were evaluated to determine the effectiveness of natural attenuation and the Phase II injection. **Figures 3 through 10** present total VOC contaminant concentration data for each well. An isoconcentration contour map with data from the May 2016 sampling event is provided on **Figure 11**.

The total VOC trend analysis for MW-A is presented on **Figure 3**. Total VOC concentrations increased in MW-A between June 1995 and April 2003. A decreasing trend began after the April 2003 sampling event but total VOC concentrations show an increasing trend between the May 2011 and 2016 events. Although total VOC concentrations in MW-A show an increasing trend, concentrations of 1,1-dichloroethane, PCE, and TCE show a decreasing trend.

Figure 4 presents the total VOC trend analysis for MW-3. Total VOC concentrations show an increasing trend between the October 2006 and the May 2016 sampling events. 1,1-Dichloroethane, PCE, and TCE are the only compounds that have been detected in MW-3 above the NC 2L Standards. The geochemical

data indicates aerobic conditions at MW-3. VOC concentrations in MW-3 deep have never been detected above the standards.

The total VOC trend analyses for MW-E Rep and -E deep are presented on **Figures 5 and 6,** respectively. Total VOC concentrations in MW-E Rep and -E deep have decreased since the November 2009 Phase I injection and are expected to continue to decrease. PCE and TCE have not been detected above the NC 2L Standards in MW-E deep since the Phase I injection and have not been detected above the MDL since the August 2010 sampling event. Delivery of the carbon substrate (i.e. SRS®-FR) during the Phase II injection was effective based on the increase in COD at MW-E deep. Reducing conditions exist at the MW-E cluster based on low DO, a negative ORP, and high methane concentrations. The increase in metabolic acids and ferrous iron at MW-E deep also indicates that a reducing subsurface environment exists. A geochemically reducing environment is favorable for anaerobic reductive dechlorination.

Figures 7 and 8 present the total VOC trend analyses for assessment wells AMW-1s and -1d, respectively. Total VOC concentrations in AMW-1s show an increasing trend from November 2010 to May 2013 but show a decreasing trend since the May 2013 sampling event. Although the geochemical results for AMW-1s indicate aerobic conditions based on a positive ORP and low concentrations of methane and ferrous iron, the concentrations of PCE and TCE show a decreasing trend. Total VOC concentrations in AMW-1d show an increasing trend between May 2010 and November 2014. Total VOC concentrations show a decreasing trend since the November 2014 sampling event. Reducing conditions exist at AMW-1d. The concentration of vinyl chloride has generally increased at AMW-1d since the Phase II injection while the concentration of TCE has decreased. The increased concentration of vinyl chloride indicates that anaerobic reductive dechlorination is occurring as vinyl chloride is a daughter product of TCE.

The total VOC trend analyses for AMW-2s and -2d are presented on **Figures 9 and 10,** respectively. Total VOC concentrations at AMW-2s show an increasing trend between the initial sampling event in October 2009 and November 2014, but show a decreasing trend since the November 2014 sampling event. Total VOC concentrations show an increasing trend at AMW-2d from the November 2010 sampling event to the November 2013 sampling event, but have fluctuated since the Phase II injection. The AMW-2 cluster is located farthest downgradient of the injection area and the shallow well is screened in partially weathered rock. Geochemical results indicate an aerobic subsurface environment, but contaminant concentrations are expected to decrease.

Recommendations

Units 2&3 of the Cabarrus County Landfill are unlined and are the source of VOC concentrations that are above the NC 2L Standards in downgradient monitoring wells. The injection remedy successfully reduced the contaminant concentrations in bedrock monitoring well MW-E deep and developed a primary VOC treatment zone in the vicinity of the injection wells and MW-E Rep. Downgradient VOC concentrations in bedrock and saprolite should continue to decrease due to reduced VOC concentrations in the primary treatment zone. Additional injections will be necessary in the future once all electron donors have been consumed and complete dechlorination stalls.

The County will continue with the semi-annual assessment monitoring program. In addition to sampling for Appendix I VOCs and metals, and the Appendix II constituent, bis(2-ethylhexyl) phthalate (sampled at CD-1s, -1d, MW-C, -E deep, -H, -I, and AMW-2d during the spring sampling event), samples collected from CD-1s, MW-A, -E Rep, -E deep, -L, -3, AMW-1s, -1d, -2s, and -2d will continue to be analyzed for natural attenuation parameters during the semi-annual sampling events. Future analytical results will be monitored to see if another injection will be needed. The next sampling event will be completed in the fall of 2016.

If you have any questions or require further explanation, do not hesitate to call me at (919) 325-3500 or by email at colonemf@cdmsmith.com.

Very truly yours,

Mathew F. Colone, P.G.
CDM Smith Inc.

cc: Kevin Grant, Cabarrus County

Table 1
Monitoring Well Construction Summary
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Installation Date	Latitude	Longitude	Geology of Screened Interval	Total Depth (feet BTOC)	Depth (feet bgs)				Monitoring Well Diameter (inches)
							6-inch Casing	Screen Interval	Filter Interval	Seal Interval	
13-02	CD-1s (background well)	8/7/2006	35.47788	80.52334	Saprolite	29.53	--	18.0-28.0	16.0-28.0	14.0-16.0	2.0
13-02	CD-1d (background well)	7/21/2004	35.47788	80.52340	PWR	52.15	--	40.0-50.0	38.0-50.0	36.0-38.0	2.0
13-02	AMW-1	10/6/2009	35.46915	80.52225	PWR	67.57	--	50.0-65.0	48.0-65.0	46.0-48.0	2.0
13-02	AMW-1d	10/8/2009	35.46914	80.52227	Bedrock	96.93	0-78.0	84.0-94.0	82.0-94.0	80.0-82.0	2.0
13-02	AMW-2	10/6/2009	35.46829	80.52232	PWR	39.90	--	22.0-37.0	20.0-37.0	18.0-20.0	2.0
13-02	AMW-2d	10/8/2009	35.46831	80.52233	Bedrock	63.55	0-51.0	55.0-60.0	53.0-60.0	51.0-53.0	2.0
13-02	CD-6	9/11/2006	35.47556	80.52420	PWR	41.49	--	23.5-38.5	21.5-38.5	19.5-21.5	2.0
13-02	MW-1	1990s	35.47355	80.52105	Saprolite/PWR	29.93	--	18.0-28.0	16.0-28.0	14.0-16.0	2.0
13-02	MW-3	2/17/1992	35.46794	80.52120	Saprolite/PWR	35.10	--	19.0-34.0	17.0-34.0	15.0-17.0	2.0
13-02	MW-3 deep	6/3/2003	35.46785	80.52133	Bedrock	93.76	0-44.0	75.0-90.0	71.0-75.0	68.0-71.0	2.0
13-02	MW-9	1990s	35.47706	80.51740	Saprolite/PWR	51.15	--	39.0-49.0	37.0-49.0	35.0-37.0	2.0
13-02	MW-A	9/16/1994	35.47289	80.52524	Saprolite/PWR	50.42	--	33.0-48.0	31.0-49.9	29.0-31.0	2.0
13-02	MW-B	9/16/1994	35.47165	80.52081	Saprolite/PWR	15.22	--	2.5-12.5	2.0-13.0	1.0-2.0	2.0
13-02	MW-C	9/16/1994	35.47042	80.52556	Saprolite/PWR	18.50	--	2.5-15.0	2.0-15.0	1.0-2.0	2.0
13-02	MW-D	9/16/1994	35.47021	80.52394	Saprolite/PWR	30.15	--	18.0-28.0	16.0-28.0	14.0-16.0	2.0
13-02	MW-E Rep	4/9/1996	35.46983	80.52212	PWR/Bedrock	45.65	--	28.0-43.0	25.0-45.0	23.0-25.0	2.0
13-02	MW-E deep	9/2/1999	35.46974	80.52220	Bedrock	59.57	--	41.0-56.0	39.0-56.0	37.0-39.0	2.0
13-02	MW-F	9/15/1994	35.47050	80.52040	Saprolite/PWR	20.08	--	3.0-18.0	1.5-18.0	0.5-1.5	2.0
13-02	MW-G	9/15/1994	35.47290	80.52121	Saprolite/PWR	20.25	--	3.0-18.0	1.5-18.0	0.5-1.5	2.0
13-02	MW-H	9/3/1999	35.46861	80.52310	Saprolite/PWR	32.70	--	19.5-29.5	17.5-29.5	15.5-17.5	2.0
13-02	MW-H deep	9/2/1999	35.46851	80.52317	Bedrock	59.67	--	41.0-56.0	39.0-56.0	37.0-39.0	2.0
13-02	MW-I	9/3/1999	35.46928	80.52076	Saprolite/PWR	65.18	--	47.0-62.0	45.0-62.0	43.0-45.0	2.0
13-02	MW-J	9/3/1999	35.47403	80.52647	Saprolite/PWR	34.90	--	29.0-32.0	28.0-32.0	25.0-28.0	2.0
13-02	MW-K	9/3/1999	35.46978	80.52467	Saprolite/PWR	36.08	--	18.0-33.0	16.0-33.0	14.0-16.0	2.0
13-02	MW-L	9/2/1999	35.46771	80.52168	Saprolite/PWR	26.90	--	14.0-24.0	12.0-24.0	10.0-12.0	2.0
13-02	MW-L deep	6/3/2003	35.46778	80.52168	Bedrock	65.20	0-48.0	53.0-63.0	50.0-63.0	47.0-50.0	2.0
13-02	MW-M	6/2/2003	35.46743	80.52026	PWR	39.80	--	21.0-36.0	18.0-36.0	16.0-18.0	2.0
13-02	MW-X	12/1/1993	35.47225	80.52664	Saprolite/PWR	31.79	--	20.0-30.0	18.0-30.0	16.0-18.0	2.0

Notes:
1. BTOC - Below Top of Casing
2. bgs - Below Ground Surface
3. PWR - Partially Weathered Rock

Table 2
Groundwater Elevations
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Sampling Event			10/18/1994	2/14/1995	6/9/1995	10/24/1995	11/13/1995	1/26/1996	12/5/1996	5/2/1997
Facility Permit Number	Monitoring Well Code	Top of Casing Elevation (AMSL)	Groundwater Elevation (AMSL)							
13-02	MW-1	701.37	691.74	689.72	689.70	690.19	690.52	690.41	690.67	690.71
13-02	MW-3	670.37								
13-02	MW-3 deep	668.33								
13-02	MW-9	780.25	743.15	739.48	739.74	738.96	739.39	740.36	739.60	739.94
13-02	MW-A	746.80	709.35	705.83	705.74	705.36	705.52	705.29	704.98	705.20
13-02	MW-B	681.66	674.65	676.32	676.28	676.78	677.16	672.22	677.70	677.86
13-02	MW-C	694.98	686.83	685.02	684.81	685.35	686.02	685.98	685.65	686.77
13-02	MW-D	720.28	704.78	699.41	698.74	697.66	697.78	697.26	696.25	696.08
13-02	MW-E Rep	712.58	684.16	680.91	681.69	682.28	682.93	682.99	689.33	689.42
13-02	MW-E deep	705.70								
13-02	MW-F	681.06	672.58	670.94	670.94	671.29	671.78	671.60	671.68	671.77
13-02	MW-G	695.19	687.89	686.34	686.22	686.99	687.68	687.52	687.02	687.04
13-02	MW-H	699.23								
13-02	MW-H deep	699.17								
13-02	MW-I	709.30								
13-02	MW-J	728.47								
13-02	MW-K	702.91								
13-02	MW-L	669.54								
13-02	MW-L deep	672.51								
13-02	MW-M	668.49								
13-02	MW-X	710.28								
13-02	CD-1s (background well)	755.00								
13-02	CD-1d (background well)	757.40								
13-02	CD-4	755.50								
13-02	CD-4 Rep	739.15								
13-02	CD-5	758.70								
13-02	CD-6	741.40								
13-02	AMW-1s	725.30								
13-02	AMW-1d	725.80								
13-02	AMW-2s	694.50								
13-02	AMW-2d	694.50								

Notes:
1. AMSL - Above Mean Sea Level; NS - Not Sampled
2. Blank Cells - Water level not measured or well not installed
3. MW-E deep, -H, -H deep, -I, -J, -K, -L, were installed in June 1999.
4. Asessment wells CD-4, -5, and -6 were installed in September 2006.
5. Assessment wells AMW-1s, -1d, -2s, and -2d were installed in October 2009.
6. CD-4 and CD-5 were abandoned in July 2010.
7. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
8. MW-9 was removed from the monitoring program in November 2012.
9. MW-E Rep was not sampled during the Novemver 2012 sampling event due to laboratory oversight.

Table 2
Groundwater Elevations
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Sampling Event			11/4/1997	4/18/1999	11/9/1998	3/31/1999	11/16/1999	4/24/2000	9/26/2000	5/8/2001
Facility Permit Number	Monitoring Well Code	Top of Casing Elevation (AMSL)	Groundwater Elevation (AMSL)							
13-02	MW-1	701.37	690.67	690.67	690.26	690.37	690.15	690.05	689.91	689.70
13-02	MW-3	670.37								
13-02	MW-3 deep	668.33								
13-02	MW-9	780.25	739.34	741.58	739.21	739.15	737.90	738.76	737.53	737.39
13-02	MW-A	746.80	704.86	705.82	704.94	704.90	703.02	703.10	702.66	702.07
13-02	MW-B	681.66	678.23	678.57	678.03	678.01	678.26	678.32	678.25	678.29
13-02	MW-C	694.98	685.31	687.13	684.05	684.03	683.93	685.68	683.24	684.12
13-02	MW-D	720.28	695.43	696.85	695.23	695.20	693.39	693.58	692.55	691.85
13-02	MW-E Rep	712.58	688.01	689.69	687.15	687.13	684.12	684.08	682.97	681.65
13-02	MW-E deep	705.70					673.76	673.75	672.69	671.35
13-02	MW-F	681.06	671.78	672.01	671.23	671.16	671.74	672.14	671.12	672.13
13-02	MW-G	695.19	686.76	687.31	686.11	686.09	686.26	686.27	686.11	686.03
13-02	MW-H	699.23					674.03	673.70	672.64	671.11
13-02	MW-H deep	699.17					673.57	673.22	672.39	670.83
13-02	MW-I	709.30					663.72	661.87	662.79	659.92
13-02	MW-J	728.47					699.29	700.72	699.13	699.03
13-02	MW-K	702.91					678.75	680.57	678.19	678.63
13-02	MW-L	669.54					654.18	655.46	653.26	651.77
13-02	MW-L deep	672.51								
13-02	MW-M	668.49								
13-02	MW-X	710.28					697.85	700.05	698.98	NS
13-02	CD-1s (background well)	755.00								
13-02	CD-1d (background well)	757.40								
13-02	CD-4	755.50								
13-02	CD-4 Rep	739.15								
13-02	CD-5	758.70								
13-02	CD-6	741.40								
13-02	AMW-1s	725.30								
13-02	AMW-1d	725.80								
13-02	AMW-2s	694.50								
13-02	AMW-2d	694.50								

Notes:
1. AMSL - Above Mean Sea Level; NS - Not Sampled
2. Blank Cells - Water level not measured or well not installed
3. MW-E deep, -H, -H deep, -I, -J, -K, -L, were installed in June 1999.
4. Asessment wells CD-4, -5, and -6 were installed in September 2006.
5. Assessment wells AMW-1s, -1d, -2s, and -2d were installed in October 2009.
6. CD-4 and CD-5 were abandoned in July 2010.
7. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
8. MW-9 was removed from the monitoring program in November 2012.
9. MW-E Rep was not sampled during the Novemver 2012 sampling event due to laboratory oversight.

Table 2
Groundwater Elevations
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Sampling Event			10/30/2001	4/23/2002	10/14/2002	4/25/2003	10/23/2003	4/21/2004	10/20/2004	4/25/2005
Facility Permit Number	Monitoring Well Code	Top of Casing Elevation (AMSL)	Groundwater Elevation (AMSL)							
13-02	MW-1	701.37	689.75	689.49	689.96	690.06	690.54	689.58	689.42	689.61
13-02	MW-3	670.37					651.74	651.71	651.24	652.13
13-02	MW-3 deep	668.33						654.24	NS	654.99
13-02	MW-9	780.25	737.06	737.09	735.92	739.12	742.56	741.50	740.20	740.65
13-02	MW-A	746.80	701.66	701.31	700.87	702.58	704.46	704.00	703.21	704.19
13-02	MW-B	681.66	678.41	678.97	678.76	678.76	678.83	678.79	679.06	678.87
13-02	MW-C	694.98	683.27	684.29	683.90	686.65	684.11	686.36	684.81	687.48
13-02	MW-D	720.28	691.21	DRY	DRY	692.98	693.96	694.07	693.16	695.38
13-02	MW-E Rep	712.58	NS	680.77	650.58	658.09	659.82	658.32	656.72	682.73
13-02	MW-E deep	705.70	672.60	670.44	672.54	673.17	674.99	673.46	671.87	672.49
13-02	MW-F	681.06	673.15	672.54	671.86	672.76	672.15	671.96	671.94	672.26
13-02	MW-G	695.19	685.96	685.93	686.74	686.47	685.99	686.17	685.94	686.17
13-02	MW-H	699.23	670.43	669.81	668.81	671.48	675.22	673.85	672.15	672.63
13-02	MW-H deep	699.17	670.04	669.38	668.49	671.02	674.56	673.06	671.57	671.77
13-02	MW-I	709.30	659.75	660.16	658.80	663.75	662.92	662.27	661.51	662.62
13-02	MW-J	728.47	698.23	699.02	697.63	700.51	701.06	701.21	699.97	701.21
13-02	MW-K	702.91	677.56	678.74	677.93	681.63	681.52	681.49	680.36	682.26
13-02	MW-L	669.54	652.72	651.69	650.01	654.43	NS	653.16	NS	653.80
13-02	MW-L deep	672.51						654.62	NS	655.20
13-02	MW-M	668.49						649.33	NS	649.79
13-02	MW-X	710.28	NS	NS	NS	NS	698.66	700.30	698.18	699.92
13-02	CD-1s (background well)	755.00								
13-02	CD-1d (background well)	757.40								
13-02	CD-4	755.50								
13-02	CD-4 Rep	739.15								
13-02	CD-5	758.70								
13-02	CD-6	741.40								
13-02	AMW-1s	725.30								
13-02	AMW-1d	725.80								
13-02	AMW-2s	694.50								
13-02	AMW-2d	694.50								

Notes:
1. AMSL - Above Mean Sea Level; NS - Not Sampled
2. Blank Cells - Water level not measured or well not installed
3. MW-E deep, -H, -H deep, -I, -J, -K, -L, were installed in June 1999.
4. Asessment wells CD-4, -5, and -6 were installed in September 2006.
5. Assessment wells AMW-1s, -1d, -2s, and -2d were installed in October 2009.
6. CD-4 and CD-5 were abandoned in July 2010.
7. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
8. MW-9 was removed from the monitoring program in November 2012.
9. MW-E Rep was not sampled during the Novemver 2012 sampling event due to laboratory oversight.

Table 2
Groundwater Elevations
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Sampling Event			10/24/2005	4/18/2006	10/31/2006	4/23/2007	10/29/2007	4/21/2008	11/19/2008	4/7/2009
Facility Permit Number	Monitoring Well Code	Top of Casing Elevation (AMSL)	Groundwater Elevation (AMSL)							
13-02	MW-1	701.37	689.14	688.35	689.18	689.43	688.76	689.38	688.61	689.63
13-02	MW-3	670.37	650.90	650.28	650.65	652.92	650.19	651.34	650.54	652.17
13-02	MW-3 deep	668.33	NS	654.26	NS	656.27	NS	654.84	NS	655.48
13-02	MW-9	780.25	739.40	738.81	737.56	739.23	736.51	736.21	735.60	736.89
13-02	MW-A	746.80	704.19	703.58	702.63	704.32	703.53	702.80	702.51	703.00
13-02	MW-B	681.66	678.54	678.72	679.41	678.88	678.01	679.11	679.16	678.93
13-02	MW-C	694.98	684.09	685.29	686.94	688.77	683.34	688.23	684.17	689.26
13-02	MW-D	720.28	693.51	691.56	693.22	695.68	692.84	693.82	692.19	695.48
13-02	MW-E Rep	712.58	681.48	680.38	679.52	682.58	680.23	679.99	679.34	680.87
13-02	MW-E deep	705.70	671.19	670.01	669.78	672.27	669.96	669.70	669.06	670.66
13-02	MW-F	681.06	670.01	671.15	672.06	673.43	668.43	672.49	672.75	672.78
13-02	MW-G	695.19	685.78	685.37	686.03	686.08	685.08	686.07	685.99	686.22
13-02	MW-H	699.23	671.35	671.19	670.14	672.00	669.89	669.79	668.75	670.25
13-02	MW-H deep	699.17	670.89	669.67	669.69	671.44	669.54	668.97	668.36	669.50
13-02	MW-I	709.30	660.96	660.60	661.60	663.58	660.07	661.73	660.82	662.40
13-02	MW-J	728.47	699.63	699.63	699.52	701.72	698.05	699.78	698.29	700.48
13-02	MW-K	702.91	679.58	680.20	678.01	681.85	677.52	680.11	678.53	681.12
13-02	MW-L	669.54	NS	652.69	NS	652.70	NS	652.84	NS	653.43
13-02	MW-L deep	672.51	NS	654.11	NS	655.72	NS	654.09	NS	654.93
13-02	MW-M	668.49	NS	646.31	NS	650.30	NS	649.08	NS	650.34
13-02	MW-X	710.28	697.73	697.67	698.25	700.31	697.74	698.58	696.84	699.75
13-02	CD-1s (background well)	755.00			732.30	733.22	731.09	731.30	729.54	731.60
13-02	CD-1d (background well)	757.40			732.05	732.98	730.87	731.02	730.34	731.37
13-02	CD-4	755.50			731.53	732.09	730.56	730.80	730.37	731.10
13-02	CD-4 Rep	739.15								
13-02	CD-5	758.70			719.21	719.02	718.32	717.58	713.47	717.00
13-02	CD-6	741.40			710.88	711.68	707.72	708.30	708.10	708.16
13-02	AMW-1s	725.30								
13-02	AMW-1d	725.80								
13-02	AMW-2s	694.50								
13-02	AMW-2d	694.50								

Notes:
1. AMSL - Above Mean Sea Level; NS - Not Sampled
2. Blank Cells - Water level not measured or well not installed
3. MW-E deep, -H, -H deep, -I, -J, -K, -L, were installed in June 1999.
4. Asessment wells CD-4, -5, and -6 were installed in September 2006.
5. Assessment wells AMW-1s, -1d, -2s, and -2d were installed in October 2009.
6. CD-4 and CD-5 were abandoned in July 2010.
7. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
8. MW-9 was removed from the monitoring program in November 2012.
9. MW-E Rep was not sampled during the Novemver 2012 sampling event due to laboratory oversight.

Table 2
Groundwater Elevations
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Sampling Event			10/14/2009	5/6/2010	11/1/2010	5/3/2011	11/7/2011	5/7/2012	11/26/2012	5/6/2013
Facility Permit Number	Monitoring Well Code	Top of Casing Elevation (AMSL)	Groundwater Elevation (AMSL)							
13-02	MW-1	701.37	688.79	689.23	688.92	689.08	689.35	689.82	688.87	690.81
13-02	MW-3	670.37	651.06	652.87	651.45	652.20	651.67	654.06	652.48	654.70
13-02	MW-3 deep	668.33	NS	654.13	NS	655.15	NS	656.74	NS	657.43
13-02	MW-9	780.25	735.72	738.26	736.58	736.07	734.92	735.84	NS	NS
13-02	MW-A	746.80	704.08	704.95	704.08	703.02	702.39	703.59	703.09	702.45
13-02	MW-B	681.66	679.38	678.61	677.64	679.04	679.56	678.34	677.44	679.71
13-02	MW-C	694.98	690.07	686.35	684.02	686.66	683.43	684.58	682.88	690.12
13-02	MW-D	720.28	696.37	695.21	693.40	692.88	691.48	693.12	691.60	692.15
13-02	MW-E Rep	712.58	679.75	682.54	680.82	679.94	679.07	682.38	NS	680.25
13-02	MW-E deep	705.70	670.29	671.99	673.60	669.66	668.80	671.10	669.31	670.05
13-02	MW-F	681.06	668.88	671.96	669.43	672.27	672.60	671.61	667.86	673.91
13-02	MW-G	695.19	685.21	685.91	685.69	685.79	686.40	685.46	685.72	686.74
13-02	MW-H	699.23	670.61	671.86	670.67	670.19	669.25	671.30	669.74	670.32
13-02	MW-H deep	699.17	670.25	671.40	670.07	669.30	668.54	670.81	669.32	669.72
13-02	MW-I	709.30	660.39	663.19	661.05	661.43	660.65	662.40	660.82	662.70
13-02	MW-J	728.47	701.65	699.97	698.20	698.68	697.11	698.49	696.45	698.77
13-02	MW-K	702.91	678.81	681.50	678.62	679.22	676.91	679.73	676.51	679.51
13-02	MW-L	669.54	NS	653.86	652.74	653.13	651.96	654.24	652.71	655.24
13-02	MW-L deep	672.51	NS	655.61	NS	654.62	NS	655.81	NS	656.74
13-02	MW-M	668.49	NS	649.00	NS	647.85	NS	648.19	NS	649.98
13-02	MW-X	710.28	700.27	698.54	696.93	697.62	700.80	697.38	695.25	699.28
13-02	CD-1s (background well)	755.00	730.59	731.50	730.72	730.81	729.60	730.65	728.94	729.28
13-02	CD-1d (background well)	757.40	730.39	732.22	730.53	730.49	729.46	730.96	728.75	729.09
13-02	CD-4	755.50	730.28	731.52	--	--	--	--	--	--
13-02	CD-4 Rep	739.15								
13-02	CD-5	758.70	717.43	715.22	--	--	--	--	--	--
13-02	CD-6	741.40	708.65	710.60	709.15	707.71	706.81	707.55	706.10	706.02
13-02	AMW-1s	725.30	671.18	673.32	671.80	670.87	670.00	672.32	670.00	671.30
13-02	AMW-1d	725.80	668.09	673.10	671.60	670.58	669.77	672.03	670.34	671.05
13-02	AMW-2s	694.50	668.20	670.09	668.74	668.16	667.10	669.38	667.78	671.47
13-02	AMW-2d	694.50	668.87	670.67	669.24	668.49	667.68	669.90	668.32	669.12

Notes:
1. AMSL - Above Mean Sea Level; NS - Not Sampled
2. Blank Cells - Water level not measured or well not installed
3. MW-E deep, -H, -H deep, -I, -J, -K, -L, were installed in June 1999.
4. Asessment wells CD-4, -5, and -6 were installed in September 2006.
5. Assessment wells AMW-1s, -1d, -2s, and -2d were installed in October 2009.
6. CD-4 and CD-5 were abandoned in July 2010.
7. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
8. MW-9 was removed from the monitoring program in November 2012.
9. MW-E Rep was not sampled during the Novemver 2012 sampling event due to laboratory oversight.

Table 2
Groundwater Elevations
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Sampling Event			11/4/2013	5/5/2014	11/3/2014	5/4/2015	10/26/2015	5/16/2016
Facility Permit Number	Monitoring Well Code	Top of Casing Elevation (AMSL)	Groundwater Elevation (AMSL)					
13-02	MW-1	701.37	689.03	689.32	690.73	689.22	688.97	688.94
13-02	MW-3	670.37	654.34	656.75	652.60	655.97	654.26	657.31
13-02	MW-3 deep	668.33	NS	659.63	NS	658.99	657.48	660.27
13-02	MW-9	780.25	NS	NS	NS	NS	NS	NS
13-02	MW-A	746.80	703.45	705.01	702.49	703.28	702.60	704.73
13-02	MW-B	681.66	678.96	678.96	675.25	679.06	678.86	678.89
13-02	MW-C	694.98	683.78	688.55	682.14	688.33	682.70	688.74
13-02	MW-D	720.28	692.58	696.21	692.98	692.78	691.53	694.50
13-02	MW-E Rep	712.58	682.53	685.83	682.49	683.00	680.93	684.97
13-02	MW-E deep	705.70	672.21	675.55	672.75	672.71	670.65	674.67
13-02	MW-F	681.06	671.41	672.51	668.38	672.66	671.66	672.46
13-02	MW-G	695.19	685.69	685.78	685.11	685.68	685.68	685.62
13-02	MW-H	699.23	672.62	675.66	672.74	672.67	671.03	674.90
13-02	MW-H deep	699.17	672.17	675.17	672.33	672.32	670.62	674.52
13-02	MW-I	709.30	662.90	665.83	662.00	664.00	662.17	665.50
13-02	MW-J	728.47	698.02	700.14	696.55	699.10	696.77	699.52
13-02	MW-K	702.91	679.09	682.24	677.86	680.25	676.84	681.21
13-02	MW-L	669.54	654.74	657.83	654.03	656.54	654.39	657.90
13-02	MW-L deep	672.51	NS	659.35	NS	658.15	656.14	659.50
13-02	MW-M	668.49	NS	650.69	NS	649.52	648.01	649.94
13-02	MW-X	710.28	696.54	698.95	695.53	698.02	696.14	698.64
13-02	CD-1s (background well)	755.00	730.20	731.82	730.20	730.42	728.55	731.10
13-02	CD-1d (background well)	757.40	730.00	731.54	729.95	730.20	728.33	730.89
13-02	CD-4	755.50	--	--	--	--	--	--
13-02	CD-4 Rep	739.15				729.45	728.68	730.45
13-02	CD-5	758.70	--	--	--	--	--	--
13-02	CD-6	741.40	704.04	710.20	709.30	707.64	706.65	708.75
13-02	AMW-1s	725.30	673.57	676.79	674.05	674.06	672.00	676.07
13-02	AMW-1d	725.80	673.31	676.62	673.02	673.85	671.73	675.85
13-02	AMW-2s	694.50	670.43	673.40	670.29	671.07	669.09	672.97
13-02	AMW-2d	694.50	671.05	673.95	670.70	671.60	669.65	673.53

Notes:
1. AMSL - Above Mean Sea Level; NS - Not Sampled
2. Blank Cells - Water level not measured or well not installed
3. MW-E deep, -H, -H deep, -I, -J, -K, -L, were installed in June 1999.
4. Asessment wells CD-4, -5, and -6 were installed in September 2006.
5. Assessment wells AMW-1s, -1d, -2s, and -2d were installed in October 2009.
6. CD-4 and CD-5 were abandoned in July 2010.
7. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
8. MW-9 was removed from the monitoring program in November 2012.
9. MW-E Rep was not sampled during the Novemver 2012 sampling event due to laboratory oversight.

Table 3
Summary of Groundwater Velocities
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sampling Date:		4/24/2000		9/26/2000		5/9/2001		10/31/2001		4/23/2002		10/14/2002	
		Hydraulic Conductivity feet/day (cm/s)	Effective Porosity	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day
13-02	MW-A	19.5 6.88E-03	0.050	0.1321	5.15E+01	0.1291	5.04E+01	0.1308	5.10E+01	0.1311	5.11E+01	0.1325	5.17E+01	0.1298	5.06E+01
13-02	MW-B	11.08 3.91E-03	0.150	0.0272	2.01E+00	0.0267	1.97E+00	0.0266	1.97E+00	0.0264	1.95E+00	0.0262	1.93E+00	0.0257	1.90E+00
13-02	MW-C	10.94 3.86E-03	0.050	0.4083	8.93E+01	0.4176	9.14E+01	0.4098	8.97E+01	0.4138	9.05E+01	0.4062	8.89E+01	0.4002	8.76E+01
13-02	MW-D	17.71 6.25E-03	0.050	0.1738	6.15E+01	0.1730	6.13E+01	0.1752	6.20E+01	0.1763	6.25E+01	DRY	DRY	DRY	DRY
13-02	MW-E Rep	174.24 6.15E-02	0.050	0.1032	3.60E+02	0.1029	3.59E+02	0.1052	3.66E+02	NS	NS	0.1063	3.70E+02	0.1130	3.94E+02
13-02	MW-F	13.68 4.83E-03	0.150	0.0260	2.37E+00	0.0259	2.37E+00	0.0255	2.32E+00	0.0250	2.28E+00	0.0252	2.30E+00	0.0250	2.28E+00
13-02	MW-G	16.56 5.84E-03	0.150	0.0309	3.41E+00	0.0302	3.34E+00	0.0302	3.34E+00	0.0301	3.32E+00	0.0301	3.32E+00	0.0289	3.19E+00
13-02	MW-1	10.94 3.86E-03	0.050	0.0290	6.34E+00	0.0283	6.20E+00	0.0284	6.21E+00	0.0282	6.16E+00	0.0283	6.20E+00	0.0274	5.99E+00
13-02	MW-9	10.94 3.86E-03	0.050	0.1163	2.54E+01	0.1167	2.55E+01	0.1165	2.55E+01	0.1187	2.60E+01	0.1081	2.36E+01	0.1062	2.32E+01
13-02	CD-1s (background well)	0.024 8.47E-06	0.020												
13-02	CD-4	0.27 9.50E-05	0.020												
13-02	CD-5	0.16 5.50E-05	0.020												

Notes:
1. CD-4 and CD-5 were installed in September 2006.
2. CD-4 and CD-5 were abandoned in July 2010.
3. Blanks indicate no data.
3. cm/s - centimeters per second
4. Hydraulic conductivity and effective porosity values are estimated from previously performed slug tests and grain size analyses.
5. The gradient and linear velocity values shown for MW-9 and CD-1s are based on the average of all the listed wells.
6. The gradient and linear velocity values shown for MW-A are based on the average of MW-B, -C, -D, -E, and -F.
7. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
8. MW-9 was removed from the monitoring program in November 2012.
9. MW-E Rep was not sampled during the November 2012 sampling event due to laboratory oversight.

Table 3
Summary of Groundwater Velocities
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sampling Date:		4/25/2003		10/23/2003		4/21/2004		10/20/2004		4/25/2005		10/25/2005	
		Hydraulic Conductivity feet/day (cm/s)	Effective Porosity	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day
13-02	MW-A	19.5 6.88E-03	0.050	0.1353	5.28E+01	0.1411	5.50E+01	0.1389	5.42E+01	0.1370	5.34E+01	0.1350	5.27E+01	0.0172	6.71E+00
13-02	MW-B	11.08 3.91E-03	0.150	0.0272	2.01E+00	0.0287	2.12E+00	0.0282	2.09E+00	0.0275	2.03E+00	0.0278	2.06E+00	0.0183	1.35E+00
13-02	MW-C	10.94 3.86E-03	0.050	0.4036	8.83E+01	0.4496	9.84E+01	0.4242	9.28E+01	0.4261	9.32E+01	0.4090	8.95E+01	0.0223	4.89E+00
13-02	MW-D	17.71 6.25E-03	0.050	0.1775	6.29E+01	0.1869	6.62E+01	0.1824	6.46E+01	0.1809	6.41E+01	0.1741	6.17E+01	0.0102	3.60E+00
13-02	MW-E Rep	174.24 6.15E-02	0.050	0.1049	3.65E+02	0.1081	3.77E+02	0.2220	7.74E+02	0.2232	7.78E+02	0.2228	7.76E+02	0.0151	5.28E+01
13-02	MW-F	13.68 4.83E-03	0.150	0.0259	2.36E+00	0.0275	2.51E+00	0.0272	2.48E+00	0.0267	2.43E+00	0.0267	2.44E+00	0.0201	1.83E+00
13-02	MW-G	16.56 5.84E-03	0.150	0.0310	3.42E+00	0.0333	3.67E+00	0.0325	3.59E+00	0.0319	3.52E+00	0.0320	3.54E+00	0.0282	3.12E+00
13-02	MW-1	10.94 3.86E-03	0.050	0.0292	6.39E+00	0.0310	6.77E+00	0.0472	1.03E+01	0.0468	1.02E+01	0.0464	1.02E+01	0.0296	6.47E+00
13-02	MW-9	10.94 3.86E-03	0.050	0.1168	2.56E+01	0.1258	2.75E+01	0.1378	3.02E+01	0.1375	3.01E+01	0.1342	2.94E+01	0.0201	4.41E+00
13-02	CD-1s (background well)	0.024 8.47E-06	0.020												
13-02	CD-4	0.27 9.50E-05	0.020												
13-02	CD-5	0.16 5.50E-05	0.020												

Notes:
1. CD-4 and CD-5 were installed in September 2006.
2. CD-4 and CD-5 were abandoned in July 2010.
3. Blanks indicate no data.
3. cm/s - centimeters per second
4. Hydraulic conductivity and effective porosity values are estimated from previously performed slug tests and grain size analyses.
5. The gradient and linear velocity values shown for MW-9 and CD-1s are based on the average of all the listed wells.
6. The gradient and linear velocity values shown for MW-A are based on the average of MW-B, -C, -D, -E, and -F.
7. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
8. MW-9 was removed from the monitoring program in November 2012.
9. MW-E Rep was not sampled during the November 2012 sampling event due to laboratory oversight.

Table 3
Summary of Groundwater Velocities
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sampling Date:		4/18/2006		10/30/2006		4/23/2007		10/29/2007		4/21/2008		11/19/2008	
		Hydraulic Conductivity feet/day (cm/s)	Effective Porosity	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day
13-02	MW-A	19.5 6.88E-03	0.050	0.0168	6.56E+00	0.0159	6.21E+00	0.0156	6.07E+00	0.0170	6.64E+00	0.0154	5.99E+00	0.0156	6.09E+00
13-02	MW-B	11.08 3.91E-03	0.150	0.0178	1.31E+00	0.0166	1.23E+00	0.0182	1.34E+00	0.0182	1.35E+00	0.0169	1.25E+00	0.0167	1.23E+00
13-02	MW-C	10.94 3.86E-03	0.050	0.0203	4.45E+00	0.0174	3.81E+00	0.0173	3.78E+00	0.0224	4.91E+00	0.0161	3.53E+00	0.0204	4.46E+00
13-02	MW-D	17.71 6.25E-03	0.050	0.0114	4.05E+00	0.0090	3.17E+00	0.0082	2.91E+00	0.0102	3.61E+00	0.0086	3.03E+00	0.0098	3.48E+00
13-02	MW-E Rep	174.24 6.15E-02	0.050	0.0155	5.39E+01	0.0154	5.37E+01	0.0145	5.05E+01	0.0155	5.41E+01	0.0152	5.30E+01	0.0154	5.38E+01
13-02	MW-F	13.68 4.83E-03	0.150	0.0191	1.74E+00	0.0180	1.64E+00	0.0182	1.66E+00	0.0206	1.88E+00	0.0178	1.63E+00	0.0175	1.60E+00
13-02	MW-G	16.56 5.84E-03	0.150	0.0281	3.11E+00	0.0271	2.99E+00	0.0280	3.09E+00	0.0271	2.99E+00	0.0264	2.91E+00	0.0261	2.88E+00
13-02	MW-1	10.94 3.86E-03	0.050	0.0297	6.49E+00	0.0285	6.23E+00	0.0293	6.41E+00	0.0281	6.15E+00	0.0275	6.03E+00	0.0276	6.05E+00
13-02	MW-9	10.94 3.86E-03	0.050	0.0198	4.34E+00	0.0183	4.00E+00	0.0182	3.98E+00	0.0191	4.19E+00	0.0177	3.87E+00	0.0179	3.91E+00
13-02	CD-1s (background well)	0.024 8.47E-06	0.020												
13-02	CD-4	0.27 9.50E-05	0.020			0.0206	2.79E-01	0.0198	2.68E-01	0.0193	2.61E-01	0.0200	2.70E-01	0.0199	2.69E-01
13-02	CD-5	0.16 5.50E-05	0.020			0.0144	1.15E-01	0.0128	1.02E-01	0.0129	1.03E-01	0.0129	1.03E-01	0.0095	7.62E-02

Notes:
1. CD-4 and CD-5 were installed in September 2006.
2. CD-4 and CD-5 were abandoned in July 2010.
3. Blanks indicate no data.
3. cm/s - centimeters per second
4. Hydraulic conductivity and effective porosity values are estimated from previously performed slug tests and grain size analyses.
5. The gradient and linear velocity values shown for MW-9 and CD-1s are based on the average of all the listed wells.
6. The gradient and linear velocity values shown for MW-A are based on the average of MW-B, -C, -D, -E, and -F.
7. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
8. MW-9 was removed from the monitoring program in November 2012.
9. MW-E Rep was not sampled during the November 2012 sampling event due to laboratory oversight.

Table 3
Summary of Groundwater Velocities
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sampling Date:		4/7/2009		10/14/2009		5/6/2010		11/1/2010		5/3/2011		11/7/2011	
		Hydraulic Conductivity feet/day (cm/s)	Effective Porosity	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day
13-02	MW-A	19.5 6.88E-03	0.050	0.0149	5.82E+00	0.0154	6.01E+00	0.0159	6.18E+00	0.0174	6.80E+00	0.0157	6.12E+00	0.0162	6.31E+00
13-02	MW-B	11.08 3.91E-03	0.150	0.0172	1.27E+00	0.0176	1.30E+00	0.0188	1.39E+00	0.0189	1.40E+00	0.0171	1.27E+00	0.0163	1.20E+00
13-02	MW-C	10.94 3.86E-03	0.050	0.0153	3.34E+00	0.0156	3.41E+00	0.0207	4.52E+00	0.0223	4.88E+00	0.0182	3.98E+00	0.0211	4.61E+00
13-02	MW-D	17.71 6.25E-03	0.050	0.0072	2.54E+00	0.0073	2.60E+00	0.0093	3.29E+00	0.0102	3.60E+00	0.0097	3.42E+00	0.0104	3.68E+00
13-02	MW-E Rep	174.24 6.15E-02	0.050	0.0148	5.14E+01	0.0162	5.65E+01	0.0149	5.21E+01	0.0155	5.40E+01	0.0154	5.36E+01	0.0155	5.42E+01
13-02	MW-F	13.68 4.83E-03	0.150	0.0178	1.62E+00	0.0207	1.89E+00	0.0194	1.77E+00	0.0204	1.86E+00	0.0181	1.65E+00	0.0175	1.60E+00
13-02	MW-G	16.56 5.84E-03	0.150	0.0267	2.94E+00	0.0266	2.93E+00	0.0276	3.04E+00	0.0268	2.96E+00	0.0265	2.92E+00	0.0255	2.82E+00
13-02	MW-1	10.94 3.86E-03	0.050	0.0278	6.08E+00	0.0276	6.04E+00	0.0288	6.31E+00	0.0280	6.13E+00	0.0276	6.05E+00	0.0268	5.87E+00
13-02	MW-9	10.94 3.86E-03	0.050	0.0174	3.80E+00	0.0177	3.88E+00	0.0183	4.01E+00	0.0199	4.36E+00	0.0185	4.05E+00	0.0187	4.08E+00
13-02	CD-1s (background well)	0.024 8.47E-06	0.020												
13-02	CD-4	0.27 9.50E-05	0.020	0.0201	2.71E-01	0.0187	2.53E-01	0.0190	2.56E-01						
13-02	CD-5	0.16 5.50E-05	0.020	0.0122	9.74E-02	0.0116	9.29E-02	0.0089	7.14E-02						

Notes:
1. CD-4 and CD-5 were installed in September 2006.
2. CD-4 and CD-5 were abandoned in July 2010.
3. Blanks indicate no data.
3. cm/s - centimeters per second
4. Hydraulic conductivity and effective porosity values are estimated from previously performed slug tests and grain size analyses.
5. The gradient and linear velocity values shown for MW-9 and CD-1s are based on the average of all the listed wells.
6. The gradient and linear velocity values shown for MW-A are based on the average of MW-B, -C, -D, -E, and -F.
7. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
8. MW-9 was removed from the monitoring program in November 2012.
9. MW-E Rep was not sampled during the November 2012 sampling event due to laboratory oversight.

Table 3
Summary of Groundwater Velocities
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sampling Date:		5/7/2012		11/26/2012		5/6/2013		11/4/2013		5/5/2014		11/3/2014	
		Hydraulic Conductivity feet/day (cm/s)	Effective Porosity	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day
13-02	MW-A	19.5 6.88E-03	0.050	0.0164	6.40E+00	0.0181	7.06E+00	0.0143	5.56E+00	0.0165	6.43E+00	0.0154	6.02E+00	0.0169	6.59E+00
13-02	MW-B	11.08 3.91E-03	0.150	0.0180	1.33E+00	0.0183	1.35E+00	0.0162	1.20E+00	0.0175	1.29E+00	0.0186	1.37E+00	0.0195	1.44E+00
13-02	MW-C	10.94 3.86E-03	0.050	0.0211	4.62E+00	0.0225	4.91E+00	0.0137	3.00E+00	0.0219	4.78E+00	0.0183	4.00E+00	0.0226	4.95E+00
13-02	MW-D	17.71 6.25E-03	0.050	0.0100	3.53E+00	0.0109	3.88E+00	0.0098	3.47E+00	0.0104	3.67E+00	0.0084	2.97E+00	0.0091	3.21E+00
13-02	MW-E Rep	174.24 6.15E-02	0.050	0.0141	4.93E+01			0.0148	5.16E+01	0.0139	4.86E+01	0.0128	4.46E+01	0.0133	4.65E+01
13-02	MW-F	13.68 4.83E-03	0.150	0.0188	1.72E+00	0.0207	1.89E+00	0.0168	1.53E+00	0.0188	1.72E+00	0.0191	1.74E+00	0.0201	1.83E+00
13-02	MW-G	16.56 5.84E-03	0.150	0.0265	2.93E+00	0.0227	2.51E+00	0.0224	2.47E+00	0.0234	2.59E+00	0.0242	2.68E+00	0.0237	2.62E+00
13-02	MW-1	10.94 3.86E-03	0.050	0.0271	5.92E+00	0.0236	5.16E+00	0.0226	4.95E+00	0.0242	5.30E+00	0.0250	5.47E+00	0.0232	5.08E+00
13-02	MW-9	10.94 3.86E-03	0.050	0.0190	4.16E+00										
13-02	CD-1s (background well)	0.024 8.47E-06	0.020			0.0196	2.35E-02	0.0163	1.96E-02	0.0183	2.20E-02	0.0177	2.13E-02	0.0185	2.23E-02
13-02	CD-4	0.27 9.50E-05	0.020												
13-02	CD-5	0.16 5.50E-05	0.020												

Notes:
1. CD-4 and CD-5 were installed in September 2006.
2. CD-4 and CD-5 were abandoned in July 2010.
3. Blanks indicate no data.
3. cm/s - centimeters per second
4. Hydraulic conductivity and effective porosity values are estimated from previously performed slug tests and grain size analyses.
5. The gradient and linear velocity values shown for MW-9 and CD-1s are based on the average of all the listed wells.
6. The gradient and linear velocity values shown for MW-A are based on the average of MW-B, -C, -D, -E, and -F.
7. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
8. MW-9 was removed from the monitoring program in November 2012.
9. MW-E Rep was not sampled during the November 2012 sampling event due to laboratory oversight.

Table 3
Summary of Groundwater Velocities
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sampling Date:		5/4/2015		10/26/2015		5/16/2016	
		Hydraulic Conductivity feet/day (cm/s)	Effective Porosity	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day	Gradient	Average Linear Velocity feet/day
13-02	MW-A	19.5 6.88E-03	0.050	0.0151	5.88E+00	0.0165	6.42E+00	0.0156	6.09E+00
13-02	MW-B	11.08 3.91E-03	0.150	0.0173	1.28E+00	0.0170	1.25E+00	0.0185	1.36E+00
13-02	MW-C	10.94 3.86E-03	0.050	0.0166	3.63E+00	0.0221	4.84E+00	0.0178	3.89E+00
13-02	MW-D	17.71 6.25E-03	0.050	0.0100	3.54E+00	0.0105	3.73E+00	0.0097	3.45E+00
13-02	MW-E Rep	174.24 6.15E-02	0.050	0.0135	4.71E+01	0.0144	5.03E+01	0.0132	4.59E+01
13-02	MW-F	13.68 4.83E-03	0.150	0.0180	1.64E+00	0.0182	1.66E+00	0.0190	1.73E+00
13-02	MW-G	16.56 5.84E-03	0.150	0.0235	2.60E+00	0.0226	2.49E+00	0.0239	2.64E+00
13-02	MW-1	10.94 3.86E-03	0.050	0.0242	5.30E+00	0.0233	5.09E+00	0.0248	5.43E+00
13-02	MW-9	10.94 3.86E-03	0.050						
13-02	CD-1s (background well)	0.024 8.47E-06	0.020	0.0173	2.07E-02	0.0181	2.17E-02	0.0178	2.14E-02
13-02	CD-4	0.27 9.50E-05	0.020						
13-02	CD-5	0.16 5.50E-05	0.020						

Notes:
1. CD-4 and CD-5 were installed in September 2006.
2. CD-4 and CD-5 were abandoned in July 2010.
3. Blanks indicate no data.
3. cm/s - centimeters per second
4. Hydraulic conductivity and effective porosity values are estimated from previously performed slug tests and grain size analyses.
5. The gradient and linear velocity values shown for MW-9 and CD-1s are based on the average of all the listed wells.
6. The gradient and linear velocity values shown for MW-A are based on the average of MW-B, -C, -D, -E, and -F.
7. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
8. MW-9 was removed from the monitoring program in November 2012.
9. MW-E Rep was not sampled during the November 2012 sampling event due to laboratory oversight.

Table 4
Water Quality Parameters
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Sampling Event:		No. 1			No. 2			No. 3			No. 4			No. 5		
Sampling Date:		10/24/1995			11/13/1995			1/25/1996			12/5/1996			5/2&4/1997		
Facility Permit Number	Monitoring Well Code	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)
13-02	CD-1s (background well)															
13-02	CD-1d (background well)															
13-02	CD-4 (abandoned)															
13-02	CD-4 Rep															
13-02	CD-5 (abandoned)															
13-02	CD-6															
13-02	AMW-1s															
13-02	AMW-1d															
13-02	AMW-2s															
13-02	AMW-2d															
13-02	MW-1	6.23	1,450	15.9	6.42	1,470	15.3	6.27	1,460	14.1	6.22	1,500	14.7	6.46	1,380	15.2
13-02	MW-3	6.08	68	16.2	6.15	550	15.0	6.05	89	14.7	5.99	69	15.1	6.04	66	16.9
13-02	MW-3 deep	5.62	210	15.9	5.41	178	14.1	5.67	336	14.1	5.46	293	14.9	5.69	313	14.9
13-02	MW-9	6.27	653	18.1	6.17	361	15.5	6.38	767	9.7	6.11	338	13.2	6.53	551	12.8
13-02	MW-A	5.76	377	17.3	5.87	244	15.6	5.91	338	12.6	5.95	109	14.9	6.26	337	13.1
13-02	MW-B	5.59	171	15.4	5.49	139	14.5	5.70	222	13.9	5.36	205	14.6	5.69	228	14.6
13-02	MW-C	5.86	56	15.6	5.79	46	14.9	5.92	138	14.1	6.12	224	14.8	6.29	177	15.4
13-02	MW-D	6.56	981	16.8	6.32	1,000	16.5	6.56	1,020	13.3	6.43	1,050	15.0	6.70	946	13.4
13-02	MW-E Rep	6.37	374	16.5	6.48	423	14.0	6.45	737	9.2	NS	NS	NS	6.54	1,260	13.9
13-02	MW-E deep															
13-02	MW-F															
13-02	MW-G															
13-02	MW-H															
13-02	MW-H deep															
13-02	MW-I															
13-02	MW-J															
13-02	MW-K															
13-02	MW-L															
13-02	MW-L deep															
13-02	MW-M															
13-02	MW-X															
Surface Water Sample Locations																
13-02	SW-1															
13-02	SW-2															

Notes:
1. NS - Not Sampled
2. Blanks indicate no data.
3. µs/cm- Microsiemens per centimeter
4. Temp. - Temperature; Deg. C - Degrees Celsius
5. S.U. - Standard Units
7. AMW-1s, -1d, -2s, and -2d were installed in October 2009.
8. CD-4 and CD-5 were abandoned in July 2010.
9. MW-3 deep, -L deep, -and -M are sampled annually during the spring event.
10. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
11. MW-9 was removed from the monitoring program in November 2012.

Table 4
Water Quality Parameters
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Sampling Event:		No. 6			No. 7			No. 8			No. 9			No. 10		
Sampling Date:		4/18-21/98			11/9-10/98			3/31/1999			11/16-19/1999			4/24-27/2000		
Facility Permit Number	Monitoring Well Code	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)
13-02	CD-1s (background well)															
13-02	CD-1d (background well)															
13-02	CD-4 (abandoned)															
13-02	CD-4 Rep															
13-02	CD-5 (abandoned)															
13-02	CD-6															
13-02	AMW-1s															
13-02	AMW-1d															
13-02	AMW-2s															
13-02	AMW-2d															
13-02	MW-1	6.25	1,500	14.8	6.77	1,440	15.6	6.50	1,530	15.6	5.68	1,330	15.5	5.50	1,260	15.3
13-02	MW-3															
13-02	MW-3 deep															
13-02	MW-9	6.01	84	16.2	6.70	86	16.6	6.60	84	15.3	6.64	83	16.1	5.46	81	16.4
13-02	MW-A	5.63	349	15.4	6.00	348	14.8	6.00	344	14.5	5.59	250	14.9	4.58	300	15.8
13-02	MW-B	6.50	1,470	12.1	6.99	1,050	16.2	6.90	1,050	16.1	6.44	595	14.1	5.70	1,220	12.9
13-02	MW-C	6.13	334	12.7	6.48	380	16.2	6.51	352	15.7	5.09	386	15.8	5.08	132	13.2
13-02	MW-D	5.65	355	14.8	5.56	313	14.9	5.50	310	14.7	4.63	404	15.0	5.50	393	14.9
13-02	MW-E Rep	6.04	186	15.3	6.08	183	14.2	6.05	186	15.3	4.70	230	15.8	5.08	242	15.7
13-02	MW-E deep										5.45	281	15.4	5.11	288	15.9
13-02	MW-F	6.69	943	13.3	6.90	1,110	16.3	6.82	1,110	16.3	6.59	1,170	15.6	5.68	1,200	13.7
13-02	MW-G	6.33	1,020	13.2	6.67	1,140	17.7	6.09	1,050	14.8	5.64	950	17.1	5.49	850	14.4
13-02	MW-H										6.48	173	14.1	5.48	159	14.0
13-02	MW-H deep										6.60	192	14.1	5.72	217	14.6
13-02	MW-I										5.97	86	13.9	6.08	187	14.8
13-02	MW-J										6.62	259	14.6	5.88	263	15.1
13-02	MW-K										5.75	133	14.7	5.66	128	14.6
13-02	MW-L										6.36	87	14.7	5.60	88	13.4
13-02	MW-L deep															
13-02	MW-M															
13-02	MW-X															
Surface Water Sample Locations																
13-02	SW-1	7.71	241	14.4	8.21	440	13.0	7.17	515	14.5				6.26	491	17.8
13-02	SW-2	7.76	140	15.2	7.78	210	13.5	7.75	203	12.8	6.21	553	12.2	5.92	287	13.7

Notes:
1. NS - Not Sampled
2. Blanks indicate no data.
3. µs/cm- Microsiemens per centimeter
4. Temp. - Temperature; Deg. C - Degrees Celsius
5. S.U. - Standard Units
7. AMW-1s, -1d, -2s, and -2d were installed in October 2009.
8. CD-4 and CD-5 were abandoned in July 2010.
9. MW-3 deep, -L deep, -and -M are sampled annually during the spring event.
10. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
11. MW-9 was removed from the monitoring program in November 2012.

Table 4
Water Quality Parameters
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Sampling Event:		No. 11			No. 12			No. 13			No. 14			No. 15		
Sampling Date:		9/26-27/2000			5/9/2001			10/31/2001			4/23/2002			10/14/2002		
Facility Permit Number	Monitoring Well Code	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)
13-02	CD-1s (background well)															
13-02	CD-1d (background well)															
13-02	CD-4 (abandoned)															
13-02	CD-4 Rep															
13-02	CD-5 (abandoned)															
13-02	CD-6															
13-02	AMW-1s															
13-02	AMW-1d															
13-02	AMW-2s															
13-02	AMW-2d															
13-02	MW-1	6.30	1,340	15.2	6.22	1,160	15.3	6.57	1,349	17.3	6.31	421	16.7	6.10	1,350	17.3
13-02	MW-3															
13-02	MW-3 deep															
13-02	MW-9	6.28	86	16.8	6.13	63	17.2	6.86	40	16.6	6.53	44	17.5	5.72	78	15.1
13-02	MW-A	6.35	313	15.5	5.50	240	17.5	5.58	150	13.6	5.12	236	13.9	5.49	243	16.1
13-02	MW-B	6.25	475	16.7	6.61	1,190	13.0	6.75	1,408	20.2	6.66	288	15.6	6.07	351	15.3
13-02	MW-C	5.94	265	16.0	5.73	98	13.4	5.94	77	15.5	5.42	69	12.6	5.41	101	16.8
13-02	MW-D	6.25	391	15.5	5.34	293	15.7	5.84	188	14.8	NS	NS	NS	NS	NS	NS
13-02	MW-E Rep	6.10	275	15.6	5.69	206	16.8	NS	NS	NS	6.04	142	18.5	5.45	232	14.8
13-02	MW-E deep	5.52	298	15.8	5.70	228	17.4	6.09	146	16.7	5.97	161	18.2	5.49	256	14.3
13-02	MW-F	6.16	1,240	16.0	6.53	824	14.1	6.97	670	18.4	6.82	179	14.6	6.46	783	15.0
13-02	MW-G	6.35	1,040	16.7	6.23	766	14.6	6.58	815	20.0	6.48	247	18.4	6.14	639	16.1
13-02	MW-H	6.08	163	14.8	6.35	126	15.5	6.55	88	16.2	6.29	89	14.9	6.01	100	15.3
13-02	MW-H deep	5.78	230	14.7	6.36	173	16.3	6.69	107	15.7	6.38	121	15.7	6.16	166	15.5
13-02	MW-I	5.68	110	14.3	6.02	67	16.2	6.64	40	15.9	6.25	58	15.4	5.75	69	15.0
13-02	MW-J	6.54	295	14.6	6.61	191	15.4	6.84	124	12.3	6.30	128	14.0	6.37	188	14.8
13-02	MW-K	6.23	134	14.2	5.73	96	15.7	6.25	58	14.7	6.10	72	14.1	5.76	97	14.8
13-02	MW-L	6.25	90	14.6	5.82	66	14.4	6.36	47	15.5	6.01	57	14.1	5.80	77	15.1
13-02	MW-L deep															
13-02	MW-M															
13-02	MW-X															
Surface Water Sample Locations																
13-02	SW-1	6.83	345	17.1	7.00	508	17.6	7.41	401	13.7	7.00	165	13.4	6.68	263	13.3
13-02	SW-2	7.43	354	13.3	7.09	628	17.5	7.31	227	9.7	6.91	176	13.8	6.45	137	13.0

Notes:
1. NS - Not Sampled
2. Blanks indicate no data.
3. µs/cm- Microsiemens per centimeter
4. Temp. - Temperature; Deg. C - Degrees Celsius
5. S.U. - Standard Units
7. AMW-1s, -1d, -2s, and -2d were installed in October 2009.
8. CD-4 and CD-5 were abandoned in July 2010.
9. MW-3 deep, -L deep, -and -M are sampled annually during the spring event.
10. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
11. MW-9 was removed from the monitoring program in November 2012.

Table 4
Water Quality Parameters
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Sampling Event:		No. 16			No. 17			No. 18			No. 19			No. 20		
Sampling Date:		4/25/2003			10/23/2003			4/21/2004			10/20/2004			4/25/2005		
Facility Permit Number	Monitoring Well Code	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)
13-02	CD-1s (background well)															
13-02	CD-1d (background well)															
13-02	CD-4 (abandoned)															
13-02	CD-4 Rep															
13-02	CD-5 (abandoned)															
13-02	CD-6															
13-02	AMW-1s															
13-02	AMW-1d															
13-02	AMW-2s															
13-02	AMW-2d															
13-02	MW-1	6.35	31	15.4	6.64	1,280	14.0	6.23	209	20.0	6.41	235	17.5	6.36	1,201	17.0
13-02	MW-3				6.49	99	18.7	6.46	95	21.3	6.28	91	18.4	6.42	111	14.8
13-02	MW-3 deep							7.65	136	18.8	NS	NS	NS	7.74	149	15.4
13-02	MW-9	6.55	19	17.4	6.59	69	16.7	6.17	65	18.9	6.34	47	18.4	5.88	77	16.6
13-02	MW-A	5.63	58	15.7	5.01	251	15.2	5.08	202	15.9	5.68	173	16.3	5.52	279	16.5
13-02	MW-B	6.70	35	14.2	6.82	658	15.7	6.62	256	19.6	6.66	287	19.3	6.56	867	15.6
13-02	MW-C	5.85	25	13.9	6.05	105	18.0	5.66	102	13.8	5.71	78	18.1	6.10	85	15.6
13-02	MW-D	5.93	38	16.0	6.00	326	16.9	5.62	213	17.2	5.75	173	16.7	5.79	365	17.8
13-02	MW-E Rep	5.83	40	18.3	6.13	286	18.8	5.85	192	21.1	6.00	195	17.7	5.51	349	18.6
13-02	MW-E deep	5.81	38	17.4	6.24	241	18.4	5.87	192	21.1	5.94	160	17.4	5.82	301	18.2
13-02	MW-F	6.80	34	14.0	7.00	639	14.9	6.73	174	17.1	6.95	163	18.1	6.39	769	14.8
13-02	MW-G	6.40	29	14.7	6.58	671	15.2	6.32	181	18.0	6.45	223	18.7	5.65	602	15.0
13-02	MW-H	6.17	36	16.7	6.26	98	16.0	5.95	87	17.4	6.15	82	16.7	6.23	100	17.4
13-02	MW-H deep	6.39	38	17.5	6.44	131	16.0	6.47	123	18.3	6.42	117	16.4	6.41	152	16.6
13-02	MW-I	6.32	26	16.6	6.22	95	16.2	6.30	95	17.0	6.28	68	16.2	5.90	75	16.2
13-02	MW-J	6.70	31	14.1	6.94	162	14.2	6.79	171	16.8	6.85	132	16.1	7.81	271	13.4
13-02	MW-K	5.91	24	14.8	6.18	87	16.3	5.95	108	15.8	6.15	79	16.8	6.20	107	16.0
13-02	MW-L	6.07	24	14.8	NS	NS	NS	5.84	91	16.6	NS	NS	NS	6.23	76	17.3
13-02	MW-L deep							10.71	192	17.9	NS	NS	NS	9.82	159	17.4
13-02	MW-M							6.71	118	18.8	NS	NS	NS	5.70	147	14.8
13-02	MW-X				6.49	162	14.2	6.21	157	14.4	6.37	123	16.2	6.72	179	13.4
Surface Water Sample Locations																
13-02	SW-1	7.10	26	14.1	7.24	348	8.2	6.88	127	16.3	7.39	104	15.7	7.36	201	12.4
13-02	SW-2	7.65	28	14.2	8.38	389	9.1	6.73	131	18.8	7.64	109	16.8	7.67	303	14.2

Notes:

1. NS - Not Sampled
2. Blanks indicate no data.
3. µs/cm- Microsiemens per centimeter
4. Temp. - Temperature; Deg. C - Degrees Celsius
5. S.U. - Standard Units
7. AMW-1s, -1d, -2s, and -2d were installed in October 2009.
8. CD-4 and CD-5 were abandoned in July 2010.
9. MW-3 deep, -L deep, -and -M are sampled annually during the spring event.
10. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
11. MW-9 was removed from the monitoring program in November 2012.

Table 4
Water Quality Parameters
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Sampling Event:		No. 21			No. 22			No. 23			No. 24			No. 25		
Sampling Date:		10/25/2005			4/18/2006			10/30/2006			4/23/2007			10/29/2007		
Facility Permit Number	Monitoring Well Code	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)
13-02	CD-1s (background well)							6.20	76	16.3	7.47	97	19.0	6.49	127	16.4
13-02	CD-1d (background well)							6.19	73	16.1	7.09	53	18.4	6.80	73	16.4
13-02	CD-4 (abandoned)							6.58	67	16.9	6.34	174	21.9	6.33	88	16.7
13-02	CD-4 Rep															
13-02	CD-5 (abandoned)							6.57	510	16.6	6.68	411	18.4	7.10	673	17.8
13-02	CD-6							5.89	96	16.8	6.04	68	18.5	6.94	93	17.7
13-02	AMW-1s															
13-02	AMW-1d															
13-02	AMW-2s															
13-02	AMW-2d															
13-02	MW-1	6.51	1,252	17.2	6.26	1,415	14.9	6.23	1,133	17.2	6.77	1,056	18.7	7.01	1,072	18.6
13-02	MW-3	6.19	97	14.3	6.64	101	15.3	5.93	87	19.3	7.21	93	16.5	6.68	117	19.1
13-02	MW-3 deep	NS	NS	NS	7.14	350	14.9	NS	NS	NS	7.74	189	18.6	NS	NS	NS
13-02	MW-9	5.87	67	17.2	6.58	65	18.2	6.14	92	18.2	6.98	54	16.3	6.70	64	17.9
13-02	MW-A	5.30	176	19.9	5.96	315	18.2	5.13	178	17.3	6.34	174	21.9	5.87	198	17.5
13-02	MW-B	6.78	872	13.0	6.42	481	14.7	6.54	582	15.6	7.53	635	13.9	6.94	413	17.6
13-02	MW-C	5.67	122	17.1	6.01	78	15.4	5.56	65	18.2	7.01	70	17.2	6.92	407	16.7
13-02	MW-D	5.43	320	13.9	5.95	363	15.2	5.51	362	17.1	6.25	318	17.8	6.07	378	16.9
13-02	MW-E Rep	5.87	506	13.4	5.87	439	16.3	5.68	445	17.8	7.02	402	17.3	6.34	498	17.6
13-02	MW-E deep	6.06	198	12.8	6.04	321	15.9	5.77	188	19.2	7.12	388	16.3	6.48	354	17.6
13-02	MW-F	6.79	858	13.1	6.14	874	14.1	6.44	743	17.4	7.31	567	15.6	7.25	901	14.7
13-02	MW-G	6.57	811	14.1	6.24	794	15.1	6.22	639	17.4	7.48	563	17.3	6.67	1,628	19.1
13-02	MW-H	6.32	88	13.5	6.15	82	14.4	5.92	85	19.4	7.04	80	14.4	6.50	102	16.4
13-02	MW-H deep	6.43	134	13.8	6.18	146	13.8	5.99	121	17.1	7.21	124	14.9	6.85	140	16.2
13-02	MW-I	6.42	69	13.0	6.19	72	14.8	7.31	68	16.1	7.76	64	15.2	6.81	64	15.8
13-02	MW-J	6.50	140	18.1	6.70	177	17.4	6.21	144	17.2	7.05	149	17.5	7.27	154	15.7
13-02	MW-K	5.80	88	15.0	6.37	96	17.8	5.68	90	17.1	6.97	96	16.3	6.43	107	16.1
13-02	MW-L	NS	NS	NS	7.71	69	16.9	NS	NS	NS	7.07	87	19.8	NS	NS	NS
13-02	MW-L deep	NS	NS	NS	8.98	174	18.0	NS	NS	NS	7.63	140	17.0	NS	NS	NS
13-02	MW-M	NS	NS	NS	6.92	146	17.4	NS	NS	NS	7.19	127	17.2	NS	NS	NS
13-02	MW-X	5.99	148	18.1	6.51	179	17.5	5.99	153	17.4	6.42	147	18.7	6.82	162	17.5
Surface Water Sample Locations																
13-02	SW-1	7.94	363	16.8	6.62	434	14.5	6.80	461	14.5	7.38	374	16.3	DRY	DRY	DRY
13-02	SW-2	8.38	310	16.4	7.15	382	18.4	7.19	505	13.0	8.19	134	22.4	7.65	329	21.4

Notes:

1. NS - Not Sampled
2. Blanks indicate no data.
3. µs/cm- Microsiemens per centimeter
4. Temp. - Temperature; Deg. C - Degrees Celsius
5. S.U. - Standard Units
7. AMW-1s, -1d, -2s, and -2d were installed in October 2009.
8. CD-4 and CD-5 were abandoned in July 2010.
9. MW-3 deep, -L deep, -and -M are sampled annually during the spring event.
10. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
11. MW-9 was removed from the monitoring program in November 2012.

Table 4
Water Quality Parameters
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Sampling Event:		No. 26			No. 27			No. 28				No. 29			
Sampling Date:		4/21/2008			11/19/2008			4/7/2009				10/14-16/2009			
Facility Permit Number	Monitoring Well Code	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	Turb. (NTUs)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	Turb. (NTUs)
13-02	CD-1s (background well)	5.86	117	17.3	6.93	104	14.9	6.79	216	15.6	148	6.63	198	15.5	123
13-02	CD-1d (background well)	5.75	122	17.1	7.40	131	14.8	7.25	115	15.8	19	7.09	108	15.3	16
13-02	CD-4 (abandoned)	4.62	112	17.2	6.94	130	16.9	6.70	145	17.3	376	6.86	139	16.3	296
13-02	CD-4 Rep														
13-02	CD-5 (abandoned)	5.90	678	17.7	6.86	463	18.8	6.85	724	16.9	16	6.75	706	16.6	12
13-02	CD-6	5.63	137	18.6	6.17	148	13.8	6.18	172	15.5	126	6.03	152	16.8	48
13-02	AMW-1s											6.51	156	16.9	12
13-02	AMW-1d											6.61	97	17.5	16
13-02	AMW-2s											7.03	113	17.1	10
13-02	AMW-2d											6.98	193	17.2	10
13-02	MW-1	6.01	1,597	16.0	6.50	938	15.0	6.39	1,257	13.9	6	6.68	1,198	15.8	5
13-02	MW-3	5.98	153	17.7	6.38	124	17.4	6.38	163	17.3	21	6.21	178	17.6	10
13-02	MW-3 deep	7.30	352	20.2	NS	NS	NS	7.71	289	16.3	4	NS	NS	NS	NS
13-02	MW-9	6.20	147	17.2	6.31	87	16.7	6.49	99	16.9	66	6.58	98	16.4	59
13-02	MW-A	5.17	303	15.8	6.45	282	16.8	6.54	288	14.9	3	6.26	265	17.5	5
13-02	MW-B	6.26	1,146	14.3	6.98	855	12.7	6.48	1,162	12.6	41	6.29	1,128	16.9	28
13-02	MW-C	4.68	113	17.3	6.63	101	13.9	6.53	118	10.4	32	6.88	102	16.6	21
13-02	MW-D	5.25	604	19.5	6.69	453	13.9	6.86	443	15.0	9	6.54	401	17.3	9
13-02	MW-E Rep	5.44	528	16.6	6.74	510	14.8	6.25	397	17.3	14	6.26	418	17.6	10
13-02	MW-E deep	5.57	396	16.7	6.99	350	15.9	6.12	432	17.0	4	6.39	428	18.1	9
13-02	MW-F	6.15	780	14.9	7.02	667	13.6	6.12	620	13.2	8	5.89	560	17.2	7
13-02	MW-G	5.99	870	15.5	6.44	609	14.5	6.88	676	12.4	63	6.47	543	16.1	40
13-02	MW-H	6.07	180	16.3	6.32	146	13.5	6.69	133	16.2	13	6.32	112	16.1	10
13-02	MW-H deep	5.56	239	15.8	6.83	198	12.9	6.91	193	15.3	5	6.70	154	16.8	6
13-02	MW-I	5.84	107	15.7	6.90	103	16.8	6.52	88	14.8	7	6.38	95	16.1	7
13-02	MW-J	5.98	251	16.1	6.37	210	13.3	6.29	227	11.9	14	6.41	218	16.6	16
13-02	MW-K	5.92	165	16.9	6.76	169	13.7	6.53	138	13.6	6	6.62	121	15.8	5
13-02	MW-L	5.25	115	17.5	NS	NS	NS	7.18	80	17.4	5	NS	NS	NS	NS
13-02	MW-L deep	5.73	291	16.6	NS	NS	NS	7.15	281	14.5	4	NS	NS	NS	NS
13-02	MW-M	5.71	247	17.7	NS	NS	NS	6.21	177	13.7	16	NS	NS	NS	NS
13-02	MW-X	6.19	276	15.4	6.83	221	13.9	6.40	213	11.1	6	6.51	198	15.9	7
Surface Water Sample Locations															
13-02	SW-1	6.45	469	16.4	7.73	503	7.6	6.11	415	12.2	7	DRY	DRY	DRY	DRY
13-02	SW-2	7.01	352	17.6	8.19	428	15.6	7.71	396	16.1	53	DRY	DRY	DRY	DRY

Notes:
1. NS - Not Sampled
2. Blanks indicate no data.
3. µs/cm- Microsiemens per centimeter
4. Temp. - Temperature; Deg. C - Degrees Celsius
5. Turb. - Turbidity; NTUs - Nephelometric Turbidity Units
7. CD-4, CD-5, and CD-6 were installed in September 2006.
8. AMW-1s, -1d, -2s, and -2d were installed in October 2009.
9. CD-4 and CD-5 were abandoned in July 2010.
10. MW-3 deep, -L deep, -and -M are sampled annually during the spring event.
11. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
12. MW-9 was removed from the monitoring program in November 2012.

Table 4
Water Quality Parameters
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Sampling Event:		No. 30				No. 31						No. 32					
Sampling Date:		05/06-10/2010				11/1-4/2010						5/3-5/2011					
Facility Permit Number	Monitoring Well Code	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	Turb. (NTUs)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mVs)	Turb. (NTUs)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mVs)	Turb. (NTUs)
13-02	CD-1s (background well)	5.67	114	15.9	6	5.20	197	14.2	6.45	195	26	5.58	158	16.0	5.96	191	87
13-02	CD-1d (background well)	5.31	120	16.0	596	5.59	197	15.8	5.89	171	28	5.55	171	16.2	8.22	191	280
13-02	CD-4 (abandoned)	5.03	106	19.1	6	--	--	--	--	--	--	--	--	--	--	--	--
13-02	CD-4 Rep																
13-02	CD-5 (abandoned)	5.68	609	23.4	5	--	--	--	--	--	--	--	--	--	--	--	--
13-02	CD-6	5.91	156	16.0	39	5.44	259	16.0	4.11	195	1	5.55	257	16.8	3.19	130	55
13-02	AMW-1s	4.90	253	21.3	9	5.80	204	14.1	1.30	237	17	5.23	225	21.9	1.22	176	10
13-02	AMW-1d	5.81	799	19.5	5	6.11	545	14.3	0.01	102	1	6.09	569	22.0	0.01	89	4
13-02	AMW-2s	5.58	140	17.8	3	5.82	129	13.9	3.15	131	15	5.65	135	17.8	2.10	128	36
13-02	AMW-2d	5.69	151	19.2	4	6.03	146	11.8	1.56	132	1	6.24	241	19.1	0.75	107	3
13-02	MW-1	6.19	1,236	14.8	2	6.39	1,187	15.8	4.65	-116	1	6.03	1,870	16.6	2.96	-77	78
13-02	MW-3	5.62	147	17.9	9	5.89	164	18.4	2.07	90	56	5.57	127	18.1	2.60	164	27
13-02	MW-3 deep	6.42	326	15.4	2	NS	NS	NS	NS	NS	NS	7.09	469	18.3	3.98	81	242
13-02	MW-9	5.33	87	18.8	17	6.10	107	13.1	3.86	132	9	6.08	90	18.9	3.45	139	4
13-02	MW-A	4.72	361	15.8	3	5.42	368	17.0	0.05	-26	1	5.01	292	17.3	1.08	113	4
13-02	MW-B	5.77	1,177	13.4	15	6.20	1,410	15.5	3.27	6	15	6.45	1,350	14.2	3.70	-116	25
13-02	MW-C	6.45	130	13.4	36	5.82	401	15.2	4.87	130	247	5.37	152	13.8	5.23	136	54
13-02	MW-D	6.00	480	15.9	5	5.43	623	15.2	2.46	65	14	5.36	610	16.7	3.14	87	135
13-02	MW-E Rep	5.37	642	18.5	6	5.74	561	14.5	0.00	24	1	5.73	586	17.7	0.01	34	9
13-02	MW-E deep	6.08	910	18.9	51	6.41	763	14.1	0.00	-48	2	6.40	738	15.9	0	-51	7
13-02	MW-F	5.94	799	14.8	10	6.43	1,450	15.3	2.09	-105	17	6.35	1,120	14.3	2.43	-139	10
13-02	MW-G	5.88	873	14.0	17	6.23	1,740	16.5	4.28	-106	46	6.11	1,110	16.5	5.79	-99	29
13-02	MW-H	6.85	150	14.5	19	5.90	258	15.9	7.28	148	172	5.29	230	14.5	9.03	197	212
13-02	MW-H deep	6.74	260	15.0	7	5.52	386	15.3	6.42	185	4	5.53	369	15.1	5.97	192	43
13-02	MW-I	6.86	121	14.7	2	5.31	194	15.3	7.42	170	1	5.46	99	16.2	3.44	164	10
13-02	MW-J	5.76	253	14.4	56	5.95	372	14.9	6.01	116	133	6.25	341	16.2	4.62	156	86
13-02	MW-K	6.35	196	14.5	13	5.84	309	14.6	4.67	49	43	5.47	269	15.6	4.74	153	38
13-02	MW-L	7.79	383	16.9	4	5.52	108	15.7	1.77	130	1	5.38	91	14.3	2.31	206	4
13-02	MW-L deep	6.19	326	15.5	10	NS	NS	NS	NS	NS	NS	6.65	368	18.7	3.49	103	18
13-02	MW-M	6.27	218	15.0	40	NS	NS	NS	NS	NS	NS	5.53	301	14.4	6.58	194	26
13-02	MW-X	6.34	256	13.7	4	6.17	389	14.9	7.56	1	1	5.93	338	15.3	4.29	174	51
Surface Water Sample Locations																	
13-02	SW-1	DRY	DRY	DRY	DRY	7.61	563	12.5	8.91	-7	92	6.14	685	10.5	6.58	78	18
13-02	SW-2	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	5.05	667.00	9.67	6.06	121	196

Notes:

1. NS - Not Sampled
2. CD-4, CD-5, and CD-6 were installed in September 2006.
3. AMW-1s, -1d, -2s, and -2d were installed in October 2009.
4. CD-4 and CD-5 were abandoned in July 2010.
5. MW-3 deep, -L deep, -and -M are sampled annually during the spring event.
7. µs/cm- Microsiemens per centimeter
8. mg/L - milligrams per liter
9. ORP - Oxidation-Reduction Potential
10. Turb. - Turbidity; NTUs - Nephelometric Turbidity Units
11. mVs - millivolts
12. DO - Dissolved Oxygen
13. S.U. - Standard Units
14. Temp. - Temperature; Deg. C - Degrees Celsius
15. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
16. MW-9 was removed from the monitoring program in November 2012.

Table 4
Water Quality Parameters
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Sampling Event:		No. 33						No. 34						No. 35					
Sampling Date:		11/7-9/2011						5/7-9/2012						11/27-29/2012					
Facility Permit Number	Monitoring Well Code	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mVs)	Turb. (NTUs)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mVs)	Turb. (NTUs)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mVs)	Turb. (NTUs)
13-02	CD-1s (background well)	5.65	120	17.5	3.83	182	59	5.86	111	16.3	1.51	181	10	6.06	116	13.8	15.50	139	7
13-02	CD-1d (background well)	5.80	132	17.9	2.70	171	84	6.27	121	17.3	1.41	150	73	6.16	125	16.4	9.53	140	5
13-02	CD-4 (abandoned)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13-02	CD-4 Rep																		
13-02	CD-5 (abandoned)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13-02	CD-6	5.49	269	16.4	4.19	183	13	5.76	208	18.4	0.78	202	7	6.03	221	16.2	0.00	71	1
13-02	AMW-1s	6.36	237	17.8	0.17	12	7	5.67	292	27.4	0.02	121	9	5.89	230	15.5	3.81	44	5
13-02	AMW-1d	7.60	638	17.3	0.00	-112	3	6.00	651	24.1	0.24	95	8	6.47	573	14.5	7.00	169	5
13-02	AMW-2s	7.72	148	17.0	2.47	-30	10	5.74	171	18.6	0.42	195	29	6.16	149	15.0	5.36	38	5
13-02	AMW-2d	6.96	167	13.9	1.07	-29	3	5.78	195	17.4	0.00	195	4	6.37	183	15.0	3.47	149	1
13-02	MW-1	6.01	1,570	16.3	2.44	139	4	6.37	1,794	16.1	0.00	-22	2	6.57	1,480	15.4	0.00	31	9
13-02	MW-3	6.01	174	17.8	4.05	198	32	5.73	155	19.5	2.76	113	9	6.19	160	15.8	12.31	73	8
13-02	MW-3 deep	NS	NS	NS	NS	NS	NS	7.93	329	17.1	0.39	21	191	NS	NS	NS	NS	NS	NS
13-02	MW-9	5.91	107	18.9	4.70	212	0	6.05	106	19.1	1.82	127	3	NS	NS	NS	NS	NS	NS
13-02	MW-A	5.47	324	17.9	0.06	205	1	5.47	411	17.1	0.00	103	3	5.47	371	14.7	2.66	140	2
13-02	MW-B	6.26	1,070	15.8	2.39	-78	5	6.70	1,097	14.8	0.00	-49	7	6.87	958	15.2	0.00	-82	10
13-02	MW-C	5.79	394	16.9	4.01	130	12	5.89	200	18.3	0.83	-16	46	5.93	187	15.2	0.00	28	4
13-02	MW-D	5.26	501	16.5	1.99	79	4	5.36	460	16.9	0.00	79	4	5.66	467	15.6	0.00	90	8
13-02	MW-E Rep	5.69	659	19.0	0.00	-115	4	5.96	785	19.3	0.00	13	6	DRY	DRY	DRY	DRY	DRY	DRY
13-02	MW-E deep	6.54	823	18.7	0.00	-67	3	6.50	842	21.1	2.51	-76	9	6.50	822	16.5	1.70	78	>800
13-02	MW-F	6.40	979	16.9	1.53	-95	4	6.30	826	16.2	0.00	-57	7	6.81	1,050	15.4	0.00	-92	12
13-02	MW-G	5.91	917	17.4	2.85	-61	2	6.21	861	14.1	0.00	-63	3	6.51	997	16.1	0.00	-84	2
13-02	MW-H	5.82	176	14.9	6.13	193	7	5.20	145	15.0	3.90	74	13	6.45	171	14.6	0.00	-22	2
13-02	MW-H deep	5.83	263	15.1	6.91	186	6	5.74	270	14.6	0.96	35	11	6.40	251	16.1	6.27	17	1
13-02	MW-I	5.67	113	15.8	4.67	114	3	5.92	109	17.9	2.58	147	3	6.14	116	14.4	0.00	84	8
13-02	MW-J	5.78	343	16.9	6.14	111	1	6.49	247	16.1	1.09	21	4	6.57	251	14.1	0.00	125	1
13-02	MW-K	5.09	311	16.4	4.32	47	8	5.75	200	15.8	1.90	143	8	6.00	235	14.8	0.00	103	9
13-02	MW-L	5.66	106	16.4	2.59	222	3	5.44	112	16.4	0.04	214	5	6.70	227	14.9	3.03	3	5
13-02	MW-L deep	NS	NS	NS	NS	NS	NS	6.20	279	18.5	0.87	75	14	NS	NS	NS	NS	NS	NS
13-02	MW-M	NS	NS	NS	NS	NS	NS	6.09	221	15.4	1.47	91	59	NS	NS	NS	NS	NS	NS
13-02	MW-X	6.01	260	16.6	6.51	33	20	5.13	241	14.9	0.91	69	4	6.37	253	14.3	0.00	145	1
Surface Water Sample Locations																			
13-02	SW-1	6.14	424	16.8	6.01	170	2	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
13-02	SW-2	DRY	DRY	DRY	DRY	DRY	DRY	6.36	455	22.3	2.49	114	13	DRY	DRY	DRY	DRY	DRY	DRY

Notes:

1. NS - Not Sampled
2. CD-4, CD-5, and CD-6 were installed in September 2006.
3. AMW-1s, -1d, -2s, and -2d were installed in October 2009.
4. CD-4 and CD-5 were abandoned in July 2010.
5. MW-3 deep, -L deep, -and -M are sampled annually during the spring event.
7. µs/cm- Microsiemens per centimeter
8. mg/L - milligrams per liter
9. ORP - Oxidation-Reduction Potential
10. Turb. - Turbidity; NTUs - Nephelometric Turbidity Units
11. mVs - millivolts
12. DO - Dissolved Oxygen
13. S.U. - Standard Units
14. Temp. - Temperature; Deg. C - Degrees Celsius
15. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
16. MW-9 was removed from the monitoring program in November 2012.
17. MW-E Rep was not sampled during the November 2012 sampling event due to laboratory oversight.

Table 4
Water Quality Parameters
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Sampling Event:		No. 36						No. 37						No. 38					
Sampling Date:		5/6-10/13						11/4-7/13						5/5-8/14					
Facility Permit Number	Monitoring Well Code	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mVs)	Turb. (NTUs)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mVs)	Turb. (NTUs)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mVs)	Turb. (NTUs)
13-02	CD-1s (background well)	6.02	104	15.1	1.96	206	5	6.06	100	13.0	1.74	348	42	6.15	119	15.9	0.02	353	9
13-02	CD-1d (background well)	6.06	117	16.9	1.11	242	27	6.03	119	14.5	1.71	320	32	6.21	134	19.2	4.56	293	9
13-02	CD-4 (abandoned)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13-02	CD-4 Rep																		
13-02	CD-5 (abandoned)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13-02	CD-6	5.75	223	16.9	0.60	166	11	6.15	994	17.1	1.24	-17	60	5.84	217	17.7	2.86	137	4
13-02	AMW-1s	5.56	256	16.4	0.34	523	1	5.72	249	17.9	1.05	149	9	5.83	251	16.8	0.02	400	10
13-02	AMW-1d	6.20	755	17.9	0.46	-53	2	6.08	727	19.6	1.40	-23	9	6.04	650	20.1	2.05	-28	604
13-02	AMW-2s	5.60	157	16.7	0.88	153	9	5.69	159	17.7	1.51	75	9	5.76	178	18.8	2.08	114	6
13-02	AMW-2d	5.83	192	17.1	0.36	126	0	6.26	203	18.5	1.40	138	1	6.30	231	16.9	3.88	95	1
13-02	MW-1	6.19	1,817	15.0	0.77	43	1	6.30	1,381	15.7	1.99	144	22	6.36	1,361	15.0	2.84	37	3
13-02	MW-3	5.76	149	16.0	1.88	188	40	5.87	160	17.0	1.99	301	40	6.05	180	18.5	0.04	150	8
13-02	MW-3 deep	7.76	348	16.4	0.39	-153	2	NS	NS	NS	NS	NS	NS	7.75	385	16.5	4.04	-65	4
13-02	MW-9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
13-02	MW-A	5.42	309	16.5	0.25	-34	0	5.40	333	15.3	1.89	291	1	5.42	432	16.9	0.04	-17	1
13-02	MW-B	6.44	1,037	13.1	1.09	-88	1	6.33	817	16.4	1.35	-67	15	6.66	1,033	12.6	2.58	-67	10
13-02	MW-C	5.35	100	13.2	1.06	104	43	5.90	206	16.7	1.31	233	72	5.64	108	12.3	2.23	44	4
13-02	MW-D	5.48	462	16.7	0.26	60	9	5.66	490	16.1	1.04	295	51	5.85	705	17.2	1.85	-17	2
13-02	MW-E Rep	6.17	991	16.8	0.47	-81	0	6.11	959	16.5	1.64	-40	3	5.99	831	19.0	0.07	-24	2
13-02	MW-E deep	6.51	803	18.1	0.51	-80	3	6.35	836	17.1	1.21	-82	3	5.60	1,042	20.2	0.09	-41	800
13-02	MW-F	6.30	745	13.7	0.64	-89	3	6.52	877	15.8	1.47	-100	10	6.57	726	13.8	2.74	-81	5
13-02	MW-G	6.10	930	14.0	0.49	-98	0	6.15	1,430	16.7	1.60	-83	23	6.27	1,542	13.7	2.29	-106	8
13-02	MW-H	5.79	149	15.7	1.77	60	9	6.04	160	15.2	2.04	335	96	5.92	161	14.5	2.39	230	19
13-02	MW-H deep	6.13	255	16.0	1.23	130	2	6.14	259	15.1	2.75	332	15	6.25	269	15.4	2.10	260	4
13-02	MW-I	5.74	112	15.3	0.21	159	1	5.97	116	15.1	1.61	311	1	5.95	118	15.3	2.59	84	3
13-02	MW-J	6.40	236	15.5	1.45	223	14	6.42	242	14.7	1.64	346	37	6.39	259	15.8	2.05	36	5
13-02	MW-K	5.72	207	15.2	0.66	175	1	5.79	199	15.2	1.40	266	33	5.81	202	16.0	2.88	96	6
13-02	MW-L	5.30	96	15.1	1.09	188	8	5.54	106	14.6	1.39	258	68	5.80	99	16.6	2.12	379	4
13-02	MW-L deep	6.02	208	17.1	1.49	133	2	NS	NS	NS	NS	NS	NS	6.88	201	17.5	2.70	380	3
13-02	MW-M	6.34	297	15.3	1.51	54	1	NS	NS	NS	NS	NS	NS	6.31	271	15.3	2.45	211	4
13-02	MW-X	6.15	222	14.6	1.20	117	2	6.25	236	15.4	1.45	348	36	6.28	216	15.2	2.07	106	21
Surface Water Sample Locations																			
13-02	SW-1	7.02	466	16.0	4.10	-17	15	6.16	560	11.0	2.12	341	11	7.24	502	24.6	0.07	-26	22
13-02	SW-2	7.10	333	15.5	4.46	-7	6	DRY	DRY	DRY	DRY	DRY	DRY	7.50	604	25.4	4.48	3	8

Notes:

1. NS - Not Sampled
2. CD-4, CD-5, and CD-6 were installed in September 2006.
3. AMW-1s, -1d, -2s, and -2d were installed in October 2009.
4. CD-4 and CD-5 were abandoned in July 2010.
5. MW-3 deep, -L deep, -and -M are sampled annually during the spring event.
7. µs/cm- Microsiemens per centimeter
8. mg/L - milligrams per liter
9. ORP - Oxidation-Reduction Potential
10. Turb. - Turbidity; NTUs - Nephelometric Turbidity Units
11. mVs - millivolts
12. DO - Dissolved Oxygen
13. S.U. - Standard Unit
14. Temp. - Temperature; Deg. C - Degrees Celsius
15. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
16. MW-9 was removed from the monitoring program in November 2012.

Table 4
Water Quality Parameters
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Sampling Event:		No. 39						No. 40						No. 41					
Sampling Date:		11/3-6/14						5/4-7/15						10/26-29/15					
Facility Permit Number	Monitoring Well Code	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mVs)	Turb. (NTUs)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mVs)	Turb. (NTUs)	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mVs)	Turb. (NTUs)
13-02	CD-1s (background well)	6.10	129	15.1	6.06	135	2	6.00	115	15.5	3.99	281	7	5.73	132	15.0	3.84	519	3
13-02	CD-1d (background well)	6.18	139	16.5	4.68	109	14	5.97	123	16.4	4.84	186	13	5.81	136	14.5	6.96	507	7
13-02	CD-4 (abandoned)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13-02	CD-4 Rep							6.29	495	13.5	2.75	70.4	4	6.06	231	16.4	3.19	31.2	3
13-02	CD-5 (abandoned)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13-02	CD-6	5.77	253	16.4	3.35	45	67	5.79	372	17.4	2.04	142	5	5.90	244	16.3	3.92	111	>800
13-02	AMW-1s	5.72	251	17.5	3.25	132	8	4.58	243	14.9	2.00	592	6	5.80	443	16.0	2.68	253	3
13-02	AMW-1d	6.13	643	18.0	1.36	-68	29	5.94	518	15.9	1.78	-52	16	6.11	1,004	15.8	2.55	-42	5
13-02	AMW-2s	5.77	182	15.2	3.48	121	6	5.07	160	14.2	3.50	562	6	5.92	173	16.2	4.19	187	3
13-02	AMW-2d	6.26	252	16.0	4.19	104	1	5.77	230	15.2	2.51	391	1	6.36	260	17.2	3.90	158	2
13-02	MW-1	6.34	1,511	15.4	2.59	-37	0	6.29	2,379	14.9	2.69	-19	6	6.31	1,743	15.5	1.94	21	7
13-02	MW-3	5.97	202	16.3	5.94	466	4	5.42	166	17.6	2.29	260	14	6.20	178	19.5	3.85	166	3
13-02	MW-3 deep	NS	NS	NS	NS	NS	NS	7.49	368	20.5	1.50	-198	4	7.63	387	19.5	1.67	-165	3
13-02	MW-9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
13-02	MW-A	5.47	451	16.4	1.70	45	2	4.78	390	15.6	2.34	27	2	5.30	402	15.5	1.41	29	3
13-02	MW-B	6.62	922	16.6	3.00	-101	1	6.70	1,485	13.0	3.03	-68	9	6.00	833	16.9	3.91	-51	6
13-02	MW-C	6.02	428	16.0	2.58	47	3	5.94	162	12.9	3.89	-181	8	5.21	186	16.7	1.73	153	37
13-02	MW-D	5.71	471	15.7	3.39	35	4	5.86	745	16.8	3.66	15	3	5.19	520	16.5	2.60	85	14
13-02	MW-E Rep	6.25	1,180	17.6	1.62	-54	3	6.04	1,095	17.3	3.61	-38	9	6.10	1,076	16.2	1.25	-36	3
13-02	MW-E deep	6.34	1,198	18.0	1.09	-82	13	6.41	1,027	18.4	0.88	-100	15	6.44	979	16.2	1.21	-71	5
13-02	MW-F	6.46	919	15.4	2.18	-104	6	6.51	1,270	13.9	3.58	-58	3	6.61	1,134	15.5	2.71	-136	3
13-02	MW-G	6.30	1,794	16.3	1.97	-124	14	6.31	2,445	13.9	2.66	-78	6	6.32	1,372	16.8	2.28	-135	0
13-02	MW-H	5.92	199	14.2	3.70	466	11	5.51	174	15.0	2.71	136-5	10	5.15	203	15.3	0.81	168	43
13-02	MW-H deep	6.24	317	14.3	3.81	427	4	6.12	285	15.4	1.62	137	4	5.72	280	15.3	0.64	146	4
13-02	MW-I	6.11	133	14.4	4.12	199	3	5.64	134	15.3	2.82	132	3	5.13	128	15.2	0.76	104	3
13-02	MW-J	6.53	245	14.2	3.75	155	14	6.54	402	14.9	3.13	137	7	6.48	274	14.3	0.38	210	7
13-02	MW-K	5.83	229	14.6	2.65	187	10	5.56	239	14.9	1.50	95	5	4.93	253	15.2	3.43	167	6
13-02	MW-L	5.78	122	16.4	4.03	59	3	5.29	97	17.5	4.15	131	3	5.92	93	18.5	3.80	89	4
13-02	MW-L deep	NS	NS	NS	NS	NS	NS	6.61	341	17.5	4.79	190	3	5.49	395	15.8	0.80	155	2
13-02	MW-M	NS	NS	NS	NS	NS	NS	6.31	334	15.4	1.49	116	4	5.67	334	15.7	0.49	151	10
13-02	MW-X	6.31	228	14.5	4.53	131	2	6.19	341	13.5	3.23	140	4	5.03	234	15.3	2.53	342	3
Surface Water Sample Locations																			
13-02	SW-1	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	6.83	840	16.0	1.04	-54	0
13-02	SW-2	6.50	325	10.4	-69.80	2	43	6.89	520	24.7	2.19	4	7	5.55	788	15.4	1.34	158	7

Notes:

1. NS - Not Sampled
2. CD-4, CD-5, and CD-6 were installed in September 2006.
3. AMW-1s, -1d, -2s, and -2d were installed in October 2009.
4. CD-4 and CD-5 were abandoned in July 2010.
5. MW-3 deep, -L deep, -and -M are sampled annually during the spring event.
7. µs/cm- Microsiemens per centimeter
8. mg/L - milligrams per liter
9. ORP - Oxidation-Reduction Potential
10. Turb. - Turbidity; NTUs - Nephelometric Turbidity Units
11. mVs - millivolts
12. DO - Dissolved Oxygen
13. S.U. - Standard Unit
14. Temp. - Temperature; Deg. C - Degrees Celsius
15. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
16. MW-9 was removed from the monitoring program in November 2012.

Table 4
Water Quality Parameters
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Sampling Event:		No. 42					
Sampling Date:		5/16-19/16					
Facility Permit Number	Monitoring Well Code	pH (S.U.)	Conductivity (µS/cm)	Temp. (deg. C)	DO (mg/L)	ORP (mVs)	Turb. (NTUs)
13-02	CD-1s (background well)	5.91	103	15.7	3.45	245	4
13-02	CD-1d (background well)	6.06	115	15.8	4.50	210	20
13-02	CD-4 (abandoned)	--	--	--	--	--	--
13-02	CD-4 Rep	6.90	242	14.2	2.68	-54	28
13-02	CD-5 (abandoned)	--	--	--	--	--	--
13-02	CD-6	6.20	271	16.9	1.50	-48	23
13-02	AMW-1s	6.07	224	16.5	3.77	222	8
13-02	AMW-1d	6.13	477	18.1	1.51	-28	4
13-02	AMW-2s	5.78	154	15.8	3.22	51	7
13-02	AMW-2d	6.04	229	15.9	2.69	88	1
13-02	MW-1	8.05	1,515	15.4	3.48	94	4
13-02	MW-3	6.04	167	16.5	3.18	101	1
13-02	MW-3 deep	7.48	362	15.6	2.26	-130	0
13-02	MW-9	NS	NS	NS	NS	NS	NS
13-02	MW-A	5.48	394	16.1	1.27	-55	1
13-02	MW-B	8.32	976	14.0	3.73	53	17
13-02	MW-C	6.50	126	14.0	3.48	-78	6
13-02	MW-D	7.26	617	16.3	1.23	-84	4
13-02	MW-E Rep	6.27	1,088	17.1	1.40	-59	1
13-02	MW-E deep	6.63	1,017	17.5	3.08	-95	9
13-02	MW-F	8.12	796	14.4	2.65	-47	6
13-02	MW-G	7.96	1,671	15.0	2.40	49	12
13-02	MW-H	6.06	162	14.2	5.40	204	38
13-02	MW-H deep	6.82	272	14.9	4.99	145	18
13-02	MW-I	6.86	127	15.0	4.40	164	7
13-02	MW-J	6.92	265	14.8	4.20	28	58
13-02	MW-K	7.03	208	15.0	4.34	21	14
13-02	MW-L	5.80	95	14.2	3.66	192	2
13-02	MW-L deep	6.82	209	15.0	3.88	149	2
13-02	MW-M	7.97	320	15.3	4.02	-3	8
13-02	MW-X	7.19	210	13.9	3.98	20	6
Surface Water Sample Locations							
13-02	SW-1	6.99	342	15.4	4.99	360.3	>800
13-02	SW-2	6.80	241	15.6	3.51	181	590

Notes:

1. NS - Not Sampled
2. CD-4, CD-5, and CD-6 were installed in September 2006.
3. AMW-1s, -1d, -2s, and -2d were installed in October 2009.
4. CD-4 and CD-5 were abandoned in July 2010.
5. MW-3 deep, -L deep, -and -M are sampled annually during the spring event.
6. µs/cm- Microsiemens per centimeter
7. mg/L - milligrams per liter
8. ORP - Oxidation-Reduction Potential
9. Turb. - Turbidity; NTUs - Nephelometric Turbidity Units
10. mVs - millivolts
11. DO - Dissolved Oxygen
12. S.U. - Standard Unit
13. Temp. - Temperature; Deg. C - Degrees Celsius
14. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
15. MW-9 was removed from the monitoring program in November 2012.

Table 5a
Detected Groundwater Constituents - Metals
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard			1*	10	700	4*	2	10	1*	1,000	300	15	50	1	100	20	20	0.2*	0.3*	1,000
Solid Waste Section Limit			6	10	100	1	1	10	10	10	300	10	50	0.2	50	10	10	5.5	25	10
	CD-1s	25-Sep-06																		
	CD-1s	1-Nov-06																		
	CD-1s	24-Apr-07			49J		0.01J	3.6J	1.6J	7.0J		1.7J			4.0J					
	CD-1s	29-Oct-07			52J		0.01J	4.4J	1.6J	5.2J		0.87J			2.8J					
	CD-1s	23-Apr-08			64J		0.01J	5.4J				2.2J			2.8J		0.19J			0.19J
	CD-1s	19-Nov-08		1.15J	193		0.02J	18				7.12J								
	CD-1s	9-Apr-09			55.7J		0.03J	2.54J				2.65J								
	CD-1s	13-Oct-09			31.1J							0.25J								
	CD-1s	11-May-10			29.8J				0.15J						1.04J					5.74J
	CD-1s	3-Nov-10		0.63J	60.4J	0.17J		3.43J	2.53J	10.9		3.87J			4.73J		0.02J	0.07J	22.6J	26.9
13-02	CD-1s	3-May-11			81.4J	0.19J		5.45JB	4.23J	16.0		2.32J			5.93J			0.14J	20.6J	26.5
	CD-1s	8-Nov-11			59.7J	0.25JB		4.46J	2.67J	12.4		1.9J			4.41J			0.08J	11.2J	18.2
	CD-1s	7-May-12			45.5J			3.30J	1.19J	8.75J		1.12J			3.01J				12.7J	12.6B
	CD-1s	28-Nov-12			63.8J	0.11J		5.65J	3.05J	11.6		1.43J			4.66J				17.1J	16.9
	CD-1s	7-May-13	0.94J	2.4JB	35.6J			0.88J	0.67J	4.04J		0.39J			1.78J			0.13J	6.06J	5.08J
	CD-1s	5-Nov-13			46.8J	0.12J		3.59J	1.63J	10.2		1.35J			3.50J				18.4JB	15.4B
	CD-1s	6-May-14			28.8J			4.14JB		1.48J		0.11J			1.03J			0.31J	3.40J	2.98JB
	CD-1s	4-Nov-14			28.7J		0.13J			1.31J		0.06J			1.04J			0.11J	2.57JB	1.58J
	CD-1s	5-May-15		1.63J	29.5JB					1.33J	371	0.15J	13.8	0.103JB	1.17J				2.40J	2.75JB
	CD-1s	27-Oct-15	1.00J		28.4J			0.80J	0.39J	0.75J	234	0.12J	35.9		1.21J		4.19CN,J	0.15J	4.10J	3.36B-01,J
	CD-1s	17-May-16			29.3J			0.94J		0.99J	446	0.12J	17.0J		1.01J				4.70J	1.93J
	CD-1d	4-Oct-06						10.4												
	CD-1d	1-Nov-06																		
	CD-1d	24-Apr-07			200	0.77J	0.02J	1.2J	9.3J	17		3.1J			6.5J		0.02J			0.02J
	CD-1d	29-Oct-07			53J	0.13J	0.01J	2.8J	2J	6.8J		0.94J			2.3J	1.1J				
	CD-1d	23-Apr-08			54J		0.02J	2.3J				1.7J					0.24J			0.24J
	CD-1d	18-Nov-08			29.9J		0.03J	0.46J				0.18J					0.03J			0.03J
	CD-1d	9-Apr-09			26.5J		0.08J					0.11J								
	CD-1d	13-Oct-09			28.3J							0.18J								
	CD-1d	11-May-10		2.21J	359			23	32.6	175		22.5			34			0.43J	168	175
	CD-1d	2-Nov-10	0.46J	0.97J	33.1J		0.15J	1.17J	0.85J	6.56J		1.09J			2.51J			0.05J	14.3J	23
13-02	CD-1d	3-May-11		2.44J	231	2.03		16.7	18.6	112		14.0			22.3J			0.11J	101	103
	CD-1d	8-Nov-11			74.5J	0.51J		4.08J	4.27J	27		2.84J			5.68J				24.6J	26.3
	CD-1d	7-May-12			72.4J	0.58J		3.91J	4.67J	25		2.81J			5.58J				26	27.9B
	CD-1d	28-Nov-12	0.33J		37.7J		0.07J	2.38J	0.94J	12.6		1.14J			2.50J				8.90J	13
	CD-1d	8-May-13	0.88J	1.02JB	31.2J		0.07J		0.78J	4.5J		0.49J			1.92J				6.18J	13.1
	CD-1d	5-Nov-13			35J				0.86J	4.34J		1.13J			1.90J				17.1JB	10.8B
	CD-1d	6-May-14		1.14J	37.8J	0.07J	0.05J	3.22JB	1.16J	7.34J		0.81J			2.74J			0.12J	6.16J	9.41JB
	CD-1d	4-Nov-14			43.1J	0.16J	0.11J		2.25J	9.09J		0.87J			2.88J				10.2JB	10.7
	CD-1d	5-May-15			34.5JB				0.84J	3.63J	1,320	0.39J	32.5		1.42J				5.18J	3.68JB
	CD-1d	27-Oct-15	0.42J		42.3J	0.13J		1.87J	2.15J	8.18J	3,170	0.97J	87.4		2.49J		4.37CN,J	0.06J	10.9J	14.0B-01
	CD-1d	17-May-16			81.3J	0.46J		4.86J	7.42J	26.0	12,000	3.13J	287		7.11J	2.11J		0.07J	29.3	29.7
	CD-4	8-Aug-06						12				12								
	CD-4	26-Sep-06																		
	CD-4	1-Nov-06																		
	CD-4	24-Apr-07	0.91J		30J	0.57J	0.04J	8.1J	2.1J	2.8J		2.3J			5.4J		0.02J		1.1J	0.01J
13-02	CD-4	30-Oct-07			26J	0.53J	0.01J	7.7J	1.4J	2.1J		1.4J			3.5J			0.42J	10J	10
	CD-4	23-Apr-08			130	4	0.04J	21	10	14		14			19J	0.91J	0.97J	0.31J	52	67
	CD-4	20-Nov-08			41.8J	1.13	0.02J	13.0	2.58J	4.54J		3.86J			6.56J		0.02J		18.7J	26.2
	CD-4	9-Apr-09		1.84J	33.8J	1.13	0.02J	10.9	2.02J	4.17J		3.40J			5.60J		0.02J		17.4JB	16.6
	CD-4	14-Oct-09			16.9J	0.48J			0.55J			0.67J			2.63J			0.29J	7.63J	5.55J
	CD-4	6-May-10			14J				0.369J			0.16J			2.16J				10.3J	3.75J
	CD-4 Rep	4-Nov-10			136			5.62J	8.37J	0.84J					5.90J				16.3J	2.31J
	CD-4 Rep	3-May-11			206			0.9JB	17.6	0.62J					8.39J					2.72JB
	CD-4 Rep (dup)	3-May-11	0.21J		206				17.9	0.68J					8.98J			0.17J		2.85J
	CD-4 Rep	8-Nov-11	0.14J		191			0.93J	18.2	1.00J					8.86J					9.44J
	CD-4 Rep	9-May-12			184			1.69J	18.1	1.70J	0.17J				11.3J				3.03J	16.1B
	CD-4 Rep	29-Nov-12			172				13.7	0.62J					7.03J				2.84J	2.14JB
13-02	CD-4 Rep	10-May-13			75.5J	0.5J		2.71J	7.87J	1.94J	0.88J				11.2J				11.1J	10.3
	CD-4 Rep	7-Nov-13	1.36J		60.4J	0.35J	0.07J	0.77J	5.31J	1.83J	0.57J				5.11J			0.13J	32	4.40JB
	CD-4 Rep	7-May-14			62.4J	0.31J	0.05J	3.25JB	5.02J	1.70J	0.32J				6.52J				22.2J	2.97JB
	CD-4 Rep	5-Nov-14			70.0J	0.31J			2.59J	1.46J	0.72J				4.29J				14.8JB	6.85J
	CD-4 Rep	6-May-15			58.4J	0.39J		1.13J	5.94J	1.90J		0.53J			4.72J				14.0J	2.99J
	CD-4 Rep	28-Oct-15		0.79J	57.9J	0.32J		2.18J	5.86J	8.95J		1.26J			10.7J		4.14CN,J		13.9J	8.34B-01,J
	CD-4 Rep	18-May-16		1.09J	56.2J	0.46J		1.24J	7.31J	1.02J		0.66J			5.43J				18.0J	3.70J

Table 5a
Detected Groundwater Constituents - Metals
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard			1*	10	700	4*	2	10	1*	1,000	300	15	50	1	100	20	20	0.2*	0.3*	1,000
Solid Waste Section Limit			6	10	100	1	1	10	10	10	300	10	50	0.2	50	10	10	5.5	25	10
	CD-5	26-Sep-06			162			40												
	CD-5	1-Nov-06																		
	CD-5	24-Apr-07		1.3J	87J		0.17J	4.6J	2.4J	2.1J		0.23J			6.5J	1.6J				0.01
	CD-5	29-Oct-07		3.8J	450	0.9J	0.19J	11	16	11		7.4J			17J	1.4J		0.37J	47	36
13-02	CD-5	22-Apr-08	0.13J	1.7J	190	0.20J	0.05J	19	5.4J	14		3.9J			12J		0.03J	0.12J	26	27
	CD-5	20-Nov-08			92.4J		0.02J	2.16J	1.86J	1.82J		0.33J			3.62J				4.03J	4.14J
	CD-5	9-Apr-09			74.9J		0.05J	3.32J	2.67J	4.57J		0.98J			4.25J				8.23JB	9.77JB
	CD-5	14-Oct-09	0.36J		106				5.13J	4.73J		0.82J			5.79J					10.4
	CD-5	6-May-10			106				6.96J						6.11J					4.79J
	CD-6	26-Sep-06																		
	CD-6	1-Nov-06																		
	CD-6	24-Apr-07			23J		0.03J	2.1J	1.1J	1.3J		0.6J			2.3J				10J	7.5J
	CD-6	30-Oct-07			38J	0.21J		4.1J	2J	2.8J		1J			4.3J			0.26J	16J	9.51J
	CD-6	23-Apr-08			260	2	0.05J	26	23	16		10			20J		0.06J	0.50J	100	75
	CD-6	20-Nov-08		1.14J	206	1.41	0.34J	16.2	16.5	13.3		8.20J			14.6J		0.06J	0.13J	77.3	64.2
	CD-6	8-Apr-09		2.44J	46J	0.29J	0.12J		2.90J	3.20J		1.31J			3.37J		0.03J	0.20J	21.3JB	11B
	CD-6	14-Oct-09			247	1.44		4.06J	14.4	9.54J		4.76J			11J				48.3	32
	CD-6	11-May-10		3.35J	134	0.80J		7.68J	11.2	8.98J		4.50J			9.22J			0.17J	55.0	31.1
	CD-6	3-Nov-10			26.2J			2.06J	0.83J	1.45J		0.13J			1.57J				18.7J	3.16J
13-02	CD-6	4-May-11			66.6J	0.42J		6.74J	4.08J	4.6J		2.01J			5.34J			0.1J	24.7J	14
	CD-6	9-Nov-11			59.6J	0.26J		4.71J	2.62J	7.89J		1.31J			5.22J				15.8J	9.62J
	CD-6	9-May-12			57.8J	0.20J		4.20J	2.08J	3.63J		1.21J			4.48J				17.2J	17.7B
	CD-6	29-Nov-12			50.8J	0.13J		2.25J	1.80J	1.86J		0.73J			3.73J				12.3J	6.61JB
	CD-6	10-May-13			61.4J	0.36J		5.89J	3.02J	4.12J		1.43J			4.77J				20.4J	13.8
	CD-6	7-Nov-13	0.57J	3.77J	298		0.14J		18.3	36.9		2.13J			11.7J	1.07J			14.6J	6.88JB
	CD-6	7-May-14			38.5J	0.10J		3.42JB		1.04J		0.07J			2.30J				4.39J	2.40JB
	CD-6	5-Nov-14			120	0.88J		7.64J	8.02J	8.02J		3.83J			9.04J			0.14J	50.6B	25.7
	CD-6	6-May-15			47.4J	0.20J		1.60J	1.84J	2.77J		0.81J			3.29J				10.5J	5.40J
	CD-6	28-Oct-15		4.97J	215	2.03		32.3	19.5	25.6		16.1			21.6J	8.64J	4.05CN,J	0.37J	107	73.9B-01
	CD-6	18-May-16		1.92J	62.2J	0.23J		3.46J	13.2	2.57J		1.58J			8.70J	1.01J			12.6J	7.94J
	AMW-1s	14-Oct-09			206	3.14		3.88J	5.01J	25		7.38J			8.64J	0.88J			16.1J	38.7
	AMW-1s	18-Feb-10			125	1.45	0.408J		1.37J			3.45J							4.7J	14.4
	AMW-1s	6-May-10				0.82J		0.76J	0.14J						3.13J				13.4J	11.6
	AMW-1s	16-Aug-10	0.287J		138	1.63		6.97J	3.28J	10.9		4.86J			5.46J				13.1J	33.0
	AMW-1s	4-Nov-10	0.18J		87.6J	0.88J	0.14J	5.14J	1.33J	7.39J		1.71J			4.21J				15.2J	16.9
	AMW-1s	3-May-11			104	0.92J		1.4JB	0.31J	2.08J		0.5J			3.59J			0.08J		8.1JB
	AMW-1s	8-Nov-11			105	0.90J		1.43J	0.46J	1.94J		0.44J			3.67J			0.10J		8.47J
13-02	AMW-1s	7-May-12			103	0.86J		2.39J		1.87J		0.22J			3.87J				2.98J	8.49JB
	AMW-1s	28-Nov-12	0.19J		97.4J	0.83J		0.78J		0.78J		0.11J			3.31J				2.41J	4.79J
	AMW-1s	8-May-13			101	0.87J				1.98J		0.09J			4.05J				2.24J	6.13J
	AMW-1s	6-Nov-13			98J	0.91J			0.22J	2.91J		0.32J			4.06J				16.7JB	6.70JB
	AMW-1s	7-May-14			93.0J	0.95J		2.44JB	0.28J	2.27J		0.47J			3.91J	1.39J				6.35JB
	AMW-1s	5-Nov-14			89.2J	1.06			0.50J	3.37J		0.78J			4.15J				4.01JB	7.60J
	AMW-1s	7-May-15			87.6J	0.97J		3.78J	0.31J	2.72J		0.68J			5.86J				3.31J	6.51J
	AMW-1s	29-Oct-15			82.5J	0.78J		1.03J		0.71J		0.19J			4.03J		3.18CN,J		4.22J	9.82B-01,J
	AMW-1s	18-May-16	0.27J	0.82J	85.4J	1.03		1.43J	0.38J	2.47J		0.92J			4.16J				5.18J	7.43J
	AMW-1d	14-Oct-09	1.54J	2.82J	140	0.56J		21.3	3.59J	8.02J		3.27J			11.1J	26			16.2J	70.1
	AMW-1d	18-Feb-10	0.460J	3.7J	145	0.168J	0.381J	2.90J	4.33J			2.66J			7.03J	3.04J	2.28J		5.64J	26.4
	AMW-1d	6-May-10	0.21J		141				4.06J			0.23J			7.78J	0.7J			10.3J	10.4
	AMW-1d	16-Aug-10	0.297J	3.09J	168			8.60J	6.75J	3.30J		3.97J			9.63J				12.7J	22.8
	AMW-1d	3-Nov-10	0.33J		127		0.09J	3.64J	4.21J	2.09J		0.31J			9.52J				17.2J	10.8
	AMW-1d	3-May-11	0.24J		129	0.12J			4.67J	2.08J		0.25J			9.16J			0.19J		9.17JB
	AMW-1d	8-Nov-11	0.18J		140	0.07J		0.94J	5.78J	1.64J		0.21J			10.2J			0.25J		7J
13-02	AMW-1d	7-May-12	0.29J		135				5.20J	2.17J		0.27J			9.17J				2.69J	8.98JB
	AMW-1d	28-Nov-12	0.41J		106	0.14J		1.38JB	3.27J	2.26J		0.52J			6.21J					5.50J
	AMW-1d	8-May-13		1.05JB	133				4.53J	1.63J		0.25J			7.81J					3.08J
	AMW-1d	6-Nov-13			133			1.88J	4.31J	1.77J		0.45J			7.45J				20.5JB	4.30JB
	AMW-1d	7-May-14			143	0.50J	0.05J	11.4B	5.48J	4.90J		3.01J			9.84J				5.89J	27.9B
	AMW-1d	5-Nov-14		1.46J	168	0.69J	0.05J	4.49J	6.70J	6.53J		4.14J			11.8J				13.8JB	20.8
	AMW-1d	7-May-15			133	0.40J		4.08J	5.51J	3.58J		2.14J			9.83J				5.47J	10.3
	AMW-1d	29-Oct-15		1.41J	123	0.18J		3.02J	5.32J	1.06J		0.93J			8.61J		3.57CN,J		4.00J	6.79B-01,J
	AMW-1d	18-May-16		1.01J	131	0.19J		2.09J	6.06J	1.52J		0.84J			9.03J				2.52J	6.84J

Table 5a
Detected Groundwater Constituents - Metals
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard			1*	10	700	4*	2	10	1*	1,000	300	15	50	1	100	20	20	0.2*	0.3*	1,000
Solid Waste Section Limit			6	10	100	1	1	10	10	10	300	10	50	0.2	50	10	10	5.5	25	10
13-02	AMW-2s	14-Oct-09	0.23J	1.6J	66.8J	1.18		2.55J	3.13J	8.5J		3.51J			5.83J				19.2J	25.2
	AMW-2s	18-Feb-10		5.44J	83.1J	1.91	0.385J	5.53J	4.62J			7.34J			2.90J				22.5J	20.2
	AMW-2s	7-May-10			39J	0.38J			0.34J			0.33J			1.18J					
	AMW-2s	16-Aug-10		9.03J	132	1.80		10.1	9.86J	3.71J		13			9.22J			0.134J	44.3	44.5
	AMW-2s	4-Nov-10			48.4J	0.86J		4.56J	1.10J	1.64J		1.54J			2.43J				17.7J	7.42J
	AMW-2s	3-May-11			52.1J	0.92J		2.49JB	1.10J	1.41J		2.2J			2.54J				7.17J	6.47JB
	AMW-2s	8-Nov-11			42.3J	0.50J		1.36J	0.29J	0.82J		2.19J			1.36J					5.08J
	AMW-2s	8-May-12			42.8J	0.45J		1.48J	0.23J	2.85J		0.66J			1.47J				3.77J	5.92JB
	AMW-2s	29-Nov-12			45.3J	0.48J		1.02J	0.23J	0.62J		0.32J			1.19J					1.41J
	AMW-2s	9-May-13			42.6J	0.57J		1.11J	0.52J	1.06J		0.63J			1.95J				3.09J	3.63J
	AMW-2s	6-Nov-13			40.1J	0.54J			0.27J	0.64J		0.42J			1.48J				16.8JB	3.51JB
	AMW-2s	7-May-14			43.7J	0.56J		2.16JB	0.30J	0.87J		0.35J			1.41J					1.96JB
	AMW-2s	5-Nov-14			46.0J	0.69J			0.44J	1.01J		0.59J			1.88J					2.84J
	AMW-2s	6-May-15		2.72J	43.4J	0.51J				1.07J		0.39J			1.46J				2.07J	2.37J
	AMW-2s	28-Oct-15		1.02J	50.6J	0.88J		1.56J	0.75J	0.50J		1.23J			1.96J		6.12CN,J		6.23J	6.14B-01,J
	AMW-2s (dup)	28-Oct-15		1.00J	51.1J	0.85J		1.79J	0.87J	0.57J		1.34J			2.10J		3.34CN,J		7.01J	7.01B-01,J
	AMW-2s	17-May-16	1.21J		45.8J	0.69J		1.15J	0.65J	0.48J		0.71J			1.63J			0.10J	4.51J	3.93J
13-02	AMW-2d	14-Oct-09	0.38J		95.8J		0.21J	32.1	2.03J	10.6		3.58J			5.16J	5.3J				26.8
	AMW-2d	18-Feb-10		4.84J	49.7J		0.46J		1.39J										1.65J	
	AMW-2d	7-May-10		2.03J	36.9J				0.15J						1.50J					3.56J
	AMW-2d	16-Aug-10	0.532J		36J			1.22J		1.61J									3.53J	7.31J
	AMW-2d	3-Nov-10			44.7J			1.99J	0.06J	0.73J					1.11J				15.6J	5.35J
	AMW-2d	3-May-11			55.2J			2.86JB		0.83J					1.03J					
	AMW-2d	8-Nov-11			47.5J			1.08J	0.12J	0.77J					1.23J					
	AMW-2d	8-May-12			78.2J			1.26J		3.20J		0.33J			1.22J				2.79J	10.5B
	AMW-2d	28-Nov-12			69.1J				0.88J	2.34J		0.39J			2.56J					4.76J
	AMW-2d	9-May-13			54.7J					1.75J		0.06J			1.42J				4.03J	2.4J
	AMW-2d	6-Nov-13			71.1J					2.43J					2.69J				18.5JB	7.86JB
	AMW-2d	7-May-14			57.0J	0.10J		2.08JB		0.84J					1.24J					0.76JB
	AMW-2d	5-Nov-14			60.4J	0.07J				1.25J					2.33J				1.09JB	5.04J
	AMW-2d	6-May-15		1.28J	67.4J					0.85J					1.67J					
	AMW-2d	28-Oct-15	0.25J		63.9J					0.45J		0.14J			1.50J		2.79CN,J		2.65J	7.41B-01,J
	AMW-2d	17-May-16			64.5J	0.13J				1.37J					1.07J					1.38J
13-02	MW-1	24-Apr-00							10											
	MW-1	26-Sep-00							20											
	MW-1	9-May-01							10											
	MW-1	31-Oct-01														30				
	MW-1	24-Apr-02							10											
	MW-1 (dup)	24-Apr-02																		
	MW-1	16-Oct-02							10											50
	MW-1	24-Apr-03							10											
	MW-1	23-Oct-03							10											
	MW-1	22-Apr-04							10											
	MW-1	21-Oct-04						90	10											
	MW-1	26-Apr-05							10											
	MW-1	25-Oct-05							20											
	MW-1	19-Apr-06							10											
	MW-1	1-Nov-06					7		20											
	MW-1	24-Apr-07		11	200		0.44J	1.5J	17	4.3J		5.9J			49.9J	30	0.03J		8.1J	9.0J
	MW-1	30-Oct-07		4.8J	140		0.91J		12	3.6J		1.5J			23J	12		0.19J	2.8J	9.4J
	MW-1	23-Apr-08		3.8J	150		0.43J	1.2J	15	8.8J					34J	12	0.02J		3.9J	3.1J
	MW-1	19-Nov-08		2.78J	131		1.30		11.8	2.45J		0.72J			22.4J	8.09J	0.02J	0.16J	5.60J	5.29J
	MW-1	8-Apr-09		1.67J	201		0.16J		16.2	3.13J		2.86J			39.2J	11.2	0.02J		6.81JB	4.46JB
	MW-1	15-Oct-09		1.73J	150				13.7	4.28J		1.08J			36.3J	8.8J				5.79J
	MW-1	11-May-10		2.50J	125		0.35J		12.1	11.5		0.61J			25.7J	4.57J				6.49J
	MW-1	4-Nov-10			22.0J	0.13J		0.51J	0.27J	1.02J		0.29J			1.76J				10.6J	14.2
	MW-1	4-May-11	0.46J	5.08J	360	0.9J	0.09J	9.05J	19.7	11.8		4.59J			20.8J	2.39J		0.09J	35.7	40.4
	MW-1	9-Nov-11		2.22J	187		0.52J		16.8	6.67J		0.64J			37.7J	3.35J				3.71J
	MW-1	9-May-12			201	0.16J	0.06J	2.26J	17.8	17.0		3.61J			42.4J	6.90J			12.2J	13.9B
	MW-1	28-Nov-12			153		1.03J	0.75J	12.6	5.54J		0.75J			29.9J	5.75J			4.86J	3.55J
	MW-1	10-May-13			172	0.12J	0.26J	0.87J	15.9	9.48J		0.3J			35.1J	8.86J				8.67J
	MW-1	6-Nov-13			127		0.31J		11.5	8.66J		1.12J			28J	5.89J			11.9JB	2.64JB
	MW-1	7-May-14		1.99J	120	0.06J	0.28J		10.3	10.2		0.28J			28.2J	5.61J		0.10J	6.99J	1.93J
	MW-1 (dup)	7-May-14			119	0.05J	0.31J		10.5	10.2		0.29J			28.0J	5.70J			6.16J	1.91J
	MW-1	4-Nov-14		2.27J	126	0.05J	0.44J		12.5	9.07J		0.95J			31.1J	2.40J			5.47JB	1.72J
	MW-1	5-May-15		0.83J	128		0.17J		11.6	7.74J		0.23J			29.9J	2.99J			3.77J	1.88J
	MW-1	28-Oct-15			144		0.36J	1.52J	14.4	8.26J		1.15J			33.3J		4.32CN,J		3.63J	4.24B-01,J
	MW-1	19-May-16			144		0.34J	0.51J	12.8	12.0		0.28J			29.4J				2.59J	1.99J

Table 5a
Detected Groundwater Constituents - Metals
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard			1*	10	700	4*	2	10	1*	1,000	300	15	50	1	100	20	20	0.2*	0.3*	1,000
Solid Waste Section Limit			6	10	100	1	1	10	10	10	300	10	50	0.2	50	10	10	5.5	25	10
	MW-2	9-Jul-98					1.0													58
13-02	MW-2	10-Nov-98					3.6	21.0											51	
	MW-2	19-Nov-99																		
	MW-3	21-Oct-04						20	10			20							50	80
	MW-3	27-Apr-05																		
	MW-3	25-Oct-05																		
	MW-3	20-Apr-06																		
	MW-3	31-Oct-06																		
	MW-3	24-Apr-07	2.0J		24J		0.07J	1.5J	0.29J	0.9J		0.22J			1.9J		0.05J		3.1J	3.2J
	MW-3	30-Oct-07			45J	0.35J	0.23J	3.9J	2.7J	2.3J		1.8J			3.3J	1.2J		0.23J	10J	14
	MW-3	22-Apr-08			46J	0.86J	0.02J	4.6J	2.6J	2.5J		4.6J			3.2J		0.04J	0.04J	15J	13
	MW-3	20-Nov-08			60.5J	1.42	0.15J	0.40J	1.15J	2.54J		2.05J			2.48J		0.06J	0.10J	9.54J	10.7
	MW-3	9-Apr-09			55.6J	0.58J	0.04J	2.71J	3.49J	3.49J		3.26J			4.47J		0.02J	0.12J	15.1JB	21.3
	MW-3	15-Oct-09			50.2J	0.65J		4.5J	3.07J	3.46J		3.55J			4.1J				17.4J	19.4
	MW-3	10-May-10			45.1J	0.38J		4.12J	2.74J	2.33J		1.91J			3.21J				19.1J	16.1
13-02	MW-3	3-Nov-10			36.9J	0.36J	0.03J	4.22J	1.54J	2.72J		2.17J			2.78J				21.5J	11.4
	MW-3	4-May-11			36.2J	0.32J		4.19JB	1.56J	1.64J		1.14J			2.34J			0.11J	6.8J	7.68J
	MW-3	9-Nov-11			35.2J	0.25J		2.56J	1.22J	1.60J		1J			2.03J					8.1J
	MW-3 (dup)	9-Nov-11			37.1J	0.24JB		2.30J	1.20J	1.55J		1.01J			2.00J					6.29J
	MW-3	8-May-12			30.1J			2.07J	0.64J	1.69J		0.79J			2.23J				3.76J	7.63JB
	MW-3	28-Nov-12			28.6J			2.30J	0.32J	0.84J		0.43J			1.20J				3.54J	1.98J
	MW-3	9-May-13			37.9J	0.51J		3.28J	1.53J	1.81J		2.21J			2.36J				6.15J	8.1J
	MW-3	7-Nov-13	0.50J		37.9J	0.47J	0.09J	3.93J	1.78J	3.55J		4.17J			4.47J				24.7J	82B
	MW-3	8-May-14			56.2J	0.70J		3.32J	2.45J	3.08J		3.28J			3.54J				8.62J	36.6
	MW-3	6-Nov-14			30.8J	0.05J		1.14JB	0.40J	1.03J		0.42J			1.56J				3.85J	3.57JB
	MW-3	6-May-15		0.81J	55.4J	0.71J		4.14JB	2.59J	3.17J		3.69J			4.36J			0.07J	11.3J	15.3
	MW-3	28-Oct-15			25.0J			1.23J				0.25J			0.83J		4.17CN,J		3.12J	5.43B-01,J
	MW-3	18-May-16						1.46J				0.35J			0.99J				3.48J	2.10J
	MW-3 Deep	11-Jun-03			26.2J															
	MW-3 Deep	22-Apr-04																		
	MW-3 Deep	27-Apr-05																		
	MW-3 Deep	19-Apr-06																		
	MW-3 Deep	23-Apr-07	0.88J		26J		0.09J	1.3J	0.22J	1.7J		0.26J			4.5J	1.2J	0.02J		2.2J	4.4J
	MW-3 Deep	21-Apr-08	0.72J	0.88J	29J		0.29J	1.6J	0.31J	1.8J		0.90J			2.7J		0.05J		2.5J	5.6J
	MW-3 Deep	8-Apr-09			32.9J		1.6	0.44J	0.27J	3.95J		0.78J			2.52J				13.6JB	12B
13-02	MW-3 Deep	11-May-10	0.25J		28.3J			1.28J		2.50J					2.80J				11.9J	3.83J
	MW-3 Deep	5-May-11	2.47J	3.11J	195	1.73	1.24	52.1	16	26		14			55.4		0.17J	0.55J	77.3	81
	MW-3 Deep	9-May-12	0.35J		38.3J					0.93J					2.12J					1.71JB
	MW-3 Deep	10-May-13	0.41J		37.7J	0.12J	0.09J	2.18JB	0.13J	1.32J		0.17J			2.49J					2.57J
	MW-3 Deep	8-May-14			40.8J		0.13J	4.10J		1.59J		0.98J			2.78J					5.44J
	MW-3 Deep	6-May-15	0.26J	2.16J	44.0J		0.13J		0.29J	1.90J		1.72J			2.47J					33.2
	MW-3 Deep	28-Oct-15		1.02J	42.2J			0.70J		0.50J		0.64J			0.57J		3.00CN,J			5.87B-01,J
	MW-3 Deep	19-May-16		1.50J	43.0J			0.69J		0.61J		0.40J			0.58J				2.37J	3.26J
	MW-9	24-Apr-02																		
	MW-9	16-Oct-02																		80
	MW-9	23-Apr-03																		70
	MW-9	23-Oct-03																	40	70
	MW-9 (dup)	23-Oct-03																	50	70
	MW-9	22-Apr-04																		
	MW-9	21-Oct-04						10												
	MW-9	26-Apr-05																		
	MW-9	25-Oct-05																		
	MW-9	20-Apr-06																		
	MW-9 (dup)	20-Apr-06																		
	MW-9	31-Oct-06																		
13-02	MW-9	24-Apr-07			34J		0.04J	1.2J	0.88J	14		0.16J			1.6J				13J	10
	MW-9	30-Oct-07			84J	0.3J	0.03J	4.1J	3.5J	52		0.72J			3.1J		0.03J	0.21J	47	26
	MW-9	23-Apr-08			55J	0.21J	0.05J	2.3J	2.0J	37		0.63J			2.3J		0.04J	0.04J	35	21
	MW-9	20-Nov-08			28.2J		0.02J	1.24J	0.98J	15		0.19J			1.04J				16.6J	9.13J
	MW-9	9-Apr-09			18.5J		0.02J		0.47J	8.46J		0.19J			0.76J				12.2JB	8.15JB
	MW-9	15-Oct-09		1.72J	206	0.72J		2.21J	8.65J	131		1.86J			7.31J			0.24J	95.7	66.7
	MW-9 (dup)	15-Oct-09			190	0.61J		3.49J	8.8J	135		1.66J			7.36J			0.24J	88.2	70
	MW-9	6-May-10			14.9J	0.61J		1.68J	0.56J	8.39J					0.81J			0.20J	15.4J	6.79J
	MW-9	2-Nov-10	0.23J		20.4J			3.89J	0.67J	10.4					0.92J			0.40J	23.2J	6.70J
	MW-9	3-May-11			11.8J			1.44JB	0.27J	3.87J					0.61J				5.87J	4.62JB
	MW-9	9-Nov-11			9.87J			1.73J	0.16J	2.04J					0.54J					4.77J
	MW-9	9-May-12			13.7J			1.33J	0.34J	5.65J		0.09J			0.80J				8.37J	6.19JB

Table 5a
Detected Groundwater Constituents - Metals
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard			1*	10	700	4*	2	10	1*	1,000	300	15	50	1	100	20	20	0.2*	0.3*	1,000
Solid Waste Section Limit			6	10	100	1	1	10	10	10	300	10	50	0.2	50	10	10	5.5	25	10
	MW-A	8-May-01																		
	MW-A (dup)	8-May-01																		
	MW-A	30-Oct-01														20				
	MW-A	23-Apr-02																		
	MW-A	15-Oct-02																		50
	MW-A	23-Apr-03																		100
	MW-A	23-Oct-03																		
	MW-A	21-Apr-04																		
	MW-A	20-Oct-04																		
	MW-A (dup)	20-Oct-04																		
	MW-A	26-Apr-05																		
	MW-A	25-Oct-05																		
	MW-A	18-Apr-06																		
	MW-A	30-Oct-06																		
	MW-A	23-Apr-07			38J		0.01J	0.73J	3.5J	0.67J		0.14J			13J	1.4J				3.7J
	MW-A	31-Oct-07			42J	0.15J	0.03J	2.6J	1.9J	1.4J					9J	1.2J		0.13J	3J	3.3J
	MW-A	22-Apr-08			44J	0.15J	0.06J	1.8J	1.5J	5.7J		0.51J			8.2J		0.03J		4.7J	3.8J
13-02	MW-A (dup)	22-Apr-08			42J	0.14J	0.01J	0.67J	1.5J	1.5J					8.1J				2.2J	1.6J
	MW-A	20-Nov-08			42.4J		0.03J	1.83J	1.34J	1.17J		0.05J			7.89J					3.27J
	MW-A	9-Apr-09			42.2J	0.11J	0.04J	0.89J	1.76J	1.56J		0.23J			9.27J				5.87JB	7.46JB
	MW-A	16-Oct-09			38.9J			1.24J	2.41J						10J	0.63J				5.56J
	MW-A	7-May-10			42.3J				9.47J						14.2J				12J	3.26J
	MW-A	2-Nov-10			38.2J		0.02J	3.93J	4.38J	0.99J					13.7J				15.8J	204
	MW-A (dup)	2-Nov-10			38.4J			3.58J	4.62J	0.78J					13.8J				14.7J	2.55J
	MW-A	3-May-11			40J	0.15J		1.38JB	3.48J	0.87J					12.5J					3.86JB
	MW-A	9-Nov-11	0.36JB		44.2J	0.13J			1.81J	0.76J					9.32J					2.82J
	MW-A	9-May-12			42.4J	0.10J		1.14J	8.20J	0.91J					15.5J					4.53JB
	MW-A	27-Nov-12	0.36JB		45.6J	0.13J		0.97J	2.86J	1.17J					11.6J				1.86J	2.63J
	MW-A	7-May-13			43.7J	0.14J		0.64J	1.48J	1.48J		0.07J			9.14J	1.09J				2.31J
	MW-A	5-Nov-13			43.4J			1.65J	2.05J	0.76J					9.93J				20.3JB	3.37JB
	MW-A	6-May-14			44.2J	0.14J		3.73JB	8.88J	0.84J					16.6J	1.15J				2.10JB
	MW-A	4-Nov-14			45.1J	0.20J			6.14J	0.94J					18.7J	1.41J				1.87J
	MW-A	5-May-15			46.9J	0.15J			3.44J	0.84J		13.4J				1.41J				1.82J
	MW-A	27-Oct-15	0.26J		47.2J	0.14J			3.15J	1.18J		0.17J			12.9J		2.25CN,J		2.14J	5.23B-01,J
	MW-A	17-May-16	0.35J	1.01J	44.3J	0.17J			9.54J	0.48J					19.8J				2.40J	1.64J
13-02	B-4	11-Jun-03																		
	MW-B	9-May-01							10											
	MW-B	30-Oct-01														30				
	MW-B	23-Apr-02							10											
	MW-B	16-Oct-02																		50
	MW-B	24-Apr-03							20											50
	MW-B	23-Oct-03							20											
	MW-B	22-Apr-04							20											
	MW-B	21-Oct-04							30											
	MW-B	26-Apr-05							10											
	MW-B	25-Oct-05							20											
	MW-B	20-Apr-06																		
	MW-B	1-Nov-06																		
	MW-B	24-Apr-07		2.9J	200		0.03J	0.94J	11	1.8J		0.67J			12J	5.3J		0.1J	2.8J	5.4J
	MW-B	31-Oct-07			130	0.45J	0.29J	3.4J	14	3.8J		0.95J			12J	2.7J		0.38J	5.5J	20
	MW-B	23-Apr-08		2.9J	240		0.08J	0.91J	14	1.3J		0.34J			8.9J	6.5J		0.10J	2.2J	2.6J
13-02	MW-B	19-Nov-08		2.9J	258	0.36J	0.23J	2.99J	9.64J	5.75J		4.23J			9.57J	5.40J	0.03J	0.25J	14.2J	584
	MW-B	8-Apr-09		4.32J	371	0.16J	0.29J		15.4	1.80J		0.41J			11.5J	4.15J	0.05J	0.32J	4.20JB	4.97JB
	MW-B	16-Oct-09			224				8.9J						10.2J	2.2J				
	MW-B	11-May-10	0.17J	4.45J	280				25.6			1.95J			12.7J	2.83J				6.06J
	MW-B	4-Nov-10			248	0.09J	0.03J	0.96J	8.41J	2.30J		0.43J			9.45J	1.63J		0.13J	17.3J	8.35J
	MW-B	4-May-11		2.35J	269	0.28J		3.78JB	18	3.45J		1.36J			11.3J	3.18J		0.14J	14.3J	9.95J
	MW-B	9-Nov-11		2.59J	249	0.06J			8.75J	1.51J		0.70J			8.91J	3.54J		0.13J		3.6J
	MW-B	9-May-12			191				8.68J	0.89J		0.09J			6.35J					15.9B
	MW-B	29-Nov-12		5.88J	268				23.5	1.08J		0.20J			9.10J	2.29J				3.58J
	MW-B	10-May-13		2.55J	197				9.39J	1.1J		0.29J			6.4J	2.89J				10.7
	MW-B	6-Nov-13		2.02J	225				11.7	0.97J		0.23J			6.72J	1.49J			15.9JB	3.77JB
	MW-B	8-May-14		2.73J	236	0.08J			11.5	1.25J		0.55J			8.80J	1.48J			5.81J	3.14J
	MW-B	4-Nov-14		6.04J	226	0.06J			21.0	1.12J		0.18J			12.1J	2.75J			2.62JB	1.52J
	MW-B	5-May-15	0.30J	1.50J	160				8.50J	1.25J		0.34J			7.05J	2.25J				1.97J
	MW-B	29-Oct-15		2.61J	171			0.52J	16.5	0.53J		0.31J			5.45J		2.39CN,J	0.07J		7.39B-01,J
	MW-B	19-May-16	0.30B-01,J	2.16J	225			1.05J	11.7	0.81J		0.39J			6.53J			0.06J	4.64J	3.54J

Table 5a
Detected Groundwater Constituents - Metals
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard			1*	10	700	4*	2	10	1*	1,000	300	15	50	1	100	20	20	0.2*	0.3*	1,000
Solid Waste Section Limit			6	10	100	1	1	10	10	10	300	10	50	0.2	50	10	10	5.5	25	10
13-02	MW-C	8-May-01																		
	MW-C	30-Oct-01																		
	MW-C	24-Apr-02						20												
	MW-C	15-Oct-02																		
	MW-C	23-Apr-03																		
	MW-C	23-Oct-03						20				10								180
	MW-C	22-Apr-04																		
	MW-C	21-Oct-04				2		50	10			20							70	
	MW-C	26-Apr-05																		
	MW-C	25-Oct-05						20												
	MW-C	19-Apr-06																		
	MW-C	31-Oct-06																		
	MW-C	24-Apr-07			36J	0.39J	0.08J	0.86J	1.9J	1.6J		2.4J			2.1J				3.1J	7.4J
	MW-C	31-Oct-07			130	2	0.78J	2.4J	7.6J	4.5J		2.9J			9.6J	2.7J		0.31J	11J	16
	MW-C	22-Apr-08			18J	0.17J	0.03J	1.6J	0.50J	0.64J		0.54J			1.2J			0.02J	2.8J	3.8J
	MW-C	20-Nov-08			42.4J	0.51J	0.06J	6.64J	2.18J	2.68J		2.45J			4.72J		0.02J		12J	17.4
	MW-C	8-Apr-09			18.0J	0.45J	0.21J		3.07J	2.15J		0.41J			1.94J				6.85JB	6.11JB
	MW-C	15-Oct-09			86.7J	1.32	0.32J	17.7	16.1	7.02J		7.18J			13.9J			0.19J	38.7	26.5
	MW-C	11-May-10			46.7J	0.40J		5.28J	10.1	2.29J		1.78J			4.78J				13.0J	10.7
	MW-C (dup)	11-May-10			47.5J			5.51J	9.87J			1.60J			4.53J				10.8J	8.8
	MW-C	4-Nov-10		2.44J	97.1J	1.55	0.14J	20	10.6	8.05J		7.51J			18.4J	11.6	0.05J		63.4	45.2
	MW-C	4-May-11			42.3J	0.44J	0.07J	7.32J	5.63J	2.58J		1.45J			4.14J			0.08J	7.26J	9.97J
	MW-C	9-Nov-11			15.5J	0.15J	0.10J	0.62J	3.43J	1.06J		0.43J			4.19J					8.62J
	MW-C	9-May-12			43.5J	0.43J		7.45J	17	3.94J		2.30J			6.85J				10.4J	22.2B
	MW-C	29-Nov-12			35.8J	0.13J		2.75J	9.05J	1.17J		0.71J			3.94J				4.87J	8.07J
	MW-C	9-May-13			19.7J	0.24J		2.96J	0.75J	1.36J		0.8J			1.77J				3.48J	10.1
	MW-C	6-Nov-13			31.7J	0.26J		3.77J	9.54J	1.79J		0.82J			3.74J				23.5JB	18.8B
	MW-C	7-May-14			19.6J	0.17J		2.98JB	3.20J	0.79J		0.26J			1.65J					3.08JB
	MW-C	5-Nov-14			47.2J	0.10J	0.57J	1.68J	4.20J	1.30J		0.29J			4.74J				2.11JB	3.06J
	MW-C	6-May-15			20.4J	0.30J		2.38J	2.26J	1.66J		0.91J			2.34J				3.53J	3.43J
	MW-C	29-Oct-15		1.42J	47.9J	0.68J		11.6	7.47J	4.52J		3.04J			9.28J	1.15J	3.79CN,J	0.10J	19.4J	14.4B-01
	MW-C	18-May-16			21.4J	0.21J		0.71J	1.78J	0.47J		0.25J			1.69J				4.11J	2.01J
13-02	MW-D	8-May-01						10												
	MW-D	31-Oct-01						60	10			10							90	90
	MW-D	23-Apr-03						10	20											90
	MW-D	23-Oct-03																		120
	MW-D	22-Apr-04																		
	MW-D	21-Oct-04																		
	MW-D	26-Apr-05																		
	MW-D	25-Oct-05																		
	MW-D	20-Apr-06																		
	MW-D	31-Oct-06																		
	MW-D	24-Apr-07	1.9J				0.05J	1.9J	10	2.6J		0.43J			19J	2.4J			3.0J	6.8J
	MW-D	31-Oct-07			110	0.14J	0.07J	5.1J	3J	5.1J		0.95J			12.4J	1.4J		0.15J	4.8J	6.1J
	MW-D	22-Apr-08		1.5J	160		0.06J	1.7J	16	2.1J					19J	1.1J		0.02J	17J	3.6J
	MW-D	20-Nov-08			127		0.05J	5.56J	4.93J	5.50J		1.18J			14.5J				2.48J	5.76J
	MW-D	8-Apr-09			175	0.17J	0.09J		26	2.39J		0.37J			22.9J				4.91JB	4.11JB
	MW-D	15-Oct-09			106			1.99J	3.67J	2.01J		0.31J			13.2J					4.75J
	MW-D	11-May-10			149				9.48J	2.07J		0.33J			16.7J				13.2J	4.30J
	MW-D	4-Nov-10		0.77J	141	0.40J	0.04J	9.64J	5.39J	12.7		2.38J			17.3J			0.79J	20.6J	23.3
	MW-D	4-May-11			193	0.81J	0.12J	32.3	11.7	30.2		5.28J			30.4J			0.25J	41.7	37.3
	MW-D	9-Nov-11	0.36JB		118	0.25J		8.02J	3.05J	8.5J		1.47J			15.3J			0.07J	5.68J	12.1
	MW-D	9-May-12			124			3J	8.97J	3.94J		0.61J			15.7J				5.12J	9.33JB
	MW-D	28-Nov-12	0.98J	1.83J	117	0.11J	0.06J	2.31J	3.01J	3.63J		0.61J			13.8J				12.1J	5.11JB
	MW-D	9-May-13			140	0.21J	0.08J	6.4J	6.72J	7.78J		0.94J			17.3J				25.8	10.8
	MW-D	6-Nov-13			194	0.86J	0.25J	28.6	12.8	35.5		7.32J			27J				105B	37.9B
	MW-D	7-May-14			169	0.21J		3.74JB	19.0	1.16J					20.7J				8.02J	1.43JB
	MW-D	5-Nov-14			121	0.11J	0.06J	1.62J	7.61J	3.41J		0.72J			18.3J				0.95JB	7.00J
	MW-D	5-May-15		1.79J	164				14.2	1.06J					21.7J				4.51J	1.62J
	MW-D	29-Oct-15	0.30J	5.11J	199	0.74J	0.12J	39.0	10.4	32.7		6.25J			37.0J	5.92J	3.91CN,J	0.37J	50.7	48.5B-01
	MW-D	18-May-16		1.65J	157	0.11J		0.85J	17.0	0.92J		0.19J			21.0J				3.92J	1.72J

Table 5a
Detected Groundwater Constituents - Metals
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard			1*	10	700	4*	2	10	1*	1,000	300	15	50	1	100	20	20	0.2*	0.3*	1,000
Solid Waste Section Limit			6	10	100	1	1	10	10	10	300	10	50	0.2	50	10	10	5.5	25	10
	MW-E Rep	9-May-01							10											
	MW-E Rep	24-Apr-02							20											
	MW-E Rep	16-Oct-02																		
	MW-E Rep	23-Apr-03							20											70
	MW-E Rep	23-Oct-03							10											120
	MW-E Rep	22-Apr-04							10											
	MW-E Rep	21-Oct-04							20											
	MW-E Rep	26-Apr-05							20											
	MW-E Rep	25-Oct-05							20											
	MW-E Rep	20-Apr-06							20											
	MW-E Rep	31-Oct-06							20											
	MW-E Rep	24-Apr-07			200	0.57J	0.06J	0.6J	23	1.1J		0.22J			19J					7.7J
	MW-E Rep	31-Oct-07			260	1	0.09J	2.2J	22	1.5J		1.1J			16J		0.35J	0.12J	5.3J	12
	MW-E Rep	23-Apr-08	0.19J	0.67J	240	0.73J	0.06J	0.78J	18	1.1J		1.7J			16J		0.02J		5.7J	11
	MW-E Rep	20-Nov-08			251	0.84J	0.23J	2.03J	14.5	3.38J		2.50J			15.6J		0.02J		6.73J	21.4
13-02	MW-E Rep	9-Apr-09			261	0.97J	0.08J	0.79J	21.8	1.95J		2.10J			17.5J		0.03J		9.04JB	12.7
	MW-E Rep	15-Oct-09			244	1.27			20.6J	5.19J		4.05J			18.2J	1.43J			13.3J	45.1
	MW-E Rep	18-Feb-10			279	0.556J			22.3						13.3J					6.74
	MW-E Rep	10-May-10		1.66J	259	0.46J			15.2			0.58J			14.2J					6.01J
	MW-E Rep	16-Aug-10			301	0.602J		1.02J	20.1			4.66J			15.3J	0.996J			10.6J	24
	MW-E Rep	4-Nov-10			239	0.47J	0.03J	3.58J	13.6	1.46J		0.96J			14.5J				20.2J	7.44J
	MW-E Rep	4-May-11			262	0.57J		1.18JB	12.4	1.09J		0.62J			15.1J					6.4J
	MW-E Rep	8-Nov-11	1.07JB		267	0.41J			9.28J	0.83J					13.2J			0.07J		2.88J
	MW-E Rep	8-May-12			303	0.31J			12.6	0.85J		0.32J			15.2J				1.72J	10.3B
	MW-E Rep	8-May-13			286	0.34J			8.29J	1.08J		0.08J			14J	0.89J				3.71J
	MW-E Rep	5-Nov-13			294				15.5	0.84J		0.22J			15.8J				14JB	6.38JB
	MW-E Rep	6-May-14			342	0.44J			16.8	1.45J		0.67J			15.9J				7.58J	6.46JB
	MW-E Rep	4-Nov-14			326	0.21J			8.39J	0.89J		0.28J			15.9J	1.57J			2.99JB	4.31J
	MW-E Rep	5-May-15			348	0.30J			7.48J	1.02J		0.62J			14.5J	1.44J			12.2J	4.46J
	MW-E Rep	27-Oct-15		0.91J	294	0.26J		1.12J	10.2			0.39J			12.3J		2.07CN,J			4.84B-01,J
	MW-E Rep	18-May-16		1.11J	365	0.27J			12.0			0.32J			12.9J				2.31J	2.99J
	MW-E Deep	30-Oct-01																		
	MW-E Deep	23-Apr-02																		
	MW-E Deep	15-Oct-02																		
	MW-E Deep	23-Apr-03																		
	MW-E Deep	23-Oct-03																		110
	MW-E Deep	22-Apr-04																		
	MW-E Deep	20-Oct-04																		
	MW-E Deep	26-Apr-05																		
	MW-E Deep	25-Oct-05																		
	MW-E Deep	19-Apr-06																		
	MW-E Deep	30-Oct-06																		
	MW-E Deep	24-Apr-07			300		0.32J	0.46J	6.0J	8.8J		0.96J			11J	1.1J	0.02J		2.1J	5.7J
	MW-E Deep	30-Oct-07			560	0.33J	2	2.2J	7.7J	16		3.1J			10J	1.2J	0.07J	0.12J	3.2J	25
	MW-E Deep	22-Apr-08		0.43J	420	0.33J	0.05J	0.36J	8.5J	1.5J		0.71J			9.4J				0.85J	9.4J
	MW-E Deep	20-Nov-08			403	0.31J	0.33J	0.59J	6.10J	3.15J		0.94J			8.80J		0.02J		2.48J	12.8
13-02	MW-E Deep	9-Apr-09			389	0.35J	0.34J		5.49J	9.34J		2.63J			8.48J		0.04J		2.45JB	12.7
	MW-E Deep	15-Oct-09	0.31J	1.71J	461	0.48J	1.54		8.12J	9.89J		12.3			13.4J	0.72J			26.6	27.2
	MW-E Deep	18-Feb-10		4.44J	2,470	0.252J	0.45J	11.3	80.3			33.2			34J		6.38J			6.19
	MW-E Deep	10-May-10		3.57J	2,920	0.43J	0.29J		75.5	9.48J		58			36.6J					17
	MW-E Deep	16-Aug-10	0.356J	6.98J	2,930	0.781J	1.42		71.5	41.1		230			37.7J	1.33J	5.40J		11.9J	47.3
	MW-E Deep	4-Nov-10		1.09J	2,770	0.23J	0.17J	1.10J	61	4.41J		24.1			29.6J		0.03J		13.2J	24.5
	MW-E Deep	4-May-11		2.96J	2,530	0.25J	0.18J	1.14JB	66.4	3.11J		20			30.8J					57.9
	MW-E Deep	8-Nov-11		3.66J	2,280	0.16J	0.22J		54.2	1.38J		16.4			26J					43.5
	MW-E Deep	8-May-12		2.51J	2,210	0.53J	0.36J		50.1	31.6		94			24.9J				7.65J	60.9B
	MW-E Deep	28-Nov-12	0.71J	3.86J	1,820	0.84J	1.99	4.56J	39.6	22.3		213			26.1J		0.18J		9.20J	67.2
	MW-E Deep	8-May-13		4.56JB	1,730	0.34J	0.71J		37.9	4.7J		74.5			20J					43
	MW-E Deep	6-Nov-13		1.09J	2,240	0.19J	0.32J		39.7	2.34J		39.3			20.5J				16JB	41.2B
	MW-E Deep	6-May-14		2.69J	2,080	0.60J	0.44J		63.4	6.29J		60.9			32.7J				2.49J	32.2B
	MW-E Deep	4-Nov-14		3.29J	2,000	0.31J	0.47J		43.6	6.41J		55.6			20.4J				3.75JB	30.0
	MW-E Deep	5-May-15		2.42J	2,040	0.25J	0.19J		34.4	2.70J		22.2			17.3J	0.87J			2.54J	19.3
	MW-E Deep	27-Oct-15		2.55J	1,900	0.28J	0.23J		34.3	4.34J		38.2			14.2J		2.81CN,J		2.97J	24.3B-01
	MW-E Deep	18-May-16		3.54J	2,150	0.48J	0.67J	0.93J	37.0	8.73J		76.4			16.0J	1.07J			8.52J	30.6

Table 5a
Detected Groundwater Constituents - Metals
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard			1*	10	700	4*	2	10	1*	1,000	300	15	50	1	100	20	20	0.2*	0.3*	1,000
Solid Waste Section Limit			6	10	100	1	1	10	10	10	300	10	50	0.2	50	10	10	5.5	25	10
13-02	MW-F	9-May-01	70						30											50
	MW-F	30-Oct-01							20											
	MW-F	24-Apr-02							20											
	MW-F	16-Oct-02							20			10								
	MW-F	23-Apr-03							10											60
	MW-F	23-Oct-03							20											100
	MW-F	22-Apr-04							20											
	MW-F	21-Oct-04							10											
	MW-F	26-Apr-05							20											
	MW-F	25-Oct-05							20											
	MW-F	20-Apr-06																		
	MW-F	1-Nov-06							20											
	MW-F (dup)	1-Nov-06							20											
	MW-F	24-Apr-07		5.0J	200	1.2J	0.09J	2.9J	26	2.0J		5.6J			13J	5.6J			18J	9.9J
	MW-F	31-Oct-07		2.4J	175		0.01J		17	0.78J					6.3J	7.4J				1.5J
	MW-F	23-Apr-08		5.4J	210		0.01J	0.70J	13	0.69J					5.1J	4.2J			0.97J	3.0J
	MW-F	19-Nov-08		4.39J	282		0.06J		10.2	0.96J		0.43J			3.61J	5.13J	0.03J		3.15J	3.33J
	MW-F	8-Apr-09		6.12J	191		0.02J		12.0	0.86JB		0.21JB			4.82J	1.79J	0.06J		3.61JB	2.03JB
	MW-F	15-Oct-09		3.94J	204				14.7			0.73J			5.87J	2.61J		0.27J	7.13J	6.81J
	MW-F	11-May-10		5.8J	195				14.3			0.93J			5.83J	2.11J				4.15J
	MW-F	4-Nov-10			341	0.28J	0.07J	2.13J	13.3	1.55J		1.56J			5.94J	0.76J	0.03J		17.8J	33.1
	MW-F	4-May-11			136	0.14J		0.75JB	1.29J	0.91J					3.15J	2.24J				
	MW-F	9-Nov-11	0.17J	5.42J	219	0.06J			10.6	1.06J					4.44J	1.57J				
	MW-F	9-May-12		3.19J	242				8.35J	1.27J					3.33J	0.92J			2.85J	2.34JB
	MW-F	29-Nov-12			283	0.15J		1.86J	8.50J	1.07J		0.59J			5.00J	1.52J			3.76J	4.46J
	MW-F	10-May-13	1.55J	1.17J	154	0.21J		1.63JB	5.16J	1.56J		0.15J			2.78J	2J		0.12J		4.86J
	MW-F	6-Nov-13		2.01J	255				11.2	0.82J		0.19J			3.45J	0.83J			12.7JB	2.43JB
	MW-F	8-May-14		5.17J	213	0.16J			10.4	0.97J		0.54J			4.88J	1.04J			6.84J	1.77J
	MW-F	4-Nov-14		2.92J	262	0.23J			11.3	0.80J		0.45J			5.51J	3.09J				1.25J
	MW-F	5-May-15	0.31J	2.29J	129	0.11J			1.39J	0.73J		0.10J			4.57J	1.85J				
	MW-F	28-Oct-15		5.94J	262			0.45J	13.0	0.79J		0.14J			4.80J		1.92CN,J			3.67B-01,J
	MW-F	18-May-16		3.40J	214				9.62J						3.84J					
13-02	MW-G	9-May-01	100																	
	MW-G	31-Oct-01																		
	MW-G	24-Apr-02																		
	MW-G	16-Oct-02							20											
	MW-G	25-Apr-03							10											50
	MW-G	23-Oct-03																		
	MW-G	22-Apr-04																		
	MW-G	21-Oct-04																		
	MW-G	26-Apr-05																		
	MW-G	25-Oct-05					11.0													
	MW-G	20-Apr-06																		
	MW-G	1-Nov-06																		
	MW-G	24-Apr-07	1.9J	1.3J	300		0.14J	1.8J	7.2J	0.9J		0.37J			5.0J	1.0J	0.04J		4.4J	4.2J
	MW-G	31-Oct-07		14	490	0.3J	0.07J		9.5J	4.5J		1.0J			7.7J	26	0.08J		7.7J	17
	MW-G (dup)	31-Oct-07		14	530	0.47J	0.14J	2.0J	11	6.3J		1.8J			9.4J	24	0.08J	0.14J	12J	37
	MW-G	23-Apr-08		4.8J	340	0.18J	0.33J	1.8J	13	4.8J		0.61J			15J	2.3J			6.2J	9.8J
	MW-G	20-Nov-08		3.27J	307		0.11J		2.20J	2.26J		0.38J			3.14J	1.12J	0.05J		5.23J	6.83J
	MW-G	8-Apr-09		3.54J	311	0.24J	0.34J		15.7	1.72J		0.52J			4.10J		0.10J		7.53JB	4.41JB
	MW-G	15-Oct-09		7.95J	374				2.19J	2.14J		0.43J			4.83J	7.44J				6.04J
	MW-G	11-May-10	0.23J	6.43J	393				8.21J			0.42J			9.31J	2.03J				5.30J
	MW-G	4-Nov-10		4.18J	413	0.32J	0.25J	3.53J	5.11J	5.12J		1.70J			7.91J	3.38J	0.05J		16.8J	29.7
	MW-G	4-May-11			148	0.08J	0.19J	1.07JB	14.6	12.6		1.15J			32.5J	8.16J			6.12J	4.01J
	MW-G	9-Nov-11	0.14J	2.75J	420	0.12J			4.99J	0.87JB					3.17J	2.79J				2.51J
	MW-G	9-May-12		4.45J	302				2.19J	0.86J					4.40J	1.41J			4.25J	13.7B
	MW-G	29-Nov-12		2.03J	385	0.15J			2.14J	0.96J		0.12J			3.69J	3.03J			2.79J	2.86J
	MW-G	10-May-13			354	0.18J			5.08J	1.19J		0.14J			2.43J	1.51J			2.11J	5.14J
	MW-G	6-Nov-13		5.44J	346				3.09J	0.81J		0.09J			4.81J	2.75J			12.4JB	2.49JB
	MW-G	8-May-14		4.42J	373	0.20J			6.69J	1.31J		0.27J			5.00J	2.95J			7.99J	4.08J
	MW-G	4-Nov-14		12.3	480	0.26J			7.02J	2.57J		0.61J			9.32J	2.96J	0.17J		10.6JB	6.72J
	MW-G	5-May-15		2.13J	340	0.18J			5.62J	2.30J		0.37J			5.29J	4.79J			4.85J	4.16J
	MW-G	28-Oct-15		4.45J	387	0.14J		1.23J	5.01J	0.74J		0.19J			4.88J		2.09CN,J		2.76J	3.69B-01,J
	MW-G	19-May-16		3.19J	412	0.15J		1.31J	6.07J	0.89J		0.26J			5.07J				4.72J	4.62J
	MW-G (dup)	19-May-16	0.31B-01,J	3.51J	417	0.11J		1.05J	5.37J			0.09J			3.64J				2.55J	2.08J

Table 5a
Detected Groundwater Constituents - Metals
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard			1*	10	700	4*	2	10	1*	1,000	300	15	50	1	100	20	20	0.2*	0.3*	1,000
Solid Waste Section Limit			6	10	100	1	1	10	10	10	300	10	50	0.2	50	10	10	5.5	25	10
13-02	MW-H	9-May-01																		
	MW-H	31-Oct-01																		
	MW-H	24-Apr-02																		70
	MW-H	15-Oct-02																		
	MW-H	23-Apr-03																		
	MW-H	23-Oct-03						20				10								120
	MW-H	22-Apr-04																		
	MW-H	21-Oct-04																		
	MW-H	26-Apr-05																		
	MW-H	25-Oct-05						10												
	MW-H	20-Apr-06																		
	MW-H	31-Oct-06																		
	MW-H	24-Apr-07			23J		0.04J	1.6J	0.36J	1.2J		0.33J			1.7J	2.2J			3.1J	3.3J
	MW-H	31-Oct-07			77J	0.5J	0.14J	9.1J	2.7J	6.8J		2.3J			7.6J	1.9J		0.15J	13J	20
	MW-H	22-Apr-08			34J		0.07J	2.0J	0.48J	1.9J		0.70J			1.8J	0.96J			4.6J	5.8J
	MW-H	20-Nov-08			37.1J		0.17J	3.27J	0.74J	3.19J		0.78J			2.93J				2.4J	7.39J
	MW-H	8-Apr-09			30.2J		0.11J		0.26J	1.98J		0.23JB			1.36J				5.70JB	3.31JB
	MW-H	15-Oct-09			45.4J			3.91J	0.99J	3.18J		0.82J			3.41J				9.73J	10.7
	MW-H	11-May-10			63.4J	0.35J		4.74J	1.87J	6.29J		1.72J			5.49J				10.8J	14.8
	MW-H	3-Nov-10			71.6J	0.38J	0.03J	7.05J	2.21J	8.20J		2.34J			6.15J				21.6J	18
	MW-H	5-May-11			62.2J	0.31J		9.05J	2.05J	6.94J		1.68J			6.89J			0.08J	9.85J	16.9
	MW-H	9-Nov-11	0.14J		32.6J	0.13J		2.69J	0.71J	2.93J		0.59J			2.83J					7.37J
	MW-H	9-May-12			44.9J	0.13J		3.58J	0.89J	4.23J		1.17J			3.17J				5.79J	12.1B
	MW-H	29-Nov-12			37.8J			1.68J	0.25J	1.62J		0.29J			1.13J				2.89J	5.65J
	MW-H	9-May-13			27.9J			1.94J	0.21J	1.33J		0.22J			1.1J				2.68J	5.45J
	MW-H	7-Nov-13			72J	0.38J		4.94J	2.51J	6.39J		2.65J			5.96J				15.4J	16.4B
	MW-H	8-May-14			67.0J	0.47J		3.48J	1.73J	6.34J		2.12J			4.49J				9.00J	14.2
	MW-H	6-Nov-14			49.8J	0.17J		2.04JB	0.95J	3.67J		0.95J			2.97J				5.33J	7.55JB
	MW-H	5-May-15		1.20J	52.5J	0.20J		0.50JB	0.89J	4.34J		1.27J			2.94J				4.63J	7.65J
	MW-H	29-Oct-15		1.85J	78.1J	0.48J		8.22J	2.56J	8.56J		2.51J			7.19J	2.57J	4.20CN,J	0.09J	14.7J	22.9B-01
	MW-H	19-May-16		1.24J	52.3J	0.25J		4.01J	1.16J	3.62J		1.26J			3.27J	1.52J			8.62J	9.43J
13-02	MW-H Deep	9-May-01																		
	MW-H Deep	30-Oct-01																		
	MW-H Deep	23-Apr-02																		
	MW-H Deep	14-Oct-02		10																
	MW-H Deep	23-Apr-03																		110
	MW-H Deep (dup)	23-Apr-03																		
	MW-H Deep	23-Oct-03																		
	MW-H Deep	22-Apr-04																		
	MW-H Deep	21-Oct-04																		
	MW-H Deep	25-Apr-05																		
	MW-H Deep (dup)	25-Apr-05																		
	MW-H Deep	25-Oct-05																		
	MW-H Deep	19-Apr-06																		
	MW-H Deep	30-Oct-06																		
	MW-H Deep	24-Apr-07			33J		0.62J	0.61J	0.14J	1.1J		0.18J			2.0J	1.0J				4.0J
	MW-H Deep	30-Oct-07			36J		0.17J	2.4J	0.12J	1.3J					1.5J	1.1J		0.51J	2.6J	3.8J
	MW-H Deep	21-Apr-08	0.20J		46J		0.15J	0.91J	0.34J	1.7J		0.46J			1.4J				4.1J	2.4J
	MW-H Deep	19-Nov-08			34.4J		0.86J	1.19J	0.16J	3.70J		0.76J			1.61J				2.33J	8.94J
	MW-H Deep	8-Apr-09			31.8J		0.47J		0.05J	1.49JB		0.17JB			0.87J				11.8JB	4.73JB
	MW-H Deep	15-Oct-09			38.5J			0.89J	0.36J	2.73J		0.43J			1.33J	1.02J				21
	MW-H Deep	11-May-10			40.9J				0.41J			0.16J			1.07J				12.1J	4.33J
	MW-H Deep	3-Nov-10			45.1J			3.43J	0.17J	1.74J		0.16J			1.43J				18.4J	4.32J
	MW-H Deep	5-May-11			57.5J	0.22J		4.33JB	0.82J	4.35J		1.57J			2.65J				7.23J	7.84J
	MW-H Deep	9-Nov-11			29.2J	0.05J		1.17J	0.71J	2.07J		0.45J			1.62J					2.55J
	MW-H Deep	9-May-12	0.74J		49.6J	0.18J		3.41J	0.95J	5.67J		1.42J			2.91J				7.53J	13.2B
	MW-H Deep	28-Nov-12			52.4J			1.28J		1.59J					0.96J				2.44J	2.62J
	MW-H Deep	9-May-13		0.83J	43J				0.47J	2.2J		0.22J			1.45J					6.98J
	MW-H Deep (dup)	9-May-13	0.24J		44.1J			1.05J	0.19J	1.72J		0.22J			1.4J				3.34J	13.3
	MW-H Deep	7-Nov-13			40.9J				0.28J	1.85J		0.23J			1.39J				12.1J	5.29JB
	MW-H Deep	8-May-14			55.0J	0.10J			0.32J	2.03J		0.37J			1.63J					3.89J
	MW-H Deep	6-Nov-14			49.9J		0.08J	1.33JB		1.45J		0.19J			2.00J				4.18J	9.25JB
	MW-H Deep (dup)	6-Nov-14			49.4J			1.54JB	0.50J	1.74J		0.27J			1.93J					6.32JB
	MW-H Deep	5-May-15		1.84J	44.4J				0.29J	2.69J		0.38J			1.97J				2.00J	2.00J
	MW-H Deep (dup)	5-May-15	1.42J		39.8J	0.13J		1.08J	0.31J	2.88J		0.37J			2.26J					3.23J
	MW-H Deep	29-Oct-15			45.9J			0.64J		1.49JB		0.23J			1.57J		3.82CN,J		4.80J	3.06B-01,J
	MW-H Deep	19-May-16	1.10B-01,J		55.9J	0.12J		0.87J		2.36J		0.45J			1.33J			0.10J	5.45J	2.27J

Table 5a
Detected Groundwater Constituents - Metals
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard			1*	10	700	4*	2	10	1*	1,000	300	15	50	1	100	20	20	0.2*	0.3*	1,000
Solid Waste Section Limit			6	10	100	1	1	10	10	10	300	10	50	0.2	50	10	10	5.5	25	10
	MW-I	9-May-01																		
	MW-I	31-Oct-01																		
	MW-I	24-Apr-02																		
	MW-I	15-Oct-02																		70
	MW-I	24-Apr-03																		60
	MW-I	23-Oct-03																		70
	MW-I	22-Apr-04																		
	MW-I	21-Oct-04																		
	MW-I	26-Apr-05																		
	MW-I	25-Oct-05																		
	MW-I	20-Apr-06																		
	MW-I	1-Nov-06																		
	MW-I	24-Apr-07			18J		0.05J	0.96J	0.12J	0.76J		0.18J			1.3J				**3.2J**	3.0J
	MW-I (dup)	24-Apr-07			17J		0.04J	0.7J	0.11J	0.5J		0.14J			1.1J				**2.8J**	2.1J
	MW-I	30-Oct-07			29J	0.13J	0.15J	2.2J	0.5J	1.5J		0.64J			1.7J	1.6J		**0.31J**	**4.6J**	6.4J
	MW-I	22-Apr-08			20J			0.97J	0.12J	0.33J		0.35J			1.0J				**3.4J**	1.8J
	MW-I	20-Nov-08			17.4J		0.04J	0.88J	0.18J	0.85J		0.28J			1.11J				**3.02J**	3.58J
13-02	MW-I	8-Apr-09			13.2J	0.18J	0.13J		0.22J	0.91JB		0.25JB			1.10J				**5.08JB**	3.59JB
	MW-I (dup)	8-Apr-09			12.8J	0.14J	0.12J		0.23J	0.87JB		0.27JB			1.11J				**6.13JB**	3.11JB
	MW-I	15-Oct-09			51.7J			2.08J	0.76J			1.08J			2.29J					7.41J
	MW-I	11-May-10	0.80J		26.1J				0.27J			0.54J			1.48J	1.1J				6.16J
	MW-I	4-Nov-10			128		0.24J	1.38J	**12**	6.17J		0.38J			28.6J	6.32J			**17.2J**	6.12J
	MW-I	4-May-11			26.3J	0.16J		4.87JB	0.29J	0.94J		0.44J			2.44J				**4.15J**	3.14J
	MW-I	9-Nov-11	0.30JB		12J	0.12JB		0.66J	0.11J	0.81J					1.24J			**0.28J**		3.36J
	MW-I	9-May-12	0.25J		17.6J		0.33J	1.80J	0.20J	1.65J		0.27J			3.01J				**3.53J**	11.5B
	MW-I (dup)	9-May-12			16.2J		0.31J	1.71J		1.11J		0.23J			2.39J					8.56JB
	MW-I	28-Nov-12	0.30J		14.3J			0.73J		0.44J					0.94J				**2.49J**	1.05JB
	MW-I	10-May-13	0.49J		17.8J	0.22J	0.07J	1.38JB	0.34J	0.79J		0.31J			1.32J					3.39J
	MW-I	7-Nov-13			14.2J	0.12J			0.21J	0.59J		0.20J			1.41J				**6.83J**	2.61JB
	MW-I	7-May-14			13.9J	0.13J		3.44JB		0.77J		0.19J			1.31J				**1.31J**	1.53JB
	MW-I	5-Nov-14			20.7J	0.16J	0.05J	0.82J	0.26J	0.90J		0.31J			1.56J				**2.55JB**	1.70J
	MW-I	5-May-15	0.50J		15.4J	0.17J		1.81J		1.71J		0.33J			1.85J					1.86J
	MW-I	29-Oct-15			21.1J	0.21J		1.10J		0.62J		0.28J			1.57J		4.40CN,J		**4.71J**	4.32B-01,J
	MW-I	19-May-16	0.37B-01,J		20.7J	0.20J		1.07J				0.33J			1.75J				**3.09J**	2.42J
	MW-J	9-May-01																		
	MW-J	31-Oct-01																		
	MW-J	24-Apr-02																		
	MW-J	15-Oct-02																		80
	MW-J	25-Apr-03																		
	MW-J	23-Oct-03																		90
	MW-J	22-Apr-04																		
	MW-J	21-Oct-04						**20**												
	MW-J	27-Apr-05																		
	MW-J	25-Oct-05																		
	MW-J	19-Apr-06																		
	MW-J	31-Oct-06																		
	MW-J	24-Apr-07			3.5J		0.03J	0.54J	0.15J	1.3J		0.18J			3.1J				**2.5J**	3.5J
	MW-J	31-Oct-07			33J		0.05J	2.7J	0.67J	1.6J		0.89J			2.6J	0.98J		**0.21J**	**6J**	11
	MW-J	22-Apr-08	0.14J	0.98J	160	1	0.31J	6.9J	**14**	11		12			20J			0.09J	**38**	91
13-02	MW-J	20-Nov-08			48.9J	0.32J	0.26J	6.23J	**2.36J**	3.35J		3.31J			6.21J		0.02J		**14J**	19.5
	MW-J	8-Apr-09			37J		0.25J		0.23J	1.99J		0.34J			1.86J				**4.08JB**	7.54JB
	MW-J	16-Oct-09			29.1J			2.27J	0.58J	3.04J		0.62J			2.17J	0.68J				4.8J
	MW-J	11-May-10	0.21J		63.2J			5.30J	**2.28J**	3.12J		2.74J			5.81J				**16.3J**	12
	MW-J	3-Nov-10			43.0J	0.41J	0.03J	7.91J	**1.92J**	3.03J		2.81J			5.66J				**18.7J**	11.8
	MW-J	4-May-11			38.4J	0.31J		6.14J	**2.01J**	3J		2.4J			5.47J			0.08J	**13J**	11.2
	MW-J	9-Nov-11	0.16JB		35.3J			1.55J	0.44J	1.26J		0.27JB			5.84J			0.12J		5.98J
	MW-J	9-May-12			15.2J			1.64J	0.38J	1.41J		0.52J			2.76J				**3.35J**	15B
	MW-J	29-Nov-12			16.4J			1.39J	0.30J	2.54J		0.30J			1.20J				**3.93J**	4.89J
	MW-J	8-May-13			10.6J			0.86J	0.31J	1.16J		0.27J			1.38J				**4.81J**	2.7J
	MW-J	6-Nov-13			17.8J				0.79J	1.43J		0.91J			2.28J				**21.4JB**	4.73JB
	MW-J	7-May-14			31.6J			3.02JB	0.52J	1.41J		0.83J			2.03J				**3.40J**	4.24JB
	MW-J	4-Nov-14			27.4J	0.17J		1.45J	**1.24J**	2.00J		1.16J			3.54J				**9.58JB**	6.38JB
	MW-J	6-May-15			10.7J			1.38J	0.51J	2.00J		0.63J			2.48J				**3.51J**	3.36J
	MW-J	28-Oct-15	**1.21J**		11.0J			0.58B-01,J	0.45J	1.64J		0.38J			2.06J		3.59CN,J		**2.47J**	5.91J
	MW-J	18-May-16		0.96J	28.2J	0.25J		3.11J	**1.40J**	1.62J		1.99J			3.55J	0.90J			**12.0J**	6.86J

Table 5a
Detected Groundwater Constituents - Metals
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard			1*	10	700	4*	2	10	1*	1,000	300	15	50	1	100	20	20	0.2*	0.3*	1,000
Solid Waste Section Limit			6	10	100	1	1	10	10	10	300	10	50	0.2	50	10	10	5.5	25	10
	MW-K	24-Apr-02																		
	MW-K	15-Oct-02						10												
	MW-K	24-Apr-03																		130
	MW-K	23-Oct-03																		
	MW-K	22-Apr-04																		
	MW-K	21-Oct-04						20												
	MW-K	26-Apr-05																		
	MW-K	25-Oct-05																		
	MW-K	19-Apr-06																		
	MW-K	31-Oct-06																		
	MW-K	24-Apr-07			11J		0.02J	1.3J	0.15J	0.36J		0.11J			1.3J				2.3J	2.3J
	MW-K	31-Oct-07			14J		0.02J	3.6J	0.77J	1.0J		0.47J			2.0J			0.18J	5.1J	4.4J
	MW-K	21-Apr-08			33	0.15J		5.2J	2.5J	1.5J		1.1J			4.2J			0.04J	10J	7.4J
	MW-K	19-Nov-08			13.3J		0.03J	3.04J	0.41J	1.65J		0.30J			1.50J					3.58J
	MW-K (dup)	19-Nov-08			37.4J		0.02J		0.46J	0.99J		0.40J			5.96J					2.86J
13-02	MW-K	8-Apr-09			17.5J	0.14J	0.02J	1.71J	0.95J	1.34JB		0.51J			2.90J				7.51JB	5.67JB
	MW-K	14-Oct-09			77.4J	0.67J		14	6.95J	12.2		4.88J			15.2J			0.22J	30.3	41.1
	MW-K	11-May-10			18.9J			2.88J	1.03J	2.74J		1.16J			2.32J				6.59J	14.1
	MW-K	4-Nov-10			23.2J			7.26J	1.62J	2.16J		1.29J			3.64J				24.7J	7.62J
	MW-K	4-May-11			25.2J	0.26J		6.52J	1.57J	2.25J		1.53J			3.65J				11J	7.96J
	MW-K	9-Nov-11			17.7J	0.14JB		2.51J	0.73J	3.67J		0.73J			2.07J			0.07J	4.96J	4.09J
	MW-K	9-May-12			35.2J	0.22J		7.59J	2.98J	3.66J		1.92J			6.06J				13.8J	20.1B
	MW-K	28-Nov-12			16.1J			1.35J	0.28J	0.74J		0.28J			1.42J				2.53J	4.44JB
	MW-K	8-May-13		1.02JB	17J	0.15J		1.91J	0.71J	1.33J		0.69J			2.24J				6.05J	5.28J
	MW-K	6-Nov-13			13.9J			2.68J	0.76J	1.26J		0.43J			1.94J				23JB	4.68JB
	MW-K	7-May-14			17.5J	0.12J		4.27JB	0.49J	1.30J		0.70J			1.83J				3.49J	2.46JB
	MW-K	5-Nov-14			13.3J	0.13J		1.21J	0.53J	1.20J		0.43J			1.97J				3.82JB	3.19J
	MW-K	5-May-15	1.16J	1.42J	15.3J	0.14J			0.49J	1.99J		0.71J			2.54J				4.66J	2.95J
	MW-K	29-Oct-15	0.35J		26.2J	0.19J		2.54B-01,J	1.16J	2.41J		1.04J			4.17J		2.87CN,J		6.18J	5.60J
	MW-K	18-May-16		1.43J	17.8J	0.16J		3.25J	0.89J	1.03J		0.83J			2.28J	1.18J			8.68J	5.35J
	MW-L	9-May-01																		
	MW-L	31-Oct-01																		
	MW-L	24-Apr-02																	50	60
	MW-L	15-Oct-02																	50	60
	MW-L	24-Apr-03																		90
	MW-L	11-Jun-03																		
	MW-L	22-Apr-04																		
	MW-L	26-Apr-05																		
	MW-L	20-Apr-06																		
	MW-L	24-Apr-07			50J		0.11J	2.2J	0.79J	0.79J		0.32J			3.5J				3.7J	5.4J
	MW-L	22-Apr-08			66J	0.25J	0.04J	2.0J	2.0J	1.2J		0.86J			4.2J		0.02J	0.05J	11J	10
	MW-L	9-Apr-09			50.4J		0.05J		0.29J	1.76J		0.34J			1.63J				6.16JB	12.7
13-02	MW-L	10-May-10	1.96J	1.93J	12.3J			1.2J	0.18J						1.17J				31.7	
	MW-L	2-Nov-10			39.4J			2.12J	0.12J	0.50J		0.13J			1.17J				12J	2.62J
	MW-L	4-May-11			45.7J			2.67JB	0.35J	0.7J		0.2J			1.64J					3.96J
	MW-L	9-Nov-11	0.19J		40.9J	0.06J		1.64J	0.41J	0.93J		0.37J			1.49J					3.72J
	MW-L	9-May-12			43.8J			1.20J		0.52J		0.09J			1.27J				1.93J	2.16JB
	MW-L	28-Nov-12	0.82J		23.0J			1.74J	0.32J	0.39J		2.21J							6.47J	3.75J
	MW-L	9-May-13		1.24JB	43.5J			1.12J	0.49J	0.83J		0.22J			1.95J				2.9J	3.29J
	MW-L	7-Nov-13			49.2J	0.19J		0.88J	1.20J	2.49J		0.85J			3.62J				11.8J	11.5B
	MW-L	8-May-14			43.7J	0.07J				0.67J		0.14J			1.28J					1.95J
	MW-L	5-Nov-14			38.6J					0.76J		0.14J			1.32J				2.44J	2.28JB
	MW-L	6-May-15			40J					0.81J		0.16J			1.27J					2.23J
	MW-L	28-Oct-15			33.5J			1.05J	0.29J		0.31J				1.07J		4.04CN,J		2.87J	6.06B-01-J
	MW-L	19-May-16				38.4J		0.88J							1.01J				2.23J	1.48J
	MW-L Deep	11-Jun-03						22.9												
	MW-L Deep	22-Apr-04																	70	
	MW-L Deep	26-Apr-05																	60	
	MW-L Deep	20-Apr-06																		
	MW-L Deep	24-Apr-07	2.8J	3.6J	12J		0.27J	0.57J	0.3J	2.3J		0.19J			3.5J	1.4J			34	2.6J
	MW-L Deep	21-Apr-08	4.6J	3.1J	120	1	0.90J	24	8.9J	16		11			19J		0.09J	0.18J	57	57
	MW-L Deep	8-Apr-09	1.88J		27.6J	0.15J	0.23J	1.74J	1.05J	3.14J		1.37J			3.27J		0.02J		35	8.14JB
13-02	MW-L Deep	11-May-10	1.58J		38J		0.23J	5.43J	1.61J	4.45J		1.51J			4.24J				28.6	16.4
	MW-L Deep	4-May-11	0.44J		56.8J	0.34J		14.7	2.86J	3.62J		3.39J			13.6J				15.2J	12.7
	MW-L Deep	9-May-12	0.62J		23J			2.03J	0.83J	1.60J		0.68J			3.14J				8.53J	7.99JB
	MW-L Deep	10-May-13	0.41J		19.2J				0.24J	1.89J		0.27J			1.63J				2.08J	21.8
	MW-L Deep	8-May-14			27.9J					1.34JB		0.11J			1.32J					6.06J
	MW-L Deep	6-May-15	0.36J		23.1J			0.90J		1.24J					1.50J				2.45J	45.1
	MW-L Deep	29-Oct-15	0.58J		23.0J			0.47B-01,J		1.23J		0.09J			1.62J		3.73CN,J			81.1
	MW-L Deep	19-May-16	0.46J		30.8J			0.44J		1.87J		0.17J			1.27J				4.59J	116

Table 5a
Detected Groundwater Constituents - Metals
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard			1*	10	700	4*	2	10	1*	1,000	300	15	50	1	100	20	20	0.2*	0.3*	1,000
Solid Waste Section Limit			6	10	100	1	1	10	10	10	300	10	50	0.2	50	10	10	5.5	25	10
	MW-M	11-Jun-03				3.7	**2.4**	**13**	**18.9**			**22.3**							**115**	64.2
	MW-M	22-Apr-04																		
	MW-M	26-Apr-05				2														
	MW-M	20-Apr-06																		
	MW-M	24-Apr-07			22J		0.03J		0.15J	1.0J		0.23J			1.3J	1.0J			**2.5J**	2.2J
	MW-M	21-Apr-08			490	**6**	0.05J	**32**	**46**	120		**49**			66	3.7J	0.13J	**0.65J**	**160**	180
	MW-M	8-Apr-09			21.6J		0.18J		0.17J	1.33JB		0.30J			1.21J				**5.53JB**	4.72JB
13-02	MW-M	11-May-10			88.7J	0.73J		3.07J	**7.93J**	24.7		7.31J			9.37J				**25.7**	20.9
	MW-M	5-May-11	0.92J		64.2J	0.56J		2.68J	**2.64J**	15.6		4.83J			5.84J			0.14J	**18.2J**	15.2
	MW-M	9-May-12			40.3J	0.26J		2.46J	**1.38J**	8.56J		3.07J			3.80J				**11.8J**	15.2B
	MW-M	10-May-13			34.9J	0.16J		1.44JB	0.69J	2.21J		0.5J			1.68J					2.2J
	MW-M	8-May-14			37.1J	0.10J		0.80J	0.30J	2.00J		0.63J			1.91J					2.42J
	MW-M	5-May-15		1.93J	39.4J				0.88J	2.02J		0.51J			2.18J				**4.07J**	1.71J
	MW-M	29-Oct-15			38.9J	0.10J		1.56B-01,J	0.39J	2.10J		0.62J			2.10J		3.09CN,J		**1.78J**	4.96J
	MW-M	18-May-16		0.92J	38.8J			0.60J	0.46J	1.60J		0.58J			1.47J				**6.84J**	1.54J
	MW-X	10-Nov-98																		110
	MW-X	19-Nov-99																		
	MW-X	23-Oct-03																		
	MW-X	22-Apr-04																		
	MW-X	21-Oct-04																		
	MW-X	27-Apr-05																		
	MW-X	25-Oct-05																		
	MW-X	19-Apr-06																		
	MW-X	31-Oct-06																		
	MW-X	23-Apr-07			37J		0.02J		0.11J	0.54J		0.07J			7.0J					2.1J
	MW-X	30-Oct-07			44J		0.07J	2.6J	0.48J	1.1J					6.5J	1.0J		0.14J		8.1J
	MW-X	21-Apr-08	0.18J	0.47J	90J	0.74J	0.02J	**29**	**7.7J**	7.0J		3.7J			26J		0.04J	0.11J	**45**	35
	MW-X	19-Nov-08			40.0J		0.07J	2.76J	0.53J	1.39J		0.29J			5.69J					7.06J
	MW-X	8-Apr-09			43.6J		0.21J	0.85J	0.80J	5.23J		0.64J			8.08J		0.02J		**3.57JB**	9.08JB
13-02	MW-X	15-Oct-09			37.2J			1.78J	0.53J	2.55J		0.34J			6.79J					7.39J
	MW-X	11-May-10			34.8J		0.32J		0.22J			0.19J			4.24J					5.33J
	MW-X	4-Nov-10			30.2J			0.99J	0.31J	1.36J		0.21J			4.59J				**8.94J**	2.08J
	MW-X	4-May-11	0.32J		51.5J	0.21J		7.8J	**2.79J**	2.91J		1.49JB			11J			0.08J	**12.2J**	12.3
	MW-X	9-Nov-11			23.1J	0.22JB		2.97J	**1.21J**	2.46J		1.77J			4.34J			0.07J	**10.5J**	6.75J
	MW-X	9-May-12			34.9J			1.52J		1.37J					5.63J					8.77JB
	MW-X	29-Nov-12			29.3J			1.80J	0.33J	1.31J		0.25J			4.74J				**5.19J**	2.17JB
	MW-X	29-Nov-12			32.0J			3.20J	0.75J	1.54J		0.39J			5.79J				**5.63J**	4.82JB
	MW-X	8-May-13		1.53JB	35.4J			0.77J	0.73J	1.8J		0.24J			6.37J				**3.12J**	4.55J
	MW-X	6-Nov-13			24.1J			1.12J	0.35J	1.04J		0.32J			4.27J				**18.2JB**	3.96JB
	MW-X	7-May-14			37.0J	0.05J		4.91JB	0.73J	1.25J		0.44J			5.74J				**4.70J**	3.84JB
	MW-X	5-Nov-14			26.8J			2.58JB	0.36J	0.97J		0.19J			3.67J				**11.2J**	2.10JB
	MW-X	6-May-15			28.9J			1.86J	0.32J	2.68J		0.21J			4.33J				**2.51J**	1.42J
	MW-X	29-Oct-15			27.8J			2.08B-01,J		1.29J					4.65J		3.24CN,J			1.74J
	MW-X	18-May-16		0.86J	32.0J			1.71J	0.52J	0.68J		0.34J			4.38J				**6.50J**	2.22J

Notes:
1. All units are in micrograms per liter (parts per billion).
2. The sampling event on 24-Oct-95 did not include metals analysis (detected Appendix II constituents only).
3. MW-G was not sampled during the December 1996 event.
4. Assessment Wells CD-4, CD-5, and CD-6 were installed in September 2006.
5. Assessment Wells AMW-1s, -1d, -2s, and -2d were installed in October 2009.
6. Assessment Wells CD-4 and CD-5 were abandoned in July 2010.
7. Monitoring wells MW-3 Deep, -L Deep, -and -M are sampled annually during the spring event.
8. * - Groundwater Protection Standard
9. dup - Duplicate
10. J - Indicates the analytical result is an estimated concentration between the method detection limit and the Solid Waste Section Reporting Limit.
11. B/B-01 - Indicates constituent was detected in the batch blank above the method detection limit.
12. CN - Detected silver concentrations were determined to be the result of contamination from the preservative acid used.
13. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
14. MW-9 was removed from the monitoring program in November 2012.
15. MW-E Rep was not sampled during the November 2012 sampling event due to laboratory oversight.

- Concentration exceeds the 15A NCAC 02L .0202 or Groundwater Protection Standard
- Indicates the result is below the detection limit or not analyzed .

Table 5b
Detected Groundwater Constituents - Volatile Organic Compounds
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Acetone	Benzene	2-Butanone	2-Hexanone	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Dichlorodifluoromethane	1,2-Dichlorobenzene	1,4-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloropropane	cis-1,2-Dichloroethene	Ethylbenzene	Methylene Chloride	4-Methyl-2-Pentanone	trans-1,2-Dichloroethene	Tetrachloroethene	Toluene	Total Xylenes	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	bis(2-Ethylhexyl)Phthalate
North Carolina 2L or Groundwater Protection Standard			6,000	1	4,000	40*	700	0.3	50	3,000	70	3	1,000	20	6	6	0.4	7	0.6	70	600	5	560*	100	0.7	600	500	200	0.6*	3	2,000	0.03	3
Solid Waste Section Limit			100	1	100	50	100	1	3	10	5	1	5	5	1	5	1	5	1	5	1	1	100	5	1	1	5	1	1	1	1	1	15
13-02	CD-1s	25-Sep-06																															
	CD-1s	31-Oct-06																															
	CD-1s	23-Apr-07																								0.40J							
	CD-1s	29-Oct-07																															
	CD-1s	23-Apr-08																															
	CD-1s	18-Nov-08																				1.1											
	CD-1s	8-Apr-09																															
	CD-1s	13-Oct-09																															
	CD-1s	11-May-10																															
	CD-1s	2-Nov-10																															
	CD-1s	3-May-11																															
	CD-1s	8-Nov-11																															
	CD-1s	7-May-12																															
	CD-1s	27-Nov-12							0.4J																	0.2J							
	CD-1s	7-May-13																															
	CD-1s	5-Nov-13																															
	CD-1s	6-May-14																															
	CD-1s	4-Nov-14																															
	CD-1s	5-May-15																															
	CD-1s	27-Oct-15																															
	CD-1s	17-May-16																															
13-02	CD-1d	4-Oct-06																															
	CD-1d	31-Oct-06																															
	CD-1d	23-Apr-07																															
	CD-1d	29-Oct-07																															
	CD-1d	23-Apr-08																								0.43J							
	CD-1d	18-Nov-08																				1.2											
	CD-1d	8-Apr-09																															
	CD-1d	13-Oct-09																															
	CD-1d	11-May-10																															
	CD-1d	2-Nov-10																															
	CD-1d	3-May-11																															
	CD-1d	8-Nov-11																															
	CD-1d	7-May-12																															
	CD-1d	27-Nov-12																															
	CD-1d	7-May-13																															
	CD-1d	5-Nov-13																															
	CD-1d	6-May-14																															
	CD-1d	4-Nov-14																															
	CD-1d	5-May-15																															
	CD-1d	27-Oct-15																															
	CD-1d	17-May-16																															
13-02	CD-4	8-Aug-06								8						51						41			1					3			
	CD-4	26-Sep-06								3						41						24			1					2	1		
	CD-4	31-Oct-06														32						14											
	CD-4	23-Apr-07		0.42J						2.01J					0.37J	41		0.49J		0.48J		4			1					3			
	CD-4	29-Oct-07		1						4.93J					0.65J	69		0.59J		0.43J		9			2	0.31J	1.1J			4			
	CD-4	22-Apr-08		0.50J						2.87J					0.38J	45		0.37J				5			1					2			
	CD-4	20-Nov-08		0.6J						4.8J					0.4J	48		0.7J		0.5J		4.2			1.4			0.1J		2.6	0.3J		
	CD-4	9-Apr-09														29		0.5J				3.4B			1.0					1.6			
	CD-4	14-Oct-09								2J						38		0.5J		0.5J		2.3			1.8					2.4			
	CD-4	6-May-10		0.3J						2.4J	0.2J				0.6J	40		0.6J		0.6J		4.7			2.4					2.8	0.3J		
13-02	CD-4 Rep	4-Nov-10																															
	CD-4 Rep	3-May-11																															
	CD-4 Rep (dup)	3-May-11																															
	CD-4 Rep	8-Nov-11																															
	CD-4 Rep	8-May-12																															
	CD-4 Rep	28-Nov-12																				0.3J											
	CD-4 Rep	9-May-13																															
	CD-4 Rep	7-Nov-13																								0.6J							
	CD-4 Rep	6-May-14																															
	CD-4 Rep	4-Nov-14																															
	CD-4 Rep	6-May-15																															
	CD-4 Rep	27-Oct-15																															
	CD-4 Rep	17-May-16																															
13-02	CD-5	26-Sep-06		2						9						95				6					2					11	2		
	CD-5	31-Oct-06								12						59														6			
	CD-5	23-Apr-07					0.36J			4.87J						59		0.73J		2.6J		2			2					6	0.36J		8.9J
	CD-5	29-Oct-07		0.41J						1.65J						47				1.8J		0.44J			0.36J					3			
	CD-5	22-Apr-08		0.77J					0.14J	3.79J						81		0.35J		3.86J				0.38J	0.54J	0.42J				7	0.28J	0.58J	
	CD-5	20-Nov-08		0.8J						6.4J						55		0.3J		3.3J		0.5J		0.4J	0.5J					5.9	0.4J	0.8J	
	CD-5	9-Apr-09	31J	0.6J			0.9J			25						30				3.4J		1.2B		0.4J						3.4		1.3	
	CD-5	14-Oct-09	39J	1.2						73						61				13		0.4J		0.8J						2.9		2.2	
	CD-5	6-May-10	12J	0.9J						33					0.4J	180		0.7J		18				2.0J	0.9J					17	0.6J	5.9	
13-02	CD-6	26-Sep-06																							1								
	CD-6	31-Oct-06																															
	CD-6	23-Apr-07														0.37J									0.87J								
	CD-6	29-Oct-07																															
	CD-6	22-Apr-08														0.34J						0.80J			0.53J					0.19J			
	CD-6	19-Nov-08																															
	CD-6	7-Apr-09																							0.6J								
	CD-6	14-Oct-09	11J																						0.3J								
	CD-6	11-May-10																							0.5J								
	CD-6	2-Nov-10														0.3J									0.7J								
	CD-6	3-May-11														0.7J									0.9J								
	CD-6	8-Nov-11														1.7J									1.4					0.6J			
	CD-6	8-May-12														2.2J									1.7					0.9J			
	CD-6	28-Nov-12														2.8J						0.4J			1.2					0.8J			
	CD-6	9-May-13														3.6J									1.6					1.3			
	CD-6	7-Nov-13	36J	1.2					0.6J	1.4J					7.8	8.4	0.6J		1.2	57				0.5J		4.6				2.4		1.7	
	CD-6	6-May-14														5.2				0.3J					1.1					1.2			
	CD-6	4-Nov-14														4.7J				0.3J					1.4					1.2			
	CD-6	6-May-15														3.7J									1.5					1.1			
	CD-6	27-Oct-15														3.1J									1.0					0.9J			
	CD-6	17-May-16														1.5J									0.5J					0.7J			

Table 5b
Detected Groundwater Constituents - Volatile Organic Compounds
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Acetone	Benzene	2-Butanone	2-Hexanone	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Dichlorodifluoromethane	1,2-Dichlorobenzene	1,4-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloropropane	cis-1,2-Dichloroethene	Ethylbenzene	Methylene Chloride	4-Methyl-2-Pentanone	trans-1,2-Dichloroethene	Tetrachloroethene	Toluene	Total Xylenes	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	bis(2-Ethylhexyl)Phthalate
North Carolina 2L or Groundwater Protection Standard			6,000	1	4,000	40*	700	0.3	50	3,000	70	3	1,000	20	6	6	0.4	7	0.6	70	600	5	560*	100	0.7	600	500	200	0.6*	3	2,000	0.03	3
Solid Waste Section Limit			100	1	100	50	100	1	3	10	5	1	5	5	1	5	1	5	1	5	1	1	100	5	1	1	5	1	1	1	1	1	15
13-02	AMW-1s	14-Oct-09		0.6J											1.2	13		1.1J		16		0.4J			5.5					5	0.3J		
	AMW-1s	18-Feb-10		0.7J											1	13		1J		16		0.79J			4.6					5.1			
	AMW-1s	6-May-10	4.4J	0.6J						2.1J	0.2J				1.2	12		1J		15					3.6					4.2	0.4J		
	AMW-1s	16-Aug-10								0.83J					0.79J	10		0.68J		12					4.0					3.8			
	AMW-1s	3-Nov-10		0.5J												6.8		0.4J		9.5					2.4	0.3J				2.5	0.2J		
	AMW-1s	3-May-11		0.5J						1J					0.9J	9.2		1J		15		0.7J			3.0					3.8			
	AMW-1s	8-Nov-11		0.5J						0.7J					0.9J	11		0.7J		15		0.7J			3.1					3.1			
	AMW-1s	7-May-12		0.7J						1J					1	12		0.8J		16		0.8J			3.5					3.9			
	AMW-1s	28-Nov-12		0.6J						0.8J					1.1	10		0.7J		14		0.6J			3.2					3.4			
	AMW-1s	8-May-13		0.9J						0.9J					1.4	13		0.9J		18		1J			4.1					4.3			
	AMW-1s	6-Nov-13		0.9J						0.9J					1.3	13		0.9J		15		1J			3.8					3.9			
	AMW-1s	7-May-14		0.9J						0.9J					1.1	9.8		0.7J		12		1.4			3.6					2.8			
	AMW-1s	5-Nov-14		0.6J											1.0J	9.0		0.5J		10					2.5					2.8			
	AMW-1s	7-May-15		0.8J											1.3	8.1		0.5J		9.9		0.9J			3.1					2.6			
	AMW-1s	29-Oct-15		0.4J						0.8J					0.8J	5.8				6.1					1.6					1.4			
	AMW-1s	18-May-16		0.6J						0.5J					0.9J	5.7				7.6		0.6J			1.8					1.7			
13-02	AMW-1d	14-Oct-09	37J	0.6J	16J	1.8J					0.9J					10		0.7J		6.2		0.9J			4.2	20				2.8			
	AMW-1d	18-Feb-10	5.2J	1.1							4.6J				0.49J	23		1.6J		15		3.2			6.9	1.8				6			
	AMW-1d	6-May-10	8.4J	0.7J							3.3J				0.4J	21		1.2J		17					1.8	0.9J				2.2			
	AMW-1d	16-Aug-10		1.2						1.3J	1.8J				0.99J	23		1.6J		28		0.90J			3.9					4.0			
	AMW-1d	3-Nov-10		1.0						1.3J	1.2J					21		1.8J		24				0.3J	4.2					4.0	0.4J	0.3J	
	AMW-1d	3-May-11		1.1						2J	1.1J,B				0.8J	24		1.9J		28				0.3J	4.2					4.7		0.3J	
	AMW-1d	8-Nov-11		1.2						1.4J					0.8J	28		1.8J		30				0.5J	0.6J					5.8	0.3J	0.4J	
	AMW-1d	7-May-12		1.2						1.7J					0.9J	27		1.8J		35		0.4J		0.4J	1.7					4.8		0.4J	
	AMW-1d	28-Nov-12		1.2		5.0J				1.3J					0.9J	29		1.9J		36		0.4J		0.6J	2.0					5.0			
	AMW-1d	8-May-13		1.1						2J					1.7	26	0.2J	2J	0.6J	40				0.6J						6.2		0.4J	
	AMW-1d	6-Nov-13		1.1						2.6J					0.8J	29		2.2J		38				0.4J	0.5J					5.2		0.5J	
	AMW-1d	7-May-14		1.2						2.2J					1.0	30		2.3J		36				0.6J	1.6					7.3		0.6J	
	AMW-1d	5-Nov-14		1.3						1.7J					1.0J	31		1.3J		13				0.5J	0.7J					3.2	0.3J	29	
	AMW-1d	7-May-15		1.2						1.2J					1.1	24		0.7J		7.1				0.4J	1.2					1.9		18	
	AMW-1d	29-Oct-15		1.0						2.0J					0.7J	23				2.8J												20	
	AMW-1d	18-May-16		1.1											0.9J	23				9.7										1.6		8.0	
13-02	AMW-2s	14-Oct-09														6.6		0.6J		0.9J		1.4			5.2					2.1			
	AMW-2s	18-Feb-10														8.4		0.8J		1.4J		2.1			5.7					2.9	1.1		
	AMW-2s	7-May-10														7.7		0.8J		1.6J		1.4			3.8	0.3J				2.4	0.8J		
	AMW-2s	16-Aug-10								0.58J						10		0.98J		2.3J		2.4			6.4					3.2	0.81J		
	AMW-2s	3-Nov-10														7.9		0.7J		2.0J		1.2			4.6					2.7	0.8J		
	AMW-2s	3-May-11								0.8J						10		1J		2.8J		2.5			5.4					3	0.7J		
	AMW-2s	8-Nov-11								0.8J						11		1J		3.8J		2.9			5					3.2	0.8J		
	AMW-2s	8-May-12								0.8J						12		1.2J		4.3J		2.7			5.8					3.8	0.9J		
	AMW-2s	29-Nov-12								0.7J						12		1.1J		4.9J		2.2			6.4					4.1	0.8J		
	AMW-2s	9-May-13														9		0.8J		4.7J		1.4			5.2					3.4	0.6J		
	AMW-2s	6-Nov-13														10		0.9J		4.8J		1.3			4.9					3.4	0.7J		
	AMW-2s	7-May-14								0.5J						12		0.8J		5.2		1.2			4.6					3.3	0.5J		
	AMW-2s	5-Nov-14														12		0.9J		6.4		0.9J			5.5					4.2	0.6J		
	AMW-2s	6-May-15														9.3		0.6J		5.5		0.6J			4.2					3.1	0.4J		
	AMW-2s	28-Oct-15														8.4				5.7		0.7J			3.3					2.6			
	AMW-2s (dup)	28-Oct-15														8.4		0.7J		5.9		0.7J			3.7					2.9			
	AMW-2s	17-May-16														8.5				6.4		0.7J			3.5					3.0			
13-02	AMW-2d	14-Oct-09	3.6J								0.8J					7		0.8J		1.2J		2.2			5.6					2.3			21
	AMW-2d	18-Feb-10	3.6J								0.86J					4.6J		0.83J		0.66J		1.6			6.4					1.8	1.2		
	AMW-2d	7-May-10									0.4J					3.4J		0.6J		0.5J		0.4J			3.8					1.3	0.8J		
	AMW-2d	16-Aug-10														3.9J		0.50J		0.58J		0.84J			2.9					1.2	0.56J		
	AMW-2d	3-Nov-10									0.2J					3.2J		0.4J		0.5J					2.0					1.2	0.8J		
	AMW-2d	3-May-11														5.6		0.9J		1.4J		2			4.0					2.3	1.4		
	AMW-2d	8-Nov-11														8.8		1J		1.9J		1.2			6.5					2.8	1.3		
	AMW-2d	8-May-12														9.7		1J		2J		1			6.1					3.1	1.1		
	AMW-2d	28-Nov-12														11		1.2J		2.5J					6.6					3.2	0.7J		
	AMW-2d	9-May-13														12		1.2J		4.6J		1.1			7.8					4	1.2		
	AMW-2d	6-Nov-13														9.4		0.6J		9.1		0.7J			2.9					1.9	0.6J		
	AMW-2d	7-May-14								0.7J						19		1.8J		6.0		2.0			8.5					5.6	1.4		
	AMW-2d	5-Nov-14														15				5.7		1.4			4.7					4.2	0.9J		
	AMW-2d	6-May-15														19		1.5J		8.4		1.3			9.8					6.3	0.8J		
	AMW-2d	28-Oct-15														14		0.8J		6.3		1.3			4.3					3.7	0.6J		
	AMW-2d	17-May-16								0.5J					0.3J	17		1.0J		9.2		1.3			7.6					5.2	0.7J		
13-02	MW-1	23-Apr-02																															
	MW-1	15-Oct-02																															
	MW-1	24-Apr-03																															
	MW-1	23-Oct-03																															
	MW-1	21-Apr-04																															
	MW-1	20-Oct-04																															
	MW-1	25-Apr-05																															
	MW-1	25-Oct-05																															
	MW-1	19-Apr-06																															
	MW-1	31-Oct-06																															
	MW-1	24-Apr-07														0.45J																	
	MW-1	30-Oct-07		0.82J					0.76J						0.32J																		
	MW-1	22-Apr-08												0.24J	0.66J	0.16J																	
	MW-1	19-Nov-08		0.4J											0.3J																		
	MW-1	7-Apr-09																															
	MW-1	15-Oct-09	3.2J													0.4J																	
	MW-1	11-May-10														1.2J				0.4J					0.4J								
	MW-1	3-Nov-10														3.1J		0.4J		0.6J					3.3					1.2	1.2		
	MW-1	3-May-11														0.7J																	
	MW-1	8-Nov-11														0.4J																	
	MW-1	8-May-12													0.4J	0.7J																	
	MW-1	27-Nov-12														0.4J						0.8J											
	MW-1	9-May-13																															
	MW-1	5-Nov-13														1.0J														0.4J			
	MW-1	7-May-14							0.4J						0.4J	2.4J				0.9J					0.5J					0.4J			
	MW-1 (dup)	7-May-14							0.3J						0.4J	2.4J				0.9J					0.5J					0.4J			
	MW-1	3-Nov-14														1.3J				0.4J					0.4J								
	MW-1	5-May-15													0.4J	1.1J				0.4J													
	MW-1	27-Oct-15														0.5J																	
	MW-1	18-May-16														1.2J				0.6J													

Table 5b
Detected Groundwater Constituents - Volatile Organic Compounds
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Acetone	Benzene	2-Butanone	2-Hexanone	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Dichlorodifluoromethane	1,2-Dichlorobenzene	1,4-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloropropane	cis-1,2-Dichloroethene	Ethylbenzene	Methylene Chloride	4-Methyl-2-Pentanone	trans-1,2-Dichloroethene	Tetrachloroethene	Toluene	Total Xylenes	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	bis(2-Ethylhexyl)Phthalate
North Carolina 2L or Groundwater Protection Standard			6,000	1	4,000	40*	700	0.3	50	3,000	70	3	1,000	20	6	6	0.4	7	0.6	70	600	5	560*	100	0.7	600	500	200	0.6*	3	2,000	0.03	3
Solid Waste Section Limit			100	1	100	50	100	1	3	10	5	1	5	5	1	5	1	5	1	5	1	1	100	5	1	1	5	1	1	1	1	1	15
13-02	MW-2	9-Jul-98																															17
	MW-2	10-Nov-98																															
	MW-2	19-Nov-99																															
13-02	MW-3	9-Jul-98																							11								8.1
	MW-3	10-Nov-98																							17								
	MW-3	19-Nov-99																							13								
	MW-3	11-Jun-03														5									21					6			
	MW-3	23-Oct-03																							15								
	MW-3	21-Apr-04																							18								
	MW-3 (dup)	21-Apr-04																															
	MW-3	20-Oct-04																							14								
	MW-3	26-Apr-05																							16								
	MW-3	25-Oct-05																							14								
	MW-3	19-Apr-06																							15								
	MW-3	30-Oct-06																							15								
	MW-3	23-Apr-07														3.72J		0.6J							14					4	0.74J		
	MW-3	30-Oct-07	2.0J													3.51J		0.7J							12					4	0.43J		
	MW-3	21-Apr-08														4.01J		0.7J				0.98J			14			0.26J		4	0.95J		
	MW-3	20-Nov-08														3.8J		0.6J		0.3J		0.5J			9.8					3			
	MW-3	9-Apr-09														3.8J		0.6J				0.7JB			11					3.6	0.6J		
	MW-3	15-Oct-09														4.5J									12	0.3J				3.3			
	MW-3	10-May-10														6.8		1.6J		0.8J					14					4.3	1.4		
	MW-3	2-Nov-10														5.6		1.2J		1.0J					14					3.9	1.1		
	MW-3	4-May-11														7.4		1.4J		0.8J					13					4	1.1		
	MW-3	9-Nov-11														12		1.7J		1.8J		0.7J			16					5.3	1.2		
	MW-3 (dup)	9-Nov-11														13		2J		1.8J		0.7J			15					5.3	1.6		
	MW-3	8-May-12														9.6		1.7J		1.2J		0.5J			17					5.4	1.3		
	MW-3	28-Nov-12														12		1.4J		1.9J		0.9J			15					5.2			
	MW-3	9-May-13														10		1.4J		1.7J		0.6J			18					5.7	1.1		
	MW-3	7-Nov-13														12		1.5J		1.7J		0.6J			15					5.1	1.0		
	MW-3	8-May-14														15		2.0J		2.6J		0.7J			17					6.1	1.0		
	MW-3	6-Nov-14														16		1.8J		3.6J		0.7J			18					7.4	1.2		
	MW-3	6-May-15														14		0.8J		3.1J		0.6J			17					5.9	0.9J		
	MW-3	28-Oct-15														13		1.4J		3.8J					13					5.2	0.8J		
	MW-3	18-May-16														13		1.3J		4.1J		0.6J			15					6.0	0.8J		
13-02	MW-3 Deep	11-Jun-03																															
	MW-3 Deep	21-Apr-04																															
	MW-3 Deep	26-Apr-05																															
	MW-3 Deep	19-Apr-06																															
	MW-3 Deep	23-Apr-07														0.35J																	
	MW-3 Deep	21-Apr-08														0.38J						0.92J				0.21J				0.18J			
	MW-3 Deep	7-Apr-09																															
	MW-3 Deep	11-May-10																															
	MW-3 Deep	4-May-11														0.5J																	
	MW-3 Deep	8-May-12																							0.4J								
	MW-3 Deep	10-May-13														1J									0.6J					0.4J			
	MW-3 Deep	8-May-14														0.4J																	
	MW-3 Deep	6-May-15														1.2J									0.4J					0.4J			
	MW-3 Deep	28-Oct-15														1.4J														0.4J			
	MW-3 Deep	19-May-16														1.2J																	
13-02	MW-9	16-Sep-94																															
	MW-9	18-Oct-94																															
	MW-9	19-Dec-94																															
	MW-9	14-Feb-95																															
	MW-9	9-Jun-95																															26
	MW-9	24-Oct-95																															
	MW-9	13-Nov-95																															
	MW-9	25-Jan-96																															
	MW-9	5-Dec-96																							3								
	MW-9	2-May-97																															
	MW-9	6-Nov-97																															
	MW-9	18-Apr-98																															
	MW-9	10-Nov-98																															
	MW-9	1-Apr-99																															
	MW-9	18-Nov-99																															
	MW-9	26-Apr-00																															
	MW-9	27-Sep-00																															
	MW-9	9-May-01																															
	MW-9	30-Oct-01																															
	MW-9	24-Apr-02																															
	MW-9	15-Oct-02																															
	MW-9	23-Apr-03																															
	MW-9	23-Oct-03																															
	MW-9 (dup)	23-Oct-03																															
	MW-9	21-Apr-04																															
	MW-9	20-Oct-04																															
	MW-9	25-Apr-05																															
	MW-9	25-Oct-05																															
	MW-9	20-Apr-06																															
	MW-9 (dup)	20-Apr-06																															
	MW-9	30-Oct-06																															
	MW-9	24-Apr-07																							0.61J								
	MW-9	29-Oct-07																							1								
	MW-9	22-Apr-08																															
	MW-9	20-Nov-08																							1								
	MW-9	9-Apr-09																				0.8J			1.3								
	MW-9	15-Oct-09																							0.9J								
	MW-9 (dup)	15-Oct-09	3.3J																						0.6J								
	MW-9	6-May-10																							1.3								
	MW-9	2-Nov-10																							0.7								
	MW-9	3-May-11																							0.8J								
	MW-9	9-Nov-11																							1.1								
	MW-9	9-May-12																							1.4								

Table 5b
Detected Groundwater Constituents - Volatile Organic Compounds
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Acetone	Benzene	2-Butanone	2-Hexanone	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Dichlorodifluoromethane	1,2-Dichlorobenzene	1,4-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloropropane	cis-1,2-Dichloroethene	Ethylbenzene	Methylene Chloride	4-Methyl-2-Pentanone	trans-1,2-Dichloroethene	Tetrachloroethene	Toluene	Total Xylenes	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	bis(2-Ethylhexyl)Phthalate
North Carolina 2L or Groundwater Protection Standard			6,000	1	4,000	40*	700	0.3	50	3,000	70	3	1,000	20	6	6	0.4	7	0.6	70	600	5	560*	100	0.7	600	500	200	0.6*	3	2,000	0.03	3
Solid Waste Section Limit			100	1	100	50	100	1	3	10	5	1	5	5	1	5	1	5	1	5	1	1	100	5	1	1	5	1	1	1	1	1	15
	MW-A	25-Jan-96											13																		182		49
	MW-A	6-Dec-96																													100		
	MW-A	4-May-97																							17			9		7	78		
	MW-A	6-Nov-97														5.6									19			8		11	33		
	MW-A	20-Apr-98								13						13									16			9		14	26		
	MW-A	10-Nov-98								10						19				7.5					16		7	6		17	8.0		
	MW-A (dup)	10-Nov-98								12						19				7.1					21		7	6		19	11		
	MW-A	1-Apr-99								22						30				12					10		7			16	6		
	MW-A	16-Nov-99								15						27				13					12					18	7		
	MW-A	26-Apr-00		6						22						42				28					5		11			21	7		
	MW-A	27-Sep-00		8						23						53				44					14		13			19	5		
	MW-A	8-May-01		9						20						58				53					13		12			20	5		
	MW-A (dup)	8-May-01		8						19						59				53					13		12			21	6		
	MW-A	30-Oct-01		9						23						60				56		10			15		12			18			
	MW-A	23-Apr-02		9						22						72				59		14			14		12			18	13		
	MW-A	15-Oct-02		10						23						77				62		20			15		12			16			
	MW-A	23-Apr-03		14						31						150				96		45			24		19			23			
	MW-A	23-Oct-03		13						26						100				80		64			18		13			17			
	MW-A	21-Apr-04		12						24						94				92		46			18		8			18			
	MW-A	20-Oct-04		11						22						89				90		47			16		8			17			
	MW-A (dup)	20-Oct-04		10						22						91				91		49			17		6.8			16			
	MW-A	25-Apr-05		13						26						100				110		62			21		9			18			
13-02	MW-A	25-Oct-05		11						67						61				100		52			16		8			14			
	MW-A	18-Apr-06		11						16						69				110		67			14					13			
	MW-A	30-Oct-06		12						39					6	64				130		74			13		5			12			
	MW-A	23-Apr-07		12			0.46J			12		0.62J			10	71	0.45J	0.35J	3	120		14		0.84J	12	0.59J	7			11	0.34J	0.35J	
	MW-A	30-Oct-07		11					1.23J						12	49			2	140		15		1.15J	10		8			9		1	
	MW-A	22-Apr-08		10					0.63J	9.84J					11	42	0.61J	0.18J	3	150		17		0.54J	7	0.20J	4.06J			6	0.24J	1	
	MW-A (dup)	22-Apr-08		11					1.02J	18					11	37		0.20J	3	150		14		0.88J	9	0.48J	8			8	0.32J	3	
	MW-A	20-Nov-08		7.4						11					12	31	0.8J		2.8	100		1		0.6J	5.2		5.7			4.7	0.2J	0.8J	
	MW-A	9-Apr-09		7.8					1.1J,B	11					15	29	0.8J		2.9	120		1.9B		0.8J	6.2		6.8			5.4		1J	
	MW-A	16-Oct-09	13J	8.9						14					16	27				140		0.4J		0.4J	5.4		7.8			4.3		1	
	MW-A	7-May-10		8.7					0.8J	17					14	19	2.1	0.2J	2.9	130				0.4J	4.6	0.3J	9.3			3.5		1.2	
	MW-A	2-Nov-10		8.3						5.3J					17	15	2.1		2.5	120				0.5J	5.4		3.1J			3.8		1.2	
	MW-A (dup)	2-Nov-10		6.9						4.8J					15	14	1.9		2.2	110				0.4J	4.8		2.9J			3.4	0.2J	1	
	MW-A	3-May-11		7.4					1J	4.7J					12	14	2.2		2.2	110		0.8J		0.4J	3.9		3.1J			3.2		0.7J	
	MW-A	9-Nov-11		9.2					1.4J	6.5J					16	18	2.8		2.4	120		2		0.6J	6.5		5.2			3.8		1J	
	MW-A	9-May-12		8.8					1.1J	6.5J					17	26	3.8	0.5J	2	110		0.9J		0.4J	6.5		2.6J	0.5J		4.5	0.2J	1.1	
	MW-A	27-Nov-12		9.3					1.6J	6.9J					15	25	3.9	0.6J	2.2	130	0.4J	0.5J		0.5J	4.7		1.7J	0.4J		4.4		0.8J	
	MW-A	7-May-13		9.1					1.3J	5.1J					22	23	3	0.4J	2.4	120	0.6J	0.8J		0.5J	6.2	0.3J	8.0			4.3			
	MW-A	5-Nov-13		11					1.4J	5.7J				0.4J	25	22	4.1			130		1.4			6.2		6.0			3.8		1.0	
	MW-A	6-May-14		11					1.3J	5.6J				0.3J	28	18	3.6	0.2J	2.1	120	0.7J	4.6		0.4J	5.3	0.4J	5.8			3.3		1.0	
	MW-A	4-Nov-14		9.5					1.6J	5.6J				0.3J	31	21	2.6			130	0.4J	1.1		0.5J	5.7		2.0J			4.5		1.0J	
	MW-A	5-May-15		9.3					1.4J	5.0J				0.3J	24	16	2.5		2.1	110	0.8J	0.8J		0.5J	5.6	0.4J	5.3			3.6		0.6J	
	MW-A	27-Oct-15		9.1					1.4J	5.4J					28	15	2.3			110	0.7J	0.8J			5.9	0.3J	4.4J			3.4		0.7J	
	MW-A	17-May-16		9.7					1.5J						31	15	1.3		2.2	120	1.1	1.4			4.8	0.6J	5.2			3.7		0.8J	
13-02	B-4	11-Jun-03														7				10					10					6			
	MW-B	14-Feb-95																															
	MW-B	9-Jun-95																															
	MW-B	24-Oct-95																															
	MW-B	13-Nov-95																															
	MW-B	25-Jan-96																															64
	MW-B	6-Dec-96																															
	MW-B	2-May-97																															
	MW-B	8-Nov-97																															
	MW-B	20-Apr-98																															
	MW-B	9-Nov-98																															
	MW-B	1-Apr-99																															
	MW-B	17-Nov-99																															
	MW-B	24-Apr-00																															
	MW-B	26-Sep-00																															
	MW-B	9-May-01																															
	MW-B	30-Oct-01																															
	MW-B	23-Apr-02																															
	MW-B	15-Oct-02																															
	MW-B	24-Apr-03																															
	MW-B	23-Oct-03																															
	MW-B	21-Apr-04																															
	MW-B	20-Oct-04																															
13-02	MW-B	25-Apr-05																															
	MW-B	25-Oct-05																															
	MW-B	19-Apr-06																															
	MW-B	31-Oct-06																															
	MW-B	24-Apr-07					0.4J																										
	MW-B	31-Oct-07																															
	MW-B	22-Apr-08							0.18J							0.19J						0.95J											
	MW-B	19-Nov-08					2.4J																										
	MW-B	7-Apr-09																															
	MW-B	16-Oct-09	3.4J																														
	MW-B	11-May-10																															
	MW-B	3-Nov-10																															
	MW-B	3-May-11																															
	MW-B	8-Nov-11																															
	MW-B	8-May-12																															
	MW-B	28-Nov-12																				0.9J											
	MW-B	9-May-13																															
	MW-B	5-Nov-13																															
	MW-B	7-May-14																															
	MW-B	3-Nov-14																															
	MW-B	5-May-15																															
	MW-B	28-Oct-15																															
	MW-B	18-May-16																															

Table 5b
Detected Groundwater Constituents - Volatile Organic Compounds
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Acetone	Benzene	2-Butanone	2-Hexanone	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Dichlorodifluoromethane	1,2-Dichlorobenzene	1,4-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloropropane	cis-1,2-Dichloroethene	Ethylbenzene	Methylene Chloride	4-Methyl-2-Pentanone	trans-1,2-Dichloroethene	Tetrachloroethene	Toluene	Total Xylenes	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	bis(2-Ethylhexyl)Phthalate
North Carolina 2L or Groundwater Protection Standard			6,000	1	4,000	40*	700	0.3	50	3,000	70	3	1,000	20	6	6	0.4	7	0.6	70	600	5	560*	100	0.7	600	500	200	0.6*	3	2,000	0.03	3
Solid Waste Section Limit			100	1	100	50	100	1	3	10	5	1	5	5	1	5	1	5	1	5	1	1	100	5	1	1	5	1	1	1	1	1	15
13-02	MW-C	14-Feb-95																															
	MW-C	10-Jun-95																															32
	MW-C	24-Oct-95																															
	MW-C	13-Nov-95																															
	MW-C	25-Jan-96																															
	MW-C	6-Dec-96																															
	MW-C	4-May-97																															
	MW-C	6-Nov-97																															
	MW-C	20-Apr-98																															
	MW-C	10-Nov-98																															
	MW-C	1-Apr-99																															
	MW-C	16-Nov-99																															
	MW-C	26-Apr-00																															
	MW-C	27-Sep-00																															
	MW-C	8-May-01																															14
	MW-C	30-Oct-01																															
	MW-C	23-Apr-02																															
	MW-C	14-Oct-02																															
	MW-C	23-Apr-03																															
	MW-C	23-Oct-03																															
	MW-C	21-Apr-04																															
	MW-C	20-Oct-04																															
	MW-C	25-Apr-05																															
	MW-C	25-Oct-05																															
	MW-C	18-Apr-06																															
	MW-C	30-Oct-06																															
	MW-C	23-Apr-07																															
	MW-C	30-Oct-07																		1.39J													
	MW-C	21-Apr-08												0.23J	0.27J																		
	MW-C	19-Nov-08																															
	MW-C	7-Apr-09																															
	MW-C	15-Oct-09	3.6J																	0.7J													
	MW-C	11-May-10																															
	MW-C	3-Nov-10								0.5J						0.2J				2.2J													
	MW-C	3-May-11																															
	MW-C	8-Nov-11																		1.4J													
	MW-C	8-May-12																															
	MW-C	28-Nov-12																		0.6J		0.5J											
	MW-C	8-May-13																															
	MW-C	5-Nov-13																								11							
	MW-C	6-May-14																															
	MW-C	4-Nov-14		0.3J																4.6J													
	MW-C	6-May-15																															
	MW-C	28-Oct-15																		0.7J													
	MW-C	17-May-16																															
13-02	MW-D	14-Feb-95																															
	MW-D	10-Jun-95																															
	MW-D	24-Oct-95																															
	MW-D	13-Nov-95																													9		
	MW-D	25-Jan-96											5																		18		
	MW-D	6-Dec-96																													30		
	MW-D	4-May-97																													21		
	MW-D (dup)	4-May-97																													22		
	MW-D	6-Nov-97																													33		
	MW-D	20-Apr-98																										5			32		
	MW-D	10-Nov-98																										7			24		
	MW-D	1-Apr-99																										6			23		
	MW-D	16-Nov-99								19																		10			23		
	MW-D	26-Apr-00								23						8												6			9		
	MW-D	27-Sep-00								27						16												6					
	MW-D	8-May-01								25						24																	
	MW-D	30-Oct-01								28						31																	
	MW-D	23-Apr-03								30						45																	
	MW-D	23-Oct-03								25						31																	
	MW-D	21-Apr-04								23						33																	
	MW-D	20-Oct-04								21						27				5													
	MW-D	25-Apr-05								19						13				8													
	MW-D	25-Oct-05								54						8				8													
	MW-D	19-Apr-06								13						9				10													
	MW-D	30-Oct-06								32						7				15										6			
	MW-D	23-Apr-07		4						6.25J					0.44J	4.23J				14		1			1					4			
	MW-D	30-Oct-07		4						6.62J						3.8J				15		0.97J			2					4		0.99J	
	MW-D	21-Apr-08								7.29J					0.92J	2.92J				20					0.63J					5			
	MW-D	19-Nov-08		4.6						6.9J					1.0	2.6J				25		0.7J		0.3J	0.8J	0.7 JB				3.6		0.8J	
	MW-D	7-Apr-09		4.4											0.9J	1.9J				22		0.3JB			0.5J					3.7		0.7J	
	MW-D	15-Oct-09		5.1						6.5J					1.2	1.9J				28		0.4J			1.3					4.6		0.9J	
	MW-D	11-May-10		4.8						3.2J					1.2	1.6J				26					0.4J					4.4		1.1	
	MW-D	3-Nov-10		5.3						2.8J					1.5	1.7J				31				0.3J	1.1					4.3		0.9J	
	MW-D	3-May-11		5.5						3.2J					1.9	1.9J				37					0.7J		1.6J			5.5		0.8J	
	MW-D	8-Nov-11		5.7						3.2J					2.9	1.8J				57		0.7J		0.4J	0.9J		1.5J			3.9		0.9J	
	MW-D	8-May-12		7					0.3J	2.7J					6.2	1.3J				56		1			1J		1.7J			5.3		0.8J	
	MW-D	27-Nov-12		6.5					0.3J	1.1J					6.4	1.3J				54		1.5			0.7J	0.2J	5.3			4.0		0.6J	
	MW-D	8-May-13		6.8					0.4J	1.6J					8.4	1.2J				56		0.8J			1.2		2.7J			5.9		0.7J	
	MW-D	5-Nov-13		7.2					0.5J	1.8J					9.3	1.0J				57		0.8J					1.8J			4.6		0.9J	
	MW-D	6-May-14		5.1					0.4J	1.1J					7.8	0.7J				39							3.3J			3.9		0.6J	
	MW-D	4-Nov-14		6.9					0.5J	0.9J					10	0.9J				53				0.2J	0.4J		1.5J			4.6		0.6J	
	MW-D	5-May-15		5.9					0.6J						7.3	0.5J				38				0.2J			1.8J			3.3		0.5J	
	MW-D	28-Oct-15		5.3						0.9J					8.1	0.5J				37							1.5J			2.7		0.6J	
	MW-D	17-May-16		5.0					0.7J						9.9					39							1.7J			2.8			

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Detected Groundwater Constituents - Volatile Organic Compounds
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Cabarrus County Landfill Units 2 and 3

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North Carolina 2L or Groundwater Protection Standard			6,000	1	4,000	40*	700	0.3	50	3,000	70	3	1,000	20	6	6	0.4	7	0.6	70	600	5	560*	100	0.7	600	500	200	0.6*	3	2,000	0.03	3
Solid Waste Section Limit			100	1	100	50	100	1	3	10	5	1	5	5	1	5	1	5	1	5	1	1	100	5	1	1	5	1	1	1	1	1	15
	MW-E Rep	6-Dec-96								2			5			13		2		12				2	15			3		5	2		
	MW-E Rep	2-May-97														11				9					10								
	MW-E Rep	6-Nov-97														15				11					12					5			
	MW-E Rep	20-Apr-98														14				8					10								
	MW-E Rep	9-Nov-98														13				8					13								
	MW-E Rep	1-Apr-99														14				7					9					5			
	MW-E Rep	16-Nov-99														20				5					15					7			
	MW-E Rep (dup)	16-Nov-99														19									14					7			
	MW-E Rep	24-Apr-00														22									13					7			
	MW-E Rep	26-Sep-00														25				5					19					8	6		
	MW-E Rep (dup)	26-Sep-00														25									18					8	6		
	MW-E Rep	9-May-01														20									14					5			
	MW-E Rep	23-Apr-02														38				15					11					10			
	MW-E Rep	15-Oct-02								11						43				18					7					15			
	MW-E Rep	23-Apr-03								14						47				49										11			
	MW-E Rep	23-Oct-03								12						34				47										8			
	MW-E Rep	21-Apr-04								13						38				45										14			
	MW-E Rep	20-Oct-04														33				41										11			
	MW-E Rep	25-Apr-05		5						16						31				57										16			
	MW-E Rep	25-Oct-05								42						20				55										15			
13-02	MW-E Rep	19-Apr-06		5											7	20				77										12			
	MW-E Rep	30-Oct-06		6						25					7	23				79										14			
	MW-E Rep	24-Apr-07		7						6.73J					11	18	0.69J	0.34J	0.61J	110		1		0.88J	0.91J	0.24J			0.33J	12		7	
	MW-E Rep	30-Oct-07		5					1.11J	4.27J					10	14				87		0.48J		0.76J						8		4	
	MW-E Rep	22-Apr-08		7					0.92J	8.49J					10	22	0.65J	0.40J	0.56J	100				0.64J	2	0.54J				13		6	
	MW-E Rep	20-Nov-08		6					2.1J	10					9.5	16	0.6J			93		0.6J		0.8J						9.3		3.8	
	MW-E Rep	9-Apr-09		4.6					1.6JB	6.2J					8.8	13	0.6J		0.8J	92		0.6JB		0.8J						8		3.1	
	MW-E Rep	15-Oct-09		5.1						7.8J					14	13				110				0.8J						4.5		3	
	MW-E Rep	18-Feb-10		6.7					1.9J	4.0J					12	16	0.7J	0.55J	0.81J	110		0.76J		0.89J	1.2	0.44J	1.04J			9.3		4.2	
	MW-E Rep	10-May-10		5.2					1.7J	11					10	17	0.9J	0.7J		100				0.8J	0.5J	0.3J				6.8		3.7	
	MW-E Rep	16-Aug-10		7.1					1.8J	4.2J					13	19	0.92J	0.53J	0.95J	120		0.94J		0.98J	1.5					7.1		4.0	
	MW-E Rep	4-Nov-10		5.3					1.9J	3.9J					11	19	0.7J	0.8J	0.9J	89				0.9J	0.4					5.4	0.5J	6.8	
	MW-E Rep	4-May-11		6					2.5J	4.5J					14	20	1J		1J	75				0.9J						3.6		6.3	
	MW-E Rep	8-Nov-11		3.3			0.7J		2.1J	4.2J					11	20	0.8J		1.1	54				0.8J						2.2		5	
	MW-E Rep	8-May-12		2.5					2.4J	5.7J					13	23	1.1		1.1	47		0.4J		0.9J	0.3J					1.8		6.6	
	MW-E Rep	8-May-13		1.3					2.78J	3.7J					14	19	0.7J		1.2	21				0.7J						0.5J		4.4	
	MW-E Rep	5-Nov-13		2.3					3.2	3.7J					16	19	1.2			41				0.7J						1.0		7.6	
	MW-E Rep	6-May-14		2.9					3.2	2.9J					16	14	1.0		1.0	53				0.7J		0.2J				1.4		9.3	
	MW-E Rep	4-Nov-14		1.5					4.1	3.6J					18	15	1.1			43				0.7J						1.0		7.5	
	MW-E Rep	5-May-15	3.4J	0.8J					3.1	4.2J				0.3J	15	8.8	1.0J		1.1	25				0.4J						0.5J		3.8	
	MW-E Rep	27-Oct-15		1.0					3.9	5.1J				0.3J	15	9.0	1.1			27				0.4J						0.6J		4.3	
	MW-E Rep	18-May-16		0.8J					2.3J	7.6J						8.2	0.9J		0.9J	12												3.2	
	MW-E Deep	23-Apr-03								13						46				46					10					14			
	MW-E Deep	23-Oct-03														57				28					21					16			
	MW-E Deep	21-Apr-04														56				31					21					15			
	MW-E Deep	20-Oct-04														65				27					18					15			
	MW-E Deep	25-Apr-05														61				35					19					17			
	MW-E Deep	25-Oct-05														39				29					11					9			
	MW-E Deep	19-Apr-06														45				41													
	MW-E Deep	30-Oct-06														50				32					12					9			12
	MW-E Deep	24-Apr-07		3	4.81					2.29J					4	42	0.64J	3.44J		51		1		0.56J	0.9J					2		2	8.9J
	MW-E Deep	30-Oct-07		3					0.83J						3	44	0.71J	3.89J		36				0.70J	13					12		0.75J	
	MW-E Deep	22-Apr-08		3					0.51J	2.02J					4	53	0.85J	3.88J	1	48		0.94J		0.57J	11	0.45J				12		1	
	MW-E Deep	20-Nov-08	25J	2					1.4J	1.4J					2.3B	41		1.5J		14				0.5J	3.7					3.6		18	
	MW-E Deep	9-Apr-09	5.4J	1.3						1.8J						31	0.6J	0.9J	0.6J	11		0.6J			0.4J					0.5J		25	
	MW-E Deep	15-Oct-09	23J	1.7											0.7J	32		1.9J		23				0.4J	1.3	0.5J				2.4		9.9	
13-02	MW-E Deep	18-Feb-10	23J	3.1					0.64J	2.9J					2.8	37	1	3.3J	1.2	62		1.6		0.51J						0.49		2.9	
	MW-E Deep	10-May-10	12J	3					0.6J	9.2J					3.2	35	1J	0.4J		6				0.6J	0.3J	0.5J				0.5J	0.2J	19	
	MW-E Deep	16-Aug-10	23J	3.8	12J	34J			0.55J	3.5J					3.4	36	0.82J		1.3	2.2J		0.63J		0.62J		1.4				0.43J		2.3	
	MW-E Deep	4-Nov-10		2.7					0.5J	4.1J					3.7	41	0.8J		1.3	1.1J				0.5J		0.4					0.5J	1.5	
	MW-E Deep	4-May-11		1.9						11					3.9	32	0.9J		1.1	1J				0.5J								1.8	
	MW-E Deep	8-Nov-11		1.5					0.6J	9.5J					3.9	34	0.8J		1.3	1.1J				0.6J								1.3	
	MW-E Deep	8-May-12		1					0.5J	12					4.3	29	0.9J		1.2	0.4J				0.5J		0.3J						0.6J	
	MW-E Deep	27-Nov-12		0.9J					1.2J	14					4.5	30	0.9J		1.1	1.0J				0.4J		0.4J						0.9J	
	MW-E Deep	8-May-13		0.8J					0.7J	6.8J					4.1	30	0.8J		1.3	0.5J						0.4J						0.5J	
	MW-E Deep	6-Nov-13		1.2					0.8J	12					5.1	26				0.7J						0.4J						1.2	
	MW-E Deep	6-May-14	85J	2.6	18J	15J			1.0J	9.5J					9.3	8.9	0.8J		0.7J	2.0J			10J			1.2	3.1J					0.4J	
	MW-E Deep	4-Nov-14	18J	0.7J	4.3J	5.4J			0.9J	17					4.1	10	0.6J			0.3J						3.4	1.0J						
	MW-E Deep	5-May-15		0.7J					1.1J	14					5.9	8.5	0.7J									1.9	1.4J						
	MW-E Deep	27-Oct-15		0.4J					0.9J	16					4.9	7.0	0.6J									0.8J	1.0J						
	MW-E Deep	18-May-16		0.4J					0.8J	11					4.2	1.0J	0.5J		0.5J							0.5J	0.8J						
	MW-F	24-Apr-07																															
	MW-F	30-Oct-07																															
	MW-F	22-Apr-08																				0.40J				0.34J							
	MW-F	19-Nov-08																															
	MW-F	7-Apr-09	11J																														
	MW-F	15-Oct-09																															
	MW-F	11-May-10																															
	MW-F	3-Nov-10							0.3J																								
	MW-F	3-May-11																															
13-02	MW-F	8-Nov-11																															
	MW-F	8-May-12																															
	MW-F	28-Nov-12																				0.6J											
	MW-F	9-May-13																															
	MW-F	5-Nov-13																															
	MW-F	7-May-14																															
	MW-F	3-Nov-14																															
	MW-F	5-May-15	3.1J																														
	MW-F	27-Oct-15								0.7J																							
	MW-F	17-May-16																															

Table 5b
Detected Groundwater Constituents - Volatile Organic Compounds
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Acetone	Benzene	2-Butanone	2-Hexanone	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Dichlorodifluoromethane	1,2-Dichlorobenzene	1,4-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloropropane	cis-1,2-Dichloroethene	Ethylbenzene	Methylene Chloride	4-Methyl-2-Pentanone	trans-1,2-Dichloroethene	Tetrachloroethene	Toluene	Total Xylenes	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	bis(2-Ethylhexyl)Phthalate
North Carolina 2L or Groundwater Protection Standard			6,000	1	4,000	40*	700	0.3	50	3,000	70	3	1,000	20	6	6	0.4	7	0.6	70	600	5	560*	100	0.7	600	500	200	0.6*	3	2,000	0.03	3
Solid Waste Section Limit			100	1	100	50	100	1	3	10	5	1	5	5	1	5	1	5	1	5	1	1	100	5	1	1	5	1	1	1	1	1	15
	MW-G	14-Feb-95																															
	MW-G	9-Jun-95																															59
	MW-G	24-Oct-95																															
	MW-G	13-Nov-95																															
	MW-G	25-Jan-96																															
	MW-G	2-May-97																															
	MW-G	7-Nov-97																															
	MW-G (dup)	7-Nov-97																															
	MW-G	20-Apr-98																															
	MW-G	9-Nov-98																															
	MW-G	1-Apr-99																															
	MW-G	16-Nov-99																															
	MW-G	24-Apr-00																															
	MW-G	26-Sep-00																															
	MW-G	9-May-01																															
	MW-G	30-Oct-01																															
	MW-G	23-Apr-02																															
	MW-G	15-Oct-02																															
	MW-G	24-Apr-03																															
	MW-G	23-Oct-03																															
	MW-G	21-Apr-04																															
	MW-G	20-Oct-04																															
	MW-G	25-Apr-05	160																														
13-02	MW-G	25-Oct-05	300																														
	MW-G	19-Apr-06	580																														
	MW-G	31-Oct-06	480																														
	MW-G	24-Apr-07	94.4J	2			0.44J		3																	0.49J							
	MW-G	30-Oct-07		2					1.87J					0.93J	5	0.57J										2							
	MW-G (dup)	30-Oct-07		2					2.43J	1.2J				0.87J	5	0.63J			0.48J							2							
	MW-G	22-Apr-08	670	1.65	3.0J		0.42J		1.57J													0.52J				0.30J							
	MW-G	19-Nov-08		0.9J					2.0J																								
	MW-G	7-Apr-09	78J	1.5					1.9JB																	1.6							
	MW-G	15-Oct-09	7.4J	0.6J											2.1																		
	MW-G	11-May-10		0.3J																													
	MW-G	3-Nov-10		0.8J					1.9J	0.7J				0.5J	2.6	0.2J																	
	MW-G	3-May-11		0.6J					1.6J																								
	MW-G	8-Nov-11		1.5					2.1J																								
	MW-G	8-May-12		0.6J					1.1J						0.3J																		
	MW-G	28-Nov-12							1.6J						1.1							0.7J											
	MW-G	9-May-13	2.8J	0.5J					1.6J																								
	MW-G	5-Nov-13	3.1J						2.3J	0.9J				0.4J	1.5	0.4J																	
	MW-G	7-May-14		0.2J					2.4J	0.8J				0.4J	1.4	0.5J																	
	MW-G	3-Nov-14		0.3J					2.6J	1.0J				0.5J	2.0	0.6J				0.4J													
	MW-G	5-May-15		0.2J					2.4J					0.4J	1.9	0.5J																	
	MW-G	27-Oct-15		1.0					5.5					0.6J	2.9																		
	MW-G	19-May-16		0.2J					2.2J	0.7J					1.4	0.6J																	
	MW-G (dup)	19-May-16		0.2J					2.1J						1.3	0.5J																	
	MW-H	19-Apr-06																															
	MW-H	30-Oct-06																															
	MW-H	24-Apr-07																															
	MW-H	30-Oct-07																															
	MW-H	21-Apr-08																				0.43J				0.23J							
	MW-H	19-Nov-08																															
	MW-H	7-Apr-09																				0.50J											
	MW-H	15-Oct-09																															9J
	MW-H	11-May-10																															
	MW-H	2-Nov-10																															
13-02	MW-H	4-May-11																															
	MW-H	8-Nov-11																															
	MW-H	8-May-12																															
	MW-H	28-Nov-12																				0.7J											
	MW-H	8-May-13																															
	MW-H	7-Nov-13																															
	MW-H	7-May-14																															
	MW-H	5-Nov-14																															
	MW-H	5-May-15																															
	MW-H	28-Oct-15																															
	MW-H	18-May-16																															2.7J
	MW-H Deep	25-Oct-05																															
	MW-H Deep	19-Apr-06																															
	MW-H Deep	30-Oct-06																															
	MW-H Deep	24-Apr-07																															
	MW-H Deep	30-Oct-07																															
	MW-H Deep	21-Apr-08																				0.43J				0.23J							
	MW-H Deep	19-Nov-08																															
	MW-H Deep	7-Apr-09																															
	MW-H Deep	15-Oct-09	3.1J																														
	MW-H Deep	11-May-10																															
	MW-H Deep	2-Nov-10																															
	MW-H Deep	4-May-11																															
13-02	MW-H Deep	8-Nov-11																															
	MW-H Deep	8-May-12																															
	MW-H Deep	28-Nov-12																				0.4J											
	MW-H Deep	8-May-13																															
	MW-H Deep (dup)	8-May-13																															
	MW-H Deep	7-Nov-13																															
	MW-H Deep	7-May-14																															
	MW-H Deep	5-Nov-14																															
	MW-H Deep (dup)	5-Nov-14																															
	MW-H Deep	5-May-15																															
	MW-H Deep (dup)	5-May-15																															
	MW-H Deep	28-Oct-15																															
	MW-H Deep	18-May-16																															

Table 5b
Detected Groundwater Constituents - Volatile Organic Compounds
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Acetone	Benzene	2-Butanone	2-Hexanone	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Dichlorodifluoromethane	1,2-Dichlorobenzene	1,4-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloropropane	cis-1,2-Dichloroethene	Ethylbenzene	Methylene Chloride	4-Methyl-2-Pentanone	trans-1,2-Dichloroethene	Tetrachloroethene	Toluene	Total Xylenes	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	bis(2-Ethylhexyl)Phthalate
North Carolina 2L or Groundwater Protection Standard			6,000	1	4,000	40*	700	0.3	50	3,000	70	3	1,000	20	6	6	0.4	7	0.6	70	600	5	560*	100	0.7	600	500	200	0.6*	3	2,000	0.03	3
Solid Waste Section Limit			100	1	100	50	100	1	3	10	5	1	5	5	1	5	1	5	1	5	1	1	100	5	1	1	5	1	1	1	1	1	15
13-02	MW-I	21-Apr-04																															
	MW-I	20-Oct-04																															
	MW-I	25-Apr-05																															
	MW-I	25-Oct-05																															
	MW-I	19-Apr-06																															
	MW-I	31-Oct-06																															
	MW-I	24-Apr-07														2.33J		0.23J				0.39J			3					1	0.66J		
	MW-I (dup)	24-Apr-07														1.95J									2					0.9J	0.49J		
	MW-I	30-Oct-07														0.77J									0.81J					0.32J			
	MW-I	22-Apr-08														2.67J		0.26J				0.69J			3	0.24J				1	0.69J		
	MW-I	20-Nov-08														1.3J									1.6					0.6J			
	MW-I	7-Apr-09														1.8J									2.0					0.9J	0.5J		
	MW-I (dup)	7-Apr-09														2.2J									1.6					0.7J			
	MW-I	15-Oct-09														1.6J									1.9	0.3J				0.7J	0.4J		
	MW-I	11-May-10														3J		0.3J		0.4J					2.5					0.9J	0.6J		
	MW-I	4-Nov-10													0.4J	0.6J									0.3J								
	MW-I	4-May-11														4J				0.8J					2.9					1.3	0.7J		
	MW-I	8-Nov-11	10J													3.5J				0.8J					2.5					1	0.6J		
	MW-I	8-May-12														3.3J		0.2J		0.8J		0.4J			2.8					1.1	0.7J		
	MW-I (dup)	8-May-12														3.3J		0.3J		0.9J		0.4J			2.6					1.1	0.7J		
	MW-I	27-Nov-12														4.0J		0.3J		0.9J		1.2			2.4					1.1			
	MW-I	9-May-13														3.6J				1.3J		0.4J			2.8					1.4	0.6J		
	MW-I	7-Nov-13														3.9J				1.3J		0.4J			2.8					1.4	0.6J		
	MW-I	6-May-14														4.7J		0.2J		1.4J					2.9					1.4	0.6J		
	MW-I	4-Nov-14														4.9J		0.4J		1.7J					3.4					1.7	0.6J		
	MW-I	5-May-15														4.4J				1.4J		0.4J			3.1					1.5	0.6J		
	MW-I	28-Oct-15														4.6J				1.9J					3.2					1.5	0.5J		
	MW-I	18-May-16														3.9J				1.8J					2.9					1.5	0.5J		2.9J
13-02	MW-J	18-Apr-06																															
	MW-J	30-Oct-06																															
	MW-J	23-Apr-07																															
	MW-J	30-Oct-07																															
	MW-J	21-Apr-08																				0.48J				0.29J							
	MW-J	19-Nov-08																															
	MW-J	7-Apr-09																															
	MW-J	16-Oct-09																															
	MW-J	11-May-10																															
	MW-J	2-Nov-10																															
	MW-J	3-May-11																															
	MW-J	8-Nov-11																															
	MW-J	8-May-12																															
	MW-J	28-Nov-12																				0.8J											
	MW-J	7-May-13																															
	MW-J	5-Nov-13																															
	MW-J	6-May-14																															
	MW-J	4-Nov-14																															
	MW-J	6-May-15																															
	MW-J	27-Oct-15																															
	MW-J	17-May-16																															
13-02	MW-K	23-Apr-03																															
	MW-K	23-Oct-03																															
	MW-K	21-Apr-04																															
	MW-K	20-Oct-04																															
	MW-K	25-Apr-05																															
	MW-K	25-Oct-05																															
	MW-K	18-Apr-06																															
	MW-K	30-Oct-06																															
	MW-K	23-Apr-07																															
	MW-K	30-Oct-07																															
	MW-K	21-Apr-08														0.37J						0.44J				0.21J							
	MW-K	19-Nov-08						0.4J	0.9J																								
	MW-K	7-Apr-09																															
	MW-K	14-Oct-09																															
	MW-K	11-May-10														0.3J																	
	MW-K	3-Nov-10														0.7J																	
	MW-K	3-May-11														0.6J																	
	MW-K	8-Nov-11					5.1J									1J																	
	MW-K	8-May-12														0.4J																	
	MW-K	27-Nov-12														1.6J				0.3J		0.7J			0.3J					0.3J			
	MW-K	7-May-13														1.3J														0.4J			
	MW-K	5-Nov-13																															
	MW-K	6-May-14														0.5J																	
	MW-K	4-Nov-14														1.1J				0.5J													
	MW-K	5-May-15														0.6J																	
	MW-K	28-Oct-15														1.4J				0.8J										0.4J			
	MW-K	17-May-16																															
13-02	MW-L	23-Apr-03																															
	MW-L	11-Jun-03																															
	MW-L	21-Apr-04																															
	MW-L	25-Apr-05																															
	MW-L	19-Apr-06																															
	MW-L	24-Apr-07																															
	MW-L	21-Apr-08																								0.41J							
	MW-L	9-Apr-09																															
	MW-L	10-May-10																0.9J							1.1					0.4J	0.2J		
	MW-L	2-Nov-10																															
	MW-L	4-May-11																															
	MW-L	9-Nov-11																															
	MW-L	9-May-12																															
	MW-L	28-Nov-12														11		1.0J		1.1J		1.2			2.5					2.4			
	MW-L	9-May-13																															
	MW-L	7-Nov-13																															
	MW-L	8-May-14																															
	MW-L	5-Nov-14																															
	MW-L	6-May-15																															
	MW-L	28-Oct-15																															
	MW-L	19-May-16																															

Table 5b
Detected Groundwater Constituents - Volatile Organic Compounds
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sample Date	Acetone	Benzene	2-Butanone	2-Hexanone	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Dichlorodifluoromethane	1,2-Dichlorobenzene	1,4-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloropropane	cis-1,2-Dichloroethene	Ethylbenzene	Methylene Chloride	4-Methyl-2-Pentanone	trans-1,2-Dichloroethene	Tetrachloroethene	Toluene	Total Xylenes	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	bis(2-Ethylhexyl)Phthalate
North Carolina 2L or Groundwater Protection Standard			6,000	1	4,000	40*	700	0.3	50	3,000	70	3	1,000	20	6	6	0.4	7	0.6	70	600	5	560*	100	0.7	600	500	200	0.6*	3	2,000	0.03	3
Solid Waste Section Limit			100	1	100	50	100	1	3	10	5	1	5	5	1	5	1	5	1	5	1	1	100	5	1	1	5	1	1	1	1	1	15
13-02	MW-L Deep	11-Jun-03																															
	MW-L Deep	21-Apr-04																															
	MW-L Deep	25-Apr-05																															
	MW-L Deep	19-Apr-06																															
	MW-L Deep	24-Apr-07					0.33J																		0.58J								
	MW-L Deep	21-Apr-08					0.33J							0.38J		0.56J									**2**	0.55J				0.45J			
	MW-L Deep	7-Apr-09														1.0J									**1.4**					0.4J			
	MW-L Deep	11-May-10														2.1J		0.3J							**4**					1	0.4J		
	MW-L Deep	4-May-11														**9.4**		1.4J		1.2J		0.7J			**13**					**3.7**	1.6		
	MW-L Deep	8-May-12														5.8		0.4J		0.6J		0.4J			**1.4**					1.2	0.6J		
	MW-L Deep	9-May-13														**11**		1.2J		1.8J		0.9J			**16**					**5.1**	1.5		
	MW-L Deep	8-May-14								0.4J						**6.8**		0.5J		0.8J					**2.2**					1.7	0.4J		
	MW-L Deep	6-May-15														5.6		0.5J		0.6J		0.4J			**3.5**					1.8	0.6J		
	MW-L Deep	29-Oct-15														4.6J				0.6J					**2.2**					1.5	0.5J		
	MW-L Deep	19-May-16														3.2J									**2.0**					0.9J			
13-02	MW-M	11-Jun-03																															
	MW-M	21-Apr-04																															
	MW-M	26-Apr-05																															
	MW-M	19-Apr-06																															
	MW-M	23-Apr-07																							0.31J								
	MW-M	21-Apr-08												0.21J		0.21J									0.31J	0.39J							
	MW-M	7-Apr-09																															
	MW-M	11-May-10																															
	MW-M	4-May-11														0.4J																	
	MW-M	8-May-12														0.9J									0.3J								
	MW-M	9-May-13														1.1J									0.5J								
	MW-M	8-May-14														1.1J																	
	MW-M	5-May-15														1.0J									0.4J								
	MW-M	28-Oct-15														0.9J																	
	MW-M	17-May-16														0.8J																	
13-02	MW-X	10-Nov-98																															
	MW-X	19-Nov-99																															
	MW-X	23-Oct-03																															
	MW-X	21-Apr-04																															
	MW-X	20-Oct-04																															
	MW-X	26-Apr-05																															
	MW-X	25-Oct-05																															
	MW-X	18-Apr-06																															
	MW-X	30-Oct-06																															
	MW-X	23-Apr-07																															
	MW-X	30-Oct-07																															
	MW-X	21-Apr-08																								0.39J							
	MW-X	19-Nov-08																															
	MW-X	7-Apr-09																															
	MW-X	15-Oct-09																															
	MW-X	11-May-10																															
	MW-X	3-Nov-10																															
	MW-X	3-May-11																															
	MW-X	8-Nov-11																															
	MW-X	8-May-12																															
	MW-X	28-Nov-12																				0.6J											
	MW-X (dup)	28-Nov-12																				0.6J											
	MW-X	7-May-13																															
	MW-X	5-Nov-13																															
	MW-X	6-May-14																															
	MW-X	4-Nov-14																															
	MW-X	6-May-15																															
	MW-X	28-Oct-15																															
	MW-X	17-May-16																															

Notes:
1. All units are in micrograms per liter (parts per billion).
2. * - Groundwater Protection Standard
3. The sampling event on 24-Oct-95 did not include metals analysis (detected Appendix II constituents only).
4. MW-G was not sampled during the December 1996 event.
5. Assessment Wells CD-4, CD-5, and CD-6 were installed in September 2006.
6. Assessment Wells AMW-1s, -1d, -2s, and -2d were installed in October 2009.
7. Assessment Wells CD-4 and CD-5 were abandoned in July 2010.
8. Monitoring wells MW-3 Deep, -L Deep, -and -M are sampled annually during the spring event.
9. J - Indicates the analytical result is an estimated concentration between the method detection limit and the Solid Waste Section Reporting Limit.
10. B - Indicates constituent was detected in the batch blank above the method detection limit.
11. dup - Duplicate
12. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
13. MW-9 was removed from the monitoring program in November 2012.
14. MW-E Rep was not sampled during the November 2012 sampling event due to laboratory oversight.

- Concentration exceeds the 15A NCAC 02L .0202 or Groundwater Protection Standard
- Indicates the result is below the detection limit.

Table 5c
Detected Surface Water Constituents - Volatile Organic Compounds and Metals
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Surface Water Sample Location	Sample Date	Metals															Volatile Organic Compounds			
			Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Acetone	Styrene	Tetrachloroethene	Toluene
North Carolina 2B Human Health or Freshwater Aquatic Life Standard			0.64*	0.01*	200*	0.0065**	0.00015**	0.024**	0.004*	0.0027*	0.00054**	0.016**	0.005**	0.00006**	0.00047*	NS	0.036*	2,000	NS	3.3**	11
Solid Waste Section Limit			0.006	0.01	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.0055	0.025	0.01	100	1	1	1
	SW-1	19-Dec-94																			
	SW-1	14-Feb-95																			
	SW-1	13-Nov-95																			
	SW-1	6-Dec-96			0.064			0.002	**0.004**								0.032				
	SW-1	4-May-97																			
	SW-1	7-Nov-97																			
	SW-1	20-Apr-98						**0.091**													
	SW-1	9-Nov-98																			
	SW-1	31-Mar-99																			
	SW-1	17-Nov-99															**0.08**				
	SW-1	24-Apr-00																			
	SW-1	26-Sep-00																			
	SW-1	9-May-01											**0.02**								
	SW-1	29-Oct-01											**0.03**								
	SW-1	24-Apr-02															**0.07**				6
	SW-1	15-Oct-02																			
	SW-1	25-Apr-03															**0.09**				
	SW-1	23-Oct-03																			
13-02	SW-1	22-Apr-04																			
	SW-1	20-Oct-04						**0.12**													
	SW-1	26-Apr-05																			
	SW-1	25-Oct-05																			
	SW-1	20-Apr-06																			
	SW-1	31-Oct-06																			
	SW-1	24-Apr-07		0.0025J	0.061J		0.00001J		**0.004J**	0.0012J	0.00033J	0.0061J	**0.0052J**				0.0088J				0.11J
	SW-1	22-Apr-08		0.0016J	0.07J			0.00043J	0.0033J	0.0011J		0.0065J	0.0043J				0.0028J				0.39J
	SW-1	19-Nov-08		0.00304J	0.0799J		0.00001J		0.00217J	0.00132J	0.00021J	0.00754J	**0.0094J**				0.00377J				0.2BJ
	SW-1	7-Apr-09			0.0699J		0.00001J		0.00353J	0.0015J	0.00007J	0.0068J	0.00232J			0.00217JB	0.00205JB				
	SW-1	4-Nov-10			0.0587J	0.00011J		0.00422J	0.00224J	**0.00332J**	0.00144J	0.00436J				0.00172J	0.00678J				
	SW-1	5-May-11	0.0002J		0.0718J			0.0012J	0.00381J	0.00115J		0.00623J	0.00248J				0.00369J				
	SW-1	9-Nov-11			0.094J				0.00077J	0.0026J	0.00023J	0.00532J	0.00174J								
	SW-1	10-May-13			0.0821J		0.00006J		0.00379J	0.00201J	0.00016J	0.0063J	0.00205J				0.00493J				
	SW-1	5-Nov-13		0.00106J	0.139				**0.00952J**	0.00175J	0.00009J	0.00851J	0.00285J		0.00012J	0.00755JB	0.00938JB	2J	0.3J		
	SW-1	5-May-14		0.00180J	0.146	0.00037J		0.00463JB	0.00117	**0.00634J**	**0.00358JB**	0.00979J	0.00283J			0.0144J	0.0343				
	SW-1	5-May-15																			
	SW-1	29-Oct-15		0.00089J	0.0692J				0.00101J	0.00172J		0.00509J	0.00439J	**0.00293CN,J**			0.00237J				
	SW-1	19-May-16		0.00352J	0.157	0.00144		**0.0372**	**0.0156**	**0.0251**	**0.0148**	**0.0172J**	**0.00533J**		0.00008J	0.0652	**0.0640**				

Table 5c
Detected Surface Water Constituents - Volatile Organic Compounds and Metals
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Surface Water Sample Location	Sample Date	Metals															Volatile Organic Compounds			
			Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Acetone	Styrene	Tetrachloroethene	Toluene
North Carolina 2B Human Health or Freshwater Aquatic Life Standard			0.64*	0.01*	200*	0.0065**	0.00015**	0.024**	0.004*	0.0027*	0.00054**	0.016**	0.005**	0.00006**	0.00047*	NS	0.036*	2,000	NS	3.3**	11
Solid Waste Section Limit			0.006	0.01	0.1	0.001	0.001	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.0055	0.025	0.01	100	1	1	1
	SW-2	19-Dec-94																			
	SW-2	14-Feb-95																			
	SW-2	13-Nov-95																			
	SW-2	6-Dec-96			60				3							0.006	0.03				
	SW-2	5-May-97						0.014									0.055			6	
	SW-2	6-Nov-97																			
	SW-2	21-Apr-98						0.0016									0.02				
	SW-2	10-Nov-98					0.0024	0.01													
	SW-2	1-Apr-99																			
	SW-2	19-Nov-99															0.03				
	SW-2	26-Apr-00																			
	SW-2	27-Sep-00																			
	SW-2	9-May-01																			
	SW-2	29-Oct-01											0.02								
	SW-2	24-Apr-02															0.06				
	SW-2	15-Oct-02						0.01			0.01					50					
	SW-2	24-Apr-03															0.07				
	SW-2	23-Oct-03																			
13-02	SW-2	22-Apr-04																			
	SW-2	20-Oct-04						0.02													
	SW-2	26-Apr-05																			
	SW-2	25-Oct-05																			
	SW-2	19-Apr-06																			
	SW-2	1-Nov-06																			
	SW-2	24-Apr-07		0.0012J	0.066J		0.00002J	0.00068J	0.0018J	0.0021J	0.0023J	0.003J	0.003J			0.0037J	0.0027J				
	SW-2	30-Oct-07		0.0019J	0.061J	0.00056J	0.00001J	0.0011J	0.0014J	0.0047J	0.0052J	0.0031J	0.0034J		0.00015J	0.015J	0.012				
	SW-2	22-Apr-08	0.00006J	0.0022J	0.3	0.002	0.00012J	0.017	0.022	0.026	0.031	0.016J	0.004J	0.00002J	0.00024J	0.049	0.067				0.41J
	SW-2	20-Nov-08		0.00419J	0.178	0.00157	0.00007J	0.0121	0.0104	0.02110	0.0224	0.0126J	0.00773J	0.00002J	0.00012J	0.0492	1.03				
	SW-2	9-Apr-09		0.00135J	0.631	0.00017J	0.00019J		0.00831J	0.00391J	0.00224J	0.00426J	0.00155J			0.0147JB	0.022				
	SW-2	5-May-11	0.00019J		0.091J	0.00018J		0.00251J	0.00425J	0.0034J	0.0013JB	0.00626J	0.00388J			0.00384J	0.00639J				
	SW-2	9-May-12			0.0653J			0.00106J	0.00088J	0.00168J	0.00085J	0.00333J	0.00133J			0.00301J	0.00267J,B				
	SW-2	10-May-13		0.00097J	0.0789J			0.00063J	0.00253J	0.0022J	0.00084J	0.00636J	0.00302J				0.00605J				
	SW-2	6-May-14		0.00145J	0.137	0.00005J			0.00329J	0.00365J	0.00152JB	0.00699J	0.00368J			0.00711J	0.0245				
	SW-2	3-Nov-14		0.00188J	0.067J				0.0127	0.00057J	0.00005J	0.00142J	0.00108J				0.00515JB	6.0J			2
	SW-2	5-May-15			0.00732JB				0.00316J	0.00121J		0.00634J	0.00340J				0.00136J				
	SW-2	29-Oct-15		0.00168J	0.0811J	0.00010J			0.00069J	0.00364J	0.00095J	0.00460J	0.00650J	0.00328CN,J		0.00193J	0.00548J				
	SW-2	19-May-16		0.00235J	0.0890J	0.00094J		0.0122	0.00721J	0.0119	0.00873J	0.00833J	0.00340J			0.0327	0.0350				

Notes:
1. All units for metals are in milligrams per liter (parts per million). All untis for volatile organic compounds are in micrograms per liter (parts per billion).
2. Standards obtained from 15A NCAC 02B .0211 (North Carolina 2B) Fresh Surface Water Quality Standards for Class C Waters - June 2016.
3. * - Human Health Standard
4. ** - Freshwater Aquatic Life Standard
5. NS - No Standard
6. J - Indicates the analytical result is an estimated concentration between the method detection limit and the Solid Waste Section Reporting Limit.
7. B - Indicates constituent was detected in the batch blank above the method detection limit.
8. CN - Detected silver concentrations were determined to be the result of contamination from the preservative acid used.
9. SW-1 was dry during the Fall 2007, Fall 2009, Spring 2010, Fall 2011, Spring 2012, Fall 2012, Fall 2014, and Spring 2015 sampling events.
10. SW-2 was dry during the Fall 2009, Spring 2010, Fall 2010, Fall 2011, Fall 2012, and Fall 2013 sampling events.

- Concentration exceeds North Carolina 2B Human Health or Freshwater Aquatic Life Standard for Class C Waters.
- Indicates the result is below the detection limit.

Table 5d
Geochemical Constituents in Groundwater
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sampling Date	Dissolved Oxygen	Oxidation-Reduction Potential	Ethane	Ethene	Methane	Acetic Acid	Butyric Acid	Formic Acid	Hexanoic Acid	i-Hexanoic Acid	i-Pentanoic Acid	Lactic Acid and HIBA	Pentanoic Acid	Propionic Acid	Pyruvuc Acid	Dissolved Hydrogen	Carbon Dioxide	Alkalinity	Biochemical Oxygen Demand (BOD)	Chemical Oxygen Demand (COD)	Chloride	Ferrous Iron	Nitrate	Sulfate	Sulfide	Total Organic Carbon (TOC)
Units			mg/l	mVolts	µg/l	µg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	nM	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
13-02	MW-9	11/28/2007	2.92	294	<0.010	0.004J	0.056	0.08	<0.07	<0.1	<0.10	<0.10	<0.07	0.15	<0.07	<0.07	<0.07	1.2	4.9J	44	<2	49	1	0	0.1	<1	<1	1
	MW-9	4/9/2009	3.09	122	<0.10	0.003J	0.047	0.03J	<0.07	<0.1	0.08J	<0.10	<0.07	0.06J	<0.07	<0.07	<0.07	0.49J	11	39	<2	36	1.5	0	0.18	<1	<1	0.14
	MW-9	10/15/2009	2.38	102	0.005J	0.023	0.7	0.055J	<0.07	<0.1	<0.10	<0.10	<0.07	0.15	<0.07	0.034J	<0.07	16	53	42	<0.5	38	1.3	0	0.08	0.22J	<0.6	0.6J
	MW-9	5/6/2010	4.10	5	<0.020	<0.020	0.033	0.008J	<0.05	<0.1	<0.05	<0.05	<0.15	<0.10	<0.07	0.030J	<0.15	1.7	<10	39	<2	<10	1.3	0	0.17	0.44J	<1	0.44J
	MW-9	11/2/2010	3.86	132	<0.010	0.004J	0.023	0.28	<0.05	<0.1	<0.05	<0.05	<0.15	<0.10	<0.07	<0.05	<0.15	1.9	22	45.7	<2	9J	1.5	0.13J	0.076	0.40J	<1	0.18J
	MW-9	5/3/2011	3.45	139	<0.010	0.004J	1.7	0.088	<0.05	<0.1	<0.05	<0.05	<0.15	0.14	<0.07	0.1	<0.15	0.65	37	50	<0.5	<6	1.3	0.16J	0.091	0.41J	<0.6	3.1
	MW-9	11/9/2011	4.70	212	0.062	0.078	3.5	<0.07	<0.05	<0.1	<0.05	<0.05	<0.15	0.033J	<0.07	<0.05	<0.15	1.4	53	35	<2	11	1.3	0.9JH	0.094	0.26J	<1	0.4JB
	MW-9	5/9/2012	1.82	127	0.11	0.012J	6.7	0.038J	<0.05	0.051J	<0.05	<0.05	<0.15	0.086J	<0.07	<0.05	<0.15	2.8	41	36	<0.002	<10	1.6	<0.2H	0.180	<5	<0.2	0.484J
13-02	CD-1s	5/11/2010																		50			3.4			1		
	CD-1s	11/3/2010																		48.3			3.8			1.2J		
	CD-1s	5/3/2011																		47			3.6			1.2J		
	CD-1s	11/8/2011																		40			4			1.1J		
	CD-1s	5/7/2012																		46			3.9					
	CD-1s	11/27/2012	15.56	139	<0.025	0.019J	1.1	<0.07	0.029J	0.019J	<0.10	<0.05	<0.15	<0.10	<0.07	<0.05	<0.15	0.94	54	39	<2	<10	4.1	0	0.06	<5	<0.2	<1
	CD-1s	5/7/2013	1.96	206	0.21	0.14	3.8	<0.07	<0.05	0.062J	<0.10	<0.05	<0.15	0.055J	<0.07	<0.05	<0.15	0.82	30	42	<2	0.64	4	0.22	0.066	<5	<0.2	<1
	CD-1s	11/5/2013	1.74	348	0.0033J	0.0037J	0.33	0.034J	0.056		<0.5	<0.1	<0.15	0.20	<0.07	<0.05	<0.15	0.74	15	30	<2	<10	3.8	2.42	0.082	<5	<0.2	<1
	CD-1s	5/6/2014	0.02	353	0.0032J	0.010J	3.4	0.037J	<0.05		<0.5	<0.1	<0.15	<0.10	<0.07	<0.05	<0.15	0.94	54	42	<2	<10	3.8	0	0.077	<5	<0.2	1.07
	CD-1s	11/4/2014	6.06	135	0.0061J	0.011J	1.8	0.041J	<0.05		<0.5	<0.2	<0.15	0.037J	<0.07	0.052	<0.15	1.7	62	41	<2	<10	3.9	0	0.065	<5	<0.2	<1
	CD-1s	5/5/2015	3.99	281	0.0034J	0.016J	0.060J	0.081	<0.05	0.10	<0.5	<0.2	<0.15	0.019J	<0.07	<0.05	0.034J	26	42	38	<2	<10	3.8	0	0.120	<5	<0.2	3.48
	CD-1s	10/27/2015	3.84	519	<0.10	0.012J	0.12J	0.036J	0.0094J	0.033J	<0.20	<0.20	<0.10	<0.20	<0.10	0.0024J	<0.10	40	61	43	<2	30.6	3.8	0	0.130	<5	<0.2	<1
	CD-1s	5/17/2016	3.45	245	<0.10	<0.10	0.048J	0.020J	<0.10	0.045J	<0.20	<0.20	<0.10	0.011J	<0.10	<0.10	<0.10	22	46	43	<2	<10	3.7	0	0.079	1	<0.2	<1
13-02	CD-1d	5/11/2010																		40			2.4			2.4		
	CD-1d	11/2/2010																		48.3			2.8			2.8J		
	CD-1d	5/3/2011																		57			2.6			3J		
	CD-1d	11/8/2011																		30			2.9			3J		
	CD-1d	5/7/2012																		50			2.8			<5		
	CD-1d	11/27/2012	9.53	140																46			3	0	0.07	<5		
	CD-1d	5/7/2013	1.11	242	0.015J	0.015J	0.31	0.021J	<0.05	0.052J	<0.10	<0.05	<0.15	0.06J	<0.07	<0.05	<0.15	0.61	40	52	4	6.05	3	0.56	0.069	<5	<0.2	1.42
	CD-1d	11/5/2013	1.71	320.1																42			3			<5		
	CD-1d	5/6/2014	4.56	293																46			2.9		0.077	<5		
	CD-1d	11/4/2014	4.68	108.7																43			3.1	0		<5		
	CD-1d	5/5/2015	4.84	186																44			2.9	0	0.086	<5		
	CD-1d	10/27/2015	4.10	507																46			2.9	0		<5		
	CD-1d	5/17/2016	4.50	210																96			18	0	<0.05	14		
13-02	CD-4	11/28/2007			0.003J	0.005J	9.2	<0.07	<0.07	<0.1	<0.10	<0.10	<0.07	0.27	<0.07	<0.07	<0.07	2.2	30	47	<5	47	2.6	0	0.03	2		<1
	CD-4	11/20/2008	2.35	171	<0.010	<0.010	3	0.1	<0.07	<0.1	0.25	<0.10	<0.07	0.18	<0.07	<0.07	<0.07	1.1	8.4	53	<4	98	3	1.8	0.07	1	<1	0.6J
	CD-4	4/9/2009	1.74	127	<0.010	<0.010	0.69	0.03J	<0.07	<0.1	0.06J	<0.10	<0.07	0.06J	<0.07	<0.07	<0.07	0.52J	21	49	<2	50	2.8	0.2	0.05	1.6	<1	0.25J
	CD-4	10/14/2009	1.64	130	0.067	0.02	540	0.03J	<0.07	<0.1	<0.10	<0.10	<0.07	0.094J	<0.07	<0.07	<0.07	15	120	52	<0.5	85	2.6	0.2	0.02	1.8	<0.6	0.24J
	CD-4	5/6/2010	3.27	-20	0.02	0.011	410	0.049J	<0.05	<0.1	<0.05	<0.05	<0.15	<0.10	<0.07	0.035J	<0.15	1.7	110	52	<2	<10	2.5	0	0.05	1.8	<1	0.26J
13-02	CD-5	11/28/2007			<0.01	0.011	1.6	0.15	<0.07	<0.1	<0.10	<0.10	<0.07	0.24	<0.07	<0.07	<0.07	1.6	19	224	6	49	8.1	0	0.02	4		8
	CD-5	11/20/2008	1.74	165	0.002J	0.02	17.0	0.1	<0.07	<0.1	0.29	<0.10	<0.07	0.18	<0.07	<0.07	<0.07	1.2	16	247	17	84	7	0.4	0.01	4	<1	3
	CD-5	4/9/2009	1.03	215	0.004J	0.007J	11.0	4.3	<0.07	<0.1	0.12	<0.10	<0.07	<0.10	<0.07	1.6	<0.07	0.49J	5.4	278	7	71	8.6	1.2	<0.01	2	<1	6.41
	CD-5	10/14/2009	1.18	86	0.18	0.086	7,200	0.92	<0.07	<0.1	<0.10	<0.10	<0.07	0.095J	<0.07	<0.07	<0.07	19	310	344	12	53	9.5	1.4	<0.006	5.4	<0.6	5.49
	CD-5	5/6/2010	6.00	-155	0.25	1.1	4,900	0.049J	<0.05	<0.1	<0.05	<0.05	<0.15	<0.10	<0.07	0.049J	<0.15	2.8	270	313	5	<10	11	3.5	<0.01	5.2	<1	1.3
13-02	CD-6	11/28/2007			<0.01	<0.01	0.26	0.06J	<0.07	<0.1	<0.10	<0.10	<0.07	0.09J	<0.07	<0.07	<0.07	2.1	0.85J	52	<5	83	2.5	0	0.34	2	<1	<1

Table 5d
Geochemical Constituents in Groundwater
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sampling Date	Dissolved Oxygen	Oxidation-Reduction Potential	Ethane	Ethene	Methane	Acetic Acid	Butyric Acid	Formic Acid	Hexanoic Acid	i-Hexanoic Acid	i-Pentanoic Acid	Lactic Acid and HIBA	Pentanoic Acid	Propionic Acid	Pyruvuc Acid	Dissolved Hydrogen	Carbon Dioxide	Alkalinity	Biochemical Oxygen Demand (BOD)	Chemical Oxygen Demand (COD)	Chloride	Ferrous Iron	Nitrate	Sulfate	Sulfide	Total Organic Carbon (TOC)
Units			mg/l	mVolts	µg/l	µg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	nM	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
13-02	AMW-1s	10/14/2009	1.60	70	0.005J	<0.01	1,200	0.025J	<0.07	<0.1	<0.10	<0.10	<0.07	0.12	<0.07	<0.07	<0.07	5.2	190	130	<0.5	72	3.5	0.6	<0.006	2.5	<0.6	0.81J
	AMW-1s	2/18/2010	0.71	574.2	<0.4	<0.4	1,280	<0.071	<0.160	<0.1	<0.320	<0.410	<0.130	<0.088	<0.180	<0.054	<0.020	1.2	507	130	<2	9.6J	4.8	0.11	12J	1.9	<0.031	0.510J
	AMW-1s	5/6/2010	2.90	52	0.008J	<0.01	1,400	<0.07	<0.05	<0.1	<0.05	<0.05	<0.15	<0.10	<0.07	0.029J	<0.15	1.9	260	116	2	<10	3.8	0	<0.01	0.330J	<1	0.5J
	AMW-1s	8/16/2010	1.46	533.1	<0.4	<0.4	632	<0.5	<0.5	<0.1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5		423	120	<2	20	4.7J	<0.05	<0.1	3.0J	<0.1	1.4
	AMW-1s	11/3/2010	1.30	237	0.006J	0.022	600	0.26	<0.05	<0.1	<0.05	<0.05	<0.15	<0.10	<0.07	<0.05	<0.15	7.3	170	114	3J	56	3.3	<0.2	<0.05	0.46J	<1	0.87J
	AMW-1s	5/3/2011	1.22	176	0.007J	0.004J	810	0.57J	<0.05	<0.1	<0.05	<0.05	<0.15	0.13	<0.07	0.63	<0.15	1	250	114	<0.5	<6	3.2	0.13J	<0.006	0.36J	<0.6	1J
	AMW-1s	11/8/2011	0.17	12	0.031	0.068	1,100	<0.07	<0.05	<0.1	<0.05	<0.05	<0.15	0.08J	<0.07	<0.05	<0.15	1.1	320	95	3	9J	3.1	<0.2	<0.05	0.26J	<1	0.7JB
	AMW-1s	5/7/2012	0.02	121	0.043	0.047	1,300	0.061J	<0.05	0.055J	<0.05	<0.05	<0.15	0.089J	<0.07	<0.05	<0.15	82	300	105	<0.002	<10	3.2	<0.2H	<0.004	<0.18	<0.2	0.524J
	AMW-1s	11/28/2012	3.81	44	0.064	0.031	1,000	<0.07	<0.05	0.036J	<0.10	<0.05	<0.15	<0.10	<0.07	<0.05	<0.15	1.1	280	92	<2	<10	3.1	0.3	<0.05	<5	<0.2	<1
	AMW-1s	5/8/2013	0.34	523	0.11	0.054	1,600	0.029J	<0.05	0.064J	<0.10	<0.05	<0.15	0.073J	<0.07	<0.05	<0.15	0.69	260	87	<2	14.4	3.5	0.11	<0.05	<5	<0.2	<1
	AMW-1s	11/6/2013	1.05	149	0.11	<0.025	1,400	0.041J	0.061		<0.5	<0.1	<0.15	0.15	<0.07	0.015J	<0.15	0.85	270	107	<2	<10	3.6	0.34	<0.05	<5	<0.2	<1
	AMW-1s	5/7/2014	0.02	400	0.095	<0.025	1,200	0.054J	<0.05		<0.5	<0.1	<0.15	0.026J	<0.07	0.036J	<0.15	0.86	280	105	<2	<10	3.4	0	<0.05	<5	<0.2	<1
	AMW-1s	11/5/2014	3.25	132.2	0.15	0.015J	1,000	0.055J	<0.05		<0.5	<0.2	<0.15	0.031J	<0.07	0.053	<0.15	1.7	280	120	<2	<10	3.7	0	<0.05	<5	<0.2	<1
	AMW-1s	5/7/2015	2.00	592	0.2	0.0073J	1,600	<0.07	<0.05	0.11	<0.5	<0.2	<0.15	0.031J	<0.07	<0.05	<0.15	12	310	96	<2	<10	3.5	0	<0.5	<5	<0.2	<1
	AMW-1s	10/29/2015	2.68	253	0.21	0.0064J	1,100	0.028J	0.0052J	0.036J	<0.20	<0.20	<0.10	0.0094J	<0.10	0.0022J	<0.10	8.2	300	10.5	<2	<10	3.7	0	<0.05	0.22J	<0.2	<1
	AMW-1s	5/18/2016	3.77	222	0.17	<0.10	1,000	0.015J	<0.10	0.030J	<0.20	<0.20	<0.10	0.0072J	0.012J	<0.10	<0.10	1.5	210	85	<2	<10	3.8	0	<0.05	<5	<0.2	1.44
13-02	AMW-1d	10/14/2009	2.01	179	0.18	0.27	1,000	0.055J	<0.07	<0.1	<0.10	<0.10	<0.07	0.27	<0.07	<0.07	<0.07	2,700	69	302	10	67	17	0.2	<0.006	63	<0.6	7.03
	AMW-1d	2/18/2010	0.74	-78.3	0.6J	1J	1,550	<0.071	<0.160	<0.1	<0.320	<0.410	<0.130	<0.088	<0.180	<0.054	<0.020	1.6	548	290	2.8	23	10	0.41	0.01	37	<0.031	6.9
	AMW-1d	5/6/2010	1.17	-92	0.18	1.1	1,200	0.084	0.058	<0.1	<0.05	<0.05	<0.15	<0.10	<0.07	0.032J	<0.15	2.3	130	387	3	10J	10	2.25	<0.01	39	<1	4.1
	AMW-1d	8/16/2010	0.52	-26.1	<0.4	<0.4	1,570	<0.5	<0.5	<0.1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5		500	320	<2	36	8.5	0.53	<0.1	31J	<0.1	7.9
	AMW-1d	11/3/2010	0.01	102	0.065	0.37	1,500	0.43	<0.05	<0.1	<0.05	<0.05	<0.15	0.26	<0.07	<0.05	<0.15	2.1	180	250	<2	22	7.3	<0.2	<0.05	34	<1	3.45
	AMW-1d	5/3/2011	0.01	89	0.059	0.71	1,100	0.11	<0.05	<0.1	<0.05	<0.05	<0.15	<0.1	<0.07	0.29	<0.15	0.89	170	295	1.8J	<6	7.3	0.14J	<0.006	31	3	1.3
	AMW-1d	11/8/2011	0.00	-112	0.18	1.4	2,900	0.23	<0.05	<0.1	<0.05	<0.05	<0.15	0.2	<0.07	<0.05	<0.15	0.89	280	320	4	19	6.8	1	<0.05	27	<1	4.6
	AMW-1d	5/7/2012	0.24	95	0.17	1.7	2,500	0.097	<0.05	0.058J	<0.05	<0.05	<0.15	0.11	<0.07	<0.05	<0.15	480	270	230	6	<10	6.6	1.91H	0.006J	15	<0.2	4.11
	AMW-1d	11/28/2012	7.00	169	0.15	1.8	2,000	1.9	<0.05	0.039J	<0.10	<0.05	<0.15	<0.10	<0.07	0.039J	<0.15	0.51J	240	265	4	30.2	6.4	1.8	<0.05	9.2	0.434	3.02
	AMW-1d	5/8/2013	0.46	-53	0.32	1.6	3,800	0.054J	<0.05	0.079J	<0.10	<0.05	<0.15	0.089J	<0.07	0.028J	<0.15	1	300	375	4	8.99	7.1	3.3	<0.05	12	<0.2	4.95
	AMW-1d	11/6/2013	1.40	-22.7	0.28	1.1	3,400	0.033J	0.066		<0.5	<0.1	<0.15	0.12	<0.07	<0.05	<0.15	0.96	290	315	<2	19.7	5.6	2.91	<0.05	6.4	<0.2	3.4
	AMW-1d	5/7/2014	2.05	-28	0.32	0.82	3,700	0.082	<0.05		<0.5	<0.1	<0.15	0.047J	<0.07	0.032J	<0.15	1.3	330	230	2	<10	5.6	5	<0.05	<5	<0.2	2.16
	AMW-1d	11/5/2014	1.36	-67.7	0.33	1.3	3,000	0.34	<0.05		<0.5	<0.2	<0.15	0.042J	<0.07	0.077	<0.15	2.0	320	375	2	44.9	5.4	4.0	<0.05	<5	0.241	2.15
	AMW-1d	5/7/2015	1.78	-52	0.5	2.2	3,400	0.15	<0.05	0.11	<0.5	<0.2	<0.15	0.014J	<0.07	<0.05	0.035J	7.3	320	230	2	35.2	5.4	2.0	<0.5	<5	<0.2	3.41
	AMW-1d	10/29/2015	2.55	-42	0.79	4.0	4,000	0.27	0.0061J	0.038J	<0.20	<0.20	<0.10	0.011J	<0.10	0.0050J	<0.10	8.2	330	255	9BOD-3	<10	5.5	2.5	<0.05	<5	<0.2	2.67
	AMW-1d	5/18/2016	1.51	-28	2.0	2.2	3,700	0.021J	<0.10	0.040J	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	1.8	300	225	<2	13.2	5.9	3.0	<0.05	<5	<0.2	2.93
13-02	AMW-2s	10/14/2009	1.60	103	0.003J	0.016	0.2	0.028J	<0.07	<0.1	<0.10	<0.10	<0.07	0.18	<0.07	<0.07	<0.07	23	77	58	<0.5	42	3.3	0.4	0.02	1.8	<0.6	0.94J
	AMW-2s	2/18/2010	6.50	165.1	<0.4	<0.4	<0.2	<0.071	<0.160	<0.1	<0.320	<0.410	<0.130	<0.088	<0.180	<0.054	<0.020	1.4	<0.78	53	<2	25	4.2	0.11	0.024	2.2	<0.031	2.3
	AMW-2s	5/6/2010	3.17	-71	0.002J	0.011	23.0	0.02J	<0.05	<0.1	<0.05	<0.05	<0.15	<0.10	<0.07	0.032J	<0.15	1.2	110	74	<2	<10	2.9	0	0.04	0.28J	<1	0.26J
	AMW-2s	8/16/2010	4.08	181.2	<0.4	<0.4	2.0	<0.5	<0.5	<0.1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5		163	68	<2	64	4.4J	0.2	<0.1	1.5J	<0.1	3.9
	AMW-2s	11/3/2010	3.15	131	0.002J	0.008J	0.086	0.32	<0.05	<0.1	<0.05	<0.05	<0.15	<0.10	<0.07	<0.05	<0.15	2.0	73	70.8	<2	38	3.1	<0.2	0.065	0.26J	<1	0.79J
	AMW-2s	5/3/2011	2.10	128	0.003J	0.014	0.240	0.098	<0.05	<0.1	<0.05	<0.05	<0.15	0.12	<0.07	0.063	<0.15	1.2	130	77	<0.5	20	3.2	<0.07	0.086	0.2J	<0.6	1.2
	AMW-2s	11/8/2011	2.47	-30	0.016J	0.076	4	<0.07	<0.05	<0.1	<0.05	<0.05	<0.15	0.092J	<0.07	<0.05	<0.15	0.68	170	70	1J	10	3.2	0.2JH	0.1	0.097J	<1	0.6JB
	AMW-2s	5/8/2012	0.42	195	0.014J	0.022J	0.34	0.042J	<0.05	0.066J	<0.05	<0.05	<0.15	0.53	<0.07	<0.05	<0.15	9.7	170	70	1.29J	<10	3.4	<0.2H	0.12	<5	<0.2	0.418J
	AMW-2s	11/29/2012	5.36	38	<0.025	0.026	0.86	<0.07	0.025J	0.023J	<0.10	<0.05	<0.15	<0.10	<0.07	<0.05	<0.15	0.41J	170	8	<2	<10	3.3	<0.2H	0.11	<5	<0.2	<1
	AMW-2s	5/9/2013	0.88	153	0.008J	0.022J	4.30	0.047J	<0.05	0.066J	0.068J	<0.05	<0.15	0.11	<0.07	<0.05	<0.15	0.87	160	46	4	13.5	3.5	0.43	0.13	<5	<0.2	1.52
	AMW-2s	11/6/2013	1.51	75.1	0.0045J	<0.025	0.58	0.020J	0.068		<0.5	<0.1	<0.15	0.10	<0.07	<0.05	<0.15	0.94	140	63	<2	15.8	3.5	0.55	0.16	<5	<0.2	12.3
	AMW-2s	5/7/2014	2.08	114	0.022J	0.0081J	0.31	0.062J	0.033J		<0.5	<0.1	<0.15	0.032J	<0.07	0.032J	<0.15	25	180	60.6	<2	<10	3.6	0	0.16	<5	<0.2	1.07
	AMW-2s	11/5/2014	3.48	120.5	0.0054J	0.014J	0.20	0.036J	<0.05		<0.5	<0.2	<0.15	<0.10	<0.07	0.048J	0.046J	1.4	180	95	<2	<10	3.6	0	0.17	<5	<0.2	<1
	AMW-2s	5/6/2015	3.50	562	0.0044J	0.020J	1.10	<0.07	<0.05	0.088J	<0.5	<0.2	<0.15	0.013J	<0.07	<0.05	<0.15	52.0	180	53	<2	<10	3.5	0	0.22	<5	<0.2	1.05
	AMW-2s	10/28/2015	4.19	187	0.0048J	0.056J	0.26J	0.026J	0.0050J	0.044J	<0.20	<0.20	<0.10	0.0087J	<0.10	0.0016J	<0.10	8.0	160	64	<2	<10	3.7	0	0.24	<5	<0.2	1.15
	AMW-2s	5/17/2016	3.22	51	<0.10	0.012J	4.6	0.017J	<0.10	0.038J	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	1.9	180	65	<2	<10	3.4	0	0.29	<5	<0.2	<1

Table 5d
Geochemical Constituents in Groundwater
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sampling Date	Dissolved Oxygen	Oxidation-Reduction Potential	Ethane	Ethene	Methane	Acetic Acid	Butyric Acid	Formic Acid	Hexanoic Acid	i-Hexanoic Acid	i-Pentanoic Acid	Lactic Acid and HIBA	Pentanoic Acid	Propionic Acid	Pyruvuc Acid	Dissolved Hydrogen	Carbon Dioxide	Alkalinity	Biochemical Oxygen Demand (BOD)	Chemical Oxygen Demand (COD)	Chloride	Ferrous Iron	Nitrate	Sulfate	Sulfide	Total Organic Carbon (TOC)
Units			mg/l	mVolts	µg/l	µg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	nM	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
13-02	AMW-2d	10/14/2009	1.04	43	0.006J	0.12	0.54	0.034J	<0.07	<0.1	<0.10	<0.10	<0.07	0.14	<0.07	<0.07	<0.07	410	41	109	<0.5	14	10	0.2	<0.006	22	<0.6	1.99
	AMW-2d	2/18/2010	1.70	-74.8	<0.4	<0.4	2.00	<0.071	<0.160	<0.1	<0.320	<0.410	<0.130	<0.088	<0.180	<0.054	<0.020	1.3	163	76	<2	3.1J	4.7J	0.59	0.0067J	11	0.180J	2.9
	AMW-2d	5/6/2010	2.75	-66	0.009J	0.09	4.40	0.014J	<0.05	<0.1	<0.05	<0.05	<0.15	<0.10	<0.07	0.032J	<0.15	2.3	48	67	<2	<10	2.9	0	<0.01	4.5	<1	0.66J
	AMW-2d	8/16/2010	2.46	60.9	<0.4	<0.4	2.0	<0.5	<0.5	<0.1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5		63.5	65	<2	5.3J	4.3J	<0.05	<0.1	3.6J	<0.1	2.5
	AMW-2d	11/2/2010	1.56	132	0.008J	0.039	0.34	0.31	<0.05	<0.1	<0.05	<0.05	<0.15	<0.10	<0.07	<0.05	<0.15	1.9	47	76.8	<2	16	2.9	<0.2	0.009J	3.3J	<1	0.39J
	AMW-2d	5/3/2011	0.75	107	0.005J	0.037	0.41	0.052J	<0.05	<0.1	<0.05	<0.05	<0.15	0.12	<0.07	0.066	<0.15	0.86	44	129	<0.5	<6	3.1	0.08J	0.017J	4.3J	<0.6	0.8J
	AMW-2d	11/8/2011	1.07	-29	0.03	0.19	7.10	<0.07	<0.05	<0.1	<0.05	<0.05	<0.15	0.032J	<0.07	<0.05	<0.15	1.4	96	75	<2	7	2.9	<0.2H	0.011J	3.5J	<1	0.7JB
	AMW-2d	5/8/2012	0.00	195	0.053	0.073	1	0.037J	<0.05	0.053J	<0.05	<0.05	<0.15	0.087J	<0.07	<0.05	<0.15	31	98	80	<0.002	<10	3	<0.2H	<0.05	<5	<0.2	0.932J
	AMW-2d	11/28/2012	3.47	149	0.10	0.69	30	0.99	<0.05	0.031J	<0.10	<0.05	<0.15	<0.10	<0.07	0.030J	<0.15	0.68	110	79	<2	13.5	3.2	0.3	<0.05	<5	<0.2	<1
	AMW-2d	5/9/2013	0.36	126	0.013J	0.049	1.1	0.1	<0.05	0.064J	<0.10	<0.05	<0.15	0.08J	<0.07	<0.05	<0.15	1.5	110	65	1.48J	11.7	3	0.06	<0.05	<5	<0.2	<1
	AMW-2d	11/6/2013	1.40	137.7	0.0072J	0.048	0.48	0.027J	0.061		<0.5	<0.1	<0.15	0.12	<0.07	<0.05	<0.15	0.65	68	85	20.4	<10	3.1	0.16	0.18	<5	<0.2	<1
	AMW-2d	5/7/2014	3.88	95	0.0068J	0.021J	0.36	0.073	<0.05		<0.5	<0.1	<0.15	0.033J	<0.07	0.030J	<0.15	18	170	78.8	<2	<10	3.2	0.5	<0.05	<5	<0.2	<1
	AMW-2d	11/5/2014	4.19	103.5	0.016J	0.016J	0.27	0.040J	<0.05		<0.5	<0.2	<0.15	0.016J	0.082	0.048J	<0.15	1.3	100	130	<2	<10	3.3	0	<0.05	<5	<0.2	<1
	AMW-2d	5/6/2015	2.51	391	0.011J	0.035J	0.97	<0.07	<0.05	0.098J	<0.5	<0.2	<0.15	<0.1	<0.07	<0.05	<0.15	23.0	200	90	<2	<10	3.4	0	<0.5	<5	<0.2	<1
	AMW-2d	10/28/2015	3.90	158	0.013J	0.039J	0.20J	0.030J	0.0075J	0.038J	<0.20	<0.20	<0.10	0.0051J	<0.10	0.0024J	<0.10	9.0	120	98	<2	<10	3.3	0	<0.05	<5	<0.2	<1
	AMW-2d	5/17/2016	2.69	88	0.023J	0.012J	0.49J	0.036J	<0.10	0.095J	<0.20	<0.20	<0.10	<0.20	<0.10	<0.10	<0.10	1.0	160	110	<2	<10	3.5	0	<0.05	<5	<0.2	<1
13-02	MW-3	11/29/2007			<0.01	<0.01	5.8	<0.07	<0.07	<0.01	<0.10	<0.10	<0.07	0.09J	<0.07	<0.07	<0.07	2	44	63	<5	46	3.7	0	0.04	<1		<1
	MW-3	11/20/2008	6.04	251	<0.01	<0.01	0.064	0.11	<0.07	<0.1	<0.10	<0.10	<0.07	0.16	<0.07	<0.07	<0.07	1.1	1.6J	68	<4	94	4	0	0.02	<1	<1	0.9J
	MW-3	4/9/2009	4.33	112	<0.01	0.006J	0.036	<0.07	<0.07	<0.1	<0.10	<0.10	<0.07	0.05J	<0.07	<0.07	<0.07	0.52J	0.32J	61	<2	28	3.6	0	0.02	<1	<1	2.13
	MW-3	10/15/2009	2.40	158	0.006J	0.02	0.093	0.025J	<0.07	<0.1	<0.10	<0.10	<0.07	0.12	<0.07	<0.07	<0.07	15	86	64	<0.5	71	3.1	0	<0.006	0.11J	<0.6	0.63J
	MW-3	5/10/2010	3.40	-26	<0.02	0.012J	0.550	0.035J	<0.05	<0.1	<0.05	<0.05	<0.15	<0.10	<0.07	0.031J	<0.15	1.7	8.7J	72	<2	<10	3	0	<0.01	0.18J	<1	0.22J
	MW-3	11/2/2010	2.07	90	0.03J	0.004J	9.7	0.28	<0.05	<0.1	<0.05	<0.05	<0.15	<0.10	<0.07	<0.05	<0.15	1.7	79	71.6	<2	18	3.1	<0.2H	0.016J	0.26J	<1	0.6J
	MW-3	5/4/2011	2.60	164	0.003J	0.006J	0.5	0.24	0.098	<0.1	<0.05	<0.05	<0.15	0.19	<0.07	0.094	<0.15	1.1	69	69	<0.5	<6	2.8	0.18J	0.022J	0.25J	<0.6	0.3J
	MW-3	11/9/2011	4.05	198	0.04	0.059	1.6	<0.07	<0.05	<0.1	<0.05	<0.05	<0.15	0.043J	<0.07	<0.05	<0.15	0.8	120	65	<2	<10	2.9	0.18JH	0.019J	0.15J	<1	0.4JB
	MW-3	5/8/2012	2.76	113	<0.025	0.021J	0.14	0.072	<0.05	0.094J	<0.05	<0.05	<0.15	0.13	<0.07	<0.05	<0.15	1.5	100	60	<0.002	<10	3.6	0.3H	<0.05	<5	<0.2	0.303J
	MW-3	11/28/2012	12.31	73	0.044	0.022J	0.83	<0.07	<0.05	0.038J	<0.10	<0.05	<0.15	<0.10	<0.07	<0.05	<0.15	1.1	120	91	<2	<10	3.2	<0.2H	<0.05	<5	<0.2	<1
	MW-3	5/9/2013	1.88	188	0.018J	0.0079J	0.40	0.025J	<0.05	0.058J	<0.10	<0.05	<0.15	0.082J	<0.07	<0.05	<0.15	1.6	82	52	<2	10.1	3.1	1.11	<0.05	<5	<0.2	<1
	MW-3	11/7/2013	1.99	301.1	0.0035J	0.0075J	0.34	0.049J	<0.05		<0.5	<0.1	<0.15	0.22	<0.07	0.015J	<0.15	1.4	110	69	26	28.1	3.4	0.83	<0.05	<5	<0.2	9.12
	MW-3	5/8/2014	0.04	150	0.0062J	0.030	0.16	0.080	<0.05		<0.5	<0.1	<0.15	0.053J	<0.07	0.034J	<0.15	1.1	140	63.6	6	<10	3.2	0	<0.05	<5	<0.2	1.67
	MW-3	11/6/2014	5.94	465.6	0.0040J	0.015J	0.30	0.045J	<0.05		<0.5	<0.2	<0.15	0.040J	0.068J	0.048J	<0.15	1.6	140	61	<2	<10	3.3	0	<0.05	<5	<0.2	<1
	MW-3	5/6/2015	2.29	260	0.0085J	0.016J	0.18J	<0.07	<0.05	0.077J	<0.05	<0.02	<0.15	0.014J	<0.07	<0.05	<0.15	14	140	65	<2	76.2	3.4	0	<0.5	<5	<0.2	1.43
	MW-3	10/28/2015	3.85	166	0.23	0.022J	0.20J	0.026J	0.0058J	0.043J	<0.20	<0.20	<0.10	<0.20	<0.10	0.0016J	<0.10	11	130	69	<2	<10	3.4	0	<0.05	<5	<0.2	<1
	MW-3	5/18/2016	3.18	101	<0.10	<0.10	0.87	0.015J	<0.10	0.079J	<0.20	<0.20	<0.10	0.0092J	<0.10	<0.10	<0.10	9.6	120	75	<2	<10	3.7	0	<0.05	<5	<0.2	1.32
13-02	MW-A	11/28/2007			0.003J	<0.01	870	0.11	<0.07	<0.1	<0.10	<0.10	<0.07	0.1J	<0.07	<0.07	<0.07	1.6	390	158	10	6	4.2	0	<1	1		2
	MW-A	11/20/2008	0.53	263	<0.010	<0.010	110	0.12	<0.07	<0.1	<0.10	<0.10	<0.07	0.21	<0.07	<0.07	<0.07	1	100	129	10	14	5	0.4	0.01	0.9J	<1	1
	MW-A	4/9/2009	0.60	65	<0.010	<0.010	100	0.04J	<0.07	<0.1	0.06J	<0.10	<0.07	0.07J	<0.07	<0.07	<0.07	0.43J	100	128	7	13	5.8	0.6	<0.01	1	<1	1.31
	MW-A	10/16/2009	0.81	86	0.015	<0.010	4,400	0.062J	<0.07	<0.1	<0.10	<0.10	<0.07	0.11	<0.07	<0.07	<0.07	16	580	135	12	49	6.2	0.4	<0.006	1.7	<0.6	2.66
	MW-A	5/7/2010	2.87	-99	0.02	<0.010	7,600	0.3	<0.05	<0.1	<0.05	<0.05	<0.15	<0.10	<0.07	0.053	<0.15	1.5	460	146	13	12	13	2.75	<0.01	6.5	<1	3.31
	MW-A	11/2/2010	0.05	-26	0.023	<0.010	4,800	0.27	<0.05	<0.1	<0.05	<0.05	<0.15	<0.10	<0.07	<0.05	<0.15	2.2	450	133	9	18	13	0.7	<0.05	7.2	<1	2.66
	MW-A	5/3/2011	1.08	113	0.018	<0.010	3,600	0.085	0.12	<0.1	<0.05	<0.05	<0.15	0.13	<0.07	0.063	<0.15	1.3	470	134	6	7J	11	0.14J	<0.006	4.5J	<0.6	7.6
	MW-A	11/9/2011	0.06	205	0.084	0.057	9,300	<0.07	<0.05	<0.1	<0.05	<0.05	<0.15	0.22	<0.07	<0.05	<0.15	1.3	610	115	2	<10	11	0.6H	<0.05	4.3J	<1	2.6
	MW-A	5/9/2012	0.00	103	0.11	0.027	8,000	0.16	<0.05	0.056J	<0.05	<0.05	<0.15	0.11	<0.07	0.020J	<0.15	3.2	560	146	6	<10	14	2.22H	<0.05	<5	<0.2	0.364J
	MW-A	11/27/2012	2.66	140	0.073	0.018J	9,000	<0.07	<0.05	0.016J	<0.10	<0.05	<0.15	0.043J	<0.07	<0.05	0.071J	4	530	127	8	13.3	19	0.60	<0.05	<5	0.228	2.52
	MW-A	5/7/2013	0.25	-34	0.11	0.033	7,500	0.03J	<0.05	0.07J	<0.10	<0.05	<0.15	0.07J	<0.07	<0.05	<0.15	0.54J	470	131	5	5.15	16	0.28	<0.05	<5	<0.2	2.62
	MW-A	11/5/2013	1.89	290.8	0.051	<0.025	8,000	0.028J	0.044J		<0.5	<0.1	<0.15	0.11	<0.07	<0.05	<0.15	0.84	530	128	6	<10	20	0.60	<0.05	3	<0.2	2.53
	MW-A	5/6/2014	0.04	-17	0.048	<0.025	11,000	0.21	0.077		<0.5	<0.1	<0.15	0.026J	<0.07	0.050	<0.15	0.90	580	131	4	<10	29	2	<0.05	3.5J	0.232	3.1
	MW-A	11/4/2014	1.70	45	0.082	0.019J	10,000	0.038J	<0.05		<0.5	<0.2	<0.15	<0.1	<0.07	0.048J	<0.15	4.8	640	111	2	<10	32	1	<0.05	4.4J	<0.2	2.32
	MW-A	5/5/2015	2.34	26	0.080J	0.015J	10,000	<0.07	<0.05	0.090J	<0.5	<0.2	<0.15	0.027J	<0.07	<0.05	<0.15	14.0	580	117	4	<10	28	1	<0.05	5.9	<0.2	3.15
	MW-A	10/27/2015	1.41	29	0.084J	0.011J	9,900	0.032J	0.0066J	0.022J	<0.20	<0.20	<0.10	0.013J	<0.10	0.0033J	<0.10	7.2	600	123	11	<10	25	0.5	<0.05	7.4	<0.2	4.18
	MW-A	5/17/2016	1.27	-55	0.094J	<0.10	11,000	0.21	0.084J	0.032J	<0.20	<0.20	<0.10	0.0075J	<0.10	<0.10	<0.10	1.3	540	85	6	<10	18	1.0	<0.05	13	<0.2	3.68

Table 5d
Geochemical Constituents in Groundwater
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sampling Date	Dissolved Oxygen	Oxidation-Reduction Potential	Ethane	Ethene	Methane	Acetic Acid	Butyric Acid	Formic Acid	Hexanoic Acid	i-Hexanoic Acid	i-Pentanoic Acid	Lactic Acid and HIBA	Pentanoic Acid	Propionic Acid	Pyruvuc Acid	Dissolved Hydrogen	Carbon Dioxide	Alkalinity	Biochemical Oxygen Demand (BOD)	Chemical Oxygen Demand (COD)	Chloride	Ferrous Iron	Nitrate	Sulfate	Sulfide	Total Organic Carbon (TOC)
Units			mg/l	mVolts	µg/l	µg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	nM	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
13-02	MW-E Rep	11/29/2007			0.002J	0.011	400	0.05J	0.07J	<0.1	<0.10	<0.10	<0.07	0.1J	<0.07	<0.07	<0.07	1.7	310	204	8	38	10.7	2.6	<1	24		4
	MW-E Rep	11/20/2008	1.59	122	<0.010	0.008J	57	0.11	0.07J	<0.1	<0.10	<0.10	<0.07	0.16	<0.07	<0.07	<0.07	1.3	66	210	11	40	12	2.2	0.02	20	<1	5
	MW-E Rep	4/9/2009	1.06	57	<0.010	0.004J	100	0.06J	<0.07	<0.1	0.08J	<0.10	<0.07	0.07J	<0.07	<0.07	<0.07	0.48J	98	237	9	17	8.5	2.0	<0.01	14	<1	2.16
	MW-E Rep	10/15/2009	1.22	105	0.014	0.013J	2,000	0.044J	<0.07	<0.1	<0.10	<0.10	<0.07	0.23	<0.07	<0.07	<0.07	1.2	190	271	6	20	13	1.8	<0.006	19	<0.6	2.31
	MW-E Rep	2/18/2010	0.84	-49.7	<0.4	<0.4	2,710	<0.071	<0.160	<0.1	<0.320	<0.410	<0.130	<0.088	<0.180	<0.054	<0.020	1.4	683	140	<2	9.6J	11	16	270	13	<0.031	4.3
	MW-E Rep	5/10/2010	5.90	-92	0.045	0.06	3,800	0.86	<0.05	<0.1	<0.05	<0.05	<0.15	<0.10	<0.07	0.049J	0.14J	2	410	269	7	<10	<0.1	3.5	0.03	18	<1	4
	MW-E Rep	8/16/2010	1.07	0.7	<0.4	<0.4	2,810	<0.5	<0.5	<0.1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5		912	260	<2	27	14	3.6	<0.1	17J	<0.1	7.5
	MW-E Rep	11/4/2010	0.01	24	0.1	0.5	3,200	0.37	<0.05	<0.1	<0.05	<0.05	<0.15	0.26	<0.07	<0.05	0.16	1.9	410	263	6	35	21	12.2	<0.05	18	<1	4.15
	MW-E Rep	5/4/2011	0.01	34	0.37	0.38	5,000	0.22	0.086	<0.1	<0.05	<0.05	0.092J	0.13	<0.07	0.092	0.18	1.4	410	261	5	13	30	<0.07H	<0.006	13	<0.6	4.2
	MW-E Rep	11/8/2011	0.00	-115	4.9	0.36	4,300	<0.07	<0.05	<0.1	<0.05	<0.05	<0.15	0.21	<0.07	<0.05	<0.15	1.4	460	275	5	34	32	5.89H	<0.05	11	<1	4
	MW-E Rep	5/8/2012	0.00	13	4.6	0.33	2,200	0.048J	<0.05	0.052J	<0.05	<0.05	<0.15	0.086J	<0.07	<0.05	<0.15	2.1	430	285	4	<10	30	8.22H	<0.05	8.1	<0.2	0.317J
	MW-E Rep	5/8/2013	0.47	-81	6.6	0.5	1,600	0.048J	<0.05	0.074J	<0.05	<0.05	<0.15	0.072J	<0.07	<0.05	<0.15	0.56J	350	405	2	16.9	52	3.3	<0.05	<5	<0.2	4.89
	MW-E Rep	11/5/2013	1.64	-39.8	4.2	0.36	1,700	0.038J	0.058		<0.5	<0.1	<0.15	0.11	<0.07	<0.05	<0.15	0.81	330	320	4.09	24.6	31	2.77	<0.05	5	<0.2	4.18
	MW-E Rep	5/6/2014	0.07	-24	2.6	0.27	2,400	0.095	0.091		<0.5	<0.1	<0.15	0.15	<0.07	0.048J	<0.15	0.97	400	285	3	<10	28	5	<0.05	8.5	<0.2	4.08
	MW-E Rep	11/4/2014	1.62	-54	3.7	0.56	2,800	0.038J	<0.05		<0.5	<0.2	<0.15	0.051J	0.070	<0.05	<0.15	1.4	430	610	3	<10	45	3.5	<0.05	11	<0.2	4.44
	MW-E Rep	5/5/2015	3.61	-38	3.4	0.47	1,700	<0.07	<0.05	0.12	<0.5	<0.2	<0.15	0.036J	0.028J	<0.05	0.044J	13	340	415	4	11	48	2.5	<0.05	11	<0.2	6.14
	MW-E Rep	10/27/2015	1.25	-36	4.1	0.73	2,300	0.038J	0.0062J	0.049J	<0.20	<0.20	<0.10	0.011J	0.011J	0.0026J	<0.10	7.3	380	365	5	<10	48	2.0	<0.05	8.3	<0.2	4.82
	MW-E Rep	5/18/2016	1.40	-59	3.3	0.63	680	0.21	1.0	0.12	<0.20	<0.20	<0.10	<0.20	0.024J	0.021J	0.014J	1.0	250	425	3	<10	55	0.5	<0.05	6	<0.2	4.49
13-02	MW-E Deep	11/29/2007			0.004J	0.006J	380	0.1	0.12	<0.1	<0.10	<0.10	<0.07	0.11	<0.07	<0.07	<0.07	1.6	180	160	10	28	15.7	1.0	0.02	<1		6
	MW-E Deep	11/29/2007	0.69	74	<0.010	<0.010	0.24	0.1	<0.07	<0.1	<0.10	<0.10	<0.07	0.17	<0.07	<0.07	<0.07	1.2	1.1J	166	5	22	17	0.4	0.02	0.7J	<1	0.6J
	MW-E Deep	4/9/2009	0.81	67	<0.010	0.006J	0.37	1.5	<0.07	<0.1	0.08J	<0.10	<0.07	0.05J	<0.07	0.22	<0.07	0.56J	0.52J	151	6	10	20	1.0	<0.01	0.78J	<1	1.64
	MW-E Deep	10/15/2009	0.82	104	0.009J	0.047	3,200	0.036J	<0.07	<0.1	<0.10	<0.10	<0.07	0.28	<0.07	<0.07	<0.07	8.5	200	167	5	15	22	0.8	<0.006	2.9	<0.6	3.62
	MW-E Deep	2/18/2010	0.75	-106.1	<0.4	4	5,620	<0.071	<0.160	<0.1	0.75	<0.410	<0.130	<0.088	<0.180	<0.054	<0.020	1.4	700	180	70	180	22	16	0.031J	1.6J	<0.031	47
	MW-E Deep	5/10/2010	4.20	-83	0.22	8.2	9,000	64	1.1	<0.1	0.14	<0.05	0.84J	<0.10	0.11	5	0.13J	11	150	369	87	140	26	9.5	0.03	<1	<1	33.4
	MW-E Deep	8/16/2010	1.91	-80.4	<0.4	7	7,050	55	<0.5	<0.1	<1	<1	<0.5	<0.5	<0.5	<0.5	<0.5		624	350	<2	710	24	13	<0.1	<5	<0.1	170
	MW-E Deep	11/4/2010	0.01	-48	4.2	2.4	7,500	12	0.14	<0.1	<0.05	<0.05	<0.15	<0.10	<0.07	0.83	0.2	4	120	384	26	73	25	7.9	<0.05	0.11J	<1	9.84
	MW-E Deep	5/4/2011	0.00	-51	3.3	0.14	6,900	4.3	0.13	<0.1	<0.05	<0.05	<0.15	<0.1	<0.07	0.25	<0.15	2.3	100	401	7	37	27	2.7	<0.006	0.096J	<0.6	5.4
	MW-E Deep	11/8/2011	0.00	-67	10	0.29	19,000	2.2	0.021J	<0.1	<0.05	<0.05	<0.15	0.076J	<0.07	<0.05	<0.15	2	160	345	16	33	26	2.2	0.007J	<5	<1	2.9
	MW-E Deep	5/8/2012	2.51	-76	7.5	0.11	14,000	0.84	<0.05	0.090J	<0.05	<0.05	<0.15	0.10	<0.07	0.024J	<0.15	3.3	160	305	24	22.6	27	4.03H	<0.05	<5	<0.2	0.207J
	MW-E Deep	11/27/2012	1.70	78	9.8	0.14	16,000	0.19	<0.05	0.058J	<0.10	<0.05	<0.15	0.034J	<0.07	<0.05	0.11J	1.1	160	255	10	39.2	28	7H	<0.05	<5	<0.2	1.37
	MW-E Deep	5/8/2013	0.51	-80	13	0.13	16,000	0.25	<0.05	0.12	<0.10	<0.05	<0.15	0.066J	<0.07	0.028J	<0.15	0.99	140	370	5	26.4	28	3.3	<0.05	<5	<0.2	2.3
	MW-E Deep	11/6/2013	1.21	-82.2	13	0.18	15,000	0.11	<0.05		<0.5	<0.1	<0.15	0.16	<0.07	<0.05	<0.15	1.5	170	345	5.97	23.1	31	3.3	<0.05	<5	<0.2	2.51
	MW-E Deep	5/6/2014	0.09	-41	4.6	0.13	19,000	120	20		2.9	<0.1	1.9	<1	20	100	4.0	1.3	480	320	1,580	2,410	20	5.5	<0.05	<5	<0.2	432
	MW-E Deep	11/4/2014	1.09	-82.3	2.8	0.056	22,000	52	2.3		0.44J	<0.2	0.18	0.046J	0.37	5.4	0.21	6.7	310	625	208	355	30	1.5	<0.05	<5	<0.2	41.6
	MW-E Deep	5/5/2015	0.88	-100	9	0.059J	22,000	7.1	0.092	0.23	<0.5	<0.2	0.029J	0.019J	<0.07	0.12	0.042J	17	220	410	47	59.2	35	1	<0.50	<5	<2	8.26
	MW-E Deep	10/27/2015	1.20	-71	8.1	<0.50	26,000	2.4	0.085J	0.035J	0.012J	<0.20	<0.10	<0.20	<0.10	0.026J	<0.10	8.7	170	415	36	22.4	34	3.0	0.13	<5	<0.2	4.52
	MW-E Deep	5/18/2016	3.08	-95	3.9	0.021J	16,000	2.8	0.20	0.064J	<0.20	<0.20	<0.10	<0.20	<0.10	0.064J	0.012J	2.3	130	<1	28	63.8	37	3.0	<0.05	<5	<0.2	6.34
13-02	MW-I	11/20/2008	1.04	156	<0.010	<0.010	0.07	0.09	<0.07	<0.1	<0.10	<0.10	<0.07	0.16	<0.07	<0.07	<0.07	1.3	16	42	<2	46	3	0	0.02	1	<1	0.7J
	MW-I	10/15/2009	2.40	158	0.005J	0.024	2.9	0.057J	<0.07	<0.1	<0.10	<0.10	<0.07	0.14	<0.07	<0.07	<0.07	14	51	46	2	8J	2.5	0	0.02	2	<0.6	0.29J

Table 5d
Geochemical Constituents in Groundwater
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

Facility Permit Number	Monitoring Well Code	Sampling Date	Dissolved Oxygen	Oxidation-Reduction Potential	Ethane	Ethene	Methane	Acetic Acid	Butyric Acid	Formic Acid	Hexanoic Acid	i-Hexanoic Acid	i-Pentanoic Acid	Lactic Acid and HIBA	Pentanoic Acid	Propionic Acid	Pyruvuc Acid	Dissolved Hydrogen	Carbon Dioxide	Alkalinity	Biochemical Oxygen Demand (BOD)	Chemical Oxygen Demand (COD)	Chloride	Ferrous Iron	Nitrate	Sulfate	Sulfide	Total Organic Carbon (TOC)
Units			mg/l	mVolts	µg/l	µg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	nM	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
13-02	MW-L	4/9/2009	2.13	16	<0.010	0.003J	0.047	0.03J	<0.07	<0.1	0.08J	<0.10	<0.07	0.06J	<0.07	<0.07	<0.07	0.62	<5.0	38	<2	48	2.7	0	0.16	1.6	<1	0.37J
	MW-L	5/10/2010	1.96	-31	0.016	0.016	1.5	0.051J	<0.05	<0.1	<0.05	<0.05	<0.15	0.60J	<0.07	0.032J	0.093J	9.1	0.8J	176	<2	<10	2.4	0	0.28	10	<1	0.97J
	MW-L	11/2/2010	1.77	130	<0.010	<0.011	0.2	0.29	<0.05	<0.1	<0.05	<0.05	<0.15	<0.10	<0.07	<0.05	<0.15	1.4	71	39.7	<2	16	2.7	0.1J	0.11	3.0J	<1	0.29J
	MW-L	5/4/2011	2.31	206	<0.01J	0.003J	0.3	0.22	0.11	<0.1	<0.05	<0.05	<0.15	0.32	<0.07	0.097	<0.15	0.7	72	44	<0.5	<6	2.2	0.16J	0.13	1.8J	<0.6	0.5J
	MW-L	11/9/2011	2.59	222	<0.025	0.066	0.3	<0.07	0.019J	<0.1	<0.05	<0.05	<0.15	0.16	<0.07	<0.05	<0.15	1.4	83	30	<2	10J	2.6	<0.2H	0.096	1.8J	<1	0.5JB
	MW-L	5/9/2012	0.04	214	<0.025	0.014J	0.69	0.049J	<0.05	0.062J	<0.05	<0.05	<0.15	0.11	<0.07	<0.05	<0.15	1.1	98	37	<0.002	<10	2.6	<0.2H	0.096	<5	<0.2	0.342J
	MW-L	11/28/2012	3.03	3	0.22	0.037	2.8	<0.07	0.033J	0.031J	<0.10	<0.05	<0.15	0.066J	<0.07	<0.05	<0.15	0.43J	72	90	<2	<10	2.7	<0.2H	0.052	<5	<0.2	<1
	MW-L	5/9/2013	1.09	188	<0.025	0.024J	0.55	0.024J	<0.05	0.056J	0.044J	<0.05	<0.15	0.085J	<0.07	<0.05	<0.15	1.2	79	28	1.91J	2.22	2.7	0	0.06	<5	<0.2	<1
	MW-L	11/7/2013	1.39	258.1	<0.025	<0.025	0.059J	0.034J	<0.05		<0.5	<0.1	<0.15	0.12	<0.07	<0.05	<0.15	0.78	90	35	2	<10	2.8	0.61	0.065	<5	<0.2	1.43
	MW-L	5/8/2014	2.12	379	0.0030J	0.0038J	0.042J	0.063J	<0.05		<0.5	<0.1	<0.15	0.033J	<0.07	0.034J	<0.15	0.79	100	34.3	<2	<10	2.8	0.5	0.061	<5	<0.2	<1
	MW-L	11/5/2014	4.03	59.2	0.0037J	0.014J	0.63	0.042J	<0.05		<0.5	<0.2	<0.15	0.058J	<0.07	0.049J	<0.15	1.3	100	31	<2	<10	3.1	0	0.081	2.8J	<0.2	<1
	MW-L	5/6/2015	4.15	131	0.0050J	0.016J	0.055J	<0.07	<0.05	0.12	<0.5	<0.2	<0.15	0.014J	<0.07	<0.05	<0.15	26	100	31	<2	11	2.7	0	<0.5	1.9J	<0.2	<1
	MW-L	10/28/2015	3.80	89	0.0058J	0.019J	0.077J	0.029J	0.0081J	0.033J	<0.20	<0.20	<0.10	<0.20	<0.10	0.0022J	<0.10	8.9	94	39	<2	<10	3	0	0.054	1.5	<0.2	<1
	MW-L	5/19/2016	3.66	192	<0.10	<0.10	0.031J	0.012J	<0.10	0.033J	<0.20	<0.20	<0.10	0.0063J	<0.10	<0.10	<0.10	0.63	98	35	<2	10	2.8	0	<0.05	1.4	<0.2	<10

Notes:
1. Blank cells indicate parameter was not analyzed or the result was below the detection limit.
2. Assessment wells CD-4 and CD-5 were installed in September 2006.
3. Assessment wells AMW-1s, -1d, 2s, and 2d were installed in October 2009.
4. Assessment wells CD-4 and CD-5 were abandoned in July 2010.
5. J - Indicates the analytical result is an estimated concentration between the method detection limit and the Solid Waste Section Reporting Limit.
6. BOD-1 - Indicates the dilutions selected for the BOD analysis based on screening COD values did not meet the oxygen depletion criteria of at least 2mg/L dissolved oxygen depletion.
The result is reported as an estimated value or non-detect at the elevated reporting limit.
7. H - Sample was analyzed outside the U.S. Environmental Protection Agency recommended holding time.
8. B - Indicates constituent was detected in the batch blank above the method detection limit.
9. BOD-3 - Lab control recovery was outside control limits biased low. Samples could not be reanalyzed due to holding time requirements. Sample values are reported as estimated values with possible low bias.
10. mg/l - milligrams per liter/µg/l - micrograms per liter/mVolts - millivolts/Nm - nanomoles
11. HIBA - Hydroxyisobutyric Acid
12. Alkalinity, chloride, ferrous iron, sulfate, and total dissolved solids were added to the sampling program in May 2010 for CD-1s and CD-1d.
13. The November 2012 sampling event was the first event that CD-1s/CD-1d replaced MW-9 as the background monitoring wells.
14. MW-9 was removed from the monitoring program in November 2012.
15. MW-E Rep was not sampled during the November 2012 sampling event due to laboratory oversight.

Table 6
Constituents Detected Above Standards
May 2016 Semi-Annual Sampling Event
Cabarrus County Landfill Units 2 and 3

FACILITY PERMIT NUMBER	MONITORING WELL	PARAMETERS EXCEEDING NORTH CAROLINA 2L OR GROUNDWATER PROTECTION STANDARD ASSESSMENT MONITORING - MAY 2016	MONITORING WELL	PARAMETERS EXCEEDING NORTH CAROLINA 2L OR GROUNDWATER PROTECTION STANDARD ASSESSMENT MONITORING - MAY 2016
13-02	**MW-9**	Not Sampled	**MW-C**	**Cobalt*, Vanadium***
13-02	**CD-1s (background well)**	Iron, **Vanadium***	**MW-D**	Cobalt*, **Vanadium***, Benzene, 1,4-Dichlorobenzene
13-02	**CD-1d (background well)**	**Cobalt***, Iron, Manganese, Vanadium*	**MW-E Rep**	Cobalt*, **Vanadium***, 1,1-Dichloroethane, **1,2-Dichloroethane**, **1,2-Dichloropropane**, Vinyl Chloride
13-02	**CD-4 Rep**	**Cobalt*, Vanadium***	**MW-E deep**	Barium, Cobalt*, Lead, **Vanadium***, **1,2-Dichloroethane**
13-02	**CD-5**	**Cobalt***, 1,1-Dichloroethane, **Tetrachloroethene**, Trichloroethene, Vinyl Chloride	**MW-F**	**Cobalt***
13-02	**CD-6**	Cobalt*, **Vanadium***	**MW-G**	**Cobalt*, Vanadium***
13-02	**AMW-1s**	**Vanadium***, Tetrachloroethene	**MW-H**	**Cobalt*, Vanadium***
13-02	**AWM-1d**	**Cobalt*, Vanadium***, Benzene, 1,1-Dichloroethane, Vinyl Chloride	**MW-H deep**	**Antimony*, Vanadium***
13-02	**AMW-2s**	**Antimony*, Vanadium***, 1,1-Dichloroethane, Tetrachloroethene, Trichloroethene	**MW-I**	**Vanadium***, Tetrachloroethene
13-02	**AMW-2d**	1,1-Dichloroethane, Tetrachloroethene, Trichloroethene	**MW-J**	**Cobalt*, Vanadium***
13-02	**MW-1**	Cobalt*, **Vanadium***	**MW-K**	**Vanadium***
13-02	**MW-3**	**Vanadium***, 1,1-Dichloroethane, Tetrachloroethene, Trichloroethene	**MW-L**	**Vanadium***
13-02	**MW-3 deep**	**Vanadium***	**MW-L deep**	**Vanadium***, Tetrachloroethene
13-02	**MW-A**	**Cobalt*, Vanadium***, Benzene, 1,4-Dichlorobenzene, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,2-Dichloropropane, cis-1,2-Dichloroethene, Tetrachloroethene, Trichloroethene, **Vinyl Chloride**	**MW-M**	**Vanadium***
13-02	**MW-B**	Cobalt*, **Vanadium***	**MW-X**	**Vanadium***

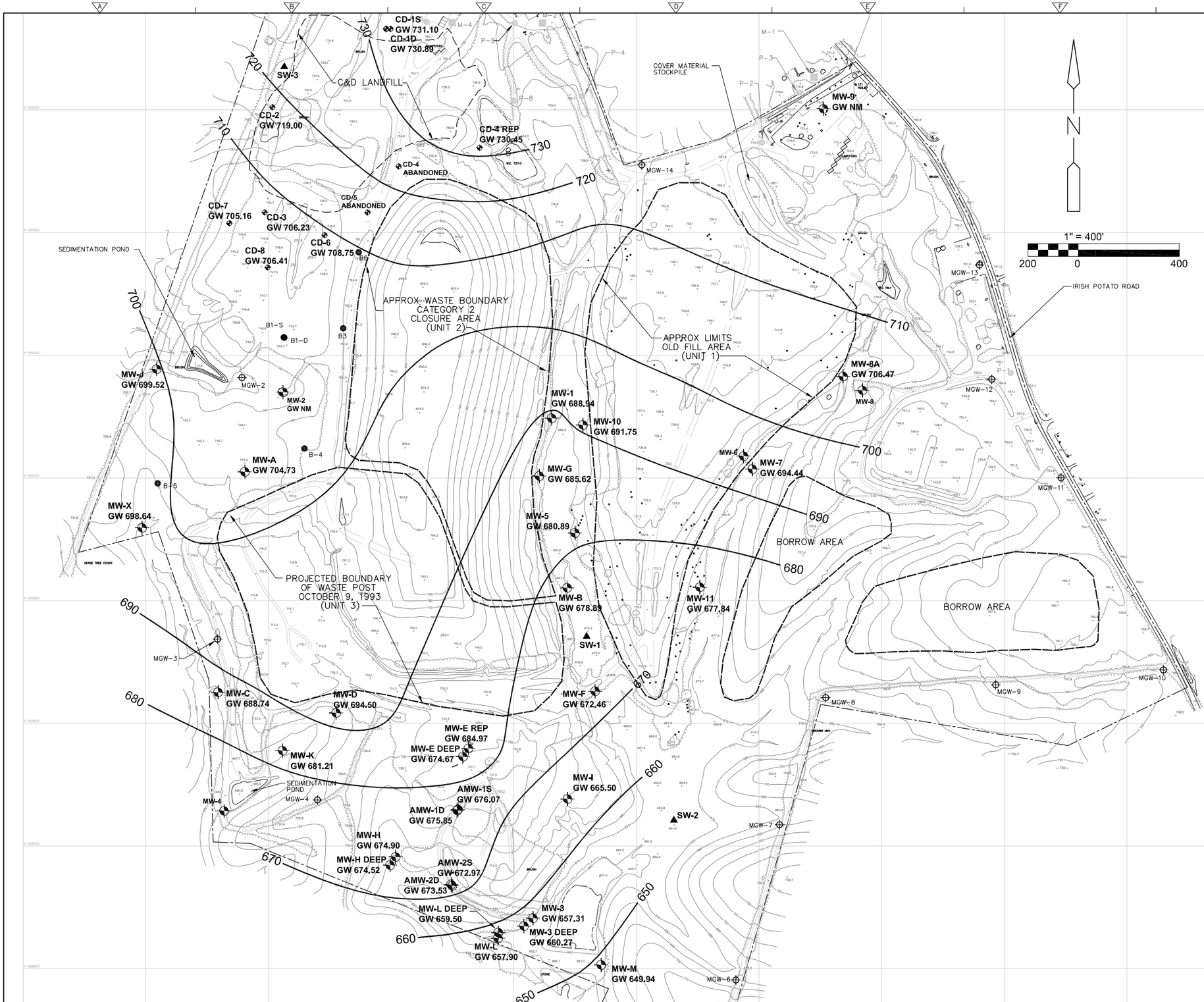
Notes:
1. MW-E deep, -H, -H deep, -I, -J, -K, -L are assessment wells installed in June 1999.
2. Assessment wells CD-4, CD-5, and CD-6 were installed in September 2006.
3. Assessment wells AMW-1s, -1d, -2s, and -2d were installed in October 2009.
4. Assessment wells CD-4 and CD-5 were abandoned in July 2010.
5. Monitoring wells MW-3 deep, -L deep, -and -M are sampled annually during the spring event.
6. * - Constituents exceed the Groundwater Protection Standard.
7. **Bold** - J Flag - Indicates the analytical result is an estimated concentration between the method detection limit and the Solid Waste Section Reporting Limit.
8. The November 2012 sampling event was the first event that CD-1s/-1d replaced MW-9 as the background monitoring wells.
9. MW-9 was removed from the monitoring program in November 2012.

Table 7
DHC Sampling Summary
Cabarrus County Landfill Units 2 and 3

Monitoring Well Code	Sample Date	DNA (ng/L)	Universal PCR*	DHC 16S rRNA Gene copy/L	Functional Gene tceA copy/L	Functional Gene bvcA copy/L	Functional Gene vcrA copy/L
MW-E Rep	9-Jan-14	1,958	+	1.37E+06 ± 1.81E+05	9.48E+05 ± 8.02E+04	0.00E+00 ± 0.00E+00	5.46E+02 ± 1.02E+02
MW-E Rep	4-Mar-15	328	+	0.00E+00 ± 0.00E+00	0.00E+00 ± 0.00E+00	0.00E+00 ± 0.00E+00	0.00E+00 ± 0.00E+00
MW-E deep	9-Jan-14	3,524	+	1.38E+07 ± 2.23E+06	7.85E+05 ± 1.10E+05	0.00E+00 ± 0.00E+00	2.84E+06 ± 4.53E+05
MW-E deep	4-Mar-15	6,848	+	5.20E+03 ± 6.72E+02	9.00E+03 ± 8.24E+01	0.00E+00 ± 0.00E+00	7.06E+02 ± 1.28E02
AMW-1s	9-Jan-14	8,214	+	0.00E+00 ± 0.00E+00	0.00E+00 ± 0.00E+00	0.00E+00 ± 0.00E+00	0.00E+00 ± 0.00E+00
AMW-1s	4-Mar-15	538	+	0.00E+00 ± 0.00E+00	0.00E+00 ± 0.00E+00	0.00E+00 ± 0.00E+00	0.00E+00 ± 0.00E+00
AMW-1d	9-Jan-14	2,648	+	3.53E+03 ± 3.17E+03	0.00E+00 ± 0.00E+00	0.00E+00 ± 0.00E+00	0.00E+00 ± 0.00E+00
AMW-1d	4-Mar-15	1,716	+	1.03E+06 ± 1.12E+05	6.18E06 ± 2.89+05	0.00E+00 ± 0.00E+00	3.13E+04 ± 2.79+03
AMW-2s	9-Jan-14	1,917	+	3.09E+05 ± 5.12E+04	1.24E+06 ± 2.26E+05	9.61E+04 ± 1.86E+04	5.66E+04 ± 1.12E+04
AMW-2s	4-Mar-15	1,564	+	0.00E+00 ± 0.00E+00	0.00E+00 ± 0.00E+00	0.00E+00 ± 0.00E+00	0.00E+00 ± 0.00E+00
AMW-2d	9-Jan-14	1,320	+	8.81E+03 ± 3.15E+02	0.00E+00 ± 0.00E+00	0.00E+00 ± 0.00E+00	0.00E+00 ± 0.00E+00
AMW-2d	4-Mar-15	108	-	0.00E+00 ± 0.00E+00	0.00E+00 ± 0.00E+00	0.00E+00 ± 0.00E+00	0.00E+00 ± 0.00E+00

Notes:
1. PCR - Polymearse chain reaction
2. DHC - Dehalococcoides spp
3. * - A "+" inidicates that amplication of bacteria was successful. "-" indicates that ampification was not successful.
4. ng/L - Nanogram per liter
5. copy/L - Copy per liter

- Indicates the result is between the laboratory method detection limit and the reporting limit.



LEGEND

- M-1 MONITORING WELL
- P-1 METHANE PROBE
- MW-5 MONITORING WELL WITH GROUNDWATER ELEVATIONS
- MW-6 ABANDONED GROUNDWATER MONITORING WELL
- SW-1 SURFACE WATER SAMPLING STATION
- (713) ESTIMATED ELEVATION OF WATER TABLE
- P-1 PIEZOMETER
- POTENTIOMETRIC CONTOUR
- MGW-1 METHANE GAS MONITORING WELL

NOTE:

1. MW-A THROUGH M, ALONG WITH MW-1-3 AND M-3 DEEP COMPRISE THE GROUNDWATER MONITORING WELLS FOR UNITS 2 AND 3 WHICH ARE PART OF THE APPROVED MONITORING SYSTEM. CD-4, CD-5, AND CD-6 WERE ADDED TO THE GROUNDWATER MONITORING NETWORK IN SEPTEMBER 2006.
2. MGW-1 THROUGH MGW-14 ARE METHANE GAS MONITORING WELLS.
3. MW-5, 7, 8A, 10, AND 11 ARE THE APPROVED GROUNDWATER MONITORING WELLS FOR UNIT 1. CD-1S AND CD-1D SERVE AS THE BACKGROUND WELL FOR UNITS 1, 2, 3, AND THE C&D LANDFILL.
4. CD-1S, CD-1D, CD-2, AND CD-3 ARE THE APPROVED MONITORING WELLS FOR THE C&D LANDFILL AND CD-4 REP WAS INSTALLED AS PART OF THE C&D PHASE I EXPANSION.
5. GROUNDWATER ELEVATIONS MEASURED MAY 16, 2016.
6. ASSESSMENT WELLS AMW-1S, -1D, -2S, AND -2D WERE ADDED TO THE GROUNDWATER MONITORING NETWORK IN OCTOBER 2009.
7. CD-4 AND CD-5 WERE ABANDONED IN JULY 2010.
8. MW-9 WAS REMOVED FROM THE MONITORING PROGRAM AND WAS NOT SAMPLED DURING THE NOVEMBER 2014 SAMPLING EVENT.
9. CD-7 AND CD-8, FORMERLY PIEZOMETERS B-7 AND B-19 RESPECTIVELY, WERE ADDED TO THE MONITORING PROGRAM IN JULY 2014.
10. CD-3 WAS RELOCATED IN JULY 2014.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: A. WEISPFENNING
DRAWN BY: J. KILLINGSWORTH
SHEET CHK'D BY: D. FORBES
CROSS CHK'D BY: M. COLONE
APPROVED BY: D. FORBES
DATE: JUNE 2016

CDM Smith

CDM Smith Inc.
5400 Glenwood Ave, Suite 400
Raleigh, NC 27612 Tel: (919) 325-3500
NC F-0412

CABARRUS COUNTY
NORTH CAROLINA

SEMI-ANNUAL GROUNDWATER MONITORING
CABARRUS COUNTY LANDFILL
FACILITY PERMIT #13-02

POTENTIOMETRIC SURFACE MAP

PROJECT NO. 1278-110485
FILE NAME: CAB-S-16.DWG

SHEET NO.
1

1" = Approximately 100'

LEGEND

- Regolith Monitoring Well
- Bedrock Monitoring Well
- Injection Well

Notes:

1. The injection wells were installed using air-rotary drilling methods from October 5-9, 2009.
2. The injection wells are spaced approximately 30 feet apart perpendicular to groundwater flow and have a radius of influence of approximately 15 feet.
3. Surface area of the injection well network is approximately 5,400 feet.
4. The Phase I injection event was completed from November 2-6, 2009.
5. The Phase II injection event was completed from February 10-18, 2014.

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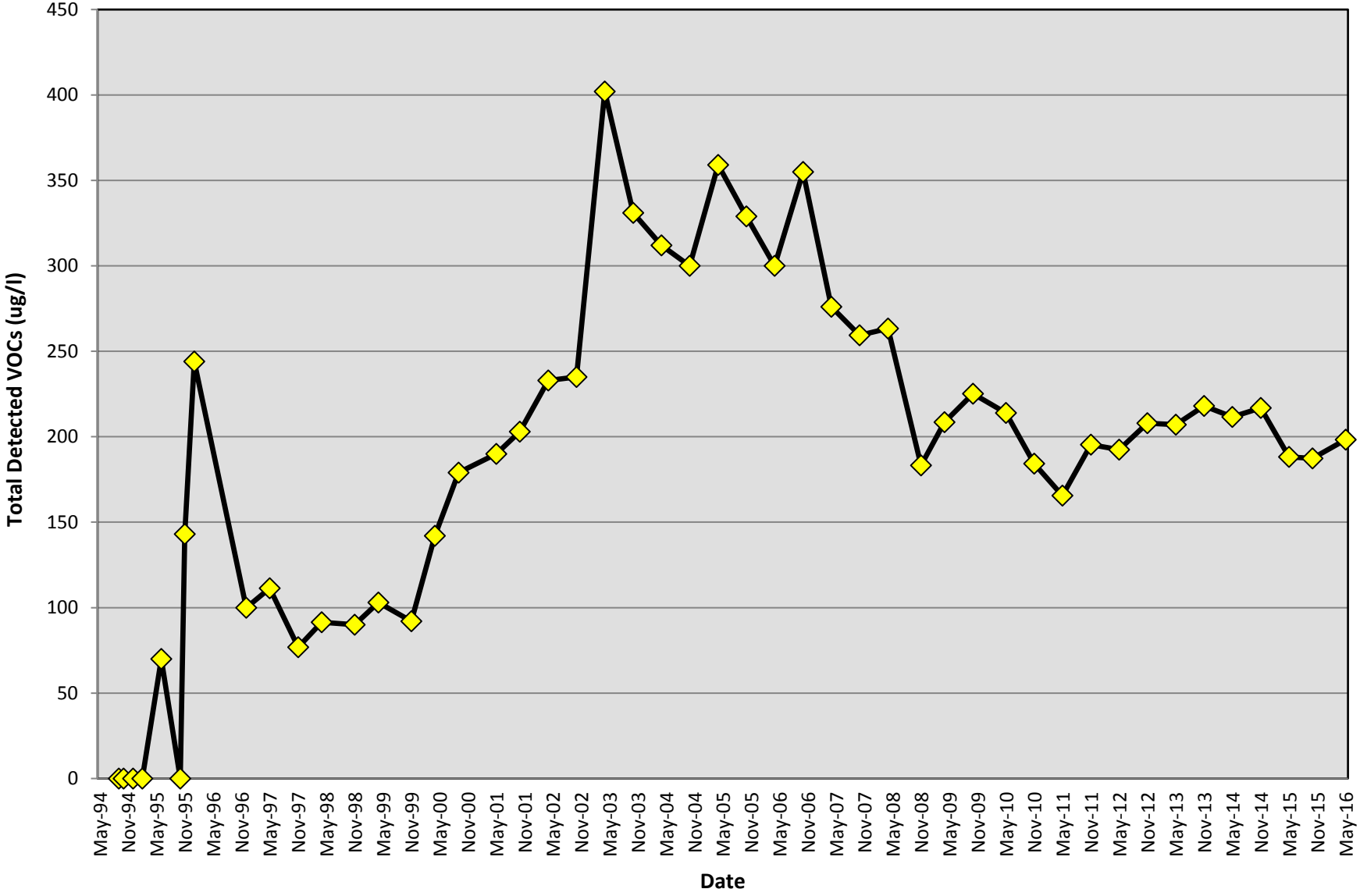
Figure 2: Injection Area Overview

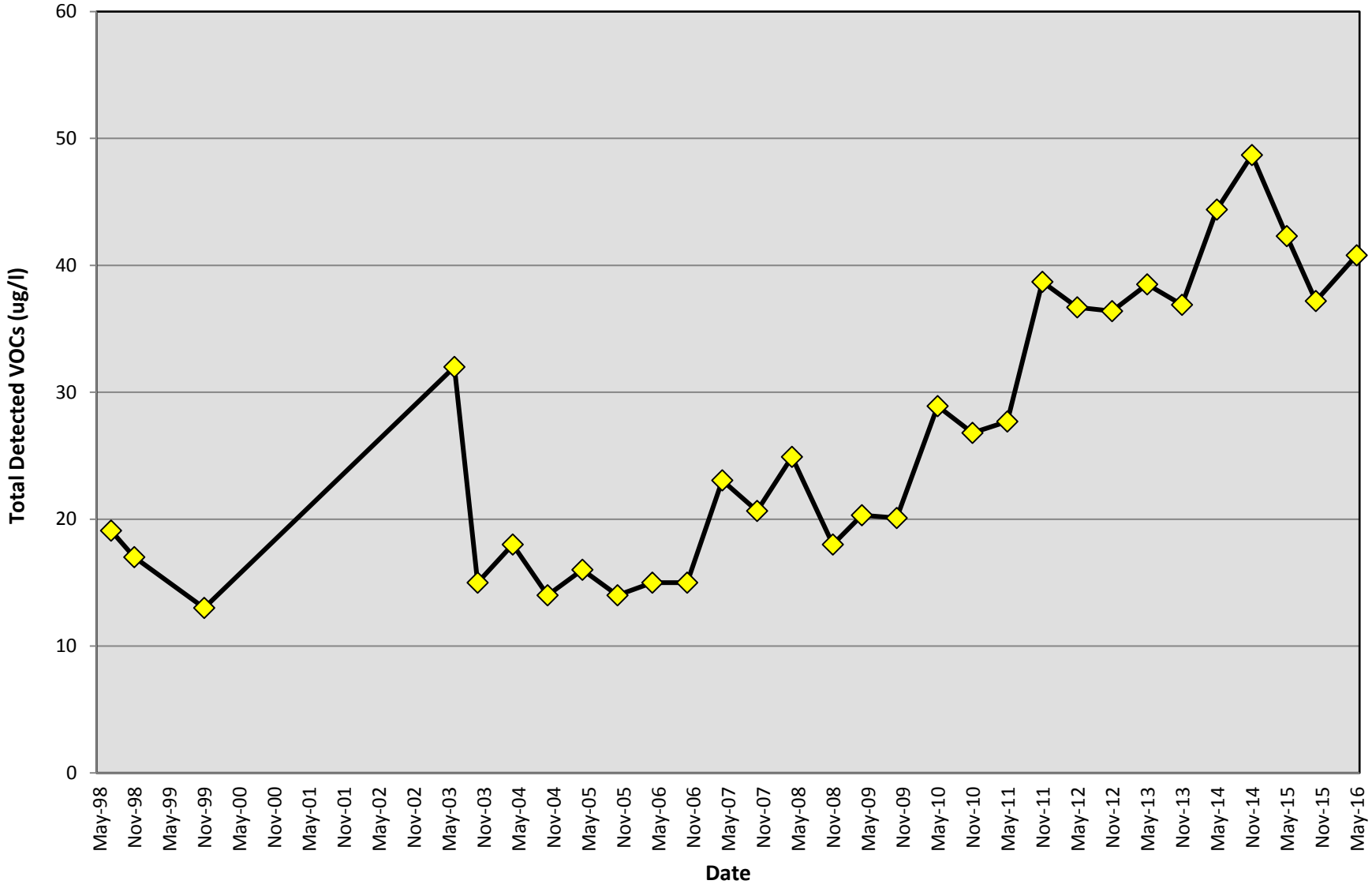
Closed Landfill Units 2 and 3
Cabarrus County, North Carolina

Figure 3
Total Detected Volatile Organic Compounds
Cabarrus County Landfill Units 2 and 3
MW-A



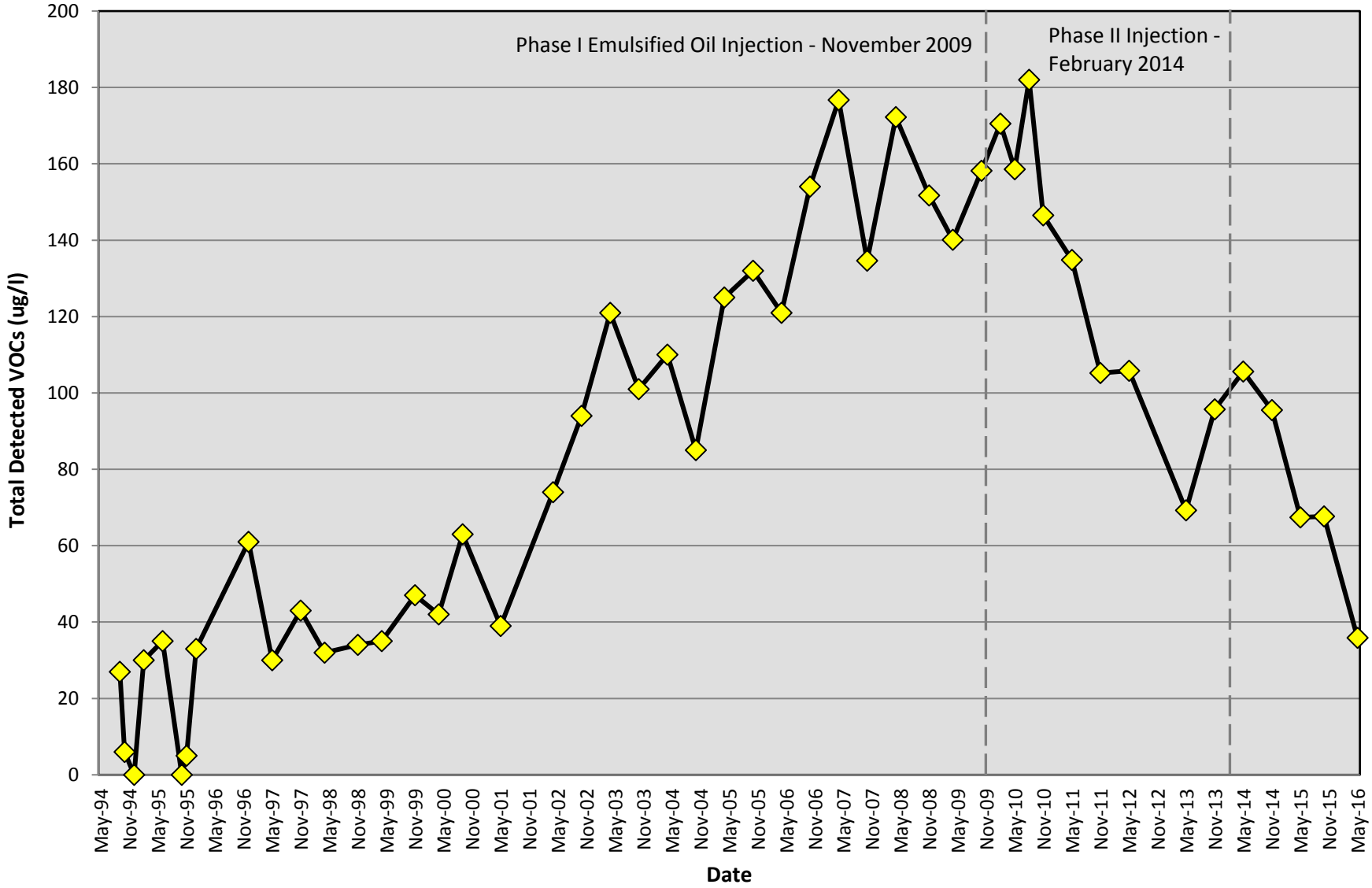
Note: Only detections above laboratory method detection limits represented in figure.

Figure 4
Total Detected Volatile Organic Compounds
Cabarrus County Landfill Units 2 and 3
MW-3



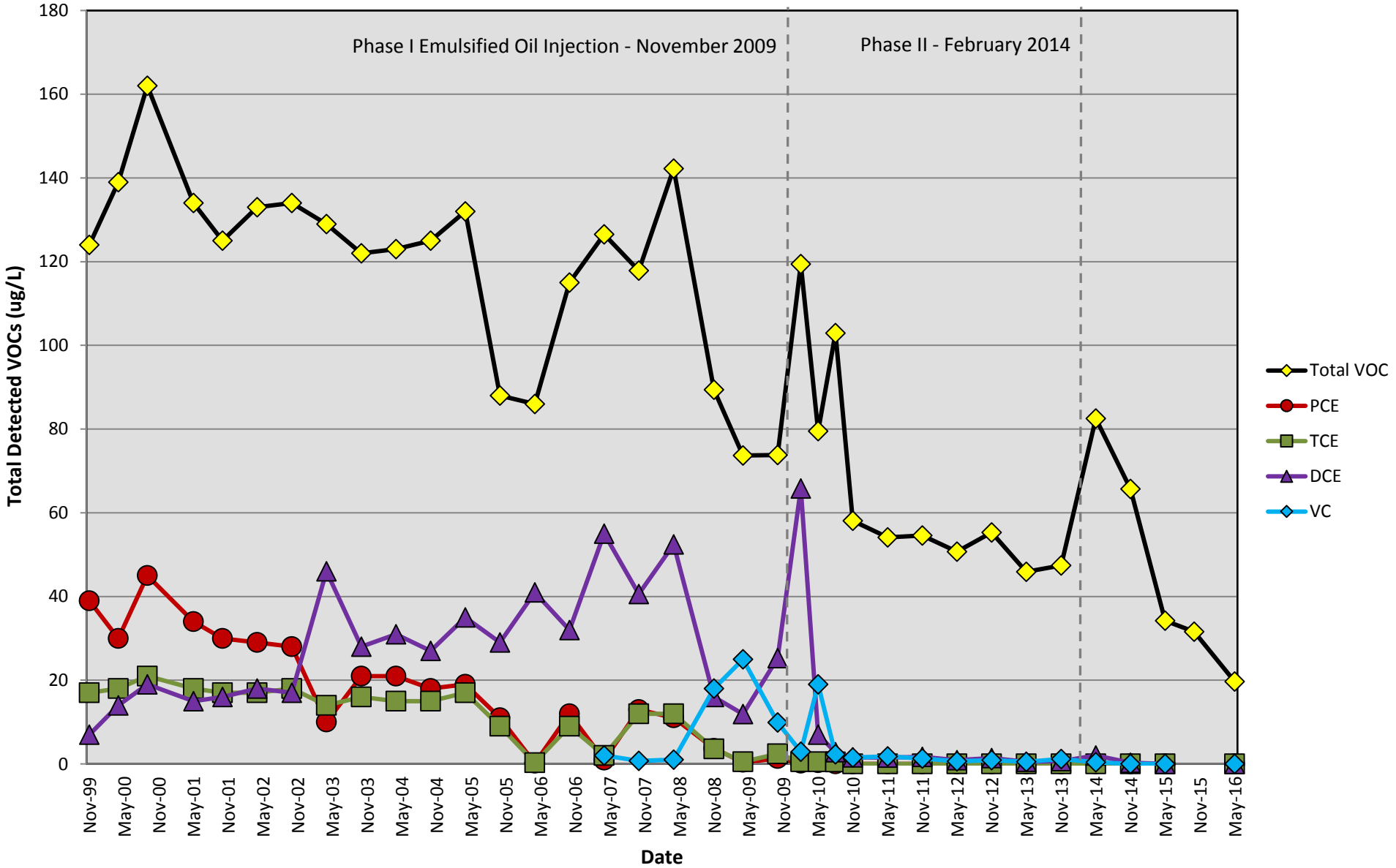
Note: Only detections above laboratory method detection limits represented in figure.

Figure 5
Total Detected Volatile Organic Compounds
Cabarrus County Landfill Units 2 and 3
MW-E Rep



Notes: Only detections above laboratory method detection limits represented in figure.
MW-E was not sampled during the November 2012 sampling event due to laboratory oversight.

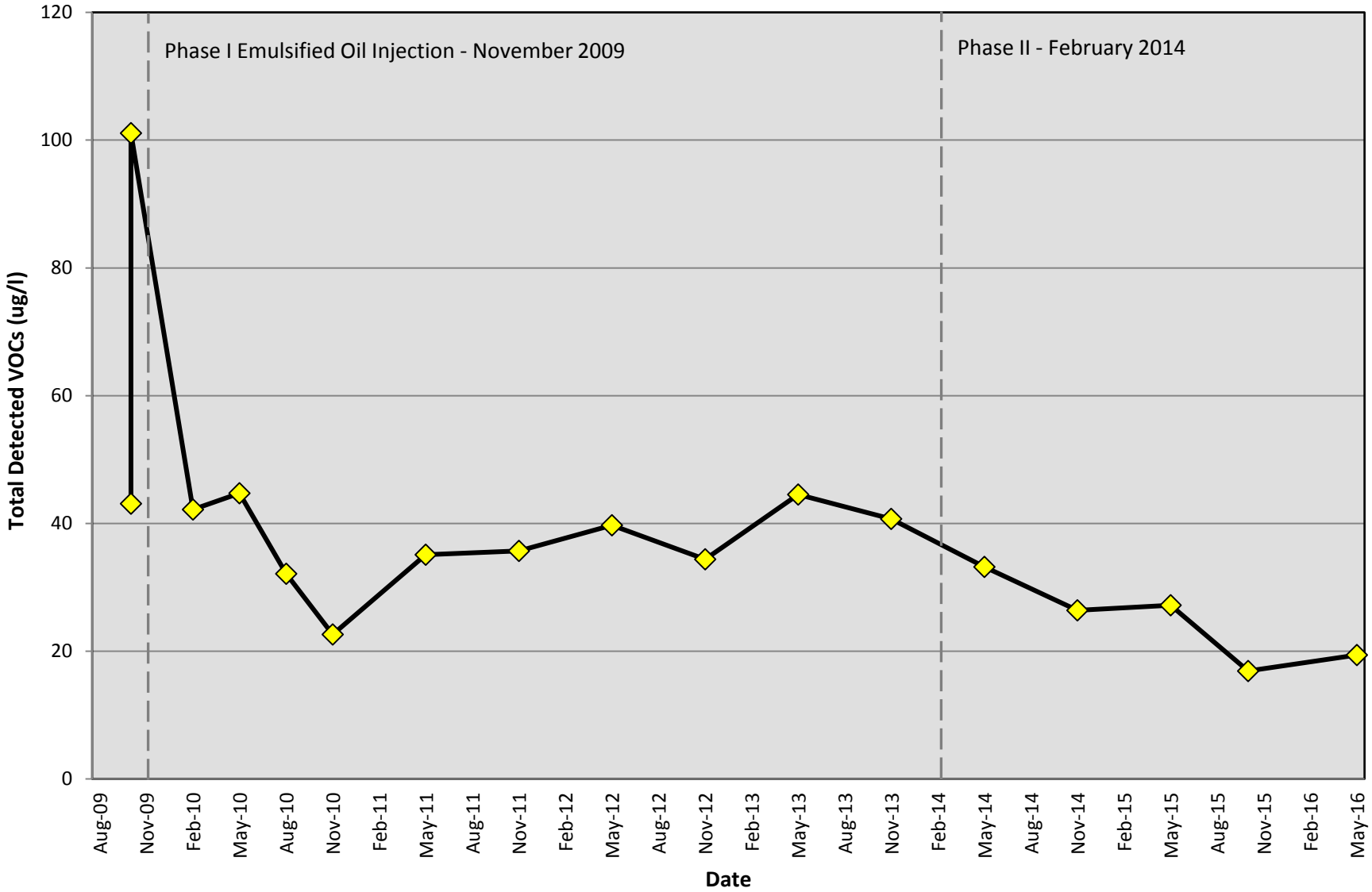
Figure 6
Detected Volatile Organic Compounds
Cabarrus County Landfill Units 2 and 3
MW-E deep



CDM Smith

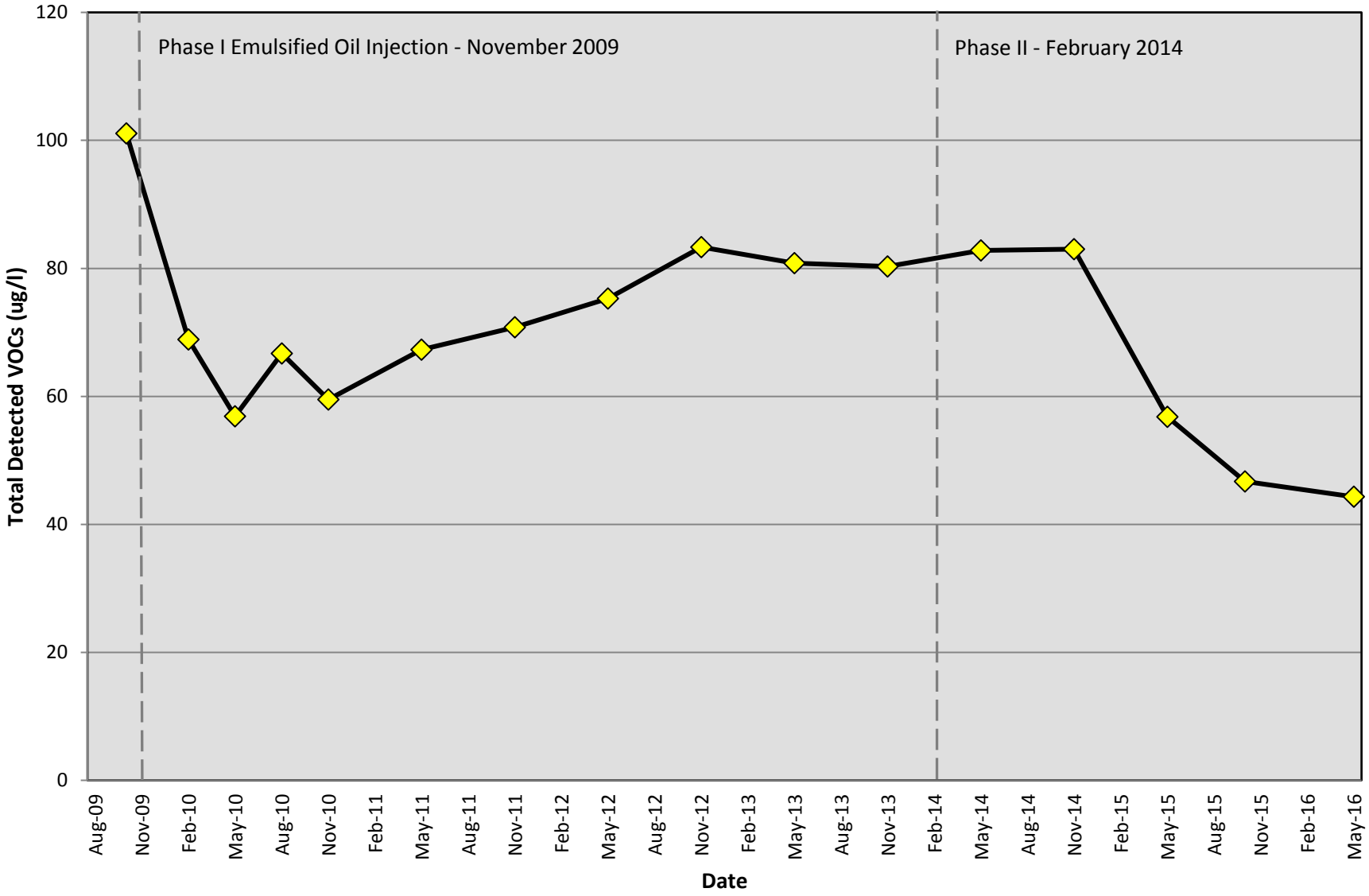
Note: Only detections above laboratory method detection lmits represented in figure.

Figure 7
Total Detected Volatile Organic Compounds
Cabarrus County Landfill Units 2 and 3
AMW-1s



Notes: Only detections above laboratory method detection limits represented in figure.

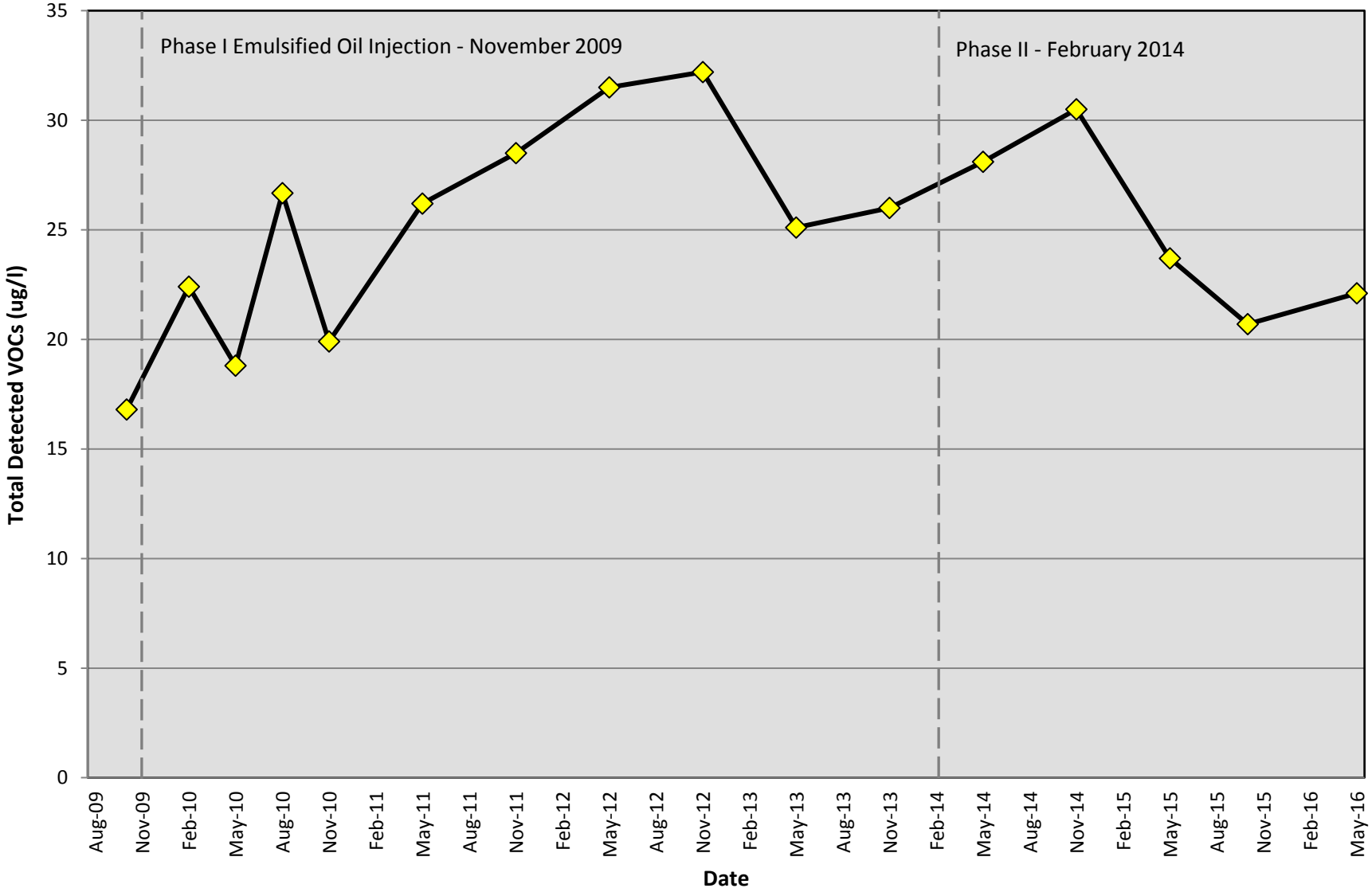
Figure 8
Total Detected Volatile Organic Compounds
Cabarrus County Landfill Units 2 and 3
AMW-1d



Notes: Only detections above laboratory method detection limits represented in figure.

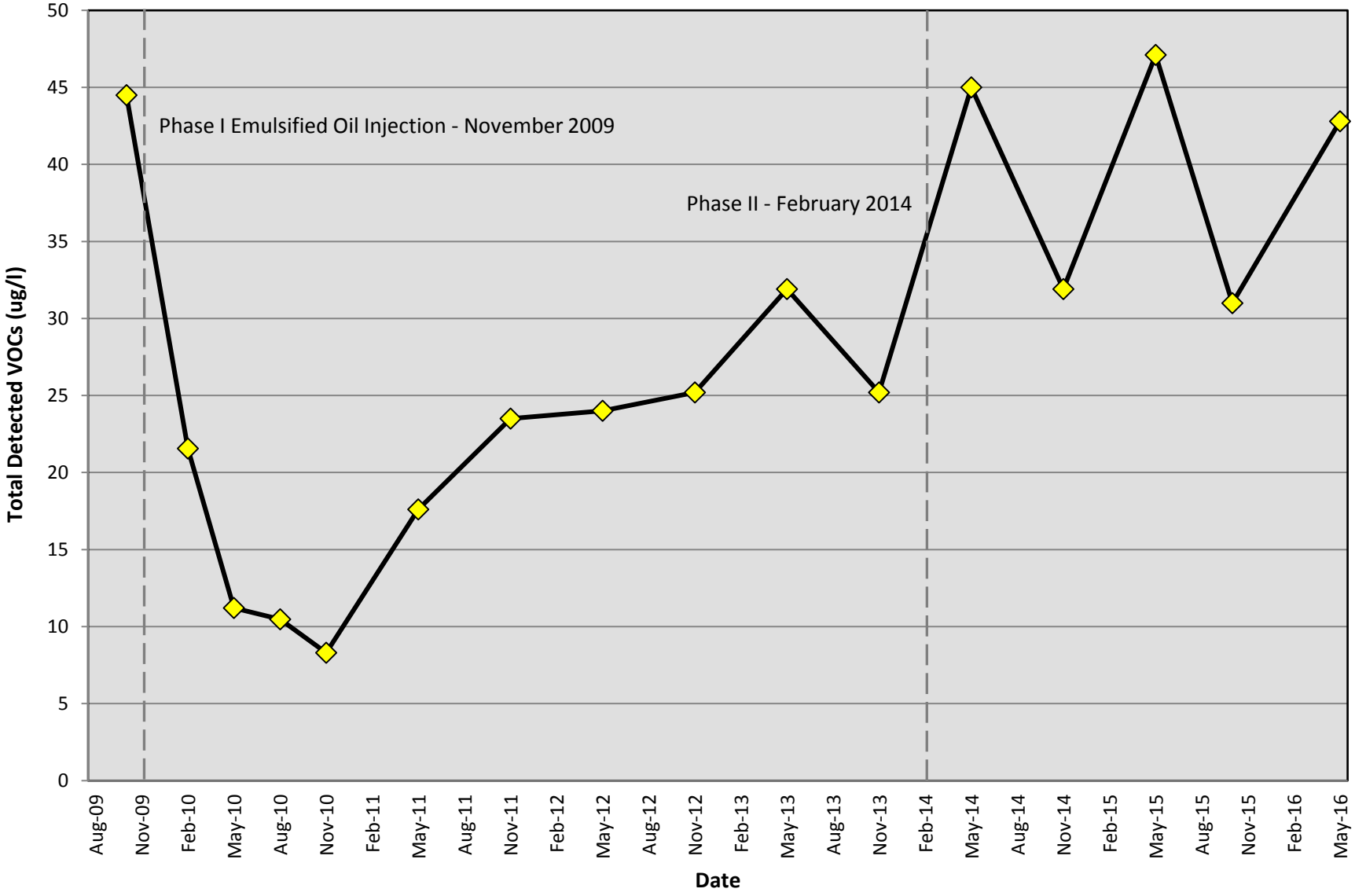
CDM Smith

Figure 9
Total Detected Volatile Organic Compounds
Cabarrus County Landfill Units 2 and 3
AMW-2s

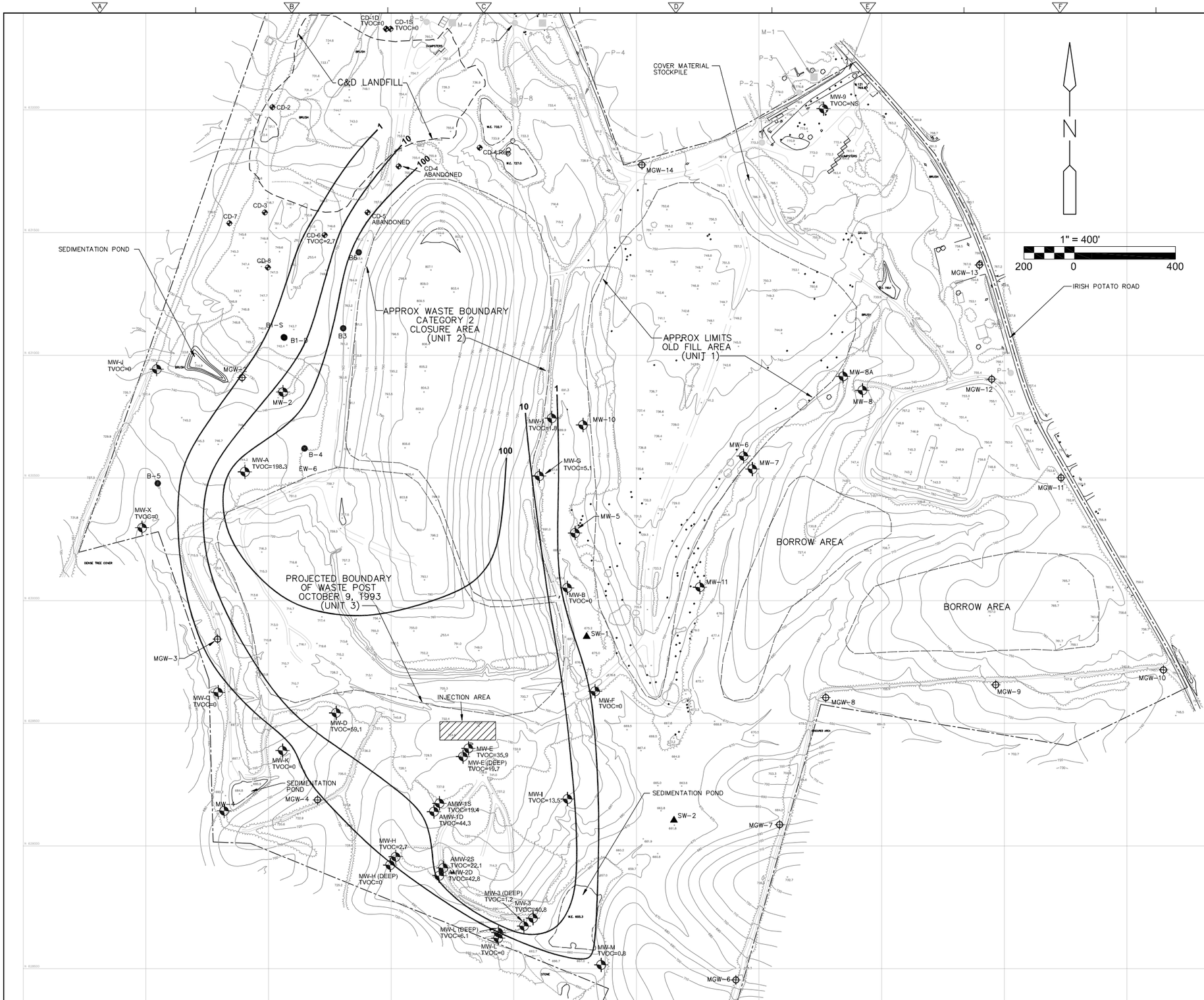


Notes: Only detections above laboratory method detection limits represented in figure.

Figure 10
Total Detected Volatile Organic Compounds
Cabarrus County Landfill Units 2 and 3
AMW-2d



Notes: Only detections above laboratory method detection limits represented in figure.



LEGEND

- M-1 MONITORING WELL
- P-1 METHANE PROBE
- MW-5 MONITORING WELL WITH TOTAL VOLATILE ORGANIC COMPOUNDS (TVOC) DATA IN PARTS PER BILLION (PPB)
- MW-6 ABANDONED GROUNDWATER MONITORING WELL
- SW-1 SURFACE WATER SAMPLING STATION
- (713) ESTIMATED ELEVATION OF WATER TABLE
- P-1 PIEZOMETER
- TVOC ISOCONTOUR (PPB)
- MGW-1 METHANE GAS MONITORING WELL
- INJECTION AREA

NOTE:

1. MW-A THROUGH M, ALONG WITH MW-1-3 AND M-3 DEEP COMPRISE THE GROUNDWATER MONITORING WELLS FOR UNITS 2 AND 3 WHICH ARE PART OF THE APPROVED MONITORING SYSTEM. CD-4, CD-5, AND CD-6 WERE ADDED TO THE GROUNDWATER MONITORING NETWORK IN SEPTEMBER 2006.
2. MGW-1 THROUGH MGW-14 ARE METHANE GAS MONITORING WELLS.
3. MW-5, 7, 8A, 10, AND 11 ARE THE APPROVED GROUNDWATER MONITORING WELLS FOR UNIT 1. CD-1S AND CD-1D SERVE AS THE BACKGROUND WELL FOR UNITS 1, 2, 3, AND THE C&D LANDFILL.
4. CD-1S, CD-1D, CD-2, AND CD-3 ARE THE APPROVED MONITORING WELLS FOR THE C&D LANDFILL AND CD-4 REP WAS INSTALLED AS PART OF THE C&D PHASE I EXPANSION.
5. TVOC DATA FROM MAY 17-19, 2016. ALL VALUES ARE REPORTED IN PARTS PER BILLION (PPB) AND DETECTIONS ARE AT OR ABOVE LABORATORY REPORTING LIMITS.
6. ASSESSMENT WELLS AMW-1S, -1D, -2S, AND -2D WERE ADDED TO THE GROUNDWATER MONITORING NETWORK IN OCTOBER 2009.
7. CD-4 AND CD-5 WERE ABANDONED IN JULY 2010.
8. MW-9 WAS REMOVED FROM THE MONITORING PROGRAM AND WAS NOT SAMPLED DURING THE NOVEMBER 2014 SAMPLING EVENT.
9. CD-7 AND CD-8, FORMERLY PIEZOMETERS B-7 AND B-19 RESPECTIVELY, WERE ADDED TO THE MONITORING PROGRAM IN JULY 2014.
10. CD-3 WAS RELOCATED IN JULY 2014.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: A. WEISPFENNING
DRAWN BY: J. KILLINGSWORTH
SHEET CHK'D BY: D. FORBES
CROSS CHK'D BY: M. COLONE
APPROVED BY: D. FORBES
DATE: JUNE 2016

CDM Smith
CDM Smith Inc.
5400 Glenwood Ave, Suite 400
Raleigh, NC 27612 Tel: (919) 325-3500
NC F-0412

CABARRUS COUNTY
NORTH CAROLINA

SEMI-ANNUAL GROUNDWATER MONITORING
CABARRUS COUNTY LANDFILL
FACILITY PERMIT #13-02

TVOC ISOCONCENTRATION CONTOUR MAP

PROJECT NO. 1278-110485
FILE NAME: CAB-ISO-S16.DWG
FIGURE
11

Appendix A

ANALYTICAL SERVICES, INC.
MONITORING WELL DATA SUMMARY

Client Name: Camp, Dresser & McKee
Client Contact: Mr. Mat Colone
Project: Semi-annual Ground Water Monitoring
Site: Cabarrus Co. Landfill - Units 2 & 3

ASI Report No.: AZE0545
Sampling Date: 5/16/16 - 5/19/16

Well ID	BOC[1]	DTW[2]	Well Vol[3]	Purge Vol[4]	pH[5]	SC[6]	Temp[7]	Turb[8]	DO[9]	ORP[10]	Comments
CD-1D	52.20	26.51	12.56	5.00 L	6.06	115	15.8	20	4.50	210.3	Slightly cloudy; no odor Fe 2+ : 0.0 mg/l
CD-1S	29.62	23.90	2.79	4.00 L	5.91	103	15.7	3.63	3.45	244.7	Clear; no odor Fe 2+ : 0.0 mg/l
CD-4 Rep	19.63	8.70	5.35	5.50	6.90	242	14.2	28	2.68	-53.5	Cloudy; slight odor
CD-6	41.50	32.65	4.33	4.00	6.20	271	16.9	23	1.50	-47.5	Cloudy (dark gray); odor
MW-1	30.24	12.43	8.71	8.75	8.05	1515	15.4	4.47	3.48	93.5	Cloudy; odor
MW-3	35.24	13.06	10.85	3.10 L	6.04	167	16.5	1.08	3.18	101.2	Clear; no odor Fe 2+ : 0.0 mg/l
MW-3(DEEP)	93.64	8.06	41.85	1.70 L	7.48	362	15.6	0.31	2.26	-129.8	Clear; odor
MW-A	50.37	42.07	4.06	6.20 L	5.48	394	16.1	1.04	1.27	-54.6	Clear; odor Fe 2+ : 1.0 mg/l
MW-B	15.29	2.77	6.12	6.25	8.32	976	14.0	17	3.73	52.6	Cloudy; odor
MW-C	17.68	6.24	5.59	3.75	6.50	126	14.0	5.92	3.48	-78.4	Cloudy; odor
MW-D	30.33	25.78	2.23	1.75	7.26	617	16.3	4.07	1.23	-84.4	Cloudy; odor
MW-E	41.62	27.61	6.85	3.50 L	6.27	1088	17.1	1.33	1.40	-59.0	Clear; odor Fe 2+ : 0.5 mg/l
MW-E (DEEP)	59.77	31.03	14.05	3.00 L	6.63	1017	17.5	9.10	3.08	-95.1	Clear; odor Fe 2+ : 3.0 mg/l
MW-F	20.06	8.60	5.60	5.75	8.12	796	14.4	5.53	2.65	-46.7	Cloudy; odor

Client Name: Camp, Dresser, & McKeee
Site: Cabarrus Co. Landfill - Units 2 & 3

ASI Report No.: AZE0545
Sampling Date: 5/16/16 - 5/19/16

Well ID	BOC[1]	DTW[2]	Vol[3]	Vol[4]	pH[5]	SC[6]	Temp[7]	Turb[8]	DO[9]	ORP[10]	Comments
MW-G	20.25	9.57	5.22	3.00	7.96	1671	15.0	12	2.40	49.0	Cloudy; strong odor
MW-H	32.90	24.33	4.19	4.25	6.06	162	14.2	38	5.40	203.6	Cloudy (brown); no odor
MW-H(DEEP)	59.70	24.65	17.14	17.25	6.82	272	14.9	18	4.99	145.0	Cloudy; no odor
MW-I	65.23	43.80	10.48	10.50	6.86	127	15.0	6.57	4.40	163.9	Cloudy; no odor
MW-J	34.89	28.95	2.91	1.50	6.92	265	14.8	58	4.20	27.6	Cloudy; no odor
MW-K	36.19	21.70	7.09	7.25	7.03	208	15.0	14	4.34	20.5	Cloudy; no odor
MW-L	27.05	11.64	7.54	2.90 L	5.80	95	14.2	1.53	3.66	192.1	Clear; no odor Fe 2+ : 0.0 mg/l
MW-L(DEEP)	64.05	13.01	24.96	1.40 L	6.82	209	15.0	2.06	3.88	149.3	Clear; no odor
MW-M	39.59	18.55	10.29	10.50	7.97	320	15.3	8.43	4.02	-3.2	Cloudy; no odor
MW-X	32.09	11.64	10.00	6.50	7.19	210	13.9	6.02	3.98	20.2	Cloudy; no odor
AMW-1D	96.82	49.95	22.92	3.10 L	6.13	477	18.1	4.46	1.51	-27.7	Clear; odor Fe 2+ : 3.0 mg/l
AMW-1S	67.60	49.23	8.98	4.80 L	6.07	224	16.5	8.46	3.77	221.5	Clear; slight odor Fe 2+ : 0.0 mg/l
AMW-2D	62.58	20.97	20.35	3.60 L	6.04	229	15.9	1.41	2.69	88	Clear; no odor Fe 2+ : 0.0 mg/l
AMW-2S	39.96	21.53	9.01	3.10 L	5.78	154	15.8	7.39	3.22	50.8	Clear; no odor Fe 2+ : 0.0 mg/l

Notes:
1 BOC - Bottom of Casing (Ft.)
2 DTW - Depth to Water from Top of Casing (Ft.)
3 Well Vol - Calculated at 3 Times One Well Volume (Gal.)
4 Actual Volume Evacuated Prior to Sample Collection (Gal.)
5 pH - Reported in Standard Units
6 SC - Specific Conductance (uS/cm)
7 Temp - Temperature (°C)
8 Turb - Turbidity (NTU)
9 DO - Dissolved Oxygen (mg/L)
10 ORP - Oxidation/Reduction Potential (mV)

Sampled By: R. Powe, M. Williams
Field Specialist(s)

Reviewed By: Jonathan Set
Field Services Manager

ANALYTICAL SERVICES, INC.
MONITORING WELL DATA SUMMARY

Client Name: Camp, Dresser, & McKee
Client Contact: Mr. Mat Colone
Project: Semi-annual Ground Water Monitoring
Site: Cabarrus Co. Landfill - Units 2 & 3

ASI Report No.: AZE0545

Sampling Date: 5/16/16

Well ID	DTW	Well ID	DTW	Well ID	DTW	Well ID	DTW
CD-4 Rep	8.70	MW-D	25.78	MW-I	43.80	AMW-2D	20.97
CD-6	32.65	MW-E (DEEP)	31.03	MW-J	28.95	AMW-2S	21.53
MW-1	12.43	MW-E (R)	27.61	MW-K	21.70	CD-1S	23.90
MW-3	13.06	MW-F	8.60	MW-L	11.64	CD-1D	26.51
MW-A	42.07	MW-G	9.57	MW-X	11.64	MW-3(DEEP)	8.06
MW-B	2.77	MW-H	24.33	AMW-1D	49.95	MW-L (DEEP)	13.01
MW-C	6.24	MW-H (DEEP)	24.65	AMW-1S	49.23	MW-M	18.55

Note:

1 DTW - Depth to Water From Top of Casing (ft.)

Sampled By: R. Powe, M. Williams
Field Specialist(s)

Reviewed By: Marlan Scott
Field Services Manager

ANALYTICAL SERVICES, INC.
MONITORING WELL DATA SUMMARY

Client Name: Camp, Dresser, & McKee
Client Contact: Mr. Mat Colone
Project: Semi-annual Ground Water Monitoring
Site: Cabarrus Co. Landfill - Units 2 & 3

ASI Report No.: AZE0545
Sampling Date: 5/16/16

Well ID	% Vol[1]	Well ID	% Vol[1]	Well ID	% Vol[1]	Well ID	% Vol[1]
CD-4 Rep	0	MW-D	40	MW-I	0	AMW-2D	0
CD-6	0	MW-E (DEEP)	0	MW-J	0	AMW-2S	0
MW-1	0	MW-E (R)	0	MW-K	0	CD-1S	0
MW-3	0	MW-F	0	MW-L(DEEP)	0	CD-1D	0
MW-A	37	MW-G	35	MW-X	0	MW-3(DEEP)	0
MW-B	0	MW-H	0	AMW-1D	0	MW-M	0
MW-C	0	MW-H (DEEP)	0	AMW-1S	0	MW-L	0

Note:

1 % Vol - Volume of Methane Gas in Headspace

Sampled By: R. Powe, M. Williams
Field Specialist(s)

Reviewed By: Sharon Scott
Field Services Manager

ANALYTICAL SERVICES, INC.
SURFACE WATER SAMPLING DATA SUMMARY

Client Name: Camp, Dresser, & McKee
Client Contact: Mr. Mat Colone
Project: Semi-annual Surface Water Monitoring
Site: Cabarrus Co. Landfill - Unit 1

ASI Report No.: AZE0544
Sampling Date: 5/19/16

Point ID	pH[1]	SC[2]	Temp[3]	Turb[4]	DO[5]	ORP[6]	Comments
1302-SW-1	6.99	342	15.4	800+	4.99	360.3	Cloudy (orange); no odor; good flow
1302-SW-2	6.80	241	15.6	590	3.51	181.3	Cloudy (orange); no odor; good flow

Notes:

1 pH - Reported in Standard Units
2 SC - Specific Conductance (uS/cm)
3 Temp - Temperature (°C)
4 Turb - Turbidity (NTU)
5 DO - Dissolved Oxygen (mg/L)
6 ORP - Oxidation/Reduction Potential (mV)

Sampled By: R. Powe
Field Specialist(s)

Reviewed By: Jonathan Smith
Field Services Manager

FIELD INSTRUMENT LOG

Project: Cabarrus Co. LF Dates: 5/16/16 – 5/19/16

Personnel: R Powe M Williams

ph/SC/TEMP/DO/ORP	Turbidity
o YSI 556 MPS serial: 05D2373AJ o YSI 556 MPS serial: 13A100062 X YSI 556 MPS serial: 08H100790 o Oakton 10 Series serial: 446654 X YSI 556 14M100424	X Lamotte serial: 5164 – 5014 o Lamotte serial: 4191 - 0814 X Oakton T-100 serial: 957596 o Lamotte serial: ME14699 o _____
Water Level	**Methane**
o Heron Dipper T serial: 06964 X Solinst serial: 048125 o Solinst serial: 237784 o _____	o RKI Eagle serial: E3Z031 X RKI Eagle serial: E3Z030 o _____

pH 4.0 Lot # 2407910 pH 4.0 Exp. 7/16 Sc 1413 Lot# 116089 Exp. 6/16

pH 7.0 Lot# 2407988 pH 7.0 Exp 7/16 Sc — Lot# — Exp. —

pH 10.0 Lot# 2501789 pH 10.0 Exp 7/16 ORP 240 Lot# 8154 Exp. 7/19

08H100790 14M100424

Date of Calibrations: 5/16/16

pH: 4.0 std. = 4.00 7.0 std. = 7.00 10.0 std. 9.96 4=4.00 7=7.00 10=9.99
SC: 1413 uS/cm = 1413 ORP 240 mV = 240 SC 1413=1413 ORP 240=240
Turbidity: 1.0 ntu = 1.0 Methane: 50 % LEL = 49 Turb 1.0=1.0

Date of Calibrations: 5/17/16

pH: 4.0 std. = 4.00 7.0 std. = 7.00 10.0 std. = 9.98 4=4.00 7=7.00 10=10.00
SC: 1413 uS/cm = 1413 ORP 240 mV = 240 SC 1413=1413 ORP 240=240
Turbidity: 1.0 ntu = 1.0 Methane: — % LEL = — Turb 1.0=1.0

Date of Calibrations: 5/18/16

pH: 4.0 std. = 4.00 7.0 std. = 7.00 10.0 std. = 9.95 4=4.00 7=7.00 10=9.99
SC: 1413 uS/cm = 1413 ORP 240 mV = 240 SC 1413=1413 ORP 240=240
Turbidity: 1.0 ntu = 1.0 Methane: — % LEL = — Turb 1.0=1.0

Date of Calibrations: 5/19/16

pH: 4.0 std. = 4.00 7.0 std. = 7.00 10.0 std. = 9.96 4=4.00 7=7.00 10=9.98
SC: 1413 uS/cm = 1413 ORP 240 mV = 240 SC 1413=1413 ORP 240=240
Turbidity: 1.0 ntu = 1.0 Methane: — % LEL = — Turb 1.0=1.0

Date of Calibrations: _____

pH: 4.0 std. = _____ 7.0 std. = _____ 10.0 std. = _____
SC: _____ uS/cm = _____ ORP _____ mV = _____
Turbidity: _____ ntu = _____ Methane: _____ % LEL = _____

WELL INTEGRITY AND WATER LEVEL FORM

Project Name: Cabarrus County Landfill
Site Location: Concord, NC Unit 1
Field Personnel: R. Powe M. Williams

Date: 5/16/16 Page 1 of 1
Weather: sunny, mild
W. L. Measuring Method: solinst 48125

Well ID	TIME	Water Level (BTOC) (feet)	Sounded Depth (BTOC) (feet)	Well located in dry area?	Well readily accessible?	Well protected with posts?	Well properly labeled?	Well casing free of kinks and/or bends?	Well area free of overgrowth?	Functioning locking cap?	Cap free of rust?	Vented well or cap?	Annular space filled with sand or gravel?	Weep hole at base of protective casing?	Lock intact and secured	Comments
CD-1S	1230	23.90	29.62	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
CD-1D	1232	26.51	52.20	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
MW-5	1439	12.18	32.39	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
MW-7	1447	2.45	21.76	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	• broken hinge° LEL= 0 O_2= 20.9
MW-8A	1453	6.87	25.32	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
MW-10	1443	8.96	35.36	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
MW-11	1435	6.68	25.33	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
				Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= O_2=
				Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= O_2=
				Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= O_2=

I have received this Well Integrity and Water Level Form(s): [signature] Signature Date

WELL INTEGRITY AND WATER LEVEL FORM

Project Name: Cabarrus County Landfill
Site Location: Concord, NC C&D Landfill
Field Personnel: R. Powe M. Williams

Date: 5/16/16
Weather: Sunny mild
W. L. Measuring Method: solinst 48125

Well ID	TIME	Water Level (BTOC) (feet)	Sounded Depth (BTOC) (feet)	Well located in dry area?	Well readily accessible?	Well protected with posts?	Well properly labeled?	Well casing free of kinks and/or bends?	Well area free of overgrowth?	Functioning locking cap?	Cap free of rust?	Vented well or cap?	Annular space filled with sand or gravel?	Weep hole at base of protective casing?	Lock intact and secured	Comments
CD-1S	—	—	—	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	See Unit 1 LEL= O_2=
CD-1D	—	—	—	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	See unit 1 LEL= O_2=
CD-2	1236	14.00	25.64	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
CD-3	1246	38.25	53.52	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
CD-7	1244	39.65	46.29	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
CD-8	1250	31.98	43.34	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Flushmount LEL=0 O_2= 20.9
				Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= O_2=
				Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= O_2=
				Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= O_2=
				Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= O_2=

I have received this Well Integrity and Water Level Form(s): _____ Signature _____ Date

WELL INTEGRITY AND WATER LEVEL FORM

Project Name: Cabarrus County Landfill
Site Location: Concord, NC Units 2 & 3
Field Personnel: R. Powe M. Williams

Date: 5/16/16
Weather: Sunny, warm
W. L. Measuring Method: Solinst 4812.5

Well ID	TIME	Water Level (BTOC) (feet)	Sounded Depth (BTOC) (feet)	Well located in dry area?	Well readily accessible?	Well protected with posts?	Well properly labeled?	Well casing free of kinks and/or bends?	Well area free of overgrowth?	Functioning locking cap?	Cap free of rust?	Vented well or cap?	Annular space filled with sand or gravel?	Weep hole at base of protective casing?	Lock intact and secured	Comments
CD-1S	—	—	—	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	See Unit 1 LEL= O_2=
CD-1D	—	—	—	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	See Unit 1 LEL= O_2=
AMW-1D	1404	49.95	96.82	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
AMW-1S	1403	49.23	67.60	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
AMW-2D	1336	20.97	62.58	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
AMW-2S	1334	21.53	39.96	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
CD-4 Rep	1225	8.70	19.63	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
CD-6	1240	32.65	41.50	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
MW-1	1425	12.43	30.24	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
MW-3	1357	13.06	35.24	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9

I have received this Well Integrity and Water Level Form(s): _____ Signature _____ Date

WELL INTEGRITY AND WATER LEVEL FORM

Project Name: Cabarrus County Landfill
Site Location: Concord, NC Units 2 & 3
Field Personnel: R. Powe M. Williams

Date: 5/16/16
Weather: sunny (mild)
W. L. Measuring Method: Solinst 48125

Well ID	TIME	Water Level (BTOC) (feet)	Sounded Depth (BTOC) (feet)	Well located in dry area?	Well readily accessible?	Well protected with posts?	Well properly labeled?	Well casing free of kinks and/or bends?	Well area free of overgrowth?	Functioning locking cap?	Cap free of rust?	Vented well or cap?	Annular space filled with sand or gravel?	Weep hole at base of protective casing?	Lock intact and secured	Comments
MW-3 DEEP	1355	8.06	93.64	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	not labeled LEL= 0 O_2= 20.9
MW-A	1312	42.07	50.37	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	VOL = 37 LEL= 100 O_2= 7.7
MW-B	1426	2.77	15.21	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
MW-C	1322	6.24	17.68	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 16.8
MW-D	1329	25.78	30.33	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	VOL = 40 LEL= 100 O_2= 5.1
MW-E	1409	27.61	41.62	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	• broken hinge LEL= 0 O_2= 20.9
MW-E DEEP	1411	31.03	59.77	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
MW-F	1432	8.60	20.06	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	heavy overgrowth LEL= 0 O_2= 17.4
MW-G	1423	9.57	20.25	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	VOL= 35 LEL= 100 O_2= 8.1
MW-H	1339	24.33	32.90	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9

I have received this Well Integrity and Water Level Form(s): _____ Signature _____ Date

WELL INTEGRITY AND WATER LEVEL FORM

Project Name: Cabarrus County Landfill
Site Location: Concord, NC Units 2 & 3
Field Personnel: R. Powe M. Williams

Date: 5/16/16
Weather: Sunny, mild
W. L. Measuring Method: solinst 48125

Well ID	TIME	Water Level (BTOC) (feet)	Sounded Depth (BTOC) (feet)	Well located in dry area?	Well readily accessible?	Well protected with posts?	Well properly labeled?	Well casing free of kinks and/or bends?	Well area free of overgrowth?	Functioning locking cap?	Cap free of rust?	Vented well or cap?	Annular space filled with sand or gravel?	Weep hole at base of protective casing?	Lock intact and secured	Comments
MW-H DEEP	1342	24.65	59.70	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	• broken hinge • LEL= 0 O_2= 20.9
MW-I	1416	43.80	65.23	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.4
MW-J	1303	28.95	34.89	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
MW-K	1325	21.70	36.19	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
MW-L	1352	11.64	27.05	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	• broken hinge • LEL= 0 O_2= 20.9
MW-L DEEP	1351	13.01	64.05	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
MW-M	1347	18.55	39.59	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
MW-X	1318	11.64	32.09	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= 0 O_2= 20.9
				Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= O_2=
				Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	LEL= O_2=

I have received this Well Integrity and Water Level Form(s): _____ Signature _____ Date

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2+3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #:	AMW-2D (1302)		
Date:	5/17/16		
Weather Conditions:	overcast, mild	Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) =	62.58	Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) =	20.97	Well Yield (subjective):	good
		Sample Date and Time:	5/17/16 @ 1444
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 =	—	PSI:	30
		Recharge:	12
Standard Evacuation Volume (3 casing volumes) =	—	Discharge:	3
Total Volume of Water Removed (~~gallons~~ L):	3.60		

Time (military)	1408	1428	1433	1438	1441	1444			
Volume Purged (~~Gallons~~ L)	0	2.00	2.50	3.00	3.30	3.60			
Water Level (ft.) stable	20.97	21.86	22.42	22.56	22.53	22.53			
pH (s.u.) ± .2	6.13	6.33	6.25	6.14	6.01	6.04			
Sp. Cond. (µmhos/cm) ± 10%	231	235	234	230	231	224			
Water Temp. (°C) constant	17.4	18.2	16.1	15.9	15.9	15.9			
Turbidity (NTU) ±10% or ≤ 5 NTU	5.49	1.99	1.57	1.65	2.04	1.41			
Dissolved Oxygen (mg/L) ±10%	5.68	5.55	4.23	2.81	2.50	2.64			
RedOx Potential/ORP (mV) ±10 mV	73.2	77.4	82.8	87.2	87.3	88.0			
~~GPM/Hz~~ LPM	—	0.100	0.100	0.100	0.100	0.100			

COMMENTS/OBSERVATIONS: clear; no odor

Diss. H2 stabilized @ 1408
sampled @ 1428

Fe2+ = 0.6 mg/L

Date: 5/17/16

By: [signature]

[signature]

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2+3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #: AMW-25 (1302)			
Date: 5/17/16			
Weather Conditions: overcast, rain		Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) = 39.96		Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) = 21.53		Well Yield (subjective): good	
		Sample Date and Time: 5/17/16 @ 1343	
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 = —		PSI: 35	
		Recharge: 12	
Standard Evacuation Volume (3 casing volumes) = —		Discharge: 3	
Total Volume of Water Removed (~~gallons~~ L): 3.16			

Time (military)	1300	1320	1325	1330	1333	1338	1343	
Volume Purged (~~Gallons~~) L	0	~~1.00~~ 2.00	1.50	~~2.00~~ 1.80	2.10	2.60	3.10	
Water Level (ft.) stable	21.53	21.73	21.73	21.73	21.73	21.73	21.73	
pH (s.u.) ±.2	5.73	5.72	5.74	5.76	5.77	5.86	5.78	
Sp. Cond. (µmhos/cm) ±10%	218	156	153	154	154	154	154	
Water Temp. (°C) constant	17.9	17.5	16.0	15.8	15.8	15.8	15.8	
Turbidity (NTU) ±10% or ≤5 NTU	19	20	19	19	16	13	7.39	
Dissolved Oxygen (mg/L) ±10%	5.75	4.33	3.70	3.22	3.18	3.31	3.22	
RedOx Potential/ORP (mV) ±10 mV	-34.4	-19.8	15.8	33.1	40.7	49.1	50.8	
~~GPM/Hz~~ LPM	—	0.100	0.100	0.100	0.100	0.100	0.100	

COMMENTS/OBSERVATIONS: clear; no odor

Diss. Fe started @ 1300
samples @ 1320

Fe2+ = 0.0 mg/L

Date: 5/17/16 By: [signature]

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	~~2"~~
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2+3,	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #: 1302 - MW-A			
Date: 5/17/16			
Weather Conditions: heavy rain, overcast		Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) = 50.37		Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) = 42.07		Well Yield (subjective): good	
		Sample Date and Time: 5/17/16 @ 1123	
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 = —		PSI: 36	
		Recharge: 12	
Standard Evacuation Volume (3 casing volumes) = —		Discharge: 3	
Total Volume of Water Removed (~~gallons~~ L): 6.20			

Time (military)	1052	1112	1117	1120	1123		
Volume Purged (~~Gallons~~) L	0	4.00	5.00	5.60	6.20		
Water Level (ft.) stable	42.07	42.16	42.16	42.16	42.16		
pH (s.u.) ± .2	5.60	5.41	5.44	5.45	5.48		
Sp. Cond. (µmhos/cm) ± 10 %	363	393	394	394	394		
Water Temp. (°C) constant	16.7	16.2	16.1	16.1	16.1		
Turbidity (NTU) ±10 % or ≤ 5 NTU	6.04	3.20	3.12	2.78	1.04		
Dissolved Oxygen (mg/L) ±10 %	5.59	1.45	1.42	1.56	1.27		
RedOx Potential/ORP (mV) ±10 mV	-12.9	-43.0	-50.4	-51.3	-54.6		
~~GPM/Hz~~ LPM	—	0.200	0.200	0.200	0.200		

COMMENTS/OBSERVATIONS: clear; odor

D.W. HH started @ 1052
Sampled @ 1112

Fe2+ = 1.00 mg/L

Date: 5/17/16

By:

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2+3, 1,CSD	Casing Material:	PVC
Field Personnel:	RAY ~~POWE~~ MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #:	CD-15 C13027		
Date:	5/17/18		
Weather Conditions:	overcast	Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) =	29.62	Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) =	23.90	Well Yield (subjective):	good
		Sample Date and Time:	5/17/18 @ 0859
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 =	0.93	PSI:	31
		Recharge:	12
Standard Evacuation Volume (3 casing volumes) =	2.79	Discharge:	3
Total Volume of Water Removed (~~gallons~~ L):	4.00		

Time (military)	0819	0824	0829	0839	0844	0849	0854	0859	
Volume Purged (~~Gallons~~) L	0	0.500	1.00	2.00	2.50	3.00	3.50	4.00	
Water Level (ft.) stable	23.96	24.10	24.16	24.30	24.61	24.88	25.03	25.07	
pH (s.u.) ± 2	5.90	5.88	5.89	5.90	5.89	5.92	5.94	5.91	
Sp. Cond. (µmhos/cm) ± 10 %	107	104	104	103	100	98	101	103	
Water Temp. (°C) constant	16.2	15.8	15.8	15.7	15.7	15.7	15.7	15.7	
Turbidity (NTU) ±10 % or ≤ 5 NTU	4.81	4.62	5.03	5.17	4.76	3.65	3.81	3.63	
Dissolved Oxygen (mg/L) ±10 %	4.28	3.71	4.05	4.20	3.99	3.90	3.74	3.45	
RedOx Potential/ORP (mV) ±10 mV	262.6	260.8	261.3	246.8	249.9	250.5	246.5	244.7	
~~GPM/Hr~~ LPM	—	0.100	0.100	0.100	0.100	0.100	0.100	0.100	

COMMENTS/OBSERVATIONS: clear; no odor

Diss. Ht started @ 0819
sampled @ 0839

Fe2+ = 0.0 mg/L

Date: 5/17/18

By: [signature]

RP
[illegible]

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2+3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL ~~WILLIAMS~~ 1, CxO	Dedicated Pump:	No
Well ID #:	1302-CD-1D		
Date:	5/17/16		
Weather Conditions:	overcast, heavy rain	Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/~~BP~~
Total Well Depth in feet (TWD) =	52.20	Method of Sample Collection:	Grundfos/Bailer/Peristaltic/~~BP~~
Depth to Ground Water in feet (DGW) =	26.51	Well Yield (subjective):	good
		Sample Date and Time:	5/17/16 @ 1014
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 =	—	PSI:	35
		Recharge:	12
Standard Evacuation Volume (3 casing volumes) =	—	Discharge:	3
Total Volume of Water Removed (~~gallons~~ L):	5.00		

Time (military)	0940	0945	0948	0951	0954	1014	
Volume Purged (~~Gallons~~ L)	0	1.00	1.60	2.20	2.80	5.00	
Water Level (ft.) stable	26.51	26.78	26.80	26.82	26.82	26.82	
pH (s.u.) ± 2	6.08	6.08	6.12	6.09	6.09	6.06	
Sp. Cond. (µmhos/cm) ± 10 %	118	115	115	117	117	115	
Water Temp. (°C) constant	15.3	15.6	15.7	15.7	15.7	15.8	
Turbidity (NTU) ±10 % or ≤ 5 NTU	5.93	8.42	11	12	18	20	
Dissolved Oxygen (mg/L) ±10 %	5.37	5.16	4.46	4.81	4.86	4.50	
RedOx Potential/ORP (mV) ±10 mV	205.2	215.1	214.7	214.2	214.8	210.3	
~~GPM/Hz~~ LPM	—	0.200	0.200	0.200	0.200	0.200	

COMMENTS/OBSERVATIONS: slightly cloudy; no odor

turbid on start

waited 20 min for turb to stabilize and sampled

Fe2+ = 0.0 mg/L

Date: 5/17/16

By: [signature]

[signature]

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2+3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSH~~ALL~~ WILLIAMS	Dedicated Pump:	No
Well ID #:	1302- mw- E (R)		
Date:	5/18/16		
Weather Conditions:	overcast, breeze	Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) =	41.62	Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) =	27.61	Well Yield (subjective):	good
		Sample Date and Time:	5/18/16 @ 0900
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 =	—	PSI:	30
		Recharge:	12
Standard Evacuation Volume (3 casing volumes) =	—	Discharge:	3
Total Volume of Water Removed (~~gallons~~ L):	3.50		

Time (military)	0825	0845	0850	0855	0900		
Volume Purged (~~Gallons~~ L)	0	2.00	2.50	3.00	3.50		
Water Level (ft.) stable	27.61	27.65	27.65	27.65	27.65		
pH (s.u.) ± .2	6.02	6.18	6.21	6.27	6.27		
Sp. Cond. (µmhos/cm) ± 10 %	763	1045	1080	1084	1088		
Water Temp. (°C) constant	18.4	17.7	17.1	17.1	17.1		
Turbidity (NTU) ±10 % or ≤ 5 NTU	4.80	3.85	1.03	2.02	1.33		
Dissolved Oxygen (mg/L) ±10 %	4.61	1.90	1.54	1.64	1.40		
RedOx Potential/ORP (mV) ±10 mV	-44.5	-57.4	-60.9	-60.3	-59.0		
~~GPM/Hz~~ LPM	—	0.100	0.100	0.100	0.100		

COMMENTS/OBSERVATIONS: clear; odor

Diss Mt Started @ 0825
Sampled @ 0845

Fe2+ = 0.5 mg/L

Date: 5/18/16 By: [signature]

RB

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #:	1302 MW-E Deep		
Date:	5/18/16		
Weather Conditions:	overcast breeze	Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) =	59.77	Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) =	31.03	Well Yield (subjective):	good
		Sample Date and Time:	5/18/16 @ 1010
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 =	—	PSI:	35
		Recharge:	1
Standard Evacuation Volume (3 casing volumes) =	—	Discharge:	4
Total Volume of Water Removed (~~gallons~~ L):	3.00		

Time (military)	0940	1000	1005	1010			
Volume Purged (~~Gallons~~ L)	0	2.00	2.50	3.00			
Water Level (ft.) stable	31.03	31.03	31.03	31.03			
pH (s.u.) ±.2	6.57	6.65	6.66	6.63			
Sp. Cond. (µmhos/cm) ±10%	1034	1022	1020	1017			
Water Temp. (°C) constant	17.9	17.5	17.5	17.5			
Turbidity (NTU) ±10% or ≤5 NTU	9.54	9.70	9.42	9.10			
Dissolved Oxygen (mg/L) ±10%	4.36	3.15	2.93	3.08			
RedOx Potential/ORP (mV) ±10 mV	-80.5	-89.1	-91.7	-95.1			
~~GPM/Hz~~ LPM	—	0.100	0.100	0.100			

COMMENTS/OBSERVATIONS: clear; odor

Diss Mt started @ 0940
sampled @ 1000

Fe2+ = 3.0 mg/L

Date: 5/18/16

By:

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2+3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL ~~WI~~LLIAMS	Dedicated Pump:	No
Well ID #:	1302- Amw - 1D		
Date:	5/18/16		
Weather Conditions:	overcast, breeze	Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) =	96.82	Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) =	49.95	Well Yield (subjective):	good
		Sample Date and Time:	5/18/16 @ 1333
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 =	—	PSI:	50
		Recharge:	11.5
Standard Evacuation Volume (3 casing volumes) =	—	Discharge:	3.5
Total Volume of Water Removed (~~gallons~~ L):	3.10		

Time (military)		1302	1322	1327	1330	1333		
Volume Purged (Gallons)		0	2.00	2.50	2.80	3.10		
Water Level (ft.)	stable	49.95	52.58	52.80	53.06	53.22		
pH (s.u.)	± .2	6.23	6.15	6.10	6.12	6.13		
Sp. Cond. (µmhos/cm)	± 10 %	469	478	478	477	477		
Water Temp. (°C)	constant	20.4	19.0	18.1	18.1	18.1		
Turbidity (NTU)	±10 % or ≤ 5 NTU	4.00	4.77	3.80	3.81	4.46		
Dissolved Oxygen (mg/L)	±10 %	5.32	1.96	1.47	1.60	1.51		
RedOx Potential/ORP (mV)	±10 mV	-32.2	-22.8	-26.2	-27.1	-27.7		
GPM/Hz		—	0.100	0.100	0.100	0.100		

COMMENTS/OBSERVATIONS: clear; odor

Diss. Ht Stabilized @ 1302
Sampled @ 1322

Fe2+ = 3.0 mg/L

Date: 5/18/16

By: [signature]

AP
B

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT	Casing Material:	PVC
Field Personnel:	RAY POWE MARSH~~ALL~~ WILLIAMS	Dedicated Pump:	No
Well ID #: 132-AMW-15			
Date: 5/18/16			
Weather Conditions: Overcast, breezy		Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) = 67.60		Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) = 49.23		Well Yield (subjective): good	
		Sample Date and Time: 5/18/16 @ 1232	
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 = —		PSI: 40	
		Recharge: 12	
Standard Evacuation Volume (3 casing volumes) = —		Discharge: 3	
Total Volume of Water Removed (~~gallons~~ L): 4.80			

Time (military)	1154	1214	1219	1224	1229	1232		
Volume Purged (~~Gallons~~) L	0	2.00	2.50	3.00	3.50	~~4.00~~ (4.80)		
Water Level (ft.) stable	49.23	49.25	49.25	49.25	49.25	49.25		
pH (s.u.) ±.2	7.73	6.30	6.09	6.07	6.05	6.07		
Sp. Cond. (µmhos/cm) ±10%	210	210	226	224	225	224		
Water Temp. (°C) constant	18.0	18.4	16.7	16.5	16.5	16.5		
Turbidity (NTU) ±10% or ≤5 NTU	1.71	15	12	9.26	6.61	8.46		
Dissolved Oxygen (mg/L) ±10%	5.20	5.53	4.86	4.88	4.01	3.77		
RedOx Potential/ORP (mV) ±10 mV	42.2	99.3	125.2	152.4	214.7	221.5		
~~GPM/Hz~~	—	0.100	0.100	0.100	0.100	0.100		

COMMENTS/OBSERVATIONS: clear; slight odor

Diss Fe+ started @ 1154
Sampled @ 1214

Fe2+ = 0.0 mg/L

Date: 5/18/16

By:

Page 26 of 11

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2+3	Casing Material:	PVC
Field Personnel:	RAY ~~POWE~~ MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #:	1302- mw-3		
Date:	5/18/16	Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Weather Conditions:	overcast, breeze.	Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) =	35.24	Well Yield (subjective):	good
Depth to Ground Water in feet (DGW) =	13.06	Sample Date and Time:	5/18/16 @ 1509
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 =	—	PSI:	35
		Recharge:	12
Standard Evacuation Volume (3 casing volumes) =	—	Discharge:	3
Total Volume of Water Removed (~~gallons~~ L):	3.10 L		

Time (military)	1438	1443	1448	1453	1458	1503	1506	1509		
Volume Purged (~~Gallons~~ L)	0	0.56	1.00	1.50	2.00	2.50	2.80	3.10		
Water Level (ft.) stable	13.06	13.22	13.20	13.20	13.20	13.20	13.20	13.20		
pH (s.u.) ±.2	6.52	6.30	6.06	6.07	6.08	6.04	6.04	6.04		
Sp. Cond. (µmhos/cm) ±10%	206	171	169	168	168	168	167	167		
Water Temp. (°C) constant	19.5	18.6	18.3	18.4	18.4	16.5	16.5	16.5		
Turbidity (NTU) ±10% or ≤ 5 NTU	3.18	2.99	0.94	0.54	2.12	1.62	1.97	1.08		
Dissolved Oxygen (mg/L) ±10%	4.40	3.82	3.59	3.77	4.18	3.14	3.09	3.18		
RedOx Potential/ORP (mV) ±10 mV	-8.8	39.4	63.5	76.2	92.2	89.8	100.3	101.2		
~~GPM/Hz~~ LPM	—	0.100	0.100	0.100	0.100	0.100	0.100	0.100		

COMMENTS/OBSERVATIONS: clear, no odor

Diss. H+ started @ 1438
Sampled @ 1458

Fe2+ = 0.0 mg/L

Date: 5/18/16 By: [signature]

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2 & 3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #:	1302 MW-J		
Date:	5/17/16	Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Weather Conditions:	Rain	Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) =	34.89	Well Yield (subjective):	Poor
Depth to Ground Water in feet (DGW) =	28.95	Sample Date and Time:	5/17/16 @ 1055
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 =	0.97	PSI:	Metals 5/18/16 @ 0900
		Recharge:	
Standard Evacuation Volume (3 casing volumes) =	2.91	Discharge:	
Total Volume of Water Removed (gallons):	DRY @ 1.50		

Time (military)	1051	1053	1055	DRY			
Volume Purged (Gallons)	0	1.00	1.50				
Water Level (ft.) stable	—	—	—				
pH (s.u.) ± .2	6.61	6.74	6.92				
Sp. Cond. (µmhos/cm) ± 10 %	2006	264	265				
Water Temp. (°C) constant	15.0	14.7	14.8				
Turbidity (NTU) ±10 % or ≤ 5 NTU	17	800+	690				
Dissolved Oxygen (mg/L) ±10 %	5.84	4.34	4.20				
RedOx Potential/ORP (mV) ±10 mV	6.7	17.6	27.6				
GPM/Hz	—	—	—				

COMMENTS/OBSERVATIONS: Cloudy, no odor
Metals 5/18/16 @ 0900 NTU = 58

Fe2+ = — mg/L

Date: 5/18/16 By: Ray Powe

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2 & 3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #:	1302-MW-K		
Date:	5/17/16	Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Weather Conditions:	Rain	Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) =	36.19	Well Yield (subjective):	Good
Depth to Ground Water in feet (DGW) =	21.70	Sample Date and Time:	5/17/16 @ 1321
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 =	2.36	PSI:	Metals 5/18/16 @ 0925
		Recharge:	
Standard Evacuation Volume (3 casing volumes) =	7.09	Discharge:	
Total Volume of Water Removed (gallons):	7.25		

Time (military)	1309	1313	1317	1321			
Volume Purged (Gallons)	0	2.50	5.00	7.25			
Water Level (ft.) stable	—	—	—	—			
pH (s.u.) ± .2	6.47	6.68	6.73	7.03			
Sp. Cond. (µmhos/cm) ± 10 %	197	196	200	208			
Water Temp. (°C) constant	15.0	14.9	14.9	15.0			
Turbidity (NTU) ±10 % or ≤ 5 NTU	33	541	709	730			
Dissolved Oxygen (mg/L) ±10 %	4.16	4.37	4.43	4.34			
RedOx Potential/ORP (mV) ±10 mV	-12.8	17.8	22.4	20.5			
GPM/Hz	—	—	—	—			

COMMENTS/OBSERVATIONS: Cloudy, no odor
Metals 5/18/16 @ 0925 NTU = 14

Fe2+ = — mg/L

Date: 5/18/16 By: Ray Powe

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2 & 3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #:	1302-MW-M		
Date:	5/17/16	Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Weather Conditions:	Overcast	Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) =	39.59	Well Yield (subjective):	Good
Depth to Ground Water in feet (DGW) =	18.55	Sample Date and Time:	5/17/16 @ 1415
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 =	3.43	PSI:	Metals 5/18/16 @ 0940
		Recharge:	
Standard Evacuation Volume (3 casing volumes) =	10.29	Discharge:	
Total Volume of Water Removed (gallons):	10.50		

Time (military)	1400	1405	1410	1415			
Volume Purged (Gallons)	0	3.50	7.00	10.50			
Water Level (ft.) stable	—	—	—	—			
pH (s.u.) ± .2	7.20	7.80	7.78	7.97			
Sp. Cond. (µmhos/cm) ± 10 %	328	322	314	320			
Water Temp. (°C) constant	15.6	15.3	15.4	15.3			
Turbidity (NTU) ±10 % or ≤ 5 NTU	25	800+	800+	800+			
Dissolved Oxygen (mg/L) ±10 %	2.61	4.01	4.44	4.02			
RedOx Potential/ORP (mV) ±10 mV	-40.7	6.6	-3.4	-3.2			
GPM/Hz	—	—	—				

COMMENTS/OBSERVATIONS: Cloudy, no odor
Metals 5/18/16 @ 0940 NTU = 8.43

Fe2+ = — mg/L

Date: 5/18/16 By: Ray Powe

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2 & 3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #:	1302-MW-X		
Date:	5/17/16		
Weather Conditions:	Rain	Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) =	32.09	Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) =	11.64	Well Yield (subjective):	Poor
		Sample Date and Time:	5/17/16 @ 1159
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 =	3.33	PSI:	Metals 5/18/16 @ 0910
		Recharge:	
Standard Evacuation Volume (3 casing volumes) =	10.00	Discharge:	
Total Volume of Water Removed (gallons):	DRY @ 6.50		

Time (military)	1150	1155	1159	DRY			
Volume Purged (Gallons)	0	3.50	6.50				
Water Level (ft.) stable	—	—	—				
pH (s.u.) ± .2	6.63	7.15	7.19				
Sp. Cond. (µmhos/cm) ± 10 %	203	223	210				
Water Temp. (°C) constant	14.1	13.6	13.9				
Turbidity (NTU) ±10 % or ≤ 5 NTU	205	107	190				
Dissolved Oxygen (mg/L) ±10 %	2.20	2.95	3.98				
RedOx Potential/ORP (mV) ±10 mV	3.0	-8.4	20.2				
GPM/Hz	—	—	—				

COMMENTS/OBSERVATIONS: Cloudy, no odor
Metals 5/18/16 @ 0910 NTU = 6.02

Fe2+ = — mg/L

Date: 5/18/16 By: Ray Powe

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2 x 3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #: 1302-CD-4 Rep			
Date: 5/17/16			
Weather Conditions: Rain		Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) = 19.63		Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) = 8.70		Well Yield (subjective):	Good
		Sample Date and Time:	5/17/16 @ 1128
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 = 1.78		PSI:	Metals 5/18/16 @ 0828
		Recharge:	
Standard Evacuation Volume (3 casing volumes) = 5.35		Discharge:	
Total Volume of Water Removed (gallons): 5.50			

Time (military)	1119	1121	1125	1128			
Volume Purged (Gallons)	0	2.00	4.00	5.50			
Water Level (ft.) stable	—	—	—	—			
pH (s.u.) ± .2	6.94	6.37	6.72	6.90			
Sp. Cond. (µmhos/cm) ± 10%	221	261	277	242			
Water Temp. (°C) constant	14.3	14.3	14.2	14.2			
Turbidity (NTU) ±10% or ≤ 5 NTU	45	701	800+	800+			
Dissolved Oxygen (mg/L) ±10%	1.99	3.12	2.95	2.68			
RedOx Potential/ORP (mV) ±10 mV	-72.9	-113.4	-86.5	-53.5			
GPM/Hz	—	—	—				

COMMENTS/OBSERVATIONS: Cloudy, slight odor
Metals 5/18/16 @ 0828 NTU = 28

Fe2+ = ——— mg/L

Date: 5/18/16 By: Ray Powe

RB
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ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2 x 3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID # 302 CD-6			
Date: 5/17/16			
Weather Conditions: Rain		Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) = 41.50		Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) = 32.65		Well Yield (subjective):	Moderate
		Sample Date and Time:	5/17/16 @ 0930
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 = 1.44		PSI:	Metals 5/18/16 @ 0841
		Recharge:	
Standard Evacuation Volume (3 casing volumes) = 4.33		Discharge:	
Total Volume of Water Removed (gallons): DRY @ 4.00			

Time (military)	0919	0923	0927	0930	DRY		
Volume Purged (Gallons)	0	1.50	3.00	4.00			
Water Level (ft.) stable	—	—	—	—			
pH (s.u.) ± .2	5.46	6.26	6.28	6.20			
Sp. Cond. (µmhos/cm) ± 10%	248	284	277	271			
Water Temp. (°C) constant	16.8	16.9	16.9	16.9			
Turbidity (NTU) ±10% or ≤ 5 NTU	800+	800+	800+	800+			
Dissolved Oxygen (mg/L) ±10%	1.51	1.63	1.56	1.50			
RedOx Potential/ORP (mV) ±10 mV	-15.3	-161.8	-114.8	-47.5			
GPM/Hz	—	—	—	—			

COMMENTS/OBSERVATIONS: Cloudy (dark gray); odor
Metals 5/18/16 @ 0841 NTU = 23

Fe2+ = — mg/L

Date: 5/18/16 By: [signature]

Page 2 of 22

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2 & 3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #: 1302 MW-C			
Date: 5/17/16			
Weather Conditions: Rain		Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) = 17.68		Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) = 6.24		Well Yield (subjective):	Poor
		Sample Date and Time:	5/17/16 @ 1250
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 = 1.87		PSI:	Metals 5/18/16 @ 0917
		Recharge:	
Standard Evacuation Volume (3 casing volumes) = 5.61		Discharge:	
Total Volume of Water Removed (gallons): DRY @ 3.75			

Time (military)	1245	1247	1250	DRY			
Volume Purged (Gallons)	0	2.00	3.75				
Water Level (ft.) stable	—	—	—				
pH (s.u.) ± .2	6.47	6.19	6.50				
Sp. Cond. (µmhos/cm) ± 10 %	115	139	126				
Water Temp. (°C) constant	15.0	14.3	14.0				
Turbidity (NTU) ±10 % or ≤ 5 NTU	47	120	309				
Dissolved Oxygen (mg/L) ±10 %	3.35	3.12	3.48				
RedOx Potential/ORP (mV) ±10 mV	-122.8	-113.8	-78.4				
GPM/Hz	—	—	—				

COMMENTS/OBSERVATIONS: Cloudy, odor
Metals 5/18/16 @ 0917 NTU = 5.92

Fe2+ = — mg/L

Date: 5/18/16 By: Ray Powe

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2 & 3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #: 1302-MW-D			
Date: 5/17/16			
Weather Conditions: Overcast		Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) = 30.33		Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) = 25.78		Well Yield (subjective):	Moderate
		Sample Date and Time:	5/17/16 @ 1342
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 = 0.74		PSI:	Metals 5/18/16 @ 0932
		Recharge:	
Standard Evacuation Volume (3 casing volumes) = 2.23		Discharge:	
Total Volume of Water Removed (gallons): DRY @ 1.75			

Time (military)	1337	1339	1341	1342	DRY		
Volume Purged (Gallons)	0	0.75	1.50	1.75			
Water Level (ft.) stable	—	—	—	—			
pH (s.u.) ± .2	7.12	7.23	7.10	7.26			
Sp. Cond. (µmhos/cm) ± 10 %	683	616	616	617			
Water Temp. (°C) constant	16.5	16.3	16.4	16.3			
Turbidity (NTU) ±10 % or ≤ 5 NTU	18	88	90	23			
Dissolved Oxygen (mg/L) ±10 %	1.65	1.72	2.58	.23			
RedOx Potential/ORP (mV) ±10 mV	-69.1	-89.4	-71.3	-84.4			
GPM/Hz	—	—	—	—			

COMMENTS/OBSERVATIONS: Cloudy, odor
Metals 5/18/16 @ 0932 NTU= 4.07

Fe2+ = — mg/L

Date: 5/18/16 By: [signature]

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 283	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #: 1302-MW-F			
Date: 5/17/16			
Weather Conditions: Overcast		Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) = 20.06		Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) = 8.60		Well Yield (subjective): Good	
		Sample Date and Time: 5/17/16 @ 1442	
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 = 1.87		PSI:	Metals 5/18/16 @ 1237
		Recharge:	
Standard Evacuation Volume (3 casing volumes) = 5.60		Discharge:	
Total Volume of Water Removed (gallons): 5.75			

Time (military)	1433	1436	1439	1442			
Volume Purged (Gallons)	0	2.00	4.00	5.75			
Water Level (ft.) stable	—	—	—	—			
pH (s.u.) ± .2	7.82	8.04	8.03	8.12			
Sp. Cond. (µmhos/cm) ± 10 %	1006	805	749	796			
Water Temp. (°C) constant	15.1	14.6	14.5	14.4			
Turbidity (NTU) ±10 % or ≤ 5 NTU	50	800+	800+	800+			
Dissolved Oxygen (mg/L) ±10 %	1.88	2.38	3.10	2.65			
RedOx Potential/ORP (mV) ±10 mV	-80.3	-83.7	-53.7	-46.7			
GPM/Hz	—	—	—	—			

COMMENTS/OBSERVATIONS: Cloudy, odor
Metals 5/18/16 @ 1237 NTU= 5.53

Fe2+ = — mg/L

Date: 5/18/16 By: Ray Powe

RP

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHA~~LL~~ WILLIAMS 2+3	Dedicated Pump:	No
Well ID #:	1302-MW-L		
Date:	5/19/16		
Weather Conditions:	rain, mild	Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) =	27.05	Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) =	11.64	Well Yield (subjective):	good
		Sample Date and Time:	5/19/16 @ 0849
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 =	—	PSI:	
		Recharge:	
Standard Evacuation Volume (3 casing volumes) =	—	Discharge:	
Total Volume of Water Removed (~~gallons~~ L):	2.90		

Time (military)	0820	0830	0840	0843	0846	0849	
Volume Purged (~~Gallons~~ L)	0	1.00	2.00	2.30	2.60	2.90	
Water Level (ft.) stable		13.36	13.59	13.54	13.54	13.54	
pH (s.u.) ± .2	6.29	5.79	5.77	5.71	5.79	5.80	
Sp. Cond. (µmhos/cm) ± 10 %	97	99	95	97	94	95	
Water Temp. (°C) constant	14.6	14.4	14.2	14.2	14.2	14.2	
Turbidity (NTU) ±10 % or ≤ 5 NTU	2.75	3.10	2.28	1.62	1.34	1.53	
Dissolved Oxygen (mg/L) ±10 %	4.25	4.42	4.47	3.31	3.69	3.66	
RedOx Potential/ORP (mV) ±10 mV	208.4	198.7	196.1	196.5	192.2	192.1	
~~GPM/Hz~~ LPM	~~0.100~~	0.100	0.100	0.100	0.100	0.100	

COMMENTS/OBSERVATIONS: clear; no odor

Diss Ht started @ 0820
Sampled @ 0840

Fe2+ = 0.0 mg/L

Date: 5/19/16

By:

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2+3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #:	1302 - [redacted] - Deep		
Date:	5/19/16		
Weather Conditions:	heavy rain, mild	Method of Well Evacuation:	Grundfos/Bailer/~~Peristaltic~~/BP
Total Well Depth in feet (TWD) =	64.05	Method of Sample Collection:	Grundfos/Bailer/~~Peristaltic~~/BP
Depth to Ground Water in feet (DGW) =	13.01	Well Yield (subjective):	good
		Sample Date and Time:	5/19/16 @ 0422
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 =	—	PSI:	
		Recharge:	
Standard Evacuation Volume (3 casing volumes) =	—	Discharge:	
Total Volume of Water Removed (~~gallons~~ L):	1.40		

Time (military)	0908	0913	0916	0919	0922		
Volume Purged (~~Gallons~~ L)	0	0.50	0.80	1.16	1.40		
Water Level (ft.) stable	13.01	15.66	16.10	16.13	16.13		
pH (s.u.) ±.2	5.90	6.34	6.66	6.74	6.82		
Sp. Cond. (µmhos/cm) ±10%	170	207	209	204	204		
Water Temp. (°C) constant	14.8	14.9	15.0	15.0	15.0		
Turbidity (NTU) ±10% or ≤5 NTU	2.35	3.18	2.96	2.82	2.06		
Dissolved Oxygen (mg/L) ±10%	3.07	3.24	2.75	3.44	3.88		
RedOx Potential/ORP (mV) ±10 mV	164.6	159.3	152.6	150.4	149.3		
~~GPM~~/Hz LPM	—	0.100	0.100	0.100	0.100		

COMMENTS/OBSERVATIONS: clear; no odor

Fe2+ = N/A mg/L

Date: 5/19/16 By: [signature]

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT ~~2~~ 3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #:	1502-mw3 Deep		
Date:	5/4/16		
Weather Conditions:	hot; sun, mild	Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) =	93.64	Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) =	8.06	Well Yield (subjective):	good
		Sample Date and Time:	5-4-16 @ 0957
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 =	—	PSI:	
		Recharge:	
Standard Evacuation Volume (3 casing volumes) =	—	Discharge:	
Total Volume of Water Removed (~~gallons~~ L):	1.70		

Time (military)	0940	0945	0948	0951	0954	0957			
Volume Purged (~~Gallons~~ L)	0	0.50	0.80	1.10	1.40	1.70			
Water Level (ft.) stable	8.06	10.98	12.49	12.91	13.20	13.57			
pH (s.u.) ± .2	6.94	7.05	7.20	7.37	7.47	7.48			
Sp. Cond. (µmhos/cm) ± 10 %	208	354	361	362	362	362			
Water Temp. (°C) constant	15.1	15.6	15.6	15.6	15.6	15.6			
Turbidity (NTU) ±10 % or ≤ 5 NTU	0.71	0.95	0.65	0.43	0.62	0.31			
Dissolved Oxygen (mg/L) ±10 %	5.51	2.56	2.30	2.22	2.35	2.26			
RedOx Potential/ORP (mV) ±10 mV	142.6	-79.5	-126.2	-129.2	-127.3	-124.8			
~~GPM/Hz~~ LPm	—	0.100	0.100	0.100	0.100	0.100			

COMMENTS/OBSERVATIONS: clear; odor

Fe2+ = N/A mg/L

Date: 5/4/16 By: [signature]

Page 11 of 11

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2 & 3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #: 1302-MW-H			
Date: 5/18/16			
Weather Conditions: Overcast		Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) = 32.90		Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) = ~~29.33~~ 24.33		Well Yield (subjective): Good	
		Sample Date and Time: 5/18/16 @ 1002	
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 = 1.40		PSI: Metals 5/19/16 @ 0847	
		Recharge:	
Standard Evacuation Volume (3 casing volumes) = 4.19		Discharge:	
Total Volume of Water Removed (gallons): 4.25			

Time (military)	0953	0957	0959	1002			
Volume Purged (Gallons)	0	1.50	3.00	4.25			
Water Level (ft.) stable	—	—	—	—			
pH (s.u.) ± .2	6.06	6.02	5.94	6.06			
Sp. Cond. (µmhos/cm) ± 10 %	162	159	163	162			
Water Temp. (°C) constant	14.8	14.2	14.2	14.2			
Turbidity (NTU) ±10 % or ≤ 5 NTU	73	800+	800+	800+			
Dissolved Oxygen (mg/L) ±10 %	5.78	5.49	5.53	5.40			
RedOx Potential/ORP (mV) ±10 mV	179.7	190.3	202.9	203.6			
GPM/Hz	—	—	—	—			

COMMENTS/OBSERVATIONS: Cloudy (brown); no odor
Metals 5/19/16 @ 0847 NTU=38

Fe2+ = ——— mg/L

Date: 5/19/16 By: Ray Powe

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2&3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #:	1302-MW-H Deep		
Date:	5/18/16		
Weather Conditions:	Overcast	Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) =	59.70	Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) =	24.65	Well Yield (subjective):	Good
		Sample Date and Time:	5/18/16 @ 1037
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 =	5.71	PSI:	Metals 5/19/16 @ 0850
		Recharge:	
Standard Evacuation Volume (3 casing volumes) =	17.14	Discharge:	
Total Volume of Water Removed (gallons):	17.25		

Time (military)	1015	1022	1029	1037			
Volume Purged (Gallons)	0	5.75	11.50	17.25			
Water Level (ft.) stable	—	—	—	—			
pH (s.u.) ± .2	6.36	6.72	6.68	6.82			
Sp. Cond. (µmhos/cm) ± 10 %	259	264	269	272			
Water Temp. (°C) constant	14.6	14.8	15.0	14.9			
Turbidity (NTU) ±10 % or ≤ 5 NTU	205	43	180	220			
Dissolved Oxygen (mg/L) ±10 %	4.86	4.92	4.68	4.99			
RedOx Potential/ORP (mV) ±10 mV	175.2	159.1	153.0	145.0			
GPM/Hz	—	—	—	—			

COMMENTS/OBSERVATIONS: Cloudy, no odor
Metals 5/19/16 @ 0850 NTU = 18

Fe2+ = — mg/L

Date: 5/18/16 By: Ray Powe

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2 & 3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #: 1302 MW-I			
Date: 5/18/16			
Weather Conditions: Overcast		Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) = 65.23		Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) = 43.80		Well Yield (subjective):	Good
		Sample Date and Time:	5/18/16 @ 1214
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 = 3.49		PSI:	Metals 5/19/16 @ 0902
		Recharge:	
Standard Evacuation Volume (3 casing volumes) = 10.48		Discharge:	
Total Volume of Water Removed (gallons): 10.50			

Time (military)	1156	1202	1208	1214			
Volume Purged (Gallons)	0	3.50	7.00	10.50			
Water Level (ft.) stable	—	—	—	—			
pH (s.u.) ± .2	7.03	7.02	6.96	6.86			
Sp. Cond. (µmhos/cm) ± 10 %	123	128	128	127			
Water Temp. (°C) constant	15.7	15.0	15.0	15.0			
Turbidity (NTU) ±10 % or ≤ 5 NTU	49	199	280	253			
Dissolved Oxygen (mg/L) ±10 %	4.86	4.76	4.51	4.40			
RedOx Potential/ORP (mV) ±10 mV	97.4	151.7	161.1	163.9			
GPM/Hz	—	—	—				

COMMENTS/OBSERVATIONS: Cloudy, no odor
Metals 5/19/16 @ 0902 NTU = 6.57

Fe2+ = — mg/L

Date: 5/19/16 By: Ray Powe

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 283	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #:	1302-MW-B		
Date:	5/18/16		
Weather Conditions:	Overcast	Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) =	15.29	Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) =	2.77	Well Yield (subjective):	Good
		Sample Date and Time:	5/18/16 @ 1258
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 =	2.04	PSI:	Metals 5/19/16 @ 0922
		Recharge:	
Standard Evacuation Volume (3 casing volumes) =	6.12	Discharge:	
Total Volume of Water Removed (gallons):	6.25		

Time (military)	1251	1253	1256	1258			
Volume Purged (Gallons)	0	2.25	4.50	6.25			
Water Level (ft.) stable	—	—	—	—			
pH (s.u.) ± .2	7.38	8.01	8.20	8.32			
Sp. Cond. (µmhos/cm) ± 10 %	906	970	950	976			
Water Temp. (°C) constant	15.5	14.7	14.3	14.0			
Turbidity (NTU) ±10 % or ≤ 5 NTU	57	800+	800+	800+			
Dissolved Oxygen (mg/L) ±10 %	2.54	3.59	4.15	3.73			
RedOx Potential/ORP (mV) ±10 mV	92.2	54.0	51.2	52.6			
GPM/Hz	—	—	—				

COMMENTS/OBSERVATIONS: Cloudy, odor
Metals 5/19/16 @ 0922 NTU = 17

Fe2+ = — mg/L

Date: 5/19/16 By: Ray Powe

RP
RB

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2 & 3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #:	1302-MW-G		
Date:	5/18/16		
Weather Conditions:	Overcast	Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) =	20.25	Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) =	9.57	Well Yield (subjective):	Poor
		Sample Date and Time:	5/18/16 @ 1320
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 =	1.74	PSI:	Metals 5/19/16 @ 0928
		Recharge:	
Standard Evacuation Volume (3 casing volumes) =	5.22	Discharge:	
Total Volume of Water Removed (gallons):	DRY @ 3.00		

Time (military)	1314	1317	1320	DRY			
Volume Purged (Gallons)	0	1.75	3.00				
Water Level (ft.) stable	—	—	—				
pH (s.u.) ± .2	7.70	7.93	7.96				
Sp. Cond. (µmhos/cm) ± 10 %	1451	1303	1671				
Water Temp. (°C) constant	15.2	14.9	15.0				
Turbidity (NTU) ±10 % or ≤ 5 NTU	37	541	800+				
Dissolved Oxygen (mg/L) ±10 %	2.20	2.98	2.40				
RedOx Potential/ORP (mV) ±10 mV	60.9	52.4	49.0				
GPM/Hz	—	—	—				

COMMENTS/OBSERVATIONS: Cloudy, Strong odor DUP here
Metals 5/19/16 @ 0928 NTU = 12

Fe2+ = — mg/L

Date: 5/19/16 By: [signature]

ASI Analytical Services

FIELD DATA INFORMATION LOG FOR GROUND-WATER SAMPLING

Client:	CAMP, DRESSER, & MCKEE, INC. - RALEIGH	Casing Diameter:	2"
Site Name:	CABARRUS CO. SANITARY LANDFILL UNIT 2 & 3	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #:	1302-MW-1		
Date:	5/18/16		
Weather Conditions:	Overcast	Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) =	30.24	Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) =	12.43	Well Yield (subjective):	Good
		Sample Date and Time:	5/18/16 @ 1352
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 =	2.90	PSI:	Metals 5/19/16 @ 0931
		Recharge:	
Standard Evacuation Volume (3 casing volumes) =	8.71	Discharge:	
Total Volume of Water Removed (gallons):	8.75		

Time (military)	1340	1344	1348	1352			
Volume Purged (Gallons)	0	3.00	6.00	8.75			
Water Level (ft.) stable	—	—	—	—			
pH (s.u.) ± .2	7.91	8.02	8.11	8.05			
Sp. Cond. (µmhos/cm) ± 10%	1730	1853	1696	1515			
Water Temp. (°C) constant	15.4	15.3	15.4	15.4			
Turbidity (NTU) ±10% or ≤ 5 NTU	17	97	90	88			
Dissolved Oxygen (mg/L) ±10%	3.79	4.13	3.08	3.48			
RedOx Potential/ORP (mV) ±10 mV	30.7	66.5	84.0	93.5			
GPM/Hz	—	—	—	—			

COMMENTS/OBSERVATIONS: Cloudy; odor
Metals 5/19/16 @ 0931
Equipment Blank here @ 1332
NTU = 4.47

Fe2+ = — mg/L

Date: 5/19/16 By: [signature]

Page 19 of ____

FIELD INFORMATION LOG

Facility: Cabarrus LF (SA SWs) Unit 1 Sample Point ID: SW-1

Location: Concord, NC Field Representatives: RP

Sample Matrix: Surfacewater Weather: Rain

Time	pH (Std Units)	Conduct. (OS/cm)	Temp (°C)	Turbidity . (NTU's)	ORP (mV)	DO (mg/L)
0918	6.99	342	15.4	800+	360.3	4.99

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

NC App I VOC – 3 40mL VOA w/ HCL Metals – 1 500 mL HDPE w/ HNO3

COMMENTS AND OBSERVATIONS: Cloudy (orange); no odor; good flow

22 of 22

Facility: Cabarrus LF (SA SWs) Unit 1 Sample Point ID: SW-2

Location: Concord, NC Field Representatives: RP

Sample Matrix: Surfacewater Weather: Rain

Time	pH (Std Units)	Conduct. (OS/cm)	Temp (°C)	Turbidity . (NTU's)	ORP (mV)	DO (mg/L)
0911	6.80	241	15.6	590	181.3	3.51

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

NC App I VOC – 3 40mL VOA w/ HCL Metals – 1 500 mL HDPE w/ HNO3

COMMENTS AND OBSERVATIONS: Cloudy (orange); no odor; good flow

I certify that sampling procedures were in accordance with all applicable EPA and State protocols.

Date: 5/19/16 By: [signature] Company: ASI

21 of 22

RP

PACE ANALYTICAL SERVICES, INC.

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

Laboratory Report

Report Number: AZE0545

Project: Cabarrus Co - 2 & 3

Project #:[none]

Prepared For:
Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh, NC 27612

Attention: Mr. Mat Colone

June 09, 2016

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. 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.

Approved:

Project Manager

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PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1302-AMW2D	AZE0545-01	Ground Water	05/17/16 14:44	05/18/16 12:45
1302-AMW2S	AZE0545-02	Ground Water	05/17/16 13:43	05/18/16 12:45
1302-MWA	AZE0545-03	Ground Water	05/17/16 11:23	05/18/16 12:45
1302-CD1S	AZE0545-04	Ground Water	05/17/16 08:59	05/18/16 12:45
1302-CD1D	AZE0545-05	Ground Water	05/17/16 10:14	05/18/16 12:45
1302-MWE	AZE0545-06	Ground Water	05/18/16 09:00	05/19/16 09:30
1302-MWE Deep	AZE0545-07	Ground Water	05/18/16 10:10	05/19/16 09:30
1302-AMW1D	AZE0545-08	Ground Water	05/18/16 13:33	05/19/16 09:30
1302-AMW1S	AZE0545-09	Ground Water	05/18/16 12:32	05/19/16 09:30
1302-MW3	AZE0545-10	Ground Water	05/18/16 15:09	05/19/16 09:30
1302-MWJ	AZE0545-11	Ground Water	05/17/16 10:55	05/19/16 09:30
1302-MWJ	AZE0545-12	Ground Water	05/18/16 09:00	05/19/16 09:30
1302-MWK	AZE0545-13	Ground Water	05/17/16 13:21	05/19/16 09:30
1302-MWK	AZE0545-14	Ground Water	05/18/16 09:25	05/19/16 09:30
1302-MWM	AZE0545-15	Ground Water	05/17/16 14:15	05/19/16 09:30
1302-MWM	AZE0545-16	Ground Water	05/18/16 09:40	05/19/16 09:30
1302-MWX	AZE0545-17	Ground Water	05/17/16 11:59	05/19/16 09:30
1302-MWX	AZE0545-18	Ground Water	05/18/16 09:10	05/19/16 09:30
1302-CD4Rep	AZE0545-19	Ground Water	05/17/16 11:28	05/19/16 09:30
1302-CD4Rep	AZE0545-20	Ground Water	05/18/16 08:28	05/19/16 09:30

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ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1302-CD6	AZE0545-21	Ground Water	05/17/16 09:30	05/19/16 09:30
1302-CD6	AZE0545-22	Ground Water	05/18/16 08:41	05/19/16 09:30
1302-MWC	AZE0545-23	Ground Water	05/17/16 12:50	05/19/16 09:30
1302-MWC	AZE0545-24	Ground Water	05/18/16 09:17	05/19/16 09:30
1302-MWD	AZE0545-25	Ground Water	05/17/16 13:42	05/19/16 09:30
1302-MWD	AZE0545-26	Ground Water	05/18/16 09:32	05/19/16 09:30
1302-MWF	AZE0545-27	Ground Water	05/17/16 14:42	05/19/16 09:30
1302-MWF	AZE0545-28	Ground Water	05/18/16 12:37	05/19/16 09:30
1302-MWL	AZE0545-29	Ground Water	05/19/16 08:49	05/19/16 15:05
1302-MWL Deep	AZE0545-30	Ground Water	05/19/16 09:22	05/19/16 15:05
1302-MW3 Deep	AZE0545-31	Ground Water	05/19/16 09:57	05/19/16 15:05
1302-MWH	AZE0545-32	Ground Water	05/18/16 10:02	05/19/16 15:05
1302-MWH	AZE0545-33	Ground Water	05/19/16 08:47	05/19/16 15:05
1302-MWH Deep	AZE0545-34	Ground Water	05/18/16 10:37	05/19/16 15:05
1302-MWH Deep	AZE0545-35	Ground Water	05/19/16 08:50	05/19/16 15:05
1302-MWI	AZE0545-36	Ground Water	05/18/16 12:14	05/19/16 15:05
1302-MWI	AZE0545-37	Ground Water	05/19/16 09:02	05/19/16 15:05
1302-MWB	AZE0545-38	Ground Water	05/18/16 12:58	05/19/16 15:05
1302-MWB	AZE0545-39	Ground Water	05/19/16 09:22	05/19/16 15:05
1302-MWG	AZE0545-40	Ground Water	05/18/16 13:20	05/19/16 15:05
1302-MWG	AZE0545-41	Ground Water	05/19/16 09:28	05/19/16 15:05

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ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1302-MW1	AZE0545-42	Ground Water	05/18/16 13:52	05/19/16 15:05
1302-MW1	AZE0545-43	Ground Water	05/19/16 09:31	05/19/16 15:05
1302-Duplicate	AZE0545-44	Ground Water	05/18/16 00:00	05/19/16 15:05
1302-Duplicate	AZE0545-45	Ground Water	05/19/16 00:00	05/19/16 15:05
1302-Equipment Blank	AZE0545-46	Water	05/18/16 13:32	05/19/16 15:05
1302-Trip Blank	AZE0545-47	Water	05/16/16 00:00	05/19/16 15:05

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June 09, 2016

Client ID: 1302-AMW2D
Lab No: AZE0545-01
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 14:44
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	224	1	1	umhos/cm		1	COND	05/17/16 14:44	05/17/16 14:44	6050530
Dissolved Oxygen	SM 4500-O G	NA	2690	0.0	1	ug/L		0.0	NA	05/17/16 14:44	05/17/16 14:44	6050530
Field - Ferrous Iron	NA	NA	ND	200	1	ug/L		200	FE2	05/17/16 14:44	05/17/16 14:44	6050530
Field - pH	EPA 9040C	NA	6.04		1	pH Units			PH	05/17/16 14:44	05/17/16 14:44	6050530
Field - Redox	NA	NA	88		1	mV			REDOX	05/17/16 14:44	05/17/16 14:44	6050530
Field - Temperature	SM 2550 B	NA	15.9		1	°C			TEMP	05/17/16 14:44	05/17/16 14:44	6050530
Field - Turbidity	EPA 180.1	NA	1.41	0.10	1	NTU		0.10	TURB	05/17/16 14:44	05/17/16 14:44	6050530
Field - Water Level	NA	NA	20.97		1	feet			WL	05/17/16 14:44	05/17/16 14:44	6050530
Field - Well Depth	NA	NA	62.50		1	feet				05/17/16 14:44	05/17/16 14:44	6050530
General Chemistry												
Alkalinity as CaCO3	SM 2320 B	SM 2320 B	110000	1000	1	ug/L		1000	ALK	05/19/16 10:40	05/19/16 10:40	6050450
Biochemical Oxygen Demand	SM 5210 B	SM 5210 B	ND	2000	1	ug/L		2000	E-10106	05/18/16 17:15	05/23/16 11:15	6050434
Chemical Oxygen Demand	SM 5220 D	SM 5220 D	ND	10000	1	ug/L		10000	E-10117	05/21/16 10:15	05/23/16 13:10	6050509
Total Sulfide	SM 4500-S D	SM 4500-S D	ND	200	1	ug/L		200	18496-25-8	05/24/16 09:30	05/24/16 09:30	6050561
Total Organic Carbon	EPA 9060A	EPA 9060A	ND	1000	1	ug/L		1000	E-10195	05/21/16 13:00	05/21/16 18:53	6050505
Inorganic Anions												
Chloride	EPA 9056A	EPA 300.0	3500	1000	1	ug/L		1000	16887-00-6	05/18/16 09:53	05/18/16 23:40	6050405
Nitrate as N	EPA 9056A	EPA 300.0	ND	50	1	ug/L		50	14797-55-8	05/18/16 09:53	05/18/16 23:40	6050405
Sulfate	EPA 9056A	EPA 300.0	ND	5000	1	ug/L		5000	14808-79-8	05/18/16 09:53	05/18/16 23:40	6050405

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Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 14:44
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/26/16 08:15	05/26/16 15:38	6050611
Arsenic	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.75	7440-38-2	05/26/16 08:15	05/26/16 15:38	6050611
Barium	EPA 6020B	EPA 3005A	64.5	100	1	ug/L	J	0.30	7440-39-3	05/26/16 08:15	05/26/16 15:38	6050611
Beryllium	EPA 6020B	EPA 3005A	0.13	1.00	1	ug/L	J	0.09	7440-41-7	05/26/16 08:15	05/26/16 15:38	6050611
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/26/16 08:15	05/26/16 15:38	6050611
Chromium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.43	7440-47-3	05/26/16 08:15	05/26/16 15:38	6050611
Cobalt	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.29	7440-48-4	05/26/16 08:15	05/26/16 15:38	6050611
Copper	EPA 6020B	EPA 3005A	1.37	10.0	1	ug/L	J	0.41	7440-50-8	05/26/16 08:15	05/26/16 15:38	6050611
Lead	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.08	7439-92-1	05/26/16 08:15	05/26/16 15:38	6050611
Nickel	EPA 6020B	EPA 3005A	1.07	50.0	1	ug/L	J	0.48	7440-02-0	05/26/16 08:15	05/26/16 15:38	6050611
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	05/26/16 08:15	05/26/16 15:38	6050611
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/26/16 08:15	05/26/16 15:38	6050611
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/26/16 08:15	05/26/16 15:38	6050611
Vanadium	EPA 6020B	EPA 3005A	ND	25.0	1	ug/L		1.57	7440-62-2	05/26/16 08:15	05/26/16 15:38	6050611
Zinc	EPA 6020B	EPA 3005A	1.38	10.0	1	ug/L	J	1.30	7440-66-6	05/26/16 08:15	05/26/16 15:38	6050611
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/20/16 12:00	05/20/16 23:07	6050503
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/20/16 12:00	05/20/16 23:07	6050503
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/20/16 12:00	05/20/16 23:07	6050503
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/20/16 12:00	05/20/16 23:07	6050503
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/20/16 12:00	05/20/16 23:07	6050503

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Client ID: 1302-AMW2D
Lab No: AZE0545-01
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 14:44
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/20/16 12:00	05/20/16 23:07	6050503
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/20/16 12:00	05/20/16 23:07	6050503
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/20/16 12:00	05/20/16 23:07	6050503
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/20/16 12:00	05/20/16 23:07	6050503
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/20/16 12:00	05/20/16 23:07	6050503
Chloroethane	EPA 8260B	EPA 5030B	0.5	10	1	ug/L	J	0.4	75-00-3	05/20/16 12:00	05/20/16 23:07	6050503
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/20/16 12:00	05/20/16 23:07	6050503
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/20/16 12:00	05/20/16 23:07	6050503
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/20/16 12:00	05/20/16 23:07	6050503
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/20/16 12:00	05/20/16 23:07	6050503
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/20/16 12:00	05/20/16 23:07	6050503
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/20/16 12:00	05/20/16 23:07	6050503
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/20/16 12:00	05/20/16 23:07	6050503
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	0.3	1.0	1	ug/L	J	0.3	106-46-7	05/20/16 12:00	05/20/16 23:07	6050503
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/20/16 12:00	05/20/16 23:07	6050503
1,1-Dichloroethane	EPA 8260B	EPA 5030B	17	5.0	1	ug/L		0.4	75-34-3	05/20/16 12:00	05/20/16 23:07	6050503
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/20/16 12:00	05/20/16 23:07	6050503
1,1-Dichloroethene	EPA 8260B	EPA 5030B	1.0	5.0	1	ug/L	J	0.5	75-35-4	05/20/16 12:00	05/20/16 23:07	6050503
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	9.2	5.0	1	ug/L		0.5	156-59-2	05/20/16 12:00	05/20/16 23:07	6050503
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/20/16 12:00	05/20/16 23:07	6050503
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/20/16 12:00	05/20/16 23:07	6050503
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/20/16 12:00	05/20/16 23:07	6050503

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Client ID: 1302-AMW2D
Lab No: AZE0545-01
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 14:44
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/20/16 12:00	05/20/16 23:07	6050503
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/20/16 12:00	05/20/16 23:07	6050503
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/20/16 12:00	05/20/16 23:07	6050503
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/20/16 12:00	05/20/16 23:07	6050503
Methylene Chloride	EPA 8260B	EPA 5030B	1.3	1.0	1	ug/L		0.5	75-09-2	05/20/16 12:00	05/20/16 23:07	6050503
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/20/16 12:00	05/20/16 23:07	6050503
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/20/16 12:00	05/20/16 23:07	6050503
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/20/16 12:00	05/20/16 23:07	6050503
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/20/16 12:00	05/20/16 23:07	6050503
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/20/16 12:00	05/20/16 23:07	6050503
Tetrachloroethene	EPA 8260B	EPA 5030B	7.6	1.0	1	ug/L		0.4	127-18-4	05/20/16 12:00	05/20/16 23:07	6050503
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/20/16 12:00	05/20/16 23:07	6050503
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/20/16 12:00	05/20/16 23:07	6050503
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/20/16 12:00	05/20/16 23:07	6050503
Trichloroethene	EPA 8260B	EPA 5030B	5.2	1.0	1	ug/L		0.4	79-01-6	05/20/16 12:00	05/20/16 23:07	6050503
Trichlorofluoromethane	EPA 8260B	EPA 5030B	0.7	1.0	1	ug/L	J	0.5	75-69-4	05/20/16 12:00	05/20/16 23:07	6050503
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/20/16 12:00	05/20/16 23:07	6050503
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/20/16 12:00	05/20/16 23:07	6050503
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/20/16 12:00	05/20/16 23:07	6050503
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/20/16 12:00	05/20/16 23:07	6050503
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	91 %		80-120				1868-53-7	05/20/16 12:00	05/20/16 23:07	6050503

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-AMW2D
Lab No: AZE0545-01
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 14:44
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	99 %		78-120				17060-07-0	05/20/16 12:00	05/20/16 23:07	6050503
Surr: Toluene-d8	EPA 8260B	EPA 5030B	100 %		80-120				2037-26-5	05/20/16 12:00	05/20/16 23:07	6050503
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	107 %		80-120				460-00-4	05/20/16 12:00	05/20/16 23:07	6050503
Base/Neutral Extractable Organic Compounds by EPA 8270												
Bis(2-ethylhexyl)phthalate	EPA 8270D	EPA 3510C	ND	15	1	ug/L		2.7	117-81-7	05/24/16 09:00	05/27/16 17:39	6050558
Surr: Nitrobenzene-d5	EPA 8270D	EPA 3510C	61 %		15-120				4165-60-0	05/24/16 09:00	05/27/16 17:39	6050558
Surr: 2-Fluorobiphenyl	EPA 8270D	EPA 3510C	63 %		23-120				321-60-8	05/24/16 09:00	05/27/16 17:39	6050558
Surr: p-Terphenyl-dl4	EPA 8270D	EPA 3510C	88 %		53-121				1718-51-0	05/24/16 09:00	05/27/16 17:39	6050558

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-AMW2S
Lab No: AZE0545-02
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 13:43
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	154	1	1	umhos/cm		1	COND	05/17/16 13:43	05/17/16 13:43	6050530
Dissolved Oxygen	SM 4500-O G	NA	3220	0.0	1	ug/L		0.0	NA	05/17/16 13:43	05/17/16 13:43	6050530
Field - Ferrous Iron	NA	NA	ND	200	1	ug/L		200	FE2	05/17/16 13:43	05/17/16 13:43	6050530
Field - pH	EPA 9040C	NA	5.78		1	pH Units			PH	05/17/16 13:43	05/17/16 13:43	6050530
Field - Redox	NA	NA	51		1	mV			REDOX	05/17/16 13:43	05/17/16 13:43	6050530
Field - Temperature	SM 2550 B	NA	15.8		1	°C			TEMP	05/17/16 13:43	05/17/16 13:43	6050530
Field - Turbidity	EPA 180.1	NA	7.39	0.10	1	NTU		0.10	TURB	05/17/16 13:43	05/17/16 13:43	6050530
Field - Water Level	NA	NA	21.53		1	feet			WL	05/17/16 13:43	05/17/16 13:43	6050530
Field - Well Depth	NA	NA	39.96		1	feet				05/17/16 13:43	05/17/16 13:43	6050530
General Chemistry												
Alkalinity as CaCO3	SM 2320 B	SM 2320 B	65000	1000	1	ug/L		1000	ALK	05/19/16 10:40	05/19/16 10:40	6050450
Biochemical Oxygen Demand	SM 5210 B	SM 5210 B	ND	2000	1	ug/L		2000	E-10106	05/18/16 17:15	05/23/16 11:15	6050434
Chemical Oxygen Demand	SM 5220 D	SM 5220 D	ND	10000	1	ug/L		10000	E-10117	05/21/16 10:15	05/23/16 13:10	6050509
Total Sulfide	SM 4500-S D	SM 4500-S D	ND	200	1	ug/L		200	18496-25-8	05/24/16 09:30	05/24/16 09:30	6050561
Total Organic Carbon	EPA 9060A	EPA 9060A	ND	1000	1	ug/L		1000	E-10195	05/21/16 13:00	05/21/16 19:10	6050505
Inorganic Anions												
Chloride	EPA 9056A	EPA 300.0	3400	1000	1	ug/L		1000	16887-00-6	05/18/16 09:53	05/19/16 00:02	6050405
Nitrate as N	EPA 9056A	EPA 300.0	290	50	1	ug/L		50	14797-55-8	05/18/16 09:53	05/19/16 00:02	6050405
Sulfate	EPA 9056A	EPA 300.0	ND	5000	1	ug/L		5000	14808-79-8	05/18/16 09:53	05/19/16 00:02	6050405

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-AMW2S
Lab No: AZE0545-02
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 13:43
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	1.21	6.00	1	ug/L	J	0.25	7440-36-0	05/31/16 08:45	05/31/16 13:48	6050664
Arsenic	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.75	7440-38-2	05/31/16 08:45	05/31/16 13:48	6050664
Barium	EPA 6020B	EPA 3005A	45.8	100	1	ug/L	J	0.30	7440-39-3	05/31/16 08:45	05/31/16 13:48	6050664
Beryllium	EPA 6020B	EPA 3005A	0.69	1.00	1	ug/L	J	0.09	7440-41-7	05/31/16 08:45	05/31/16 13:48	6050664
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/31/16 08:45	05/31/16 13:48	6050664
Chromium	EPA 6020B	EPA 3005A	1.15	10.0	1	ug/L	J	0.43	7440-47-3	05/31/16 08:45	05/31/16 13:48	6050664
Cobalt	EPA 6020B	EPA 3005A	0.65	10.0	1	ug/L	J	0.29	7440-48-4	05/31/16 08:45	05/31/16 13:48	6050664
Copper	EPA 6020B	EPA 3005A	0.48	10.0	1	ug/L	J	0.41	7440-50-8	05/31/16 08:45	05/31/16 13:48	6050664
Lead	EPA 6020B	EPA 3005A	0.71	10.0	1	ug/L	J	0.08	7439-92-1	05/31/16 08:45	05/31/16 13:48	6050664
Nickel	EPA 6020B	EPA 3005A	1.63	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 13:48	6050664
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	05/31/16 08:45	05/31/16 13:48	6050664
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 13:48	6050664
Thallium	EPA 6020B	EPA 3005A	0.10	5.50	1	ug/L	J	0.06	7440-28-0	05/31/16 08:45	05/31/16 13:48	6050664
Vanadium	EPA 6020B	EPA 3005A	4.51	25.0	1	ug/L	J	1.57	7440-62-2	05/31/16 08:45	05/31/16 13:48	6050664
Zinc	EPA 6020B	EPA 3005A	3.93	10.0	1	ug/L	J	1.30	7440-66-6	05/31/16 08:45	05/31/16 13:48	6050664
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/20/16 12:00	05/20/16 23:32	6050503
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/20/16 12:00	05/20/16 23:32	6050503
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/20/16 12:00	05/20/16 23:32	6050503
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/20/16 12:00	05/20/16 23:32	6050503
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/20/16 12:00	05/20/16 23:32	6050503

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-AMW2S
Lab No: AZE0545-02
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 13:43
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/20/16 12:00	05/20/16 23:32	6050503
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/20/16 12:00	05/20/16 23:32	6050503
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/20/16 12:00	05/20/16 23:32	6050503
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/20/16 12:00	05/20/16 23:32	6050503
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/20/16 12:00	05/20/16 23:32	6050503
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/20/16 12:00	05/20/16 23:32	6050503
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/20/16 12:00	05/20/16 23:32	6050503
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/20/16 12:00	05/20/16 23:32	6050503
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/20/16 12:00	05/20/16 23:32	6050503
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/20/16 12:00	05/20/16 23:32	6050503
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/20/16 12:00	05/20/16 23:32	6050503
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/20/16 12:00	05/20/16 23:32	6050503
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/20/16 12:00	05/20/16 23:32	6050503
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/20/16 12:00	05/20/16 23:32	6050503
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/20/16 12:00	05/20/16 23:32	6050503
1,1-Dichloroethane	EPA 8260B	EPA 5030B	8.5	5.0	1	ug/L		0.4	75-34-3	05/20/16 12:00	05/20/16 23:32	6050503
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/20/16 12:00	05/20/16 23:32	6050503
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/20/16 12:00	05/20/16 23:32	6050503
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	6.4	5.0	1	ug/L		0.5	156-59-2	05/20/16 12:00	05/20/16 23:32	6050503
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/20/16 12:00	05/20/16 23:32	6050503
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/20/16 12:00	05/20/16 23:32	6050503
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/20/16 12:00	05/20/16 23:32	6050503

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-AMW2S
Lab No: AZE0545-02
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 13:43
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/20/16 12:00	05/20/16 23:32	6050503
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/20/16 12:00	05/20/16 23:32	6050503
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/20/16 12:00	05/20/16 23:32	6050503
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/20/16 12:00	05/20/16 23:32	6050503
Methylene Chloride	EPA 8260B	EPA 5030B	0.7	1.0	1	ug/L	J	0.5	75-09-2	05/20/16 12:00	05/20/16 23:32	6050503
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/20/16 12:00	05/20/16 23:32	6050503
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/20/16 12:00	05/20/16 23:32	6050503
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/20/16 12:00	05/20/16 23:32	6050503
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/20/16 12:00	05/20/16 23:32	6050503
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/20/16 12:00	05/20/16 23:32	6050503
Tetrachloroethene	EPA 8260B	EPA 5030B	3.5	1.0	1	ug/L		0.4	127-18-4	05/20/16 12:00	05/20/16 23:32	6050503
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/20/16 12:00	05/20/16 23:32	6050503
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/20/16 12:00	05/20/16 23:32	6050503
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/20/16 12:00	05/20/16 23:32	6050503
Trichloroethene	EPA 8260B	EPA 5030B	3.0	1.0	1	ug/L		0.4	79-01-6	05/20/16 12:00	05/20/16 23:32	6050503
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/20/16 12:00	05/20/16 23:32	6050503
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/20/16 12:00	05/20/16 23:32	6050503
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/20/16 12:00	05/20/16 23:32	6050503
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/20/16 12:00	05/20/16 23:32	6050503
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/20/16 12:00	05/20/16 23:32	6050503
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	92 %		80-120				1868-53-7	05/20/16 12:00	05/20/16 23:32	6050503

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-AMW2S
Lab No: AZE0545-02
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 13:43
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	104 %		78-120				17060-07-0	05/20/16 12:00	05/20/16 23:32	6050503
Surr: Toluene-d8	EPA 8260B	EPA 5030B	102 %		80-120				2037-26-5	05/20/16 12:00	05/20/16 23:32	6050503
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	108 %		80-120				460-00-4	05/20/16 12:00	05/20/16 23:32	6050503

PACE ANALYTICAL SERVICES, INC.

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWA
Lab No: AZE0545-03
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 11:23
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	394	1	1	umhos/cm		1	COND	05/17/16 11:23	05/17/16 11:23	6050530
Dissolved Oxygen	SM 4500-O G	NA	1270	0.0	1	ug/L		0.0	NA	05/17/16 11:23	05/17/16 11:23	6050530
Field - Ferrous Iron	NA	NA	1000	200	1	ug/L		200	FE2	05/17/16 11:23	05/17/16 11:23	6050530
Field - pH	EPA 9040C	NA	5.48		1	pH Units			PH	05/17/16 11:23	05/17/16 11:23	6050530
Field - Redox	NA	NA	-55		1	mV			REDOX	05/17/16 11:23	05/17/16 11:23	6050530
Field - Temperature	SM 2550 B	NA	16.1		1	°C			TEMP	05/17/16 11:23	05/17/16 11:23	6050530
Field - Turbidity	EPA 180.1	NA	1.04	0.10	1	NTU		0.10	TURB	05/17/16 11:23	05/17/16 11:23	6050530
Field - Water Level	NA	NA	42.07		1	feet			WL	05/17/16 11:23	05/17/16 11:23	6050530
Field - Well Depth	NA	NA	50.37		1	feet				05/17/16 11:23	05/17/16 11:23	6050530
General Chemistry												
Alkalinity as CaCO3	SM 2320 B	SM 2320 B	85000	1000	1	ug/L		1000	ALK	05/19/16 10:40	05/19/16 10:40	6050450
Biochemical Oxygen Demand	SM 5210 B	SM 5210 B	6000	2000	1	ug/L		2000	E-10106	05/18/16 17:15	05/23/16 11:15	6050434
Chemical Oxygen Demand	SM 5220 D	SM 5220 D	ND	10000	1	ug/L		10000	E-10117	05/21/16 10:15	05/23/16 13:10	6050509
Total Sulfide	SM 4500-S D	SM 4500-S D	ND	200	1	ug/L		200	18496-25-8	05/24/16 09:30	05/24/16 09:30	6050561
Total Organic Carbon	EPA 9060A	EPA 9060A	3680	1000	1	ug/L		1000	E-10195	05/21/16 13:00	05/21/16 19:28	6050505
Inorganic Anions												
Chloride	EPA 9056A	EPA 300.0	18000	1000	1	ug/L		1000	16887-00-6	05/18/16 09:53	05/18/16 23:19	6050405
Nitrate as N	EPA 9056A	EPA 300.0	ND	50	1	ug/L		50	14797-55-8	05/18/16 09:53	05/18/16 23:19	6050405
Sulfate	EPA 9056A	EPA 300.0	13000	5000	1	ug/L		5000	14808-79-8	05/18/16 09:53	05/18/16 23:19	6050405

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWA
Lab No: AZE0545-03
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 11:23
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	0.35	6.00	1	ug/L	J	0.25	7440-36-0	05/31/16 08:45	05/31/16 13:53	6050664
Arsenic	EPA 6020B	EPA 3005A	1.01	10.0	1	ug/L	J	0.75	7440-38-2	05/31/16 08:45	05/31/16 13:53	6050664
Barium	EPA 6020B	EPA 3005A	44.3	100	1	ug/L	J	0.30	7440-39-3	05/31/16 08:45	05/31/16 13:53	6050664
Beryllium	EPA 6020B	EPA 3005A	0.17	1.00	1	ug/L	J	0.09	7440-41-7	05/31/16 08:45	05/31/16 13:53	6050664
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/31/16 08:45	05/31/16 13:53	6050664
Chromium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.43	7440-47-3	05/31/16 08:45	05/31/16 13:53	6050664
Cobalt	EPA 6020B	EPA 3005A	9.54	10.0	1	ug/L	J	0.29	7440-48-4	05/31/16 08:45	05/31/16 13:53	6050664
Copper	EPA 6020B	EPA 3005A	0.48	10.0	1	ug/L	J	0.41	7440-50-8	05/31/16 08:45	05/31/16 13:53	6050664
Lead	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.08	7439-92-1	05/31/16 08:45	05/31/16 13:53	6050664
Nickel	EPA 6020B	EPA 3005A	19.8	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 13:53	6050664
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	05/31/16 08:45	05/31/16 13:53	6050664
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 13:53	6050664
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/31/16 08:45	05/31/16 13:53	6050664
Vanadium	EPA 6020B	EPA 3005A	2.40	25.0	1	ug/L	J	1.57	7440-62-2	05/31/16 08:45	05/31/16 13:53	6050664
Zinc	EPA 6020B	EPA 3005A	1.64	10.0	1	ug/L	J	1.30	7440-66-6	05/31/16 08:45	05/31/16 13:53	6050664
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/20/16 12:00	05/20/16 23:57	6050503
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/20/16 12:00	05/20/16 23:57	6050503
Benzene	EPA 8260B	EPA 5030B	9.7	1.0	1	ug/L		0.2	71-43-2	05/20/16 12:00	05/20/16 23:57	6050503
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/20/16 12:00	05/20/16 23:57	6050503
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/20/16 12:00	05/20/16 23:57	6050503

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWA
Lab No: AZE0545-03
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 11:23
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/20/16 12:00	05/20/16 23:57	6050503
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/20/16 12:00	05/20/16 23:57	6050503
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/20/16 12:00	05/20/16 23:57	6050503
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/20/16 12:00	05/20/16 23:57	6050503
Chlorobenzene	EPA 8260B	EPA 5030B	1.5	3.0	1	ug/L	J	0.4	108-90-7	05/20/16 12:00	05/20/16 23:57	6050503
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/20/16 12:00	05/20/16 23:57	6050503
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/20/16 12:00	05/20/16 23:57	6050503
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/20/16 12:00	05/20/16 23:57	6050503
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/20/16 12:00	05/20/16 23:57	6050503
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/20/16 12:00	05/20/16 23:57	6050503
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/20/16 12:00	05/20/16 23:57	6050503
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/20/16 12:00	05/20/16 23:57	6050503
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/20/16 12:00	05/20/16 23:57	6050503
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	31	1.0	1	ug/L		0.3	106-46-7	05/20/16 12:00	05/20/16 23:57	6050503
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/20/16 12:00	05/20/16 23:57	6050503
1,1-Dichloroethane	EPA 8260B	EPA 5030B	15	5.0	1	ug/L		0.4	75-34-3	05/20/16 12:00	05/20/16 23:57	6050503
1,2-Dichloroethane	EPA 8260B	EPA 5030B	1.3	1.0	1	ug/L		0.3	107-06-2	05/20/16 12:00	05/20/16 23:57	6050503
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/20/16 12:00	05/20/16 23:57	6050503
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	120	5.0	1	ug/L		0.5	156-59-2	05/20/16 12:00	05/20/16 23:57	6050503
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/20/16 12:00	05/20/16 23:57	6050503
1,2-Dichloropropane	EPA 8260B	EPA 5030B	2.2	1.0	1	ug/L		0.5	78-87-5	05/20/16 12:00	05/20/16 23:57	6050503
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/20/16 12:00	05/20/16 23:57	6050503

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWA
Lab No: AZE0545-03
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 11:23
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/20/16 12:00	05/20/16 23:57	6050503
Ethylbenzene	EPA 8260B	EPA 5030B	1.1	1.0	1	ug/L		0.2	100-41-4	05/20/16 12:00	05/20/16 23:57	6050503
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/20/16 12:00	05/20/16 23:57	6050503
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/20/16 12:00	05/20/16 23:57	6050503
Methylene Chloride	EPA 8260B	EPA 5030B	1.4	1.0	1	ug/L		0.5	75-09-2	05/20/16 12:00	05/20/16 23:57	6050503
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/20/16 12:00	05/20/16 23:57	6050503
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/20/16 12:00	05/20/16 23:57	6050503
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/20/16 12:00	05/20/16 23:57	6050503
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/20/16 12:00	05/20/16 23:57	6050503
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/20/16 12:00	05/20/16 23:57	6050503
Tetrachloroethene	EPA 8260B	EPA 5030B	4.8	1.0	1	ug/L		0.4	127-18-4	05/20/16 12:00	05/20/16 23:57	6050503
Toluene	EPA 8260B	EPA 5030B	0.6	1.0	1	ug/L	J	0.3	108-88-3	05/20/16 12:00	05/20/16 23:57	6050503
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/20/16 12:00	05/20/16 23:57	6050503
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/20/16 12:00	05/20/16 23:57	6050503
Trichloroethene	EPA 8260B	EPA 5030B	3.7	1.0	1	ug/L		0.4	79-01-6	05/20/16 12:00	05/20/16 23:57	6050503
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/20/16 12:00	05/20/16 23:57	6050503
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/20/16 12:00	05/20/16 23:57	6050503
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/20/16 12:00	05/20/16 23:57	6050503
Vinyl Chloride	EPA 8260B	EPA 5030B	0.8	1.0	1	ug/L	J	0.7	75-01-4	05/20/16 12:00	05/20/16 23:57	6050503
Xylenes, total	EPA 8260B	EPA 5030B	5.2	5.0	1	ug/L		0.4	1330-20-7	05/20/16 12:00	05/20/16 23:57	6050503
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	94 %		80-120				1868-53-7	05/20/16 12:00	05/20/16 23:57	6050503

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June 09, 2016

Client ID: 1302-MWA
Lab No: AZE0545-03
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 11:23
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	100 %		78-120				17060-07-0	05/20/16 12:00	05/20/16 23:57	6050503
Surr: Toluene-d8	EPA 8260B	EPA 5030B	102 %		80-120				2037-26-5	05/20/16 12:00	05/20/16 23:57	6050503
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	107 %		80-120				460-00-4	05/20/16 12:00	05/20/16 23:57	6050503

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD1S
Lab No: AZE0545-04
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 08:59
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	103	1	1	umhos/cm		1	COND	05/17/16 08:59	05/17/16 08:59	6050530
Dissolved Oxygen	SM 4500-O G	NA	3450	0.0	1	ug/L		0.0	NA	05/17/16 08:59	05/17/16 08:59	6050530
Field - Ferrous Iron	NA	NA	ND	200	1	ug/L		200	FE2	05/17/16 08:59	05/17/16 08:59	6050530
Field - pH	EPA 9040C	NA	5.91		1	pH Units			PH	05/17/16 08:59	05/17/16 08:59	6050530
Field - Redox	NA	NA	245		1	mV			REDOX	05/17/16 08:59	05/17/16 08:59	6050530
Field - Temperature	SM 2550 B	NA	15.7		1	°C			TEMP	05/17/16 08:59	05/17/16 08:59	6050530
Field - Turbidity	EPA 180.1	NA	3.63	0.10	1	NTU		0.10	TURB	05/17/16 08:59	05/17/16 08:59	6050530
Field - Water Level	NA	NA	23.90		1	feet			WL	05/17/16 08:59	05/17/16 08:59	6050530
Field - Well Depth	NA	NA	29.62		1	feet				05/17/16 08:59	05/17/16 08:59	6050530
General Chemistry												
Alkalinity as CaCO3	SM 2320 B	SM 2320 B	43000	1000	1	ug/L		1000	ALK	05/19/16 10:40	05/19/16 10:40	6050450
Biochemical Oxygen Demand	SM 5210 B	SM 5210 B	ND	2000	1	ug/L		2000	E-10106	05/18/16 17:15	05/23/16 11:15	6050434
Chemical Oxygen Demand	SM 5220 D	SM 5220 D	ND	10000	1	ug/L		10000	E-10117	05/21/16 10:15	05/23/16 13:10	6050509
Total Sulfide	SM 4500-S D	SM 4500-S D	ND	200	1	ug/L		200	18496-25-8	05/24/16 09:30	05/24/16 09:30	6050561
Total Dissolved Solids	SM 2540 C	SM 2540 C	130000	10000	1	ug/L		10000	E-10173	05/23/16 12:00	05/23/16 12:00	6050522
Total Organic Carbon	EPA 9060A	EPA 9060A	ND	1000	1	ug/L		1000	E-10195	05/21/16 13:00	05/21/16 19:45	6050505
Inorganic Anions												
Chloride	EPA 9056A	EPA 300.0	3700	1000	1	ug/L		1000	16887-00-6	05/18/16 09:53	05/18/16 22:35	6050405
Nitrate as N	EPA 9056A	EPA 300.0	79	50	1	ug/L		50	14797-55-8	05/18/16 09:53	05/18/16 22:35	6050405
Sulfate	EPA 9056A	EPA 300.0	1000	5000	1	ug/L	J	51	14808-79-8	05/18/16 09:53	05/18/16 22:35	6050405

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD1S
Lab No: AZE0545-04
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 08:59
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/26/16 08:15	05/26/16 14:32	6050611
Arsenic	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.75	7440-38-2	05/26/16 08:15	05/26/16 14:32	6050611
Barium	EPA 6020B	EPA 3005A	29.3	100	1	ug/L	J	0.30	7440-39-3	05/26/16 08:15	05/26/16 14:32	6050611
Beryllium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.09	7440-41-7	05/26/16 08:15	05/26/16 14:32	6050611
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/26/16 08:15	05/26/16 14:32	6050611
Chromium	EPA 6020B	EPA 3005A	0.94	10.0	1	ug/L	J	0.43	7440-47-3	05/26/16 08:15	05/26/16 14:32	6050611
Cobalt	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.29	7440-48-4	05/26/16 08:15	05/26/16 14:32	6050611
Copper	EPA 6020B	EPA 3005A	0.99	10.0	1	ug/L	J	0.41	7440-50-8	05/26/16 08:15	05/26/16 14:32	6050611
Lead	EPA 6020B	EPA 3005A	0.12	10.0	1	ug/L	J	0.08	7439-92-1	05/26/16 08:15	05/26/16 14:32	6050611
Nickel	EPA 6020B	EPA 3005A	1.01	50.0	1	ug/L	J	0.48	7440-02-0	05/26/16 08:15	05/26/16 14:32	6050611
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	05/26/16 08:15	05/26/16 14:32	6050611
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/26/16 08:15	05/26/16 14:32	6050611
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/26/16 08:15	05/26/16 14:32	6050611
Vanadium	EPA 6020B	EPA 3005A	4.70	25.0	1	ug/L	J	1.57	7440-62-2	05/26/16 08:15	05/26/16 14:32	6050611
Zinc	EPA 6020B	EPA 3005A	1.93	10.0	1	ug/L	J	1.30	7440-66-6	05/26/16 08:15	05/26/16 14:32	6050611
Iron	EPA 6020A	EPA 3005A	446	40.0	1	ug/L		5.7	7439-89-6	05/26/16 08:15	05/26/16 14:32	6050611
Manganese	EPA 6020A	EPA 3005A	17.0	10.0	1	ug/L		1.0	7439-96-5	05/26/16 08:15	05/26/16 14:32	6050611
Mercury	EPA 7470A	EPA 7470A	ND	0.200	1	ug/L		0.132	7439-97-6	06/01/16 15:00	06/02/16 16:02	6060013
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/20/16 12:00	05/20/16 18:54	6050503
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/20/16 12:00	05/20/16 18:54	6050503

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD1S
Lab No: AZE0545-04
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 08:59
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/20/16 12:00	05/20/16 18:54	6050503
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/20/16 12:00	05/20/16 18:54	6050503
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/20/16 12:00	05/20/16 18:54	6050503
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/20/16 12:00	05/20/16 18:54	6050503
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/20/16 12:00	05/20/16 18:54	6050503
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/20/16 12:00	05/20/16 18:54	6050503
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/20/16 12:00	05/20/16 18:54	6050503
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/20/16 12:00	05/20/16 18:54	6050503
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/20/16 12:00	05/20/16 18:54	6050503
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/20/16 12:00	05/20/16 18:54	6050503
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/20/16 12:00	05/20/16 18:54	6050503
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/20/16 12:00	05/20/16 18:54	6050503
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/20/16 12:00	05/20/16 18:54	6050503
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/20/16 12:00	05/20/16 18:54	6050503
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/20/16 12:00	05/20/16 18:54	6050503
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/20/16 12:00	05/20/16 18:54	6050503
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/20/16 12:00	05/20/16 18:54	6050503
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/20/16 12:00	05/20/16 18:54	6050503
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/20/16 12:00	05/20/16 18:54	6050503
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/20/16 12:00	05/20/16 18:54	6050503
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/20/16 12:00	05/20/16 18:54	6050503
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/20/16 12:00	05/20/16 18:54	6050503

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD1S
Lab No: AZE0545-04
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 08:59
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/20/16 12:00	05/20/16 18:54	6050503
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/20/16 12:00	05/20/16 18:54	6050503
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/20/16 12:00	05/20/16 18:54	6050503
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/20/16 12:00	05/20/16 18:54	6050503
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/20/16 12:00	05/20/16 18:54	6050503
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/20/16 12:00	05/20/16 18:54	6050503
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/20/16 12:00	05/20/16 18:54	6050503
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/20/16 12:00	05/20/16 18:54	6050503
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/20/16 12:00	05/20/16 18:54	6050503
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/20/16 12:00	05/20/16 18:54	6050503
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/20/16 12:00	05/20/16 18:54	6050503
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/20/16 12:00	05/20/16 18:54	6050503
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/20/16 12:00	05/20/16 18:54	6050503
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/20/16 12:00	05/20/16 18:54	6050503
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/20/16 12:00	05/20/16 18:54	6050503
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/20/16 12:00	05/20/16 18:54	6050503
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/20/16 12:00	05/20/16 18:54	6050503
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/20/16 12:00	05/20/16 18:54	6050503
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/20/16 12:00	05/20/16 18:54	6050503
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/20/16 12:00	05/20/16 18:54	6050503
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/20/16 12:00	05/20/16 18:54	6050503

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD1S
Lab No: AZE0545-04
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 08:59
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/20/16 12:00	05/20/16 18:54	6050503
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/20/16 12:00	05/20/16 18:54	6050503
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	93 %		80-120				1868-53-7	05/20/16 12:00	05/20/16 18:54	6050503
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	102 %		78-120				17060-07-0	05/20/16 12:00	05/20/16 18:54	6050503
Surr: Toluene-d8	EPA 8260B	EPA 5030B	102 %		80-120				2037-26-5	05/20/16 12:00	05/20/16 18:54	6050503
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	109 %		80-120				460-00-4	05/20/16 12:00	05/20/16 18:54	6050503

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD1D
Lab No: AZE0545-05
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 10:14
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	115	1	1	umhos/cm		1	COND	05/17/16 10:14	05/17/16 10:14	6050530
Dissolved Oxygen	SM 4500-O G	NA	4500	0.0	1	ug/L		0.0	NA	05/17/16 10:14	05/17/16 10:14	6050530
Field - pH	EPA 9040C	NA	6.06		1	pH Units			PH	05/17/16 10:14	05/17/16 10:14	6050530
Field - Redox	NA	NA	210		1	mV			REDOX	05/17/16 10:14	05/17/16 10:14	6050530
Field - Temperature	SM 2550 B	NA	15.8		1	°C			TEMP	05/17/16 10:14	05/17/16 10:14	6050530
Field - Turbidity	EPA 180.1	NA	20.0	0.10	1	NTU		0.10	TURB	05/17/16 10:14	05/17/16 10:14	6050530
Field - Water Level	NA	NA	26.51		1	feet			WL	05/17/16 10:14	05/17/16 10:14	6050530
Field - Well Depth	NA	NA	52.20		1	feet				05/17/16 10:14	05/17/16 10:14	6050530
General Chemistry												
Alkalinity as CaCO3	SM 2320 B	SM 2320 B	96000	1000	1	ug/L		1000	ALK	05/19/16 10:40	05/19/16 10:40	6050450
Total Dissolved Solids	SM 2540 C	SM 2540 C	202000	10000	1	ug/L		10000	E-10173	05/23/16 12:00	05/23/16 12:00	6050522
Inorganic Anions												
Chloride	EPA 9056A	EPA 9056A	18000	1000	1	ug/L		1000	16887-00-6	05/25/16 13:58	05/26/16 03:55	6050603
Nitrate as N	EPA 9056A	EPA 9056A	ND	50	1	ug/L		50	14797-55-8	05/25/16 13:58	05/26/16 03:55	6050603
Sulfate	EPA 9056A	EPA 9056A	14000	5000	1	ug/L		5000	14808-79-8	05/25/16 13:58	05/26/16 03:55	6050603
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/26/16 08:15	05/26/16 14:37	6050611
Arsenic	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.75	7440-38-2	05/26/16 08:15	05/26/16 14:37	6050611
Barium	EPA 6020B	EPA 3005A	81.3	100	1	ug/L	J	0.30	7440-39-3	05/26/16 08:15	05/26/16 14:37	6050611

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD1D
Lab No: AZE0545-05
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 10:14
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Beryllium	EPA 6020B	EPA 3005A	0.46	1.00	1	ug/L	J	0.09	7440-41-7	05/26/16 08:15	05/26/16 14:37	6050611
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/26/16 08:15	05/26/16 14:37	6050611
Chromium	EPA 6020B	EPA 3005A	4.86	10.0	1	ug/L	J	0.43	7440-47-3	05/26/16 08:15	05/26/16 14:37	6050611
Cobalt	EPA 6020B	EPA 3005A	7.42	10.0	1	ug/L	J	0.29	7440-48-4	05/26/16 08:15	05/26/16 14:37	6050611
Copper	EPA 6020B	EPA 3005A	26.0	10.0	1	ug/L		0.41	7440-50-8	05/26/16 08:15	05/26/16 14:37	6050611
Lead	EPA 6020B	EPA 3005A	3.13	10.0	1	ug/L	J	0.08	7439-92-1	05/26/16 08:15	05/26/16 14:37	6050611
Nickel	EPA 6020B	EPA 3005A	7.11	50.0	1	ug/L	J	0.48	7440-02-0	05/26/16 08:15	05/26/16 14:37	6050611
Selenium	EPA 6020B	EPA 3005A	2.11	10.0	1	ug/L	J	0.85	7782-49-2	05/26/16 08:15	05/26/16 14:37	6050611
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/26/16 08:15	05/26/16 14:37	6050611
Thallium	EPA 6020B	EPA 3005A	0.07	5.50	1	ug/L	J	0.06	7440-28-0	05/26/16 08:15	05/26/16 14:37	6050611
Vanadium	EPA 6020B	EPA 3005A	29.3	25.0	1	ug/L		1.57	7440-62-2	05/26/16 08:15	05/26/16 14:37	6050611
Zinc	EPA 6020B	EPA 3005A	29.7	10.0	1	ug/L		1.30	7440-66-6	05/26/16 08:15	05/26/16 14:37	6050611
Iron	EPA 6020A	EPA 3005A	12000	400	10	ug/L		57.2	7439-89-6	05/26/16 08:15	06/03/16 16:05	6050611
Manganese	EPA 6020A	EPA 3005A	287	10.0	1	ug/L		1.0	7439-96-5	05/26/16 08:15	05/26/16 14:37	6050611
Mercury	EPA 7470A	EPA 7470A	ND	0.200	1	ug/L		0.132	7439-97-6	06/01/16 15:00	06/02/16 16:04	6060013
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/20/16 12:00	05/20/16 19:19	6050503
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/20/16 12:00	05/20/16 19:19	6050503
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/20/16 12:00	05/20/16 19:19	6050503
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/20/16 12:00	05/20/16 19:19	6050503
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/20/16 12:00	05/20/16 19:19	6050503

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD1D
Lab No: AZE0545-05
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 10:14
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/20/16 12:00	05/20/16 19:19	6050503
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/20/16 12:00	05/20/16 19:19	6050503
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/20/16 12:00	05/20/16 19:19	6050503
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/20/16 12:00	05/20/16 19:19	6050503
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/20/16 12:00	05/20/16 19:19	6050503
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/20/16 12:00	05/20/16 19:19	6050503
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/20/16 12:00	05/20/16 19:19	6050503
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/20/16 12:00	05/20/16 19:19	6050503
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/20/16 12:00	05/20/16 19:19	6050503
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/20/16 12:00	05/20/16 19:19	6050503
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/20/16 12:00	05/20/16 19:19	6050503
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/20/16 12:00	05/20/16 19:19	6050503
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/20/16 12:00	05/20/16 19:19	6050503
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/20/16 12:00	05/20/16 19:19	6050503
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/20/16 12:00	05/20/16 19:19	6050503
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/20/16 12:00	05/20/16 19:19	6050503
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/20/16 12:00	05/20/16 19:19	6050503
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/20/16 12:00	05/20/16 19:19	6050503
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/20/16 12:00	05/20/16 19:19	6050503
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/20/16 12:00	05/20/16 19:19	6050503
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/20/16 12:00	05/20/16 19:19	6050503
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/20/16 12:00	05/20/16 19:19	6050503

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD1D
Lab No: AZE0545-05
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 10:14
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/20/16 12:00	05/20/16 19:19	6050503
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/20/16 12:00	05/20/16 19:19	6050503
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/20/16 12:00	05/20/16 19:19	6050503
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/20/16 12:00	05/20/16 19:19	6050503
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/20/16 12:00	05/20/16 19:19	6050503
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/20/16 12:00	05/20/16 19:19	6050503
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/20/16 12:00	05/20/16 19:19	6050503
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/20/16 12:00	05/20/16 19:19	6050503
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/20/16 12:00	05/20/16 19:19	6050503
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/20/16 12:00	05/20/16 19:19	6050503
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/20/16 12:00	05/20/16 19:19	6050503
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/20/16 12:00	05/20/16 19:19	6050503
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/20/16 12:00	05/20/16 19:19	6050503
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/20/16 12:00	05/20/16 19:19	6050503
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/20/16 12:00	05/20/16 19:19	6050503
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/20/16 12:00	05/20/16 19:19	6050503
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/20/16 12:00	05/20/16 19:19	6050503
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/20/16 12:00	05/20/16 19:19	6050503
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/20/16 12:00	05/20/16 19:19	6050503
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/20/16 12:00	05/20/16 19:19	6050503
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	91 %		80-120				1868-53-7	05/20/16 12:00	05/20/16 19:19	6050503

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD1D
Lab No: AZE0545-05
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 10:14
Date/Time Received: 05/18/16 12:45

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	101 %		78-120				17060-07-0	05/20/16 12:00	05/20/16 19:19	6050503
Surr: Toluene-d8	EPA 8260B	EPA 5030B	102 %		80-120				2037-26-5	05/20/16 12:00	05/20/16 19:19	6050503
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	107 %		80-120				460-00-4	05/20/16 12:00	05/20/16 19:19	6050503

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWE
Lab No: AZE0545-06
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 09:00
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	1090	1	1	umhos/cm		1	COND	05/18/16 09:00	05/18/16 09:00	6050530
Dissolved Oxygen	SM 4500-O G	NA	1400	0.0	1	ug/L		0.0	NA	05/18/16 09:00	05/18/16 09:00	6050530
Field - Ferrous Iron	NA	NA	500	200	1	ug/L		200	FE2	05/18/16 09:00	05/18/16 09:00	6050530
Field - pH	EPA 9040C	NA	6.27		1	pH Units			PH	05/18/16 09:00	05/18/16 09:00	6050530
Field - Redox	NA	NA	-59		1	mV			REDOX	05/18/16 09:00	05/18/16 09:00	6050530
Field - Temperature	SM 2550 B	NA	17.1		1	°C			TEMP	05/18/16 09:00	05/18/16 09:00	6050530
Field - Turbidity	EPA 180.1	NA	1.33	0.10	1	NTU		0.10	TURB	05/18/16 09:00	05/18/16 09:00	6050530
Field - Water Level	NA	NA	27.61		1	feet			WL	05/18/16 09:00	05/18/16 09:00	6050530
Field - Well Depth	NA	NA	41.62		1	feet				05/18/16 09:00	05/18/16 09:00	6050530
General Chemistry												
Alkalinity as CaCO3	SM 2320 B	SM 2320 B	425000	1000	1	ug/L		1000	ALK	05/20/16 14:00	05/20/16 14:00	6050491
Biochemical Oxygen Demand	SM 5210 B	SM 5210 B	3000	2000	1	ug/L		2000	E-10106	05/19/16 13:11	05/24/16 11:20	6050461
Chemical Oxygen Demand	SM 5220 D	SM 5220 D	ND	10000	1	ug/L		10000	E-10117	05/21/16 10:15	05/23/16 13:10	6050509
Total Sulfide	SM 4500-S D	SM 4500-S D	ND	200	1	ug/L		200	18496-25-8	05/24/16 09:30	05/24/16 09:30	6050561
Total Organic Carbon	EPA 9060A	EPA 9060A	4490	1000	1	ug/L		1000	E-10195	05/21/16 13:00	05/21/16 20:03	6050505
Inorganic Anions												
Chloride	EPA 9056A	EPA 300.0	55000	2000	2	ug/L		2000	16887-00-6	05/19/16 12:27	06/02/16 13:43	6050469
Nitrate as N	EPA 9056A	EPA 300.0	ND	50	1	ug/L		50	14797-55-8	05/19/16 12:27	05/19/16 18:59	6050469
Sulfate	EPA 9056A	EPA 300.0	6000	5000	1	ug/L		5000	14808-79-8	05/19/16 12:27	05/19/16 18:59	6050469

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWE
Lab No: AZE0545-06
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 09:00
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/31/16 08:45	05/31/16 13:58	6050664
Arsenic	EPA 6020B	EPA 3005A	1.11	10.0	1	ug/L	J	0.75	7440-38-2	05/31/16 08:45	05/31/16 13:58	6050664
Barium	EPA 6020B	EPA 3005A	365	100	1	ug/L		0.30	7440-39-3	05/31/16 08:45	05/31/16 13:58	6050664
Beryllium	EPA 6020B	EPA 3005A	0.27	1.00	1	ug/L	J	0.09	7440-41-7	05/31/16 08:45	05/31/16 13:58	6050664
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/31/16 08:45	05/31/16 13:58	6050664
Chromium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.43	7440-47-3	05/31/16 08:45	05/31/16 13:58	6050664
Cobalt	EPA 6020B	EPA 3005A	12.0	10.0	1	ug/L		0.29	7440-48-4	05/31/16 08:45	05/31/16 13:58	6050664
Copper	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.41	7440-50-8	05/31/16 08:45	05/31/16 13:58	6050664
Lead	EPA 6020B	EPA 3005A	0.32	10.0	1	ug/L	J	0.08	7439-92-1	05/31/16 08:45	05/31/16 13:58	6050664
Nickel	EPA 6020B	EPA 3005A	12.9	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 13:58	6050664
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	05/31/16 08:45	05/31/16 13:58	6050664
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 13:58	6050664
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/31/16 08:45	05/31/16 13:58	6050664
Vanadium	EPA 6020B	EPA 3005A	2.31	25.0	1	ug/L	J	1.57	7440-62-2	05/31/16 08:45	05/31/16 13:58	6050664
Zinc	EPA 6020B	EPA 3005A	2.99	10.0	1	ug/L	J	1.30	7440-66-6	05/31/16 08:45	05/31/16 13:58	6050664
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/20/16 12:00	05/21/16 00:22	6050503
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/20/16 12:00	05/21/16 00:22	6050503
Benzene	EPA 8260B	EPA 5030B	0.8	1.0	1	ug/L	J	0.2	71-43-2	05/20/16 12:00	05/21/16 00:22	6050503
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/20/16 12:00	05/21/16 00:22	6050503
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/20/16 12:00	05/21/16 00:22	6050503

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWE
Lab No: AZE0545-06
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 09:00
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/20/16 12:00	05/21/16 00:22	6050503
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/20/16 12:00	05/21/16 00:22	6050503
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/20/16 12:00	05/21/16 00:22	6050503
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/20/16 12:00	05/21/16 00:22	6050503
Chlorobenzene	EPA 8260B	EPA 5030B	2.3	3.0	1	ug/L	J	0.4	108-90-7	05/20/16 12:00	05/21/16 00:22	6050503
Chloroethane	EPA 8260B	EPA 5030B	7.6	10	1	ug/L	J	0.4	75-00-3	05/20/16 12:00	05/21/16 00:22	6050503
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/20/16 12:00	05/21/16 00:22	6050503
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/20/16 12:00	05/21/16 00:22	6050503
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/20/16 12:00	05/21/16 00:22	6050503
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/20/16 12:00	05/21/16 00:22	6050503
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/20/16 12:00	05/21/16 00:22	6050503
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/20/16 12:00	05/21/16 00:22	6050503
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/20/16 12:00	05/21/16 00:22	6050503
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	13	1.0	1	ug/L		0.3	106-46-7	05/20/16 12:00	05/21/16 00:22	6050503
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/20/16 12:00	05/21/16 00:22	6050503
1,1-Dichloroethane	EPA 8260B	EPA 5030B	8.2	5.0	1	ug/L		0.4	75-34-3	05/20/16 12:00	05/21/16 00:22	6050503
1,2-Dichloroethane	EPA 8260B	EPA 5030B	0.9	1.0	1	ug/L	J	0.3	107-06-2	05/20/16 12:00	05/21/16 00:22	6050503
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/20/16 12:00	05/21/16 00:22	6050503
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	12	5.0	1	ug/L		0.5	156-59-2	05/20/16 12:00	05/21/16 00:22	6050503
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/20/16 12:00	05/21/16 00:22	6050503
1,2-Dichloropropane	EPA 8260B	EPA 5030B	0.9	1.0	1	ug/L	J	0.5	78-87-5	05/20/16 12:00	05/21/16 00:22	6050503
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/20/16 12:00	05/21/16 00:22	6050503

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWE
Lab No: AZE0545-06
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 09:00
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/20/16 12:00	05/21/16 00:22	6050503
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/20/16 12:00	05/21/16 00:22	6050503
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/20/16 12:00	05/21/16 00:22	6050503
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/20/16 12:00	05/21/16 00:22	6050503
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/20/16 12:00	05/21/16 00:22	6050503
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/20/16 12:00	05/21/16 00:22	6050503
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/20/16 12:00	05/21/16 00:22	6050503
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/20/16 12:00	05/21/16 00:22	6050503
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/20/16 12:00	05/21/16 00:22	6050503
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/20/16 12:00	05/21/16 00:22	6050503
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/20/16 12:00	05/21/16 00:22	6050503
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/20/16 12:00	05/21/16 00:22	6050503
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/20/16 12:00	05/21/16 00:22	6050503
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/20/16 12:00	05/21/16 00:22	6050503
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/20/16 12:00	05/21/16 00:22	6050503
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/20/16 12:00	05/21/16 00:22	6050503
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/20/16 12:00	05/21/16 00:22	6050503
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/20/16 12:00	05/21/16 00:22	6050503
Vinyl Chloride	EPA 8260B	EPA 5030B	3.2	1.0	1	ug/L		0.7	75-01-4	05/20/16 12:00	05/21/16 00:22	6050503
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/20/16 12:00	05/21/16 00:22	6050503
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	94 %		80-120				1868-53-7	05/20/16 12:00	05/21/16 00:22	6050503

PACE ANALYTICAL SERVICES, INC.

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWE
Lab No: AZE0545-06
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 09:00
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	102 %		78-120				17060-07-0	05/20/16 12:00	05/21/16 00:22	6050503
Surr: Toluene-d8	EPA 8260B	EPA 5030B	101 %		80-120				2037-26-5	05/20/16 12:00	05/21/16 00:22	6050503
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	106 %		80-120				460-00-4	05/20/16 12:00	05/21/16 00:22	6050503

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWE Deep
Lab No: AZE0545-07
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 10:10
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	1020	1	1	umhos/cm		1	COND	05/18/16 10:10	05/18/16 10:10	6050530
Dissolved Oxygen	SM 4500-O G	NA	3080	0.0	1	ug/L		0.0	NA	05/18/16 10:10	05/18/16 10:10	6050530
Field - Ferrous Iron	NA	NA	3000	200	1	ug/L		200	FE2	05/18/16 10:10	05/18/16 10:10	6050530
Field - pH	EPA 9040C	NA	6.63		1	pH Units			PH	05/18/16 10:10	05/18/16 10:10	6050530
Field - Redox	NA	NA	-95		1	mV			REDOX	05/18/16 10:10	05/18/16 10:10	6050530
Field - Temperature	SM 2550 B	NA	17.5		1	°C			TEMP	05/18/16 10:10	05/18/16 10:10	6050530
Field - Turbidity	EPA 180.1	NA	9.10	0.10	1	NTU		0.10	TURB	05/18/16 10:10	05/18/16 10:10	6050530
Field - Water Level	NA	NA	31.03		1	feet			WL	05/18/16 10:10	05/18/16 10:10	6050530
Field - Well Depth	NA	NA	59.77		1	feet				05/18/16 10:10	05/18/16 10:10	6050530
General Chemistry												
Alkalinity as CaCO3	SM 2320 B	SM 2320 B	ND	1000	1	ug/L		1000	ALK	05/20/16 14:00	05/20/16 14:00	6050491
Biochemical Oxygen Demand	SM 5210 B	SM 5210 B	28000	2000	1	ug/L		2000	E-10106	05/19/16 13:11	05/24/16 11:20	6050461
Chemical Oxygen Demand	SM 5220 D	SM 5220 D	63800	10000	1	ug/L		10000	E-10117	05/21/16 10:15	05/23/16 13:10	6050509
Total Sulfide	SM 4500-S D	SM 4500-S D	ND	200	1	ug/L		200	18496-25-8	05/24/16 09:30	05/24/16 09:30	6050561
Total Organic Carbon	EPA 9060A	EPA 9060A	6340	1000	1	ug/L		1000	E-10195	05/21/16 13:00	05/21/16 20:22	6050505
Inorganic Anions												
Chloride	EPA 9056A	EPA 300.0	37000	1000	1	ug/L		1000	16887-00-6	05/19/16 12:27	05/19/16 19:20	6050469
Nitrate as N	EPA 9056A	EPA 300.0	ND	50	1	ug/L		50	14797-55-8	05/19/16 12:27	05/19/16 19:20	6050469
Sulfate	EPA 9056A	EPA 300.0	ND	5000	1	ug/L		5000	14808-79-8	05/19/16 12:27	05/19/16 19:20	6050469

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWE Deep
Lab No: AZE0545-07
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 10:10
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/31/16 08:45	05/31/16 14:03	6050664
Arsenic	EPA 6020B	EPA 3005A	3.54	10.0	1	ug/L	J	0.75	7440-38-2	05/31/16 08:45	05/31/16 14:03	6050664
Barium	EPA 6020B	EPA 3005A	2150	500	5	ug/L		1.49	7440-39-3	05/31/16 08:45	06/03/16 18:12	6050664
Beryllium	EPA 6020B	EPA 3005A	0.48	1.00	1	ug/L	J	0.09	7440-41-7	05/31/16 08:45	05/31/16 14:03	6050664
Cadmium	EPA 6020B	EPA 3005A	0.67	1.00	1	ug/L	J	0.10	7440-43-9	05/31/16 08:45	05/31/16 14:03	6050664
Chromium	EPA 6020B	EPA 3005A	0.93	10.0	1	ug/L	J	0.43	7440-47-3	05/31/16 08:45	05/31/16 14:03	6050664
Cobalt	EPA 6020B	EPA 3005A	37.0	10.0	1	ug/L		0.29	7440-48-4	05/31/16 08:45	05/31/16 14:03	6050664
Copper	EPA 6020B	EPA 3005A	8.73	10.0	1	ug/L	J	0.41	7440-50-8	05/31/16 08:45	05/31/16 14:03	6050664
Lead	EPA 6020B	EPA 3005A	76.4	10.0	1	ug/L		0.08	7439-92-1	05/31/16 08:45	05/31/16 14:03	6050664
Nickel	EPA 6020B	EPA 3005A	16.0	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 14:03	6050664
Selenium	EPA 6020B	EPA 3005A	1.07	10.0	1	ug/L	J	0.85	7782-49-2	05/31/16 08:45	05/31/16 14:03	6050664
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 14:03	6050664
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/31/16 08:45	05/31/16 14:03	6050664
Vanadium	EPA 6020B	EPA 3005A	8.52	25.0	1	ug/L	J	1.57	7440-62-2	05/31/16 08:45	05/31/16 14:03	6050664
Zinc	EPA 6020B	EPA 3005A	30.6	10.0	1	ug/L		1.30	7440-66-6	05/31/16 08:45	05/31/16 14:03	6050664
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 07:37	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 07:37	6050511
Benzene	EPA 8260B	EPA 5030B	0.4	1.0	1	ug/L	J	0.2	71-43-2	05/21/16 05:50	05/21/16 07:37	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 07:37	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 07:37	6050511

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWE Deep
Lab No: AZE0545-07
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 10:10
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 07:37	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 07:37	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 07:37	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 07:37	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	0.8	3.0	1	ug/L	J	0.4	108-90-7	05/21/16 05:50	05/21/16 07:37	6050511
Chloroethane	EPA 8260B	EPA 5030B	11	10	1	ug/L		0.4	75-00-3	05/21/16 05:50	05/21/16 07:37	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 07:37	6050511
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 07:37	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 07:37	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 07:37	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 07:37	6050511
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 07:37	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 07:37	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	4.2	1.0	1	ug/L		0.3	106-46-7	05/21/16 05:50	05/21/16 07:37	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 07:37	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	1.0	5.0	1	ug/L	J	0.4	75-34-3	05/21/16 05:50	05/21/16 07:37	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	0.5	1.0	1	ug/L	J	0.3	107-06-2	05/21/16 05:50	05/21/16 07:37	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/21/16 05:50	05/21/16 07:37	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/21/16 05:50	05/21/16 07:37	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 07:37	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	0.5	1.0	1	ug/L	J	0.5	78-87-5	05/21/16 05:50	05/21/16 07:37	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 07:37	6050511

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWE Deep
Lab No: AZE0545-07
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 10:10
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 07:37	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 07:37	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 07:37	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 07:37	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/21/16 05:50	05/21/16 07:37	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 07:37	6050511
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 07:37	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 07:37	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 07:37	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 07:37	6050511
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/21/16 05:50	05/21/16 07:37	6050511
Toluene	EPA 8260B	EPA 5030B	0.5	1.0	1	ug/L	J	0.3	108-88-3	05/21/16 05:50	05/21/16 07:37	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 07:37	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 07:37	6050511
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/21/16 05:50	05/21/16 07:37	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/21/16 05:50	05/21/16 07:37	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 07:37	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 07:37	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 07:37	6050511
Xylenes, total	EPA 8260B	EPA 5030B	0.8	5.0	1	ug/L	J	0.4	1330-20-7	05/21/16 05:50	05/21/16 07:37	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	94 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 07:37	6050511

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWE Deep
Lab No: AZE0545-07
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 10:10
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	100 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 07:37	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	100 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 07:37	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	109 %		80-120				460-00-4	05/21/16 05:50	05/21/16 07:37	6050511
Base/Neutral Extractable Organic Compounds by EPA 8270												
Bis(2-ethylhexyl)phthalate	EPA 8270D	EPA 3510C	ND	15	1	ug/L		2.7	117-81-7	05/24/16 09:00	05/27/16 18:02	6050558
Surr: Nitrobenzene-d5	EPA 8270D	EPA 3510C	40 %		15-120				4165-60-0	05/24/16 09:00	05/27/16 18:02	6050558
Surr: 2-Fluorobiphenyl	EPA 8270D	EPA 3510C	44 %		23-120				321-60-8	05/24/16 09:00	05/27/16 18:02	6050558
Surr: p-Terphenyl-dl4	EPA 8270D	EPA 3510C	52 %		53-121		S-04		1718-51-0	05/24/16 09:00	05/27/16 18:02	6050558

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-AMW1D
Lab No: AZE0545-08
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 13:33
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	477	1	1	umhos/cm		1	COND	05/18/16 13:33	05/18/16 13:33	6050530
Dissolved Oxygen	SM 4500-O G	NA	1510	0.0	1	ug/L		0.0	NA	05/18/16 13:33	05/18/16 13:33	6050530
Field - Ferrous Iron	NA	NA	3000	200	1	ug/L		200	FE2	05/18/16 13:33	05/18/16 13:33	6050530
Field - pH	EPA 9040C	NA	6.13		1	pH Units			PH	05/18/16 13:33	05/18/16 13:33	6050530
Field - Redox	NA	NA	-28		1	mV			REDOX	05/18/16 13:33	05/18/16 13:33	6050530
Field - Temperature	SM 2550 B	NA	18.1		1	°C			TEMP	05/18/16 13:33	05/18/16 13:33	6050530
Field - Turbidity	EPA 180.1	NA	4.46	0.10	1	NTU		0.10	TURB	05/18/16 13:33	05/18/16 13:33	6050530
Field - Water Level	NA	NA	49.95		1	feet			WL	05/18/16 13:33	05/18/16 13:33	6050530
Field - Well Depth	NA	NA	96.82		1	feet				05/18/16 13:33	05/18/16 13:33	6050530
General Chemistry												
Alkalinity as CaCO3	SM 2320 B	SM 2320 B	225000	1000	1	ug/L		1000	ALK	05/20/16 14:00	05/20/16 14:00	6050491
Biochemical Oxygen Demand	SM 5210 B	SM 5210 B	ND	2000	1	ug/L		2000	E-10106	05/19/16 13:11	05/24/16 11:20	6050461
Chemical Oxygen Demand	SM 5220 D	SM 5220 D	13200	10000	1	ug/L		10000	E-10117	05/21/16 10:15	05/23/16 13:10	6050509
Total Sulfide	SM 4500-S D	SM 4500-S D	ND	200	1	ug/L		200	18496-25-8	05/24/16 09:30	05/24/16 09:30	6050561
Total Organic Carbon	EPA 9060A	EPA 9060A	2930	1000	1	ug/L		1000	E-10195	05/21/16 13:00	05/21/16 20:40	6050505
Inorganic Anions												
Chloride	EPA 9056A	EPA 300.0	5900	1000	1	ug/L		1000	16887-00-6	05/19/16 12:27	05/19/16 19:41	6050469
Nitrate as N	EPA 9056A	EPA 300.0	ND	50	1	ug/L		50	14797-55-8	05/19/16 12:27	05/19/16 19:41	6050469
Sulfate	EPA 9056A	EPA 300.0	ND	5000	1	ug/L		5000	14808-79-8	05/19/16 12:27	05/19/16 19:41	6050469

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Client ID: 1302-AMW1D
Lab No: AZE0545-08
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 13:33
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/31/16 08:45	05/31/16 14:08	6050664
Arsenic	EPA 6020B	EPA 3005A	1.01	10.0	1	ug/L	J	0.75	7440-38-2	05/31/16 08:45	05/31/16 14:08	6050664
Barium	EPA 6020B	EPA 3005A	131	100	1	ug/L		0.30	7440-39-3	05/31/16 08:45	05/31/16 14:08	6050664
Beryllium	EPA 6020B	EPA 3005A	0.19	1.00	1	ug/L	J	0.09	7440-41-7	05/31/16 08:45	05/31/16 14:08	6050664
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/31/16 08:45	05/31/16 14:08	6050664
Chromium	EPA 6020B	EPA 3005A	2.09	10.0	1	ug/L	J	0.43	7440-47-3	05/31/16 08:45	05/31/16 14:08	6050664
Cobalt	EPA 6020B	EPA 3005A	6.06	10.0	1	ug/L	J	0.29	7440-48-4	05/31/16 08:45	05/31/16 14:08	6050664
Copper	EPA 6020B	EPA 3005A	1.52	10.0	1	ug/L	J	0.41	7440-50-8	05/31/16 08:45	05/31/16 14:08	6050664
Lead	EPA 6020B	EPA 3005A	0.84	10.0	1	ug/L	J	0.08	7439-92-1	05/31/16 08:45	05/31/16 14:08	6050664
Nickel	EPA 6020B	EPA 3005A	9.03	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 14:08	6050664
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	05/31/16 08:45	05/31/16 14:08	6050664
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 14:08	6050664
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/31/16 08:45	05/31/16 14:08	6050664
Vanadium	EPA 6020B	EPA 3005A	2.52	25.0	1	ug/L	J	1.57	7440-62-2	05/31/16 08:45	05/31/16 14:08	6050664
Zinc	EPA 6020B	EPA 3005A	6.84	10.0	1	ug/L	J	1.30	7440-66-6	05/31/16 08:45	05/31/16 14:08	6050664
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 08:03	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 08:03	6050511
Benzene	EPA 8260B	EPA 5030B	1.1	1.0	1	ug/L		0.2	71-43-2	05/21/16 05:50	05/21/16 08:03	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 08:03	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 08:03	6050511

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-AMW1D
Lab No: AZE0545-08
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 13:33
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 08:03	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 08:03	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 08:03	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 08:03	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/21/16 05:50	05/21/16 08:03	6050511
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/21/16 05:50	05/21/16 08:03	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 08:03	6050511
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 08:03	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 08:03	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 08:03	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 08:03	6050511
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 08:03	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 08:03	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	0.9	1.0	1	ug/L	J	0.3	106-46-7	05/21/16 05:50	05/21/16 08:03	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 08:03	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	23	5.0	1	ug/L		0.4	75-34-3	05/21/16 05:50	05/21/16 08:03	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/21/16 05:50	05/21/16 08:03	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/21/16 05:50	05/21/16 08:03	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	9.7	5.0	1	ug/L		0.5	156-59-2	05/21/16 05:50	05/21/16 08:03	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 08:03	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/21/16 05:50	05/21/16 08:03	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 08:03	6050511

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Lab No: AZE0545-08
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 13:33
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 08:03	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 08:03	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 08:03	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 08:03	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/21/16 05:50	05/21/16 08:03	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 08:03	6050511
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 08:03	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 08:03	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 08:03	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 08:03	6050511
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/21/16 05:50	05/21/16 08:03	6050511
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/21/16 05:50	05/21/16 08:03	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 08:03	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 08:03	6050511
Trichloroethene	EPA 8260B	EPA 5030B	1.6	1.0	1	ug/L		0.4	79-01-6	05/21/16 05:50	05/21/16 08:03	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/21/16 05:50	05/21/16 08:03	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 08:03	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 08:03	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	8.0	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 08:03	6050511
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/21/16 05:50	05/21/16 08:03	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	94 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 08:03	6050511

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Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	100 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 08:03	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	101 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 08:03	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	108 %		80-120				460-00-4	05/21/16 05:50	05/21/16 08:03	6050511

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June 09, 2016

Client ID: 1302-AMW1S
Lab No: AZE0545-09
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 12:32
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	224	1	1	umhos/cm		1	COND	05/18/16 12:32	05/18/16 12:32	6050530
Dissolved Oxygen	SM 4500-O G	NA	3770	0.0	1	ug/L		0.0	NA	05/18/16 12:32	05/18/16 12:32	6050530
Field - Ferrous Iron	NA	NA	ND	200	1	ug/L		200	FE2	05/18/16 12:32	05/18/16 12:32	6050530
Field - pH	EPA 9040C	NA	6.07		1	pH Units			PH	05/18/16 12:32	05/18/16 12:32	6050530
Field - Redox	NA	NA	222		1	mV			REDOX	05/18/16 12:32	05/18/16 12:32	6050530
Field - Temperature	SM 2550 B	NA	16.5		1	°C			TEMP	05/18/16 12:32	05/18/16 12:32	6050530
Field - Turbidity	EPA 180.1	NA	8.46	0.10	1	NTU		0.10	TURB	05/18/16 12:32	05/18/16 12:32	6050530
Field - Water Level	NA	NA	49.23		1	feet			WL	05/18/16 12:32	05/18/16 12:32	6050530
Field - Well Depth	NA	NA	67.60		1	feet				05/18/16 12:32	05/18/16 12:32	6050530
General Chemistry												
Alkalinity as CaCO3	SM 2320 B	SM 2320 B	85000	1000	1	ug/L		1000	ALK	05/20/16 14:00	05/20/16 14:00	6050491
Biochemical Oxygen Demand	SM 5210 B	SM 5210 B	ND	2000	1	ug/L		2000	E-10106	05/19/16 13:11	05/24/16 11:20	6050461
Chemical Oxygen Demand	SM 5220 D	SM 5220 D	ND	10000	1	ug/L		10000	E-10117	05/21/16 10:15	05/23/16 13:10	6050509
Total Sulfide	SM 4500-S D	SM 4500-S D	ND	200	1	ug/L		200	18496-25-8	05/24/16 09:30	05/24/16 09:30	6050561
Total Organic Carbon	EPA 9060A	EPA 9060A	1440	1000	1	ug/L		1000	E-10195	05/21/16 13:00	05/21/16 20:57	6050505
Inorganic Anions												
Chloride	EPA 9056A	EPA 300.0	3800	1000	1	ug/L		1000	16887-00-6	05/19/16 12:27	05/19/16 20:01	6050469
Nitrate as N	EPA 9056A	EPA 300.0	ND	50	1	ug/L		50	14797-55-8	05/19/16 12:27	05/19/16 20:01	6050469
Sulfate	EPA 9056A	EPA 300.0	ND	5000	1	ug/L		5000	14808-79-8	05/19/16 12:27	05/19/16 20:01	6050469

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Metals, Total												
Antimony	EPA 6020B	EPA 3005A	0.27	6.00	1	ug/L	J	0.25	7440-36-0	05/31/16 08:45	05/31/16 14:25	6050664
Arsenic	EPA 6020B	EPA 3005A	0.82	10.0	1	ug/L	J	0.75	7440-38-2	05/31/16 08:45	05/31/16 14:25	6050664
Barium	EPA 6020B	EPA 3005A	85.4	100	1	ug/L	J	0.30	7440-39-3	05/31/16 08:45	05/31/16 14:25	6050664
Beryllium	EPA 6020B	EPA 3005A	1.03	1.00	1	ug/L		0.09	7440-41-7	05/31/16 08:45	05/31/16 14:25	6050664
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/31/16 08:45	05/31/16 14:25	6050664
Chromium	EPA 6020B	EPA 3005A	1.43	10.0	1	ug/L	J	0.43	7440-47-3	05/31/16 08:45	05/31/16 14:25	6050664
Cobalt	EPA 6020B	EPA 3005A	0.38	10.0	1	ug/L	J	0.29	7440-48-4	05/31/16 08:45	05/31/16 14:25	6050664
Copper	EPA 6020B	EPA 3005A	2.47	10.0	1	ug/L	J	0.41	7440-50-8	05/31/16 08:45	05/31/16 14:25	6050664
Lead	EPA 6020B	EPA 3005A	0.92	10.0	1	ug/L	J	0.08	7439-92-1	05/31/16 08:45	05/31/16 14:25	6050664
Nickel	EPA 6020B	EPA 3005A	4.16	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 14:25	6050664
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	05/31/16 08:45	05/31/16 14:25	6050664
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 14:25	6050664
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/31/16 08:45	05/31/16 14:25	6050664
Vanadium	EPA 6020B	EPA 3005A	5.18	25.0	1	ug/L	J	1.57	7440-62-2	05/31/16 08:45	05/31/16 14:25	6050664
Zinc	EPA 6020B	EPA 3005A	7.43	10.0	1	ug/L	J	1.30	7440-66-6	05/31/16 08:45	05/31/16 14:25	6050664
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 09:19	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 09:19	6050511
Benzene	EPA 8260B	EPA 5030B	0.6	1.0	1	ug/L	J	0.2	71-43-2	05/21/16 05:50	05/21/16 09:19	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 09:19	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 09:19	6050511

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-AMW1S
Lab No: AZE0545-09
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 12:32
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 09:19	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 09:19	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 09:19	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 09:19	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/21/16 05:50	05/21/16 09:19	6050511
Chloroethane	EPA 8260B	EPA 5030B	0.5	10	1	ug/L	J	0.4	75-00-3	05/21/16 05:50	05/21/16 09:19	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 09:19	6050511
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 09:19	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 09:19	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 09:19	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 09:19	6050511
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 09:19	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 09:19	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	0.9	1.0	1	ug/L	J	0.3	106-46-7	05/21/16 05:50	05/21/16 09:19	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 09:19	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	5.7	5.0	1	ug/L		0.4	75-34-3	05/21/16 05:50	05/21/16 09:19	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/21/16 05:50	05/21/16 09:19	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/21/16 05:50	05/21/16 09:19	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	7.6	5.0	1	ug/L		0.5	156-59-2	05/21/16 05:50	05/21/16 09:19	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 09:19	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/21/16 05:50	05/21/16 09:19	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 09:19	6050511

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-AMW1S
Lab No: AZE0545-09
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 12:32
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 09:19	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 09:19	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 09:19	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 09:19	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	0.6	1.0	1	ug/L	J	0.5	75-09-2	05/21/16 05:50	05/21/16 09:19	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 09:19	6050511
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 09:19	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 09:19	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 09:19	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 09:19	6050511
Tetrachloroethene	EPA 8260B	EPA 5030B	1.8	1.0	1	ug/L		0.4	127-18-4	05/21/16 05:50	05/21/16 09:19	6050511
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/21/16 05:50	05/21/16 09:19	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 09:19	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 09:19	6050511
Trichloroethene	EPA 8260B	EPA 5030B	1.7	1.0	1	ug/L		0.4	79-01-6	05/21/16 05:50	05/21/16 09:19	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/21/16 05:50	05/21/16 09:19	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 09:19	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 09:19	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 09:19	6050511
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/21/16 05:50	05/21/16 09:19	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	91 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 09:19	6050511

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-AMW1S
Lab No: AZE0545-09
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 12:32
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	102 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 09:19	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	101 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 09:19	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	107 %		80-120				460-00-4	05/21/16 05:50	05/21/16 09:19	6050511

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MW3
Lab No: AZE0545-10
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 15:09
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	167	1	1	umhos/cm		1	COND	05/18/16 15:09	05/18/16 15:09	6050530
Dissolved Oxygen	SM 4500-O G	NA	3180	0.0	1	ug/L		0.0	NA	05/18/16 15:09	05/18/16 15:09	6050530
Field - Ferrous Iron	NA	NA	ND	200	1	ug/L		200	FE2	05/18/16 15:09	05/18/16 15:09	6050530
Field - pH	EPA 9040C	NA	6.04		1	pH Units			PH	05/18/16 15:09	05/18/16 15:09	6050530
Field - Redox	NA	NA	101		1	mV			REDOX	05/18/16 15:09	05/18/16 15:09	6050530
Field - Temperature	SM 2550 B	NA	16.5		1	°C			TEMP	05/18/16 15:09	05/18/16 15:09	6050530
Field - Turbidity	EPA 180.1	NA	1.08	0.10	1	NTU		0.10	TURB	05/18/16 15:09	05/18/16 15:09	6050530
Field - Water Level	NA	NA	13.06		1	feet			WL	05/18/16 15:09	05/18/16 15:09	6050530
Field - Well Depth	NA	NA	35.24		1	feet				05/18/16 15:09	05/18/16 15:09	6050530
General Chemistry												
Alkalinity as CaCO3	SM 2320 B	SM 2320 B	75000	1000	1	ug/L		1000	ALK	05/20/16 14:00	05/20/16 14:00	6050491
Biochemical Oxygen Demand	SM 5210 B	SM 5210 B	ND	2000	1	ug/L		2000	E-10106	05/19/16 13:11	05/24/16 11:20	6050461
Chemical Oxygen Demand	SM 5220 D	SM 5220 D	ND	10000	1	ug/L		10000	E-10117	05/21/16 10:15	05/23/16 13:10	6050509
Total Sulfide	SM 4500-S D	SM 4500-S D	ND	200	1	ug/L		200	18496-25-8	05/24/16 09:30	05/24/16 09:30	6050561
Total Organic Carbon	EPA 9060A	EPA 9060A	1320	1000	1	ug/L		1000	E-10195	05/21/16 13:00	05/21/16 21:14	6050505
Inorganic Anions												
Chloride	EPA 9056A	EPA 300.0	3700	1000	1	ug/L		1000	16887-00-6	05/19/16 12:27	05/19/16 20:22	6050469
Nitrate as N	EPA 9056A	EPA 300.0	ND	50	1	ug/L		50	14797-55-8	05/19/16 12:27	05/19/16 20:22	6050469
Sulfate	EPA 9056A	EPA 300.0	ND	5000	1	ug/L		5000	14808-79-8	05/19/16 12:27	05/19/16 20:22	6050469

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June 09, 2016

Client ID: 1302-MW3
Lab No: AZE0545-10
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 15:09
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/31/16 08:45	05/31/16 14:30	6050664
Arsenic	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.75	7440-38-2	05/31/16 08:45	05/31/16 14:30	6050664
Barium	EPA 6020B	EPA 3005A	26.2	100	1	ug/L	J	0.30	7440-39-3	05/31/16 08:45	05/31/16 14:30	6050664
Beryllium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.09	7440-41-7	05/31/16 08:45	05/31/16 14:30	6050664
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/31/16 08:45	05/31/16 14:30	6050664
Chromium	EPA 6020B	EPA 3005A	1.46	10.0	1	ug/L	J	0.43	7440-47-3	05/31/16 08:45	05/31/16 14:30	6050664
Cobalt	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.29	7440-48-4	05/31/16 08:45	05/31/16 14:30	6050664
Copper	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.41	7440-50-8	05/31/16 08:45	05/31/16 14:30	6050664
Lead	EPA 6020B	EPA 3005A	0.35	10.0	1	ug/L	J	0.08	7439-92-1	05/31/16 08:45	05/31/16 14:30	6050664
Nickel	EPA 6020B	EPA 3005A	0.99	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 14:30	6050664
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	05/31/16 08:45	05/31/16 14:30	6050664
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 14:30	6050664
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/31/16 08:45	05/31/16 14:30	6050664
Vanadium	EPA 6020B	EPA 3005A	3.48	25.0	1	ug/L	J	1.57	7440-62-2	05/31/16 08:45	05/31/16 14:30	6050664
Zinc	EPA 6020B	EPA 3005A	2.10	10.0	1	ug/L	J	1.30	7440-66-6	05/31/16 08:45	05/31/16 14:30	6050664
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 09:44	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 09:44	6050511
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/21/16 05:50	05/21/16 09:44	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 09:44	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 09:44	6050511

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MW3
Lab No: AZE0545-10
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 15:09
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 09:44	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 09:44	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 09:44	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 09:44	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/21/16 05:50	05/21/16 09:44	6050511
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/21/16 05:50	05/21/16 09:44	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 09:44	6050511
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 09:44	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 09:44	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 09:44	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 09:44	6050511
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 09:44	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 09:44	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/21/16 05:50	05/21/16 09:44	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 09:44	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	13	5.0	1	ug/L		0.4	75-34-3	05/21/16 05:50	05/21/16 09:44	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/21/16 05:50	05/21/16 09:44	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	1.3	5.0	1	ug/L	J	0.5	75-35-4	05/21/16 05:50	05/21/16 09:44	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	4.1	5.0	1	ug/L	J	0.5	156-59-2	05/21/16 05:50	05/21/16 09:44	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 09:44	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/21/16 05:50	05/21/16 09:44	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 09:44	6050511

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MW3
Lab No: AZE0545-10
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 15:09
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 09:44	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 09:44	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 09:44	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 09:44	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	0.6	1.0	1	ug/L	J	0.5	75-09-2	05/21/16 05:50	05/21/16 09:44	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 09:44	6050511
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 09:44	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 09:44	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 09:44	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 09:44	6050511
Tetrachloroethene	EPA 8260B	EPA 5030B	15	1.0	1	ug/L		0.4	127-18-4	05/21/16 05:50	05/21/16 09:44	6050511
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/21/16 05:50	05/21/16 09:44	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 09:44	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 09:44	6050511
Trichloroethene	EPA 8260B	EPA 5030B	6.0	1.0	1	ug/L		0.4	79-01-6	05/21/16 05:50	05/21/16 09:44	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	0.8	1.0	1	ug/L	J	0.5	75-69-4	05/21/16 05:50	05/21/16 09:44	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 09:44	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 09:44	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 09:44	6050511
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/21/16 05:50	05/21/16 09:44	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	93 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 09:44	6050511

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MW3
Lab No: AZE0545-10
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 15:09
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	100 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 09:44	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	100 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 09:44	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	107 %		80-120				460-00-4	05/21/16 05:50	05/21/16 09:44	6050511

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWJ
Lab No: AZE0545-11
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 10:55
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	265	1	1	umhos/cm		1	COND	05/17/16 10:55	05/17/16 10:55	6050530
Dissolved Oxygen	SM 4500-O G	NA	4200	0.0	1	ug/L		0.0	NA	05/17/16 10:55	05/17/16 10:55	6050530
Field - pH	EPA 9040C	NA	6.92		1	pH Units			PH	05/17/16 10:55	05/17/16 10:55	6050530
Field - Redox	NA	NA	28		1	mV			REDOX	05/17/16 10:55	05/17/16 10:55	6050530
Field - Temperature	SM 2550 B	NA	14.8		1	°C			TEMP	05/17/16 10:55	05/17/16 10:55	6050530
Field - Turbidity	EPA 180.1	NA	690	0.10	1	NTU		0.10	TURB	05/17/16 10:55	05/17/16 10:55	6050530
Field - Water Level	NA	NA	28.95		1	feet			WL	05/17/16 10:55	05/17/16 10:55	6050530
Field - Well Depth	NA	NA	34.89		1	feet				05/17/16 10:55	05/17/16 10:55	6050530
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 10:09	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 10:09	6050511
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/21/16 05:50	05/21/16 10:09	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 10:09	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 10:09	6050511
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 10:09	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 10:09	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 10:09	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 10:09	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/21/16 05:50	05/21/16 10:09	6050511
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/21/16 05:50	05/21/16 10:09	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 10:09	6050511

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWJ
Lab No: AZE0545-11
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 10:55
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 10:09	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 10:09	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 10:09	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 10:09	6050511
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 10:09	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 10:09	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/21/16 05:50	05/21/16 10:09	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 10:09	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/21/16 05:50	05/21/16 10:09	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/21/16 05:50	05/21/16 10:09	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/21/16 05:50	05/21/16 10:09	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/21/16 05:50	05/21/16 10:09	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 10:09	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/21/16 05:50	05/21/16 10:09	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 10:09	6050511
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 10:09	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 10:09	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 10:09	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 10:09	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/21/16 05:50	05/21/16 10:09	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 10:09	6050511

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWJ
Lab No: AZE0545-11
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 10:55
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 10:09	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 10:09	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 10:09	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 10:09	6050511
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/21/16 05:50	05/21/16 10:09	6050511
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/21/16 05:50	05/21/16 10:09	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 10:09	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 10:09	6050511
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/21/16 05:50	05/21/16 10:09	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/21/16 05:50	05/21/16 10:09	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 10:09	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 10:09	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 10:09	6050511
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/21/16 05:50	05/21/16 10:09	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	91 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 10:09	6050511
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	101 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 10:09	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	101 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 10:09	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	107 %		80-120				460-00-4	05/21/16 05:50	05/21/16 10:09	6050511

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWJ
Lab No: AZE0545-12
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 09:00
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Turbidity	EPA 180.1	NA	58.0	0.10	1	NTU		0.10	TURB	05/18/16 09:00	05/18/16 09:00	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/31/16 08:45	05/31/16 14:35	6050664
Arsenic	EPA 6020B	EPA 3005A	0.96	10.0	1	ug/L	J	0.75	7440-38-2	05/31/16 08:45	05/31/16 14:35	6050664
Barium	EPA 6020B	EPA 3005A	28.2	100	1	ug/L	J	0.30	7440-39-3	05/31/16 08:45	05/31/16 14:35	6050664
Beryllium	EPA 6020B	EPA 3005A	0.25	1.00	1	ug/L	J	0.09	7440-41-7	05/31/16 08:45	05/31/16 14:35	6050664
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/31/16 08:45	05/31/16 14:35	6050664
Chromium	EPA 6020B	EPA 3005A	3.11	10.0	1	ug/L	J	0.43	7440-47-3	05/31/16 08:45	05/31/16 14:35	6050664
Cobalt	EPA 6020B	EPA 3005A	1.40	10.0	1	ug/L	J	0.29	7440-48-4	05/31/16 08:45	05/31/16 14:35	6050664
Copper	EPA 6020B	EPA 3005A	1.62	10.0	1	ug/L	J	0.41	7440-50-8	05/31/16 08:45	05/31/16 14:35	6050664
Lead	EPA 6020B	EPA 3005A	1.99	10.0	1	ug/L	J	0.08	7439-92-1	05/31/16 08:45	05/31/16 14:35	6050664
Nickel	EPA 6020B	EPA 3005A	3.55	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 14:35	6050664
Selenium	EPA 6020B	EPA 3005A	0.90	10.0	1	ug/L	J	0.85	7782-49-2	05/31/16 08:45	05/31/16 14:35	6050664
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 14:35	6050664
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/31/16 08:45	05/31/16 14:35	6050664
Vanadium	EPA 6020B	EPA 3005A	12.0	25.0	1	ug/L	J	1.57	7440-62-2	05/31/16 08:45	05/31/16 14:35	6050664
Zinc	EPA 6020B	EPA 3005A	6.86	10.0	1	ug/L	J	1.30	7440-66-6	05/31/16 08:45	05/31/16 14:35	6050664

PACE ANALYTICAL SERVICES, INC.

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110 Technology Parkway, Peachtree Corners, GA 30092

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWK
Lab No: AZE0545-13
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 13:21
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	208	1	1	umhos/cm		1	COND	05/17/16 13:21	05/17/16 13:21	6050530
Dissolved Oxygen	SM 4500-O G	NA	4340	0.0	1	ug/L		0.0	NA	05/17/16 13:21	05/17/16 13:21	6050530
Field - pH	EPA 9040C	NA	7.03		1	pH Units			PH	05/17/16 13:21	05/17/16 13:21	6050530
Field - Redox	NA	NA	20		1	mV			REDOX	05/17/16 13:21	05/17/16 13:21	6050530
Field - Temperature	SM 2550 B	NA	15.0		1	°C			TEMP	05/17/16 13:21	05/17/16 13:21	6050530
Field - Turbidity	EPA 180.1	NA	730	0.10	1	NTU		0.10	TURB	05/17/16 13:21	05/17/16 13:21	6050530
Field - Water Level	NA	NA	21.70		1	feet			WL	05/17/16 13:21	05/17/16 13:21	6050530
Field - Well Depth	NA	NA	36.19		1	feet				05/17/16 13:21	05/17/16 13:21	6050530
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 10:34	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 10:34	6050511
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/21/16 05:50	05/21/16 10:34	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 10:34	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 10:34	6050511
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 10:34	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 10:34	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 10:34	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 10:34	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/21/16 05:50	05/21/16 10:34	6050511
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/21/16 05:50	05/21/16 10:34	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 10:34	6050511

PACE ANALYTICAL SERVICES, INC.

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWK
Lab No: AZE0545-13
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 13:21
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 10:34	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 10:34	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 10:34	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 10:34	6050511
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 10:34	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 10:34	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/21/16 05:50	05/21/16 10:34	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 10:34	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/21/16 05:50	05/21/16 10:34	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/21/16 05:50	05/21/16 10:34	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/21/16 05:50	05/21/16 10:34	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/21/16 05:50	05/21/16 10:34	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 10:34	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/21/16 05:50	05/21/16 10:34	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 10:34	6050511
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 10:34	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 10:34	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 10:34	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 10:34	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/21/16 05:50	05/21/16 10:34	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 10:34	6050511

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWK
Lab No: AZE0545-13
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 13:21
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 10:34	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 10:34	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 10:34	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 10:34	6050511
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/21/16 05:50	05/21/16 10:34	6050511
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/21/16 05:50	05/21/16 10:34	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 10:34	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 10:34	6050511
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/21/16 05:50	05/21/16 10:34	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/21/16 05:50	05/21/16 10:34	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 10:34	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 10:34	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 10:34	6050511
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/21/16 05:50	05/21/16 10:34	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	92 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 10:34	6050511
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	100 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 10:34	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	101 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 10:34	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	106 %		80-120				460-00-4	05/21/16 05:50	05/21/16 10:34	6050511

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWK
Lab No: AZE0545-14
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 09:25
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Turbidity	EPA 180.1	NA	14.0	0.10	1	NTU		0.10	TURB	05/18/16 09:25	05/18/16 09:25	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/31/16 08:45	05/31/16 14:40	6050664
Arsenic	EPA 6020B	EPA 3005A	1.43	10.0	1	ug/L	J	0.75	7440-38-2	05/31/16 08:45	05/31/16 14:40	6050664
Barium	EPA 6020B	EPA 3005A	17.8	100	1	ug/L	J	0.30	7440-39-3	05/31/16 08:45	05/31/16 14:40	6050664
Beryllium	EPA 6020B	EPA 3005A	0.16	1.00	1	ug/L	J	0.09	7440-41-7	05/31/16 08:45	05/31/16 14:40	6050664
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/31/16 08:45	05/31/16 14:40	6050664
Chromium	EPA 6020B	EPA 3005A	3.25	10.0	1	ug/L	J	0.43	7440-47-3	05/31/16 08:45	05/31/16 14:40	6050664
Cobalt	EPA 6020B	EPA 3005A	0.89	10.0	1	ug/L	J	0.29	7440-48-4	05/31/16 08:45	05/31/16 14:40	6050664
Copper	EPA 6020B	EPA 3005A	1.03	10.0	1	ug/L	J	0.41	7440-50-8	05/31/16 08:45	05/31/16 14:40	6050664
Lead	EPA 6020B	EPA 3005A	0.83	10.0	1	ug/L	J	0.08	7439-92-1	05/31/16 08:45	05/31/16 14:40	6050664
Nickel	EPA 6020B	EPA 3005A	2.28	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 14:40	6050664
Selenium	EPA 6020B	EPA 3005A	1.18	10.0	1	ug/L	J	0.85	7782-49-2	05/31/16 08:45	05/31/16 14:40	6050664
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 14:40	6050664
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/31/16 08:45	05/31/16 14:40	6050664
Vanadium	EPA 6020B	EPA 3005A	8.68	25.0	1	ug/L	J	1.57	7440-62-2	05/31/16 08:45	05/31/16 14:40	6050664
Zinc	EPA 6020B	EPA 3005A	3.53	10.0	1	ug/L	J	1.30	7440-66-6	05/31/16 08:45	05/31/16 14:40	6050664

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWM
Lab No: AZE0545-15
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 14:15
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	320	1	1	umhos/cm		1	COND	05/17/16 14:15	05/17/16 14:15	6050530
Dissolved Oxygen	SM 4500-O G	NA	4020	0.0	1	ug/L		0.0	NA	05/17/16 14:15	05/17/16 14:15	6050530
Field - pH	EPA 9040C	NA	7.97		1	pH Units			PH	05/17/16 14:15	05/17/16 14:15	6050530
Field - Redox	NA	NA	-3		1	mV			REDOX	05/17/16 14:15	05/17/16 14:15	6050530
Field - Temperature	SM 2550 B	NA	15.3		1	°C			TEMP	05/17/16 14:15	05/17/16 14:15	6050530
Field - Turbidity	EPA 180.1	NA	800	0.10	1	NTU	>	0.10	TURB	05/17/16 14:15	05/17/16 14:15	6050530
Field - Water Level	NA	NA	18.55		1	feet			WL	05/17/16 14:15	05/17/16 14:15	6050530
Field - Well Depth	NA	NA	39.59		1	feet				05/17/16 14:15	05/17/16 14:15	6050530
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 11:00	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 11:00	6050511
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/21/16 05:50	05/21/16 11:00	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 11:00	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 11:00	6050511
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 11:00	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 11:00	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 11:00	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 11:00	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/21/16 05:50	05/21/16 11:00	6050511
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/21/16 05:50	05/21/16 11:00	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 11:00	6050511

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWM
Lab No: AZE0545-15
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 14:15
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 11:00	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 11:00	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 11:00	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 11:00	6050511
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 11:00	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 11:00	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/21/16 05:50	05/21/16 11:00	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 11:00	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	0.8	5.0	1	ug/L	J	0.4	75-34-3	05/21/16 05:50	05/21/16 11:00	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/21/16 05:50	05/21/16 11:00	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/21/16 05:50	05/21/16 11:00	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/21/16 05:50	05/21/16 11:00	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 11:00	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/21/16 05:50	05/21/16 11:00	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 11:00	6050511
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 11:00	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 11:00	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 11:00	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 11:00	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/21/16 05:50	05/21/16 11:00	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 11:00	6050511

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWM
Lab No: AZE0545-15
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 14:15
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 11:00	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 11:00	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 11:00	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 11:00	6050511
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/21/16 05:50	05/21/16 11:00	6050511
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/21/16 05:50	05/21/16 11:00	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 11:00	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 11:00	6050511
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/21/16 05:50	05/21/16 11:00	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/21/16 05:50	05/21/16 11:00	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 11:00	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 11:00	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 11:00	6050511
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/21/16 05:50	05/21/16 11:00	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	92 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 11:00	6050511
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	102 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 11:00	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	100 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 11:00	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	106 %		80-120				460-00-4	05/21/16 05:50	05/21/16 11:00	6050511

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWM
Lab No: AZE0545-16
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 09:40
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Turbidity	EPA 180.1	NA	8.43	0.10	1	NTU		0.10	TURB	05/18/16 09:40	05/18/16 09:40	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/31/16 08:45	05/31/16 14:45	6050664
Arsenic	EPA 6020B	EPA 3005A	0.92	10.0	1	ug/L	J	0.75	7440-38-2	05/31/16 08:45	05/31/16 14:45	6050664
Barium	EPA 6020B	EPA 3005A	38.8	100	1	ug/L	J	0.30	7440-39-3	05/31/16 08:45	05/31/16 14:45	6050664
Beryllium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.09	7440-41-7	05/31/16 08:45	05/31/16 14:45	6050664
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/31/16 08:45	05/31/16 14:45	6050664
Chromium	EPA 6020B	EPA 3005A	0.60	10.0	1	ug/L	J	0.43	7440-47-3	05/31/16 08:45	05/31/16 14:45	6050664
Cobalt	EPA 6020B	EPA 3005A	0.46	10.0	1	ug/L	J	0.29	7440-48-4	05/31/16 08:45	05/31/16 14:45	6050664
Copper	EPA 6020B	EPA 3005A	1.60	10.0	1	ug/L	J	0.41	7440-50-8	05/31/16 08:45	05/31/16 14:45	6050664
Lead	EPA 6020B	EPA 3005A	0.58	10.0	1	ug/L	J	0.08	7439-92-1	05/31/16 08:45	05/31/16 14:45	6050664
Nickel	EPA 6020B	EPA 3005A	1.47	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 14:45	6050664
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	05/31/16 08:45	05/31/16 14:45	6050664
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 14:45	6050664
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/31/16 08:45	05/31/16 14:45	6050664
Vanadium	EPA 6020B	EPA 3005A	6.84	25.0	1	ug/L	J	1.57	7440-62-2	05/31/16 08:45	05/31/16 14:45	6050664
Zinc	EPA 6020B	EPA 3005A	1.54	10.0	1	ug/L	J	1.30	7440-66-6	05/31/16 08:45	05/31/16 14:45	6050664

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWX
Lab No: AZE0545-17
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 11:59
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	210	1	1	umhos/cm		1	COND	05/17/16 11:59	05/17/16 11:59	6050530
Dissolved Oxygen	SM 4500-O G	NA	3980	0.0	1	ug/L		0.0	NA	05/17/16 11:59	05/17/16 11:59	6050530
Field - pH	EPA 9040C	NA	7.19		1	pH Units			PH	05/17/16 11:59	05/17/16 11:59	6050530
Field - Redox	NA	NA	20		1	mV			REDOX	05/17/16 11:59	05/17/16 11:59	6050530
Field - Temperature	SM 2550 B	NA	13.9		1	°C			TEMP	05/17/16 11:59	05/17/16 11:59	6050530
Field - Turbidity	EPA 180.1	NA	190	0.10	1	NTU		0.10	TURB	05/17/16 11:59	05/17/16 11:59	6050530
Field - Water Level	NA	NA	11.64		1	feet			WL	05/17/16 11:59	05/17/16 11:59	6050530
Field - Well Depth	NA	NA	32.09		1	feet				05/17/16 11:59	05/17/16 11:59	6050530
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 11:25	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 11:25	6050511
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/21/16 05:50	05/21/16 11:25	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 11:25	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 11:25	6050511
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 11:25	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 11:25	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 11:25	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 11:25	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/21/16 05:50	05/21/16 11:25	6050511
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/21/16 05:50	05/21/16 11:25	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 11:25	6050511

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWX
Lab No: AZE0545-17
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 11:59
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 11:25	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 11:25	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 11:25	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 11:25	6050511
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 11:25	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 11:25	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/21/16 05:50	05/21/16 11:25	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 11:25	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/21/16 05:50	05/21/16 11:25	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/21/16 05:50	05/21/16 11:25	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/21/16 05:50	05/21/16 11:25	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/21/16 05:50	05/21/16 11:25	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 11:25	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/21/16 05:50	05/21/16 11:25	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 11:25	6050511
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 11:25	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 11:25	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 11:25	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 11:25	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/21/16 05:50	05/21/16 11:25	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 11:25	6050511

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWX
Lab No: AZE0545-17
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 11:59
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 11:25	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 11:25	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 11:25	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 11:25	6050511
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/21/16 05:50	05/21/16 11:25	6050511
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/21/16 05:50	05/21/16 11:25	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 11:25	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 11:25	6050511
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/21/16 05:50	05/21/16 11:25	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/21/16 05:50	05/21/16 11:25	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 11:25	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 11:25	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 11:25	6050511
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/21/16 05:50	05/21/16 11:25	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	95 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 11:25	6050511
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	102 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 11:25	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	102 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 11:25	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	103 %		80-120				460-00-4	05/21/16 05:50	05/21/16 11:25	6050511

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWX
Lab No: AZE0545-18
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 09:10
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Turbidity	EPA 180.1	NA	6.02	0.10	1	NTU		0.10	TURB	05/18/16 09:10	05/18/16 09:10	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/31/16 08:45	05/31/16 14:50	6050664
Arsenic	EPA 6020B	EPA 3005A	0.86	10.0	1	ug/L	J	0.75	7440-38-2	05/31/16 08:45	05/31/16 14:50	6050664
Barium	EPA 6020B	EPA 3005A	32.0	100	1	ug/L	J	0.30	7440-39-3	05/31/16 08:45	05/31/16 14:50	6050664
Beryllium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.09	7440-41-7	05/31/16 08:45	05/31/16 14:50	6050664
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/31/16 08:45	05/31/16 14:50	6050664
Chromium	EPA 6020B	EPA 3005A	1.71	10.0	1	ug/L	J	0.43	7440-47-3	05/31/16 08:45	05/31/16 14:50	6050664
Cobalt	EPA 6020B	EPA 3005A	0.52	10.0	1	ug/L	J	0.29	7440-48-4	05/31/16 08:45	05/31/16 14:50	6050664
Copper	EPA 6020B	EPA 3005A	0.68	10.0	1	ug/L	J	0.41	7440-50-8	05/31/16 08:45	05/31/16 14:50	6050664
Lead	EPA 6020B	EPA 3005A	0.34	10.0	1	ug/L	J	0.08	7439-92-1	05/31/16 08:45	05/31/16 14:50	6050664
Nickel	EPA 6020B	EPA 3005A	4.38	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 14:50	6050664
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	05/31/16 08:45	05/31/16 14:50	6050664
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 14:50	6050664
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/31/16 08:45	05/31/16 14:50	6050664
Vanadium	EPA 6020B	EPA 3005A	6.50	25.0	1	ug/L	J	1.57	7440-62-2	05/31/16 08:45	05/31/16 14:50	6050664
Zinc	EPA 6020B	EPA 3005A	2.22	10.0	1	ug/L	J	1.30	7440-66-6	05/31/16 08:45	05/31/16 14:50	6050664

PACE ANALYTICAL SERVICES, INC.

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110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD4Rep
Lab No: AZE0545-19
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 11:28
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	242	1	1	umhos/cm		1	COND	05/17/16 11:28	05/17/16 11:28	6050530
Dissolved Oxygen	SM 4500-O G	NA	2680	0.0	1	ug/L		0.0	NA	05/17/16 11:28	05/17/16 11:28	6050530
Field - pH	EPA 9040C	NA	6.90		1	pH Units			PH	05/17/16 11:28	05/17/16 11:28	6050530
Field - Redox	NA	NA	-54		1	mV			REDOX	05/17/16 11:28	05/17/16 11:28	6050530
Field - Temperature	SM 2550 B	NA	14.2		1	°C			TEMP	05/17/16 11:28	05/17/16 11:28	6050530
Field - Turbidity	EPA 180.1	NA	800	0.10	1	NTU	>	0.10	TURB	05/17/16 11:28	05/17/16 11:28	6050530
Field - Water Level	NA	NA	8.70		1	feet			WL	05/17/16 11:28	05/17/16 11:28	6050530
Field - Well Depth	NA	NA	19.63		1	feet				05/17/16 11:28	05/17/16 11:28	6050530
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 11:50	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 11:50	6050511
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/21/16 05:50	05/21/16 11:50	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 11:50	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 11:50	6050511
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 11:50	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 11:50	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 11:50	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 11:50	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/21/16 05:50	05/21/16 11:50	6050511
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/21/16 05:50	05/21/16 11:50	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 11:50	6050511

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD4Rep
Lab No: AZE0545-19
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 11:28
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 11:50	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 11:50	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 11:50	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 11:50	6050511
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 11:50	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 11:50	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/21/16 05:50	05/21/16 11:50	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 11:50	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/21/16 05:50	05/21/16 11:50	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/21/16 05:50	05/21/16 11:50	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/21/16 05:50	05/21/16 11:50	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/21/16 05:50	05/21/16 11:50	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 11:50	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/21/16 05:50	05/21/16 11:50	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 11:50	6050511
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 11:50	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 11:50	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 11:50	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 11:50	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/21/16 05:50	05/21/16 11:50	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 11:50	6050511

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD4Rep
Lab No: AZE0545-19
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 11:28
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 11:50	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 11:50	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 11:50	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 11:50	6050511
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/21/16 05:50	05/21/16 11:50	6050511
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/21/16 05:50	05/21/16 11:50	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 11:50	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 11:50	6050511
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/21/16 05:50	05/21/16 11:50	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/21/16 05:50	05/21/16 11:50	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 11:50	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 11:50	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 11:50	6050511
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/21/16 05:50	05/21/16 11:50	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	91 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 11:50	6050511
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	101 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 11:50	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	101 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 11:50	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	107 %		80-120				460-00-4	05/21/16 05:50	05/21/16 11:50	6050511

PACE ANALYTICAL SERVICES, INC.

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD4Rep
Lab No: AZE0545-20
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 08:28
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Turbidity	EPA 180.1	NA	28.0	0.10	1	NTU		0.10	TURB	05/18/16 08:28	05/18/16 08:28	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/31/16 08:45	05/31/16 14:55	6050664
Arsenic	EPA 6020B	EPA 3005A	1.09	10.0	1	ug/L	J	0.75	7440-38-2	05/31/16 08:45	05/31/16 14:55	6050664
Barium	EPA 6020B	EPA 3005A	56.2	100	1	ug/L	J	0.30	7440-39-3	05/31/16 08:45	05/31/16 14:55	6050664
Beryllium	EPA 6020B	EPA 3005A	0.46	1.00	1	ug/L	J	0.09	7440-41-7	05/31/16 08:45	05/31/16 14:55	6050664
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/31/16 08:45	05/31/16 14:55	6050664
Chromium	EPA 6020B	EPA 3005A	1.24	10.0	1	ug/L	J	0.43	7440-47-3	05/31/16 08:45	05/31/16 14:55	6050664
Cobalt	EPA 6020B	EPA 3005A	7.31	10.0	1	ug/L	J	0.29	7440-48-4	05/31/16 08:45	05/31/16 14:55	6050664
Copper	EPA 6020B	EPA 3005A	1.02	10.0	1	ug/L	J	0.41	7440-50-8	05/31/16 08:45	05/31/16 14:55	6050664
Lead	EPA 6020B	EPA 3005A	0.66	10.0	1	ug/L	J	0.08	7439-92-1	05/31/16 08:45	05/31/16 14:55	6050664
Nickel	EPA 6020B	EPA 3005A	5.43	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 14:55	6050664
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	05/31/16 08:45	05/31/16 14:55	6050664
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 14:55	6050664
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/31/16 08:45	05/31/16 14:55	6050664
Vanadium	EPA 6020B	EPA 3005A	18.0	25.0	1	ug/L	J	1.57	7440-62-2	05/31/16 08:45	05/31/16 14:55	6050664
Zinc	EPA 6020B	EPA 3005A	3.70	10.0	1	ug/L	J	1.30	7440-66-6	05/31/16 08:45	05/31/16 14:55	6050664

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD6
Lab No: AZE0545-21
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 09:30
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	271	1	1	umhos/cm		1	COND	05/17/16 09:30	05/17/16 09:30	6050530
Dissolved Oxygen	SM 4500-O G	NA	1500	0.0	1	ug/L		0.0	NA	05/17/16 09:30	05/17/16 09:30	6050530
Field - pH	EPA 9040C	NA	6.20		1	pH Units			PH	05/17/16 09:30	05/17/16 09:30	6050530
Field - Redox	NA	NA	-48		1	mV			REDOX	05/17/16 09:30	05/17/16 09:30	6050530
Field - Temperature	SM 2550 B	NA	16.9		1	°C			TEMP	05/17/16 09:30	05/17/16 09:30	6050530
Field - Turbidity	EPA 180.1	NA	800	0.10	1	NTU	>	0.10	TURB	05/17/16 09:30	05/17/16 09:30	6050530
Field - Water Level	NA	NA	32.65		1	feet			WL	05/17/16 09:30	05/17/16 09:30	6050530
Field - Well Depth	NA	NA	41.50		1	feet				05/17/16 09:30	05/17/16 09:30	6050530
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 12:15	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 12:15	6050511
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/21/16 05:50	05/21/16 12:15	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 12:15	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 12:15	6050511
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 12:15	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 12:15	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 12:15	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 12:15	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/21/16 05:50	05/21/16 12:15	6050511
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/21/16 05:50	05/21/16 12:15	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 12:15	6050511

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD6
Lab No: AZE0545-21
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 09:30
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 12:15	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 12:15	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 12:15	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 12:15	6050511
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 12:15	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 12:15	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/21/16 05:50	05/21/16 12:15	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 12:15	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	1.5	5.0	1	ug/L	J	0.4	75-34-3	05/21/16 05:50	05/21/16 12:15	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/21/16 05:50	05/21/16 12:15	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/21/16 05:50	05/21/16 12:15	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/21/16 05:50	05/21/16 12:15	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 12:15	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/21/16 05:50	05/21/16 12:15	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 12:15	6050511
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 12:15	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 12:15	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 12:15	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 12:15	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/21/16 05:50	05/21/16 12:15	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 12:15	6050511

PACE ANALYTICAL SERVICES, INC.

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD6
Lab No: AZE0545-21
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 09:30
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 12:15	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 12:15	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 12:15	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 12:15	6050511
Tetrachloroethene	EPA 8260B	EPA 5030B	0.5	1.0	1	ug/L	J	0.4	127-18-4	05/21/16 05:50	05/21/16 12:15	6050511
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/21/16 05:50	05/21/16 12:15	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 12:15	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 12:15	6050511
Trichloroethene	EPA 8260B	EPA 5030B	0.7	1.0	1	ug/L	J	0.4	79-01-6	05/21/16 05:50	05/21/16 12:15	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/21/16 05:50	05/21/16 12:15	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 12:15	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 12:15	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 12:15	6050511
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/21/16 05:50	05/21/16 12:15	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	95 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 12:15	6050511
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	102 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 12:15	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	100 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 12:15	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	108 %		80-120				460-00-4	05/21/16 05:50	05/21/16 12:15	6050511

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD6
Lab No: AZE0545-22
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 08:41
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Turbidity	EPA 180.1	NA	23.0	0.10	1	NTU		0.10	TURB	05/18/16 08:41	05/18/16 08:41	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/31/16 08:45	05/31/16 15:00	6050664
Arsenic	EPA 6020B	EPA 3005A	1.92	10.0	1	ug/L	J	0.75	7440-38-2	05/31/16 08:45	05/31/16 15:00	6050664
Barium	EPA 6020B	EPA 3005A	62.2	100	1	ug/L	J	0.30	7440-39-3	05/31/16 08:45	05/31/16 15:00	6050664
Beryllium	EPA 6020B	EPA 3005A	0.23	1.00	1	ug/L	J	0.09	7440-41-7	05/31/16 08:45	05/31/16 15:00	6050664
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/31/16 08:45	05/31/16 15:00	6050664
Chromium	EPA 6020B	EPA 3005A	3.46	10.0	1	ug/L	J	0.43	7440-47-3	05/31/16 08:45	05/31/16 15:00	6050664
Cobalt	EPA 6020B	EPA 3005A	13.2	10.0	1	ug/L		0.29	7440-48-4	05/31/16 08:45	05/31/16 15:00	6050664
Copper	EPA 6020B	EPA 3005A	2.57	10.0	1	ug/L	J	0.41	7440-50-8	05/31/16 08:45	05/31/16 15:00	6050664
Lead	EPA 6020B	EPA 3005A	1.58	10.0	1	ug/L	J	0.08	7439-92-1	05/31/16 08:45	05/31/16 15:00	6050664
Nickel	EPA 6020B	EPA 3005A	8.70	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 15:00	6050664
Selenium	EPA 6020B	EPA 3005A	1.01	10.0	1	ug/L	J	0.85	7782-49-2	05/31/16 08:45	05/31/16 15:00	6050664
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 15:00	6050664
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/31/16 08:45	05/31/16 15:00	6050664
Vanadium	EPA 6020B	EPA 3005A	12.6	25.0	1	ug/L	J	1.57	7440-62-2	05/31/16 08:45	05/31/16 15:00	6050664
Zinc	EPA 6020B	EPA 3005A	7.94	10.0	1	ug/L	J	1.30	7440-66-6	05/31/16 08:45	05/31/16 15:00	6050664

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWC
Lab No: AZE0545-23
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 12:50
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	126	1	1	umhos/cm		1	COND	05/17/16 12:50	05/17/16 12:50	6050530
Dissolved Oxygen	SM 4500-O G	NA	3480	0.0	1	ug/L		0.0	NA	05/17/16 12:50	05/17/16 12:50	6050530
Field - pH	EPA 9040C	NA	6.50		1	pH Units			PH	05/17/16 12:50	05/17/16 12:50	6050530
Field - Redox	NA	NA	-78		1	mV			REDOX	05/17/16 12:50	05/17/16 12:50	6050530
Field - Temperature	SM 2550 B	NA	14.0		1	°C			TEMP	05/17/16 12:50	05/17/16 12:50	6050530
Field - Turbidity	EPA 180.1	NA	30.9	0.10	1	NTU		0.10	TURB	05/17/16 12:50	05/17/16 12:50	6050530
Field - Water Level	NA	NA	6.24		1	feet			WL	05/17/16 12:50	05/17/16 12:50	6050530
Field - Well Depth	NA	NA	17.68		1	feet				05/17/16 12:50	05/17/16 12:50	6050530
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 12:41	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 12:41	6050511
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/21/16 05:50	05/21/16 12:41	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 12:41	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 12:41	6050511
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 12:41	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 12:41	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 12:41	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 12:41	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/21/16 05:50	05/21/16 12:41	6050511
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/21/16 05:50	05/21/16 12:41	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 12:41	6050511

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWC
Lab No: AZE0545-23
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 12:50
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 12:41	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 12:41	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 12:41	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 12:41	6050511
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 12:41	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 12:41	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/21/16 05:50	05/21/16 12:41	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 12:41	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/21/16 05:50	05/21/16 12:41	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/21/16 05:50	05/21/16 12:41	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/21/16 05:50	05/21/16 12:41	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/21/16 05:50	05/21/16 12:41	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 12:41	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/21/16 05:50	05/21/16 12:41	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 12:41	6050511
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 12:41	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 12:41	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 12:41	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 12:41	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/21/16 05:50	05/21/16 12:41	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 12:41	6050511

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWC
Lab No: AZE0545-23
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 12:50
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 12:41	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 12:41	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 12:41	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 12:41	6050511
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/21/16 05:50	05/21/16 12:41	6050511
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/21/16 05:50	05/21/16 12:41	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 12:41	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 12:41	6050511
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/21/16 05:50	05/21/16 12:41	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/21/16 05:50	05/21/16 12:41	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 12:41	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 12:41	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 12:41	6050511
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/21/16 05:50	05/21/16 12:41	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	93 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 12:41	6050511
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	104 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 12:41	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	102 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 12:41	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	108 %		80-120				460-00-4	05/21/16 05:50	05/21/16 12:41	6050511
Base/Neutral Extractable Organic Compounds by EPA 8270												
Bis(2-ethylhexyl)phthalate	EPA 8270D	EPA 3510C	ND	15	1	ug/L		2.7	117-81-7	05/24/16 09:00	05/27/16 18:25	6050558
Surr: Nitrobenzene-d5	EPA 8270D	EPA 3510C	56 %		15-120				4165-60-0	05/24/16 09:00	05/27/16 18:25	6050558

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWC
Lab No: AZE0545-23
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 12:50
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Base/Neutral Extractable Organic Compounds by EPA 8270												
Surr: 2-Fluorobiphenyl	EPA 8270D	EPA 3510C	58 %		23-120				321-60-8	05/24/16 09:00	05/27/16 18:25	6050558
Surr: p-Terphenyl-dl4	EPA 8270D	EPA 3510C	64 %		53-121				1718-51-0	05/24/16 09:00	05/27/16 18:25	6050558

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWC
Lab No: AZE0545-24
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 09:17
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Turbidity	EPA 180.1	NA	5.92	0.10	1	NTU		0.10	TURB	05/18/16 09:17	05/18/16 09:17	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/31/16 08:45	05/31/16 15:05	6050664
Arsenic	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.75	7440-38-2	05/31/16 08:45	05/31/16 15:05	6050664
Barium	EPA 6020B	EPA 3005A	21.4	100	1	ug/L	J	0.30	7440-39-3	05/31/16 08:45	05/31/16 15:05	6050664
Beryllium	EPA 6020B	EPA 3005A	0.21	1.00	1	ug/L	J	0.09	7440-41-7	05/31/16 08:45	05/31/16 15:05	6050664
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/31/16 08:45	05/31/16 15:05	6050664
Chromium	EPA 6020B	EPA 3005A	0.71	10.0	1	ug/L	J	0.43	7440-47-3	05/31/16 08:45	05/31/16 15:05	6050664
Cobalt	EPA 6020B	EPA 3005A	1.78	10.0	1	ug/L	J	0.29	7440-48-4	05/31/16 08:45	05/31/16 15:05	6050664
Copper	EPA 6020B	EPA 3005A	0.47	10.0	1	ug/L	J	0.41	7440-50-8	05/31/16 08:45	05/31/16 15:05	6050664
Lead	EPA 6020B	EPA 3005A	0.25	10.0	1	ug/L	J	0.08	7439-92-1	05/31/16 08:45	05/31/16 15:05	6050664
Nickel	EPA 6020B	EPA 3005A	1.69	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 15:05	6050664
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	05/31/16 08:45	05/31/16 15:05	6050664
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 15:05	6050664
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/31/16 08:45	05/31/16 15:05	6050664
Vanadium	EPA 6020B	EPA 3005A	4.11	25.0	1	ug/L	J	1.57	7440-62-2	05/31/16 08:45	05/31/16 15:05	6050664
Zinc	EPA 6020B	EPA 3005A	2.01	10.0	1	ug/L	J	1.30	7440-66-6	05/31/16 08:45	05/31/16 15:05	6050664

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWD
Lab No: AZE0545-25
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 13:42
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	617	1	1	umhos/cm		1	COND	05/17/16 13:42	05/17/16 13:42	6050530
Dissolved Oxygen	SM 4500-O G	NA	1230	0.0	1	ug/L		0.0	NA	05/17/16 13:42	05/17/16 13:42	6050530
Field - pH	EPA 9040C	NA	7.26		1	pH Units			PH	05/17/16 13:42	05/17/16 13:42	6050530
Field - Redox	NA	NA	-84		1	mV			REDOX	05/17/16 13:42	05/17/16 13:42	6050530
Field - Temperature	SM 2550 B	NA	16.3		1	°C			TEMP	05/17/16 13:42	05/17/16 13:42	6050530
Field - Turbidity	EPA 180.1	NA	123	0.10	1	NTU		0.10	TURB	05/17/16 13:42	05/17/16 13:42	6050530
Field - Water Level	NA	NA	25.78		1	feet			WL	05/17/16 13:42	05/17/16 13:42	6050530
Field - Well Depth	NA	NA	30.33		1	feet				05/17/16 13:42	05/17/16 13:42	6050530
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 13:06	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 13:06	6050511
Benzene	EPA 8260B	EPA 5030B	5.0	1.0	1	ug/L		0.2	71-43-2	05/21/16 05:50	05/21/16 13:06	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 13:06	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 13:06	6050511
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 13:06	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 13:06	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 13:06	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 13:06	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	0.7	3.0	1	ug/L	J	0.4	108-90-7	05/21/16 05:50	05/21/16 13:06	6050511
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/21/16 05:50	05/21/16 13:06	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 13:06	6050511

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWD
Lab No: AZE0545-25
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 13:42
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 13:06	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 13:06	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 13:06	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 13:06	6050511
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 13:06	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 13:06	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	9.9	1.0	1	ug/L		0.3	106-46-7	05/21/16 05:50	05/21/16 13:06	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 13:06	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/21/16 05:50	05/21/16 13:06	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/21/16 05:50	05/21/16 13:06	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/21/16 05:50	05/21/16 13:06	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	39	5.0	1	ug/L		0.5	156-59-2	05/21/16 05:50	05/21/16 13:06	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 13:06	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/21/16 05:50	05/21/16 13:06	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 13:06	6050511
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 13:06	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 13:06	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 13:06	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 13:06	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/21/16 05:50	05/21/16 13:06	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 13:06	6050511

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June 09, 2016

Client ID: 1302-MWD
Lab No: AZE0545-25
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 13:42
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 13:06	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 13:06	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 13:06	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 13:06	6050511
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/21/16 05:50	05/21/16 13:06	6050511
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/21/16 05:50	05/21/16 13:06	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 13:06	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 13:06	6050511
Trichloroethene	EPA 8260B	EPA 5030B	2.8	1.0	1	ug/L		0.4	79-01-6	05/21/16 05:50	05/21/16 13:06	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/21/16 05:50	05/21/16 13:06	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 13:06	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 13:06	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 13:06	6050511
Xylenes, total	EPA 8260B	EPA 5030B	1.7	5.0	1	ug/L	J	0.4	1330-20-7	05/21/16 05:50	05/21/16 13:06	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	96 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 13:06	6050511
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	103 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 13:06	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	101 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 13:06	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	106 %		80-120				460-00-4	05/21/16 05:50	05/21/16 13:06	6050511

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWD
Lab No: AZE0545-26
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 09:32
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Turbidity	EPA 180.1	NA	4.07	0.10	1	NTU		0.10	TURB	05/18/16 09:32	05/18/16 09:32	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/31/16 08:45	05/31/16 15:10	6050664
Arsenic	EPA 6020B	EPA 3005A	1.65	10.0	1	ug/L	J	0.75	7440-38-2	05/31/16 08:45	05/31/16 15:10	6050664
Barium	EPA 6020B	EPA 3005A	157	100	1	ug/L		0.30	7440-39-3	05/31/16 08:45	05/31/16 15:10	6050664
Beryllium	EPA 6020B	EPA 3005A	0.11	1.00	1	ug/L	J	0.09	7440-41-7	05/31/16 08:45	05/31/16 15:10	6050664
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/31/16 08:45	05/31/16 15:10	6050664
Chromium	EPA 6020B	EPA 3005A	0.85	10.0	1	ug/L	J	0.43	7440-47-3	05/31/16 08:45	05/31/16 15:10	6050664
Cobalt	EPA 6020B	EPA 3005A	17.0	10.0	1	ug/L		0.29	7440-48-4	05/31/16 08:45	05/31/16 15:10	6050664
Copper	EPA 6020B	EPA 3005A	0.92	10.0	1	ug/L	J	0.41	7440-50-8	05/31/16 08:45	05/31/16 15:10	6050664
Lead	EPA 6020B	EPA 3005A	0.19	10.0	1	ug/L	J	0.08	7439-92-1	05/31/16 08:45	05/31/16 15:10	6050664
Nickel	EPA 6020B	EPA 3005A	21.0	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 15:10	6050664
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	05/31/16 08:45	05/31/16 15:10	6050664
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 15:10	6050664
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/31/16 08:45	05/31/16 15:10	6050664
Vanadium	EPA 6020B	EPA 3005A	3.92	25.0	1	ug/L	J	1.57	7440-62-2	05/31/16 08:45	05/31/16 15:10	6050664
Zinc	EPA 6020B	EPA 3005A	1.72	10.0	1	ug/L	J	1.30	7440-66-6	05/31/16 08:45	05/31/16 15:10	6050664

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWF
Lab No: AZE0545-27
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 14:42
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	796	1	1	umhos/cm		1	COND	05/17/16 14:42	05/17/16 14:42	6050530
Dissolved Oxygen	SM 4500-O G	NA	2650	0.0	1	ug/L		0.0	NA	05/17/16 14:42	05/17/16 14:42	6050530
Field - pH	EPA 9040C	NA	8.12		1	pH Units			PH	05/17/16 14:42	05/17/16 14:42	6050530
Field - Redox	NA	NA	-47		1	mV			REDOX	05/17/16 14:42	05/17/16 14:42	6050530
Field - Temperature	SM 2550 B	NA	14.4		1	°C			TEMP	05/17/16 14:42	05/17/16 14:42	6050530
Field - Turbidity	EPA 180.1	NA	800	0.10	1	NTU	>	0.10	TURB	05/17/16 14:42	05/17/16 14:42	6050530
Field - Water Level	NA	NA	8.60		1	feet			WL	05/17/16 14:42	05/17/16 14:42	6050530
Field - Well Depth	NA	NA	20.06		1	feet				05/17/16 14:42	05/17/16 14:42	6050530
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 13:32	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 13:32	6050511
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/21/16 05:50	05/21/16 13:32	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 13:32	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 13:32	6050511
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 13:32	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 13:32	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 13:32	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 13:32	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/21/16 05:50	05/21/16 13:32	6050511
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/21/16 05:50	05/21/16 13:32	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 13:32	6050511

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWF
Lab No: AZE0545-27
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 14:42
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 13:32	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 13:32	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 13:32	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 13:32	6050511
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 13:32	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 13:32	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/21/16 05:50	05/21/16 13:32	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 13:32	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/21/16 05:50	05/21/16 13:32	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/21/16 05:50	05/21/16 13:32	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/21/16 05:50	05/21/16 13:32	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/21/16 05:50	05/21/16 13:32	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 13:32	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/21/16 05:50	05/21/16 13:32	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 13:32	6050511
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 13:32	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 13:32	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 13:32	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 13:32	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/21/16 05:50	05/21/16 13:32	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 13:32	6050511

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWF
Lab No: AZE0545-27
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/17/16 14:42
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 13:32	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 13:32	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 13:32	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 13:32	6050511
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/21/16 05:50	05/21/16 13:32	6050511
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/21/16 05:50	05/21/16 13:32	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 13:32	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 13:32	6050511
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/21/16 05:50	05/21/16 13:32	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/21/16 05:50	05/21/16 13:32	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 13:32	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 13:32	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 13:32	6050511
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/21/16 05:50	05/21/16 13:32	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	94 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 13:32	6050511
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	104 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 13:32	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	102 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 13:32	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	105 %		80-120				460-00-4	05/21/16 05:50	05/21/16 13:32	6050511

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWF
Lab No: AZE0545-28
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 12:37
Date/Time Received: 05/19/16 09:30

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Turbidity	EPA 180.1	NA	5.53	0.10	1	NTU		0.10	TURB	05/18/16 12:37	05/18/16 12:37	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/31/16 08:45	05/31/16 15:26	6050664
Arsenic	EPA 6020B	EPA 3005A	3.40	10.0	1	ug/L	J	0.75	7440-38-2	05/31/16 08:45	05/31/16 15:26	6050664
Barium	EPA 6020B	EPA 3005A	214	100	1	ug/L		0.30	7440-39-3	05/31/16 08:45	05/31/16 15:26	6050664
Beryllium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.09	7440-41-7	05/31/16 08:45	05/31/16 15:26	6050664
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/31/16 08:45	05/31/16 15:26	6050664
Chromium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.43	7440-47-3	05/31/16 08:45	05/31/16 15:26	6050664
Cobalt	EPA 6020B	EPA 3005A	9.62	10.0	1	ug/L	J	0.29	7440-48-4	05/31/16 08:45	05/31/16 15:26	6050664
Copper	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.41	7440-50-8	05/31/16 08:45	05/31/16 15:26	6050664
Lead	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.08	7439-92-1	05/31/16 08:45	05/31/16 15:26	6050664
Nickel	EPA 6020B	EPA 3005A	3.84	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 15:26	6050664
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	05/31/16 08:45	05/31/16 15:26	6050664
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 15:26	6050664
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/31/16 08:45	05/31/16 15:26	6050664
Vanadium	EPA 6020B	EPA 3005A	ND	25.0	1	ug/L		1.57	7440-62-2	05/31/16 08:45	05/31/16 15:26	6050664
Zinc	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		1.30	7440-66-6	05/31/16 08:45	05/31/16 15:26	6050664

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWL
Lab No: AZE0545-29
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 08:49
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	95	1	1	umhos/cm		1	COND	05/19/16 08:49	05/19/16 08:49	6050530
Dissolved Oxygen	SM 4500-O G	NA	3660	0.0	1	ug/L		0.0	NA	05/19/16 08:49	05/19/16 08:49	6050530
Field - Ferrous Iron	NA	NA	ND	200	1	ug/L		200	FE2	05/19/16 08:49	05/19/16 08:49	6050530
Field - pH	EPA 9040C	NA	5.80		1	pH Units			PH	05/19/16 08:49	05/19/16 08:49	6050530
Field - Redox	NA	NA	192		1	mV			REDOX	05/19/16 08:49	05/19/16 08:49	6050530
Field - Temperature	SM 2550 B	NA	14.2		1	°C			TEMP	05/19/16 08:49	05/19/16 08:49	6050530
Field - Turbidity	EPA 180.1	NA	1.53	0.10	1	NTU		0.10	TURB	05/19/16 08:49	05/19/16 08:49	6050530
Field - Water Level	NA	NA	11.64		1	feet			WL	05/19/16 08:49	05/19/16 08:49	6050530
Field - Well Depth	NA	NA	27.05		1	feet				05/19/16 08:49	05/19/16 08:49	6050530
General Chemistry												
Alkalinity as CaCO3	SM 2320 B	SM 2320 B	35000	1000	1	ug/L		1000	ALK	05/20/16 14:00	05/20/16 14:00	6050491
Biochemical Oxygen Demand	SM 5210 B	SM 5210 B	ND	2000	1	ug/L		2000	E-10106	05/20/16 10:09	05/25/16 10:00	6050485
Chemical Oxygen Demand	SM 5220 D	SM 5220 D	32200	10000	1	ug/L		10000	E-10117	05/21/16 10:15	05/23/16 13:10	6050509
Total Sulfide	SM 4500-S D	SM 4500-S D	ND	200	1	ug/L		200	18496-25-8	05/24/16 09:30	05/24/16 09:30	6050561
Total Organic Carbon	EPA 9060A	EPA 9060A	ND	1000	1	ug/L		1000	E-10195	05/21/16 13:00	05/21/16 21:31	6050505
Inorganic Anions												
Chloride	EPA 9056A	EPA 300.0	2800	1000	1	ug/L		1000	16887-00-6	05/19/16 12:27	05/19/16 20:43	6050469
Nitrate as N	EPA 9056A	EPA 300.0	ND	50	1	ug/L		50	14797-55-8	05/19/16 12:27	05/19/16 20:43	6050469
Sulfate	EPA 9056A	EPA 300.0	1400	5000	1	ug/L	J	51	14808-79-8	05/19/16 12:27	05/19/16 20:43	6050469

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWL
Lab No: AZE0545-29
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 08:49
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/31/16 08:45	05/31/16 15:31	6050664
Arsenic	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.75	7440-38-2	05/31/16 08:45	05/31/16 15:31	6050664
Barium	EPA 6020B	EPA 3005A	38.4	100	1	ug/L	J	0.30	7440-39-3	05/31/16 08:45	05/31/16 15:31	6050664
Beryllium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.09	7440-41-7	05/31/16 08:45	05/31/16 15:31	6050664
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/31/16 08:45	05/31/16 15:31	6050664
Chromium	EPA 6020B	EPA 3005A	0.88	10.0	1	ug/L	J	0.43	7440-47-3	05/31/16 08:45	05/31/16 15:31	6050664
Cobalt	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.29	7440-48-4	05/31/16 08:45	05/31/16 15:31	6050664
Copper	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.41	7440-50-8	05/31/16 08:45	05/31/16 15:31	6050664
Lead	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.08	7439-92-1	05/31/16 08:45	05/31/16 15:31	6050664
Nickel	EPA 6020B	EPA 3005A	1.01	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 15:31	6050664
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	05/31/16 08:45	05/31/16 15:31	6050664
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 15:31	6050664
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/31/16 08:45	05/31/16 15:31	6050664
Vanadium	EPA 6020B	EPA 3005A	2.23	25.0	1	ug/L	J	1.57	7440-62-2	05/31/16 08:45	05/31/16 15:31	6050664
Zinc	EPA 6020B	EPA 3005A	1.48	10.0	1	ug/L	J	1.30	7440-66-6	05/31/16 08:45	05/31/16 15:31	6050664
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 13:57	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 13:57	6050511
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/21/16 05:50	05/21/16 13:57	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 13:57	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 13:57	6050511

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWL
Lab No: AZE0545-29
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 08:49
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 13:57	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 13:57	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 13:57	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 13:57	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/21/16 05:50	05/21/16 13:57	6050511
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/21/16 05:50	05/21/16 13:57	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 13:57	6050511
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 13:57	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 13:57	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 13:57	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 13:57	6050511
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 13:57	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 13:57	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/21/16 05:50	05/21/16 13:57	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 13:57	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/21/16 05:50	05/21/16 13:57	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/21/16 05:50	05/21/16 13:57	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/21/16 05:50	05/21/16 13:57	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/21/16 05:50	05/21/16 13:57	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 13:57	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/21/16 05:50	05/21/16 13:57	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 13:57	6050511

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWL
Lab No: AZE0545-29
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 08:49
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 13:57	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 13:57	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 13:57	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 13:57	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/21/16 05:50	05/21/16 13:57	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 13:57	6050511
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 13:57	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 13:57	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 13:57	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 13:57	6050511
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/21/16 05:50	05/21/16 13:57	6050511
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/21/16 05:50	05/21/16 13:57	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 13:57	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 13:57	6050511
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/21/16 05:50	05/21/16 13:57	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/21/16 05:50	05/21/16 13:57	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 13:57	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 13:57	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 13:57	6050511
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/21/16 05:50	05/21/16 13:57	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	94 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 13:57	6050511

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWL
Lab No: AZE0545-29
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 08:49
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	101 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 13:57	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	102 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 13:57	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	104 %		80-120				460-00-4	05/21/16 05:50	05/21/16 13:57	6050511

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWL Deep
Lab No: AZE0545-30
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 09:22
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	209	1	1	umhos/cm		1	COND	05/19/16 09:22	05/19/16 09:22	6050530
Dissolved Oxygen	SM 4500-O G	NA	3880	0.0	1	ug/L		0.0	NA	05/19/16 09:22	05/19/16 09:22	6050530
Field - pH	EPA 9040C	NA	6.82		1	pH Units			PH	05/19/16 09:22	05/19/16 09:22	6050530
Field - Redox	NA	NA	149		1	mV			REDOX	05/19/16 09:22	05/19/16 09:22	6050530
Field - Temperature	SM 2550 B	NA	15.0		1	°C			TEMP	05/19/16 09:22	05/19/16 09:22	6050530
Field - Turbidity	EPA 180.1	NA	2.06	0.10	1	NTU		0.10	TURB	05/19/16 09:22	05/19/16 09:22	6050530
Field - Water Level	NA	NA	13.01		1	feet			WL	05/19/16 09:22	05/19/16 09:22	6050530
Field - Well Depth	NA	NA	64.05		1	feet				05/19/16 09:22	05/19/16 09:22	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	0.46	6.00	1	ug/L	J	0.25	7440-36-0	05/31/16 08:45	05/31/16 15:36	6050664
Arsenic	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.75	7440-38-2	05/31/16 08:45	05/31/16 15:36	6050664
Barium	EPA 6020B	EPA 3005A	30.8	100	1	ug/L	J	0.30	7440-39-3	05/31/16 08:45	05/31/16 15:36	6050664
Beryllium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.09	7440-41-7	05/31/16 08:45	05/31/16 15:36	6050664
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/31/16 08:45	05/31/16 15:36	6050664
Chromium	EPA 6020B	EPA 3005A	0.44	10.0	1	ug/L	J	0.43	7440-47-3	05/31/16 08:45	05/31/16 15:36	6050664
Cobalt	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.29	7440-48-4	05/31/16 08:45	05/31/16 15:36	6050664
Copper	EPA 6020B	EPA 3005A	1.87	10.0	1	ug/L	J	0.41	7440-50-8	05/31/16 08:45	05/31/16 15:36	6050664
Lead	EPA 6020B	EPA 3005A	0.17	10.0	1	ug/L	J	0.08	7439-92-1	05/31/16 08:45	05/31/16 15:36	6050664
Nickel	EPA 6020B	EPA 3005A	1.27	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 15:36	6050664
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	05/31/16 08:45	05/31/16 15:36	6050664

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWL Deep
Lab No: AZE0545-30
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 09:22
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 15:36	6050664
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/31/16 08:45	05/31/16 15:36	6050664
Vanadium	EPA 6020B	EPA 3005A	4.59	25.0	1	ug/L	J	1.57	7440-62-2	05/31/16 08:45	05/31/16 15:36	6050664
Zinc	EPA 6020B	EPA 3005A	116	10.0	1	ug/L		1.30	7440-66-6	05/31/16 08:45	05/31/16 15:36	6050664
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 14:22	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 14:22	6050511
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/21/16 05:50	05/21/16 14:22	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 14:22	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 14:22	6050511
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 14:22	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 14:22	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 14:22	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 14:22	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/21/16 05:50	05/21/16 14:22	6050511
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/21/16 05:50	05/21/16 14:22	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 14:22	6050511
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 14:22	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 14:22	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 14:22	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 14:22	6050511

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWL Deep
Lab No: AZE0545-30
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 09:22
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 14:22	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 14:22	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/21/16 05:50	05/21/16 14:22	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 14:22	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	3.2	5.0	1	ug/L	J	0.4	75-34-3	05/21/16 05:50	05/21/16 14:22	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/21/16 05:50	05/21/16 14:22	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/21/16 05:50	05/21/16 14:22	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/21/16 05:50	05/21/16 14:22	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 14:22	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/21/16 05:50	05/21/16 14:22	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 14:22	6050511
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 14:22	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 14:22	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 14:22	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 14:22	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/21/16 05:50	05/21/16 14:22	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 14:22	6050511
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 14:22	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 14:22	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 14:22	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 14:22	6050511

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWL Deep
Lab No: AZE0545-30
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 09:22
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Tetrachloroethene	EPA 8260B	EPA 5030B	2.0	1.0	1	ug/L		0.4	127-18-4	05/21/16 05:50	05/21/16 14:22	6050511
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/21/16 05:50	05/21/16 14:22	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 14:22	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 14:22	6050511
Trichloroethene	EPA 8260B	EPA 5030B	0.9	1.0	1	ug/L	J	0.4	79-01-6	05/21/16 05:50	05/21/16 14:22	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/21/16 05:50	05/21/16 14:22	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 14:22	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 14:22	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 14:22	6050511
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/21/16 05:50	05/21/16 14:22	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	91 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 14:22	6050511
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	101 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 14:22	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	101 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 14:22	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	105 %		80-120				460-00-4	05/21/16 05:50	05/21/16 14:22	6050511

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MW3 Deep
Lab No: AZE0545-31
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 09:57
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	362	1	1	umhos/cm		1	COND	05/19/16 09:57	05/19/16 09:57	6050530
Dissolved Oxygen	SM 4500-O G	NA	2260	0.0	1	ug/L		0.0	NA	05/19/16 09:57	05/19/16 09:57	6050530
Field - pH	EPA 9040C	NA	7.48		1	pH Units			PH	05/19/16 09:57	05/19/16 09:57	6050530
Field - Redox	NA	NA	-130		1	mV			REDOX	05/19/16 09:57	05/19/16 09:57	6050530
Field - Temperature	SM 2550 B	NA	15.6		1	°C			TEMP	05/19/16 09:57	05/19/16 09:57	6050530
Field - Turbidity	EPA 180.1	NA	0.31	0.10	1	NTU		0.10	TURB	05/19/16 09:57	05/19/16 09:57	6050530
Field - Water Level	NA	NA	8.06		1	feet			WL	05/19/16 09:57	05/19/16 09:57	6050530
Field - Well Depth	NA	NA	93.64		1	feet				05/19/16 09:57	05/19/16 09:57	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/31/16 08:45	05/31/16 15:41	6050664
Arsenic	EPA 6020B	EPA 3005A	1.50	10.0	1	ug/L	J	0.75	7440-38-2	05/31/16 08:45	05/31/16 15:41	6050664
Barium	EPA 6020B	EPA 3005A	43.0	100	1	ug/L	J	0.30	7440-39-3	05/31/16 08:45	05/31/16 15:41	6050664
Beryllium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.09	7440-41-7	05/31/16 08:45	05/31/16 15:41	6050664
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/31/16 08:45	05/31/16 15:41	6050664
Chromium	EPA 6020B	EPA 3005A	0.69	10.0	1	ug/L	J	0.43	7440-47-3	05/31/16 08:45	05/31/16 15:41	6050664
Cobalt	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.29	7440-48-4	05/31/16 08:45	05/31/16 15:41	6050664
Copper	EPA 6020B	EPA 3005A	0.61	10.0	1	ug/L	J	0.41	7440-50-8	05/31/16 08:45	05/31/16 15:41	6050664
Lead	EPA 6020B	EPA 3005A	0.40	10.0	1	ug/L	J	0.08	7439-92-1	05/31/16 08:45	05/31/16 15:41	6050664
Nickel	EPA 6020B	EPA 3005A	0.58	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 15:41	6050664
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	05/31/16 08:45	05/31/16 15:41	6050664

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MW3 Deep
Lab No: AZE0545-31
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 09:57
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 15:41	6050664
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/31/16 08:45	05/31/16 15:41	6050664
Vanadium	EPA 6020B	EPA 3005A	2.37	25.0	1	ug/L	J	1.57	7440-62-2	05/31/16 08:45	05/31/16 15:41	6050664
Zinc	EPA 6020B	EPA 3005A	3.26	10.0	1	ug/L	J	1.30	7440-66-6	05/31/16 08:45	05/31/16 15:41	6050664
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 14:47	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 14:47	6050511
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/21/16 05:50	05/21/16 14:47	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 14:47	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 14:47	6050511
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 14:47	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 14:47	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 14:47	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 14:47	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/21/16 05:50	05/21/16 14:47	6050511
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/21/16 05:50	05/21/16 14:47	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 14:47	6050511
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 14:47	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 14:47	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 14:47	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 14:47	6050511

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MW3 Deep
Lab No: AZE0545-31
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 09:57
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 14:47	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 14:47	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/21/16 05:50	05/21/16 14:47	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 14:47	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	1.2	5.0	1	ug/L	J	0.4	75-34-3	05/21/16 05:50	05/21/16 14:47	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/21/16 05:50	05/21/16 14:47	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/21/16 05:50	05/21/16 14:47	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/21/16 05:50	05/21/16 14:47	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 14:47	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/21/16 05:50	05/21/16 14:47	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 14:47	6050511
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 14:47	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 14:47	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 14:47	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 14:47	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/21/16 05:50	05/21/16 14:47	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 14:47	6050511
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 14:47	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 14:47	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 14:47	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 14:47	6050511

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MW3 Deep
Lab No: AZE0545-31
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 09:57
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/21/16 05:50	05/21/16 14:47	6050511
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/21/16 05:50	05/21/16 14:47	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 14:47	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 14:47	6050511
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/21/16 05:50	05/21/16 14:47	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/21/16 05:50	05/21/16 14:47	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 14:47	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 14:47	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 14:47	6050511
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/21/16 05:50	05/21/16 14:47	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	93 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 14:47	6050511
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	101 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 14:47	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	101 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 14:47	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	106 %		80-120				460-00-4	05/21/16 05:50	05/21/16 14:47	6050511

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWH
Lab No: AZE0545-32
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 10:02
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	162	1	1	umhos/cm		1	COND	05/18/16 10:02	05/18/16 10:02	6050530
Dissolved Oxygen	SM 4500-O G	NA	5400	0.0	1	ug/L		0.0	NA	05/18/16 10:02	05/18/16 10:02	6050530
Field - pH	EPA 9040C	NA	6.06		1	pH Units			PH	05/18/16 10:02	05/18/16 10:02	6050530
Field - Redox	NA	NA	204		1	mV			REDOX	05/18/16 10:02	05/18/16 10:02	6050530
Field - Temperature	SM 2550 B	NA	14.2		1	°C			TEMP	05/18/16 10:02	05/18/16 10:02	6050530
Field - Turbidity	EPA 180.1	NA	800	0.10	1	NTU	>	0.10	TURB	05/18/16 10:02	05/18/16 10:02	6050530
Field - Water Level	NA	NA	24.33		1	feet			WL	05/18/16 10:02	05/18/16 10:02	6050530
Field - Well Depth	NA	NA	32.90		1	feet				05/18/16 10:02	05/18/16 10:02	6050530
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 15:13	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 15:13	6050511
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/21/16 05:50	05/21/16 15:13	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 15:13	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 15:13	6050511
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 15:13	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 15:13	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 15:13	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 15:13	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/21/16 05:50	05/21/16 15:13	6050511
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/21/16 05:50	05/21/16 15:13	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 15:13	6050511

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWH
Lab No: AZE0545-32
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 10:02
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 15:13	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 15:13	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 15:13	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 15:13	6050511
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 15:13	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 15:13	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/21/16 05:50	05/21/16 15:13	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 15:13	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/21/16 05:50	05/21/16 15:13	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/21/16 05:50	05/21/16 15:13	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/21/16 05:50	05/21/16 15:13	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/21/16 05:50	05/21/16 15:13	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 15:13	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/21/16 05:50	05/21/16 15:13	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 15:13	6050511
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 15:13	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 15:13	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 15:13	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 15:13	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/21/16 05:50	05/21/16 15:13	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 15:13	6050511

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWH
Lab No: AZE0545-32
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 10:02
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 15:13	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 15:13	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 15:13	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 15:13	6050511
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/21/16 05:50	05/21/16 15:13	6050511
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/21/16 05:50	05/21/16 15:13	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 15:13	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 15:13	6050511
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/21/16 05:50	05/21/16 15:13	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/21/16 05:50	05/21/16 15:13	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 15:13	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 15:13	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 15:13	6050511
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/21/16 05:50	05/21/16 15:13	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	94 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 15:13	6050511
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	104 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 15:13	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	101 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 15:13	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	107 %		80-120				460-00-4	05/21/16 05:50	05/21/16 15:13	6050511
Base/Neutral Extractable Organic Compounds by EPA 8270												
Bis(2-ethylhexyl)phthalate	EPA 8270D	EPA 3510C	2.7	15	1	ug/L	J	2.7	117-81-7	05/24/16 09:00	05/27/16 18:48	6050558
Surr: Nitrobenzene-d5	EPA 8270D	EPA 3510C	63 %		15-120				4165-60-0	05/24/16 09:00	05/27/16 18:48	6050558

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWH
Lab No: AZE0545-32
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 10:02
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Base/Neutral Extractable Organic Compounds by EPA 8270												
Surr: 2-Fluorobiphenyl	EPA 8270D	EPA 3510C	66 %		23-120				321-60-8	05/24/16 09:00	05/27/16 18:48	6050558
Surr: p-Terphenyl-dl4	EPA 8270D	EPA 3510C	77 %		53-121				1718-51-0	05/24/16 09:00	05/27/16 18:48	6050558

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWH
Lab No: AZE0545-33
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 08:47
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Turbidity	EPA 180.1	NA	38.0	0.10	1	NTU		0.10	TURB	05/19/16 08:47	05/19/16 08:47	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/31/16 08:45	05/31/16 15:46	6050664
Arsenic	EPA 6020B	EPA 3005A	1.24	10.0	1	ug/L	J	0.75	7440-38-2	05/31/16 08:45	05/31/16 15:46	6050664
Barium	EPA 6020B	EPA 3005A	52.3	100	1	ug/L	J	0.30	7440-39-3	05/31/16 08:45	05/31/16 15:46	6050664
Beryllium	EPA 6020B	EPA 3005A	0.25	1.00	1	ug/L	J	0.09	7440-41-7	05/31/16 08:45	05/31/16 15:46	6050664
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/31/16 08:45	05/31/16 15:46	6050664
Chromium	EPA 6020B	EPA 3005A	4.01	10.0	1	ug/L	J	0.43	7440-47-3	05/31/16 08:45	05/31/16 15:46	6050664
Cobalt	EPA 6020B	EPA 3005A	1.16	10.0	1	ug/L	J	0.29	7440-48-4	05/31/16 08:45	05/31/16 15:46	6050664
Copper	EPA 6020B	EPA 3005A	3.62	10.0	1	ug/L	J	0.41	7440-50-8	05/31/16 08:45	05/31/16 15:46	6050664
Lead	EPA 6020B	EPA 3005A	1.26	10.0	1	ug/L	J	0.08	7439-92-1	05/31/16 08:45	05/31/16 15:46	6050664
Nickel	EPA 6020B	EPA 3005A	3.27	50.0	1	ug/L	J	0.48	7440-02-0	05/31/16 08:45	05/31/16 15:46	6050664
Selenium	EPA 6020B	EPA 3005A	1.52	10.0	1	ug/L	J	0.85	7782-49-2	05/31/16 08:45	05/31/16 15:46	6050664
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/31/16 08:45	05/31/16 15:46	6050664
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/31/16 08:45	05/31/16 15:46	6050664
Vanadium	EPA 6020B	EPA 3005A	8.62	25.0	1	ug/L	J	1.57	7440-62-2	05/31/16 08:45	05/31/16 15:46	6050664
Zinc	EPA 6020B	EPA 3005A	9.43	10.0	1	ug/L	J	1.30	7440-66-6	05/31/16 08:45	05/31/16 15:46	6050664

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWH Deep
Lab No: AZE0545-34
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 10:37
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	272	1	1	umhos/cm		1	COND	05/18/16 10:37	05/18/16 10:37	6050530
Dissolved Oxygen	SM 4500-O G	NA	4990	0.0	1	ug/L		0.0	NA	05/18/16 10:37	05/18/16 10:37	6050530
Field - pH	EPA 9040C	NA	6.82		1	pH Units			PH	05/18/16 10:37	05/18/16 10:37	6050530
Field - Redox	NA	NA	145		1	mV			REDOX	05/18/16 10:37	05/18/16 10:37	6050530
Field - Temperature	SM 2550 B	NA	14.9		1	°C			TEMP	05/18/16 10:37	05/18/16 10:37	6050530
Field - Turbidity	EPA 180.1	NA	220	0.10	1	NTU		0.10	TURB	05/18/16 10:37	05/18/16 10:37	6050530
Field - Water Level	NA	NA	24.65		1	feet			WL	05/18/16 10:37	05/18/16 10:37	6050530
Field - Well Depth	NA	NA	59.70		1	feet				05/18/16 10:37	05/18/16 10:37	6050530
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 15:38	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 15:38	6050511
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/21/16 05:50	05/21/16 15:38	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 15:38	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 15:38	6050511
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 15:38	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 15:38	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 15:38	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 15:38	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/21/16 05:50	05/21/16 15:38	6050511
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/21/16 05:50	05/21/16 15:38	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 15:38	6050511

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWH Deep
Lab No: AZE0545-34
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 10:37
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 15:38	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 15:38	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 15:38	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 15:38	6050511
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 15:38	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 15:38	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/21/16 05:50	05/21/16 15:38	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 15:38	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/21/16 05:50	05/21/16 15:38	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/21/16 05:50	05/21/16 15:38	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/21/16 05:50	05/21/16 15:38	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/21/16 05:50	05/21/16 15:38	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 15:38	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/21/16 05:50	05/21/16 15:38	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 15:38	6050511
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 15:38	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 15:38	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 15:38	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 15:38	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/21/16 05:50	05/21/16 15:38	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 15:38	6050511

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWH Deep
Lab No: AZE0545-34
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 10:37
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 15:38	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 15:38	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 15:38	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 15:38	6050511
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/21/16 05:50	05/21/16 15:38	6050511
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/21/16 05:50	05/21/16 15:38	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 15:38	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 15:38	6050511
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/21/16 05:50	05/21/16 15:38	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/21/16 05:50	05/21/16 15:38	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 15:38	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 15:38	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 15:38	6050511
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/21/16 05:50	05/21/16 15:38	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	92 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 15:38	6050511
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	102 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 15:38	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	100 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 15:38	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	108 %		80-120				460-00-4	05/21/16 05:50	05/21/16 15:38	6050511

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWH Deep
Lab No: AZE0545-35
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 08:50
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Turbidity	EPA 180.1	NA	18.0	0.10	1	NTU		0.10	TURB	05/19/16 08:50	05/19/16 08:50	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	1.10	6.00	1	ug/L	B-01, J	0.25	7440-36-0	06/02/16 09:30	06/03/16 12:56	6060033
Arsenic	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.75	7440-38-2	06/02/16 09:30	06/03/16 12:56	6060033
Barium	EPA 6020B	EPA 3005A	55.9	100	1	ug/L	J	0.30	7440-39-3	06/02/16 09:30	06/03/16 12:56	6060033
Beryllium	EPA 6020B	EPA 3005A	0.12	1.00	1	ug/L	J	0.09	7440-41-7	06/02/16 09:30	06/03/16 12:56	6060033
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	06/02/16 09:30	06/03/16 12:56	6060033
Chromium	EPA 6020B	EPA 3005A	0.87	10.0	1	ug/L	J	0.43	7440-47-3	06/02/16 09:30	06/03/16 12:56	6060033
Cobalt	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.29	7440-48-4	06/02/16 09:30	06/03/16 12:56	6060033
Copper	EPA 6020B	EPA 3005A	2.36	10.0	1	ug/L	J	0.41	7440-50-8	06/02/16 09:30	06/03/16 12:56	6060033
Lead	EPA 6020B	EPA 3005A	0.45	10.0	1	ug/L	J	0.08	7439-92-1	06/02/16 09:30	06/03/16 12:56	6060033
Nickel	EPA 6020B	EPA 3005A	1.33	50.0	1	ug/L	J	0.48	7440-02-0	06/02/16 09:30	06/03/16 12:56	6060033
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	06/02/16 09:30	06/03/16 12:56	6060033
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	06/02/16 09:30	06/03/16 12:56	6060033
Thallium	EPA 6020B	EPA 3005A	0.10	5.50	1	ug/L	J	0.06	7440-28-0	06/02/16 09:30	06/03/16 12:56	6060033
Vanadium	EPA 6020B	EPA 3005A	5.45	25.0	1	ug/L	J	1.57	7440-62-2	06/02/16 09:30	06/03/16 12:56	6060033
Zinc	EPA 6020B	EPA 3005A	2.27	10.0	1	ug/L	J	1.30	7440-66-6	06/02/16 09:30	06/03/16 12:56	6060033

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWI
Lab No: AZE0545-36
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 12:14
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	127	1	1	umhos/cm		1	COND	05/18/16 12:14	05/18/16 12:14	6050530
Dissolved Oxygen	SM 4500-O G	NA	4400	0.0	1	ug/L		0.0	NA	05/18/16 12:14	05/18/16 12:14	6050530
Field - pH	EPA 9040C	NA	6.86		1	pH Units			PH	05/18/16 12:14	05/18/16 12:14	6050530
Field - Redox	NA	NA	164		1	mV			REDOX	05/18/16 12:14	05/18/16 12:14	6050530
Field - Temperature	SM 2550 B	NA	15.0		1	°C			TEMP	05/18/16 12:14	05/18/16 12:14	6050530
Field - Turbidity	EPA 180.1	NA	253	0.10	1	NTU		0.10	TURB	05/18/16 12:14	05/18/16 12:14	6050530
Field - Water Level	NA	NA	43.80		1	feet			WL	05/18/16 12:14	05/18/16 12:14	6050530
Field - Well Depth	NA	NA	65.23		1	feet				05/18/16 12:14	05/18/16 12:14	6050530
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 16:03	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 16:03	6050511
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/21/16 05:50	05/21/16 16:03	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 16:03	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 16:03	6050511
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 16:03	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 16:03	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 16:03	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 16:03	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/21/16 05:50	05/21/16 16:03	6050511
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/21/16 05:50	05/21/16 16:03	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 16:03	6050511

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWI
Lab No: AZE0545-36
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 12:14
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 16:03	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 16:03	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 16:03	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 16:03	6050511
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 16:03	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 16:03	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/21/16 05:50	05/21/16 16:03	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 16:03	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	3.9	5.0	1	ug/L	J	0.4	75-34-3	05/21/16 05:50	05/21/16 16:03	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/21/16 05:50	05/21/16 16:03	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/21/16 05:50	05/21/16 16:03	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	1.8	5.0	1	ug/L	J	0.5	156-59-2	05/21/16 05:50	05/21/16 16:03	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 16:03	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/21/16 05:50	05/21/16 16:03	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 16:03	6050511
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 16:03	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 16:03	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 16:03	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 16:03	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/21/16 05:50	05/21/16 16:03	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 16:03	6050511

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWI
Lab No: AZE0545-36
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 12:14
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 16:03	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 16:03	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 16:03	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 16:03	6050511
Tetrachloroethene	EPA 8260B	EPA 5030B	2.9	1.0	1	ug/L		0.4	127-18-4	05/21/16 05:50	05/21/16 16:03	6050511
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/21/16 05:50	05/21/16 16:03	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 16:03	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 16:03	6050511
Trichloroethene	EPA 8260B	EPA 5030B	1.5	1.0	1	ug/L		0.4	79-01-6	05/21/16 05:50	05/21/16 16:03	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	0.5	1.0	1	ug/L	J	0.5	75-69-4	05/21/16 05:50	05/21/16 16:03	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 16:03	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 16:03	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 16:03	6050511
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/21/16 05:50	05/21/16 16:03	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	94 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 16:03	6050511
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	104 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 16:03	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	102 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 16:03	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	106 %		80-120				460-00-4	05/21/16 05:50	05/21/16 16:03	6050511
Base/Neutral Extractable Organic Compounds by EPA 8270												
Bis(2-ethylhexyl)phthalate	EPA 8270D	EPA 3510C	2.9	15	1	ug/L	J	2.7	117-81-7	05/24/16 09:00	05/27/16 19:12	6050558
Surr: Nitrobenzene-d5	EPA 8270D	EPA 3510C	59 %		15-120				4165-60-0	05/24/16 09:00	05/27/16 19:12	6050558

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWI
Lab No: AZE0545-36
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 12:14
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Base/Neutral Extractable Organic Compounds by EPA 8270												
Surr: 2-Fluorobiphenyl	EPA 8270D	EPA 3510C	59 %		23-120				321-60-8	05/24/16 09:00	05/27/16 19:12	6050558
Surr: p-Terphenyl-dl4	EPA 8270D	EPA 3510C	82 %		53-121				1718-51-0	05/24/16 09:00	05/27/16 19:12	6050558

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWI
Lab No: AZE0545-37
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 09:02
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Turbidity	EPA 180.1	NA	6.57	0.10	1	NTU		0.10	TURB	05/19/16 08:02	05/19/16 08:02	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	0.37	6.00	1	ug/L	B-01, J	0.25	7440-36-0	06/02/16 09:30	06/03/16 13:01	6060033
Arsenic	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.75	7440-38-2	06/02/16 09:30	06/03/16 13:01	6060033
Barium	EPA 6020B	EPA 3005A	20.7	100	1	ug/L	J	0.30	7440-39-3	06/02/16 09:30	06/03/16 13:01	6060033
Beryllium	EPA 6020B	EPA 3005A	0.20	1.00	1	ug/L	J	0.09	7440-41-7	06/02/16 09:30	06/03/16 13:01	6060033
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	06/02/16 09:30	06/03/16 13:01	6060033
Chromium	EPA 6020B	EPA 3005A	1.07	10.0	1	ug/L	J	0.43	7440-47-3	06/02/16 09:30	06/03/16 13:01	6060033
Cobalt	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.29	7440-48-4	06/02/16 09:30	06/03/16 13:01	6060033
Copper	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.41	7440-50-8	06/02/16 09:30	06/03/16 13:01	6060033
Lead	EPA 6020B	EPA 3005A	0.33	10.0	1	ug/L	J	0.08	7439-92-1	06/02/16 09:30	06/03/16 13:01	6060033
Nickel	EPA 6020B	EPA 3005A	1.75	50.0	1	ug/L	J	0.48	7440-02-0	06/02/16 09:30	06/03/16 13:01	6060033
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	06/02/16 09:30	06/03/16 13:01	6060033
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	06/02/16 09:30	06/03/16 13:01	6060033
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	06/02/16 09:30	06/03/16 13:01	6060033
Vanadium	EPA 6020B	EPA 3005A	3.09	25.0	1	ug/L	J	1.57	7440-62-2	06/02/16 09:30	06/03/16 13:01	6060033
Zinc	EPA 6020B	EPA 3005A	2.42	10.0	1	ug/L	J	1.30	7440-66-6	06/02/16 09:30	06/03/16 13:01	6060033

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWB
Lab No: AZE0545-38
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 12:58
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	976	1	1	umhos/cm		1	COND	05/18/16 12:58	05/18/16 12:58	6050530
Dissolved Oxygen	SM 4500-O G	NA	3730	0.0	1	ug/L		0.0	NA	05/18/16 12:58	05/18/16 12:58	6050530
Field - pH	EPA 9040C	NA	8.32		1	pH Units			PH	05/18/16 12:58	05/18/16 12:58	6050530
Field - Redox	NA	NA	53		1	mV			REDOX	05/18/16 12:58	05/18/16 12:58	6050530
Field - Temperature	SM 2550 B	NA	14.0		1	°C			TEMP	05/18/16 12:58	05/18/16 12:58	6050530
Field - Turbidity	EPA 180.1	NA	800	0.10	1	NTU	>	0.10	TURB	05/18/16 12:58	05/18/16 12:58	6050530
Field - Water Level	NA	NA	2.77		1	feet			WL	05/18/16 12:58	05/18/16 12:58	6050530
Field - Well Depth	NA	NA	15.29		1	feet				05/18/16 12:58	05/18/16 12:58	6050530
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/21/16 05:50	05/21/16 16:29	6050511
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/21/16 05:50	05/21/16 16:29	6050511
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/21/16 05:50	05/21/16 16:29	6050511
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/21/16 05:50	05/21/16 16:29	6050511
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/21/16 05:50	05/21/16 16:29	6050511
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/21/16 05:50	05/21/16 16:29	6050511
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/21/16 05:50	05/21/16 16:29	6050511
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/21/16 05:50	05/21/16 16:29	6050511
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/21/16 05:50	05/21/16 16:29	6050511
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/21/16 05:50	05/21/16 16:29	6050511
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/21/16 05:50	05/21/16 16:29	6050511
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/21/16 05:50	05/21/16 16:29	6050511

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWB
Lab No: AZE0545-38
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 12:58
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/21/16 05:50	05/21/16 16:29	6050511
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/21/16 05:50	05/21/16 16:29	6050511
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/21/16 05:50	05/21/16 16:29	6050511
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/21/16 05:50	05/21/16 16:29	6050511
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/21/16 05:50	05/21/16 16:29	6050511
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/21/16 05:50	05/21/16 16:29	6050511
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/21/16 05:50	05/21/16 16:29	6050511
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/21/16 05:50	05/21/16 16:29	6050511
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/21/16 05:50	05/21/16 16:29	6050511
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/21/16 05:50	05/21/16 16:29	6050511
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/21/16 05:50	05/21/16 16:29	6050511
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/21/16 05:50	05/21/16 16:29	6050511
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/21/16 05:50	05/21/16 16:29	6050511
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/21/16 05:50	05/21/16 16:29	6050511
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/21/16 05:50	05/21/16 16:29	6050511
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/21/16 05:50	05/21/16 16:29	6050511
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/21/16 05:50	05/21/16 16:29	6050511
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/21/16 05:50	05/21/16 16:29	6050511
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/21/16 05:50	05/21/16 16:29	6050511
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/21/16 05:50	05/21/16 16:29	6050511
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/21/16 05:50	05/21/16 16:29	6050511

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWB
Lab No: AZE0545-38
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 12:58
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/21/16 05:50	05/21/16 16:29	6050511
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/21/16 05:50	05/21/16 16:29	6050511
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/21/16 05:50	05/21/16 16:29	6050511
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/21/16 05:50	05/21/16 16:29	6050511
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/21/16 05:50	05/21/16 16:29	6050511
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/21/16 05:50	05/21/16 16:29	6050511
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/21/16 05:50	05/21/16 16:29	6050511
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/21/16 05:50	05/21/16 16:29	6050511
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/21/16 05:50	05/21/16 16:29	6050511
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/21/16 05:50	05/21/16 16:29	6050511
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/21/16 05:50	05/21/16 16:29	6050511
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/21/16 05:50	05/21/16 16:29	6050511
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/21/16 05:50	05/21/16 16:29	6050511
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/21/16 05:50	05/21/16 16:29	6050511
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	95 %		80-120				1868-53-7	05/21/16 05:50	05/21/16 16:29	6050511
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	102 %		78-120				17060-07-0	05/21/16 05:50	05/21/16 16:29	6050511
Surr: Toluene-d8	EPA 8260B	EPA 5030B	101 %		80-120				2037-26-5	05/21/16 05:50	05/21/16 16:29	6050511
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	104 %		80-120				460-00-4	05/21/16 05:50	05/21/16 16:29	6050511

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWB
Lab No: AZE0545-39
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 09:22
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Turbidity	EPA 180.1	NA	17.0	0.10	1	NTU		0.10	TURB	05/19/16 09:22	05/19/16 09:22	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	0.30	6.00	1	ug/L	B-01, J	0.25	7440-36-0	06/02/16 09:30	06/03/16 13:06	6060033
Arsenic	EPA 6020B	EPA 3005A	2.16	10.0	1	ug/L	J	0.75	7440-38-2	06/02/16 09:30	06/03/16 13:06	6060033
Barium	EPA 6020B	EPA 3005A	225	100	1	ug/L		0.30	7440-39-3	06/02/16 09:30	06/03/16 13:06	6060033
Beryllium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.09	7440-41-7	06/02/16 09:30	06/03/16 13:06	6060033
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	06/02/16 09:30	06/03/16 13:06	6060033
Chromium	EPA 6020B	EPA 3005A	1.05	10.0	1	ug/L	J	0.43	7440-47-3	06/02/16 09:30	06/03/16 13:06	6060033
Cobalt	EPA 6020B	EPA 3005A	11.7	10.0	1	ug/L		0.29	7440-48-4	06/02/16 09:30	06/03/16 13:06	6060033
Copper	EPA 6020B	EPA 3005A	0.81	10.0	1	ug/L	J	0.41	7440-50-8	06/02/16 09:30	06/03/16 13:06	6060033
Lead	EPA 6020B	EPA 3005A	0.39	10.0	1	ug/L	J	0.08	7439-92-1	06/02/16 09:30	06/03/16 13:06	6060033
Nickel	EPA 6020B	EPA 3005A	6.53	50.0	1	ug/L	J	0.48	7440-02-0	06/02/16 09:30	06/03/16 13:06	6060033
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	06/02/16 09:30	06/03/16 13:06	6060033
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	06/02/16 09:30	06/03/16 13:06	6060033
Thallium	EPA 6020B	EPA 3005A	0.06	5.50	1	ug/L	J	0.06	7440-28-0	06/02/16 09:30	06/03/16 13:06	6060033
Vanadium	EPA 6020B	EPA 3005A	4.64	25.0	1	ug/L	J	1.57	7440-62-2	06/02/16 09:30	06/03/16 13:06	6060033
Zinc	EPA 6020B	EPA 3005A	3.54	10.0	1	ug/L	J	1.30	7440-66-6	06/02/16 09:30	06/03/16 13:06	6060033

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWG
Lab No: AZE0545-40
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 13:20
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	1670	1	1	umhos/cm		1	COND	05/18/16 13:20	05/18/16 13:20	6050530
Dissolved Oxygen	SM 4500-O G	NA	2400	0.0	1	ug/L		0.0	NA	05/18/16 13:20	05/18/16 13:20	6050530
Field - pH	EPA 9040C	NA	7.96		1	pH Units			PH	05/18/16 13:20	05/18/16 13:20	6050530
Field - Redox	NA	NA	49		1	mV			REDOX	05/18/16 13:20	05/18/16 13:20	6050530
Field - Temperature	SM 2550 B	NA	15.0		1	°C			TEMP	05/18/16 13:20	05/18/16 13:20	6050530
Field - Turbidity	EPA 180.1	NA	800	0.10	1	NTU	>	0.10	TURB	05/18/16 13:20	05/18/16 13:20	6050530
Field - Water Level	NA	NA	9.57		1	feet			WL	05/18/16 13:20	05/18/16 13:20	6050530
Field - Well Depth	NA	NA	20.25		1	feet				05/18/16 13:20	05/18/16 13:20	6050530
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/23/16 05:30	05/23/16 08:15	6050513
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/23/16 05:30	05/23/16 08:15	6050513
Benzene	EPA 8260B	EPA 5030B	0.2	1.0	1	ug/L	J	0.2	71-43-2	05/23/16 05:30	05/23/16 08:15	6050513
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/23/16 05:30	05/23/16 08:15	6050513
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/23/16 05:30	05/23/16 08:15	6050513
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/23/16 05:30	05/23/16 08:15	6050513
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/23/16 05:30	05/23/16 08:15	6050513
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/23/16 05:30	05/23/16 08:15	6050513
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/23/16 05:30	05/23/16 08:15	6050513
Chlorobenzene	EPA 8260B	EPA 5030B	2.2	3.0	1	ug/L	J	0.4	108-90-7	05/23/16 05:30	05/23/16 08:15	6050513
Chloroethane	EPA 8260B	EPA 5030B	0.7	10	1	ug/L	J	0.4	75-00-3	05/23/16 05:30	05/23/16 08:15	6050513
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/23/16 05:30	05/23/16 08:15	6050513

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MWG
Lab No: AZE0545-40
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 13:20
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/23/16 05:30	05/23/16 08:15	6050513
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/23/16 05:30	05/23/16 08:15	6050513
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/23/16 05:30	05/23/16 08:15	6050513
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/23/16 05:30	05/23/16 08:15	6050513
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/23/16 05:30	05/23/16 08:15	6050513
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/23/16 05:30	05/23/16 08:15	6050513
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	1.4	1.0	1	ug/L		0.3	106-46-7	05/23/16 05:30	05/23/16 08:15	6050513
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/23/16 05:30	05/23/16 08:15	6050513
1,1-Dichloroethane	EPA 8260B	EPA 5030B	0.6	5.0	1	ug/L	J	0.4	75-34-3	05/23/16 05:30	05/23/16 08:15	6050513
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/23/16 05:30	05/23/16 08:15	6050513
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/23/16 05:30	05/23/16 08:15	6050513
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/23/16 05:30	05/23/16 08:15	6050513
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/23/16 05:30	05/23/16 08:15	6050513
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/23/16 05:30	05/23/16 08:15	6050513
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/23/16 05:30	05/23/16 08:15	6050513
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/23/16 05:30	05/23/16 08:15	6050513
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/23/16 05:30	05/23/16 08:15	6050513
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/23/16 05:30	05/23/16 08:15	6050513
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/23/16 05:30	05/23/16 08:15	6050513
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/23/16 05:30	05/23/16 08:15	6050513
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/23/16 05:30	05/23/16 08:15	6050513

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June 09, 2016

Client ID: 1302-MWG
Lab No: AZE0545-40
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 13:20
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/23/16 05:30	05/23/16 08:15	6050513
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/23/16 05:30	05/23/16 08:15	6050513
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/23/16 05:30	05/23/16 08:15	6050513
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/23/16 05:30	05/23/16 08:15	6050513
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/23/16 05:30	05/23/16 08:15	6050513
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/23/16 05:30	05/23/16 08:15	6050513
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/23/16 05:30	05/23/16 08:15	6050513
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/23/16 05:30	05/23/16 08:15	6050513
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/23/16 05:30	05/23/16 08:15	6050513
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/23/16 05:30	05/23/16 08:15	6050513
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/23/16 05:30	05/23/16 08:15	6050513
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/23/16 05:30	05/23/16 08:15	6050513
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/23/16 05:30	05/23/16 08:15	6050513
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/23/16 05:30	05/23/16 08:15	6050513
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	94 %		80-120				1868-53-7	05/23/16 05:30	05/23/16 08:15	6050513
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	100 %		78-120				17060-07-0	05/23/16 05:30	05/23/16 08:15	6050513
Surr: Toluene-d8	EPA 8260B	EPA 5030B	98 %		80-120				2037-26-5	05/23/16 05:30	05/23/16 08:15	6050513
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	106 %		80-120				460-00-4	05/23/16 05:30	05/23/16 08:15	6050513

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June 09, 2016

Client ID: 1302-MWG
Lab No: AZE0545-41
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 09:28
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Turbidity	EPA 180.1	NA	12.0	0.10	1	NTU		0.10	TURB	05/19/16 09:28	05/19/16 09:28	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	06/02/16 09:30	06/03/16 13:11	6060033
Arsenic	EPA 6020B	EPA 3005A	3.19	10.0	1	ug/L	J	0.75	7440-38-2	06/02/16 09:30	06/03/16 13:11	6060033
Barium	EPA 6020B	EPA 3005A	412	100	1	ug/L		0.30	7440-39-3	06/02/16 09:30	06/03/16 13:11	6060033
Beryllium	EPA 6020B	EPA 3005A	0.15	1.00	1	ug/L	J	0.09	7440-41-7	06/02/16 09:30	06/03/16 13:11	6060033
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	06/02/16 09:30	06/03/16 13:11	6060033
Chromium	EPA 6020B	EPA 3005A	1.31	10.0	1	ug/L	J	0.43	7440-47-3	06/02/16 09:30	06/03/16 13:11	6060033
Cobalt	EPA 6020B	EPA 3005A	6.07	10.0	1	ug/L	J	0.29	7440-48-4	06/02/16 09:30	06/03/16 13:11	6060033
Copper	EPA 6020B	EPA 3005A	0.89	10.0	1	ug/L	J	0.41	7440-50-8	06/02/16 09:30	06/03/16 13:11	6060033
Lead	EPA 6020B	EPA 3005A	0.26	10.0	1	ug/L	J	0.08	7439-92-1	06/02/16 09:30	06/03/16 13:11	6060033
Nickel	EPA 6020B	EPA 3005A	5.07	50.0	1	ug/L	J	0.48	7440-02-0	06/02/16 09:30	06/03/16 13:11	6060033
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	06/02/16 09:30	06/03/16 13:11	6060033
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	06/02/16 09:30	06/03/16 13:11	6060033
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	06/02/16 09:30	06/03/16 13:11	6060033
Vanadium	EPA 6020B	EPA 3005A	4.72	25.0	1	ug/L	J	1.57	7440-62-2	06/02/16 09:30	06/03/16 13:11	6060033
Zinc	EPA 6020B	EPA 3005A	4.62	10.0	1	ug/L	J	1.30	7440-66-6	06/02/16 09:30	06/03/16 13:11	6060033

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MW1
Lab No: AZE0545-42
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 13:52
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	1520	1	1	umhos/cm		1	COND	05/18/16 13:52	05/18/16 13:52	6050530
Dissolved Oxygen	SM 4500-O G	NA	3480	0.0	1	ug/L		0.0	NA	05/18/16 13:52	05/18/16 13:52	6050530
Field - pH	EPA 9040C	NA	8.05		1	pH Units			PH	05/18/16 13:52	05/18/16 13:52	6050530
Field - Redox	NA	NA	94		1	mV			REDOX	05/18/16 13:52	05/18/16 13:52	6050530
Field - Temperature	SM 2550 B	NA	15.4		1	°C			TEMP	05/18/16 13:52	05/18/16 13:52	6050530
Field - Turbidity	EPA 180.1	NA	88.0	0.10	1	NTU		0.10	TURB	05/18/16 13:52	05/18/16 13:52	6050530
Field - Water Level	NA	NA	12.43		1	feet			WL	05/18/16 13:52	05/18/16 13:52	6050530
Field - Well Depth	NA	NA	30.24		1	feet				05/18/16 13:52	05/18/16 13:52	6050530
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/23/16 05:30	05/23/16 08:40	6050513
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/23/16 05:30	05/23/16 08:40	6050513
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/23/16 05:30	05/23/16 08:40	6050513
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/23/16 05:30	05/23/16 08:40	6050513
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/23/16 05:30	05/23/16 08:40	6050513
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/23/16 05:30	05/23/16 08:40	6050513
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/23/16 05:30	05/23/16 08:40	6050513
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/23/16 05:30	05/23/16 08:40	6050513
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/23/16 05:30	05/23/16 08:40	6050513
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/23/16 05:30	05/23/16 08:40	6050513
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/23/16 05:30	05/23/16 08:40	6050513
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/23/16 05:30	05/23/16 08:40	6050513

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June 09, 2016

Client ID: 1302-MW1
Lab No: AZE0545-42
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 13:52
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/23/16 05:30	05/23/16 08:40	6050513
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/23/16 05:30	05/23/16 08:40	6050513
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/23/16 05:30	05/23/16 08:40	6050513
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/23/16 05:30	05/23/16 08:40	6050513
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/23/16 05:30	05/23/16 08:40	6050513
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/23/16 05:30	05/23/16 08:40	6050513
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/23/16 05:30	05/23/16 08:40	6050513
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/23/16 05:30	05/23/16 08:40	6050513
1,1-Dichloroethane	EPA 8260B	EPA 5030B	1.2	5.0	1	ug/L	J	0.4	75-34-3	05/23/16 05:30	05/23/16 08:40	6050513
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/23/16 05:30	05/23/16 08:40	6050513
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/23/16 05:30	05/23/16 08:40	6050513
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	0.6	5.0	1	ug/L	J	0.5	156-59-2	05/23/16 05:30	05/23/16 08:40	6050513
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/23/16 05:30	05/23/16 08:40	6050513
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/23/16 05:30	05/23/16 08:40	6050513
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/23/16 05:30	05/23/16 08:40	6050513
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/23/16 05:30	05/23/16 08:40	6050513
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/23/16 05:30	05/23/16 08:40	6050513
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/23/16 05:30	05/23/16 08:40	6050513
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/23/16 05:30	05/23/16 08:40	6050513
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/23/16 05:30	05/23/16 08:40	6050513
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/23/16 05:30	05/23/16 08:40	6050513

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MW1
Lab No: AZE0545-42
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 13:52
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/23/16 05:30	05/23/16 08:40	6050513
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/23/16 05:30	05/23/16 08:40	6050513
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/23/16 05:30	05/23/16 08:40	6050513
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/23/16 05:30	05/23/16 08:40	6050513
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/23/16 05:30	05/23/16 08:40	6050513
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/23/16 05:30	05/23/16 08:40	6050513
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/23/16 05:30	05/23/16 08:40	6050513
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/23/16 05:30	05/23/16 08:40	6050513
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/23/16 05:30	05/23/16 08:40	6050513
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/23/16 05:30	05/23/16 08:40	6050513
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/23/16 05:30	05/23/16 08:40	6050513
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/23/16 05:30	05/23/16 08:40	6050513
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/23/16 05:30	05/23/16 08:40	6050513
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/23/16 05:30	05/23/16 08:40	6050513
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	93 %		80-120				1868-53-7	05/23/16 05:30	05/23/16 08:40	6050513
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	97 %		78-120				17060-07-0	05/23/16 05:30	05/23/16 08:40	6050513
Surr: Toluene-d8	EPA 8260B	EPA 5030B	100 %		80-120				2037-26-5	05/23/16 05:30	05/23/16 08:40	6050513
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	103 %		80-120				460-00-4	05/23/16 05:30	05/23/16 08:40	6050513

PACE ANALYTICAL SERVICES, INC.

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-MW1
Lab No: AZE0545-43
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 09:31
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Turbidity	EPA 180.1	NA	4.47	0.10	1	NTU		0.10	TURB	05/19/16 09:31	05/19/16 09:31	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	06/02/16 09:30	06/03/16 13:16	6060033
Arsenic	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.75	7440-38-2	06/02/16 09:30	06/03/16 13:16	6060033
Barium	EPA 6020B	EPA 3005A	144	100	1	ug/L		0.30	7440-39-3	06/02/16 09:30	06/03/16 13:16	6060033
Beryllium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.09	7440-41-7	06/02/16 09:30	06/03/16 13:16	6060033
Cadmium	EPA 6020B	EPA 3005A	0.34	1.00	1	ug/L	J	0.10	7440-43-9	06/02/16 09:30	06/03/16 13:16	6060033
Chromium	EPA 6020B	EPA 3005A	0.51	10.0	1	ug/L	J	0.43	7440-47-3	06/02/16 09:30	06/03/16 13:16	6060033
Cobalt	EPA 6020B	EPA 3005A	12.8	10.0	1	ug/L		0.29	7440-48-4	06/02/16 09:30	06/03/16 13:16	6060033
Copper	EPA 6020B	EPA 3005A	12.0	10.0	1	ug/L		0.41	7440-50-8	06/02/16 09:30	06/03/16 13:16	6060033
Lead	EPA 6020B	EPA 3005A	0.28	10.0	1	ug/L	J	0.08	7439-92-1	06/02/16 09:30	06/03/16 13:16	6060033
Nickel	EPA 6020B	EPA 3005A	29.4	50.0	1	ug/L	J	0.48	7440-02-0	06/02/16 09:30	06/03/16 13:16	6060033
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	06/02/16 09:30	06/03/16 13:16	6060033
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	06/02/16 09:30	06/03/16 13:16	6060033
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	06/02/16 09:30	06/03/16 13:16	6060033
Vanadium	EPA 6020B	EPA 3005A	2.59	25.0	1	ug/L	J	1.57	7440-62-2	06/02/16 09:30	06/03/16 13:16	6060033
Zinc	EPA 6020B	EPA 3005A	1.99	10.0	1	ug/L	J	1.30	7440-66-6	06/02/16 09:30	06/03/16 13:16	6060033

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-Duplicate
Lab No: AZE0545-44
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 00:00
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/23/16 05:30	05/23/16 09:06	6050513
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/23/16 05:30	05/23/16 09:06	6050513
Benzene	EPA 8260B	EPA 5030B	0.2	1.0	1	ug/L	J	0.2	71-43-2	05/23/16 05:30	05/23/16 09:06	6050513
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/23/16 05:30	05/23/16 09:06	6050513
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/23/16 05:30	05/23/16 09:06	6050513
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/23/16 05:30	05/23/16 09:06	6050513
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/23/16 05:30	05/23/16 09:06	6050513
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/23/16 05:30	05/23/16 09:06	6050513
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/23/16 05:30	05/23/16 09:06	6050513
Chlorobenzene	EPA 8260B	EPA 5030B	2.1	3.0	1	ug/L	J	0.4	108-90-7	05/23/16 05:30	05/23/16 09:06	6050513
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/23/16 05:30	05/23/16 09:06	6050513
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/23/16 05:30	05/23/16 09:06	6050513
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/23/16 05:30	05/23/16 09:06	6050513
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/23/16 05:30	05/23/16 09:06	6050513
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/23/16 05:30	05/23/16 09:06	6050513
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/23/16 05:30	05/23/16 09:06	6050513
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/23/16 05:30	05/23/16 09:06	6050513
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/23/16 05:30	05/23/16 09:06	6050513
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	1.3	1.0	1	ug/L		0.3	106-46-7	05/23/16 05:30	05/23/16 09:06	6050513
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/23/16 05:30	05/23/16 09:06	6050513
1,1-Dichloroethane	EPA 8260B	EPA 5030B	0.5	5.0	1	ug/L	J	0.4	75-34-3	05/23/16 05:30	05/23/16 09:06	6050513
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/23/16 05:30	05/23/16 09:06	6050513

PACE ANALYTICAL SERVICES, INC.

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-Duplicate
Lab No: AZE0545-44
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 00:00
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/23/16 05:30	05/23/16 09:06	6050513
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/23/16 05:30	05/23/16 09:06	6050513
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/23/16 05:30	05/23/16 09:06	6050513
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/23/16 05:30	05/23/16 09:06	6050513
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/23/16 05:30	05/23/16 09:06	6050513
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/23/16 05:30	05/23/16 09:06	6050513
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/23/16 05:30	05/23/16 09:06	6050513
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/23/16 05:30	05/23/16 09:06	6050513
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/23/16 05:30	05/23/16 09:06	6050513
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/23/16 05:30	05/23/16 09:06	6050513
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/23/16 05:30	05/23/16 09:06	6050513
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/23/16 05:30	05/23/16 09:06	6050513
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/23/16 05:30	05/23/16 09:06	6050513
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/23/16 05:30	05/23/16 09:06	6050513
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/23/16 05:30	05/23/16 09:06	6050513
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/23/16 05:30	05/23/16 09:06	6050513
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/23/16 05:30	05/23/16 09:06	6050513
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/23/16 05:30	05/23/16 09:06	6050513
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/23/16 05:30	05/23/16 09:06	6050513
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/23/16 05:30	05/23/16 09:06	6050513
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/23/16 05:30	05/23/16 09:06	6050513

PACE ANALYTICAL SERVICES, INC.

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-Duplicate
Lab No: AZE0545-44
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 00:00
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/23/16 05:30	05/23/16 09:06	6050513
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/23/16 05:30	05/23/16 09:06	6050513
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/23/16 05:30	05/23/16 09:06	6050513
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/23/16 05:30	05/23/16 09:06	6050513
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	94 %		80-120				1868-53-7	05/23/16 05:30	05/23/16 09:06	6050513
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	102 %		78-120				17060-07-0	05/23/16 05:30	05/23/16 09:06	6050513
Surr: Toluene-d8	EPA 8260B	EPA 5030B	99 %		80-120				2037-26-5	05/23/16 05:30	05/23/16 09:06	6050513
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	108 %		80-120				460-00-4	05/23/16 05:30	05/23/16 09:06	6050513

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-Duplicate
Lab No: AZE0545-45
Matrix: Ground Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/19/16 00:00
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	0.31	6.00	1	ug/L	B-01, J	0.25	7440-36-0	06/02/16 09:30	06/03/16 13:33	6060033
Arsenic	EPA 6020B	EPA 3005A	3.51	10.0	1	ug/L	J	0.75	7440-38-2	06/02/16 09:30	06/03/16 13:33	6060033
Barium	EPA 6020B	EPA 3005A	417	100	1	ug/L		0.30	7440-39-3	06/02/16 09:30	06/03/16 13:33	6060033
Beryllium	EPA 6020B	EPA 3005A	0.11	1.00	1	ug/L	J	0.09	7440-41-7	06/02/16 09:30	06/03/16 13:33	6060033
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	06/02/16 09:30	06/03/16 13:33	6060033
Chromium	EPA 6020B	EPA 3005A	1.05	10.0	1	ug/L	J	0.43	7440-47-3	06/02/16 09:30	06/03/16 13:33	6060033
Cobalt	EPA 6020B	EPA 3005A	5.37	10.0	1	ug/L	J	0.29	7440-48-4	06/02/16 09:30	06/03/16 13:33	6060033
Copper	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.41	7440-50-8	06/02/16 09:30	06/03/16 13:33	6060033
Lead	EPA 6020B	EPA 3005A	0.09	10.0	1	ug/L	J	0.08	7439-92-1	06/02/16 09:30	06/03/16 13:33	6060033
Nickel	EPA 6020B	EPA 3005A	3.64	50.0	1	ug/L	J	0.48	7440-02-0	06/02/16 09:30	06/03/16 13:33	6060033
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	06/02/16 09:30	06/03/16 13:33	6060033
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	06/02/16 09:30	06/03/16 13:33	6060033
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	06/02/16 09:30	06/03/16 13:33	6060033
Vanadium	EPA 6020B	EPA 3005A	2.55	25.0	1	ug/L	J	1.57	7440-62-2	06/02/16 09:30	06/03/16 13:33	6060033
Zinc	EPA 6020B	EPA 3005A	2.08	10.0	1	ug/L	J	1.30	7440-66-6	06/02/16 09:30	06/03/16 13:33	6060033

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-SW1
Lab No: AZE0544-15
Matrix: Surface Water

Project: Cabarrus Co-Unit 1
Date/Time Sampled: 05/19/16 09:18
Date/Time Received: 05/19/16 15:05

Report No.: AZE0544

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	342	1	1	umhos/cm		1	COND	05/19/16 09:18	05/19/16 09:18	6050530
Dissolved Oxygen	SM 4500-O G	NA	4990	0.0	1	ug/L		0.0	NA	05/19/16 09:18	05/19/16 09:18	6050530
Field - pH	EPA 9040C	NA	6.99		1	pH Units			PH	05/19/16 09:18	05/19/16 09:18	6050530
Field - Redox	NA	NA	360		1	mV			REDOX	05/19/16 09:18	05/19/16 09:18	6050530
Field - Temperature	SM 2550 B	NA	15.4		1	°C			TEMP	05/19/16 09:18	05/19/16 09:18	6050530
Field - Turbidity	EPA 180.1	NA	800	0.10	1	NTU	>	0.10	TURB	05/19/16 09:18	05/19/16 09:18	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/26/16 08:15	05/26/16 15:29	6050611
Arsenic	EPA 6020B	EPA 3005A	3.52	10.0	1	ug/L	J	0.75	7440-38-2	05/26/16 08:15	05/26/16 15:29	6050611
Barium	EPA 6020B	EPA 3005A	157	100	1	ug/L		0.30	7440-39-3	05/26/16 08:15	05/26/16 15:29	6050611
Beryllium	EPA 6020B	EPA 3005A	1.44	1.00	1	ug/L		0.09	7440-41-7	05/26/16 08:15	05/26/16 15:29	6050611
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/26/16 08:15	05/26/16 15:29	6050611
Chromium	EPA 6020B	EPA 3005A	37.2	10.0	1	ug/L		0.43	7440-47-3	05/26/16 08:15	05/26/16 15:29	6050611
Cobalt	EPA 6020B	EPA 3005A	15.6	10.0	1	ug/L		0.29	7440-48-4	05/26/16 08:15	05/26/16 15:29	6050611
Copper	EPA 6020B	EPA 3005A	25.1	10.0	1	ug/L		0.41	7440-50-8	05/26/16 08:15	05/26/16 15:29	6050611
Lead	EPA 6020B	EPA 3005A	14.8	10.0	1	ug/L		0.08	7439-92-1	05/26/16 08:15	05/26/16 15:29	6050611
Nickel	EPA 6020B	EPA 3005A	17.2	50.0	1	ug/L	J	0.48	7440-02-0	05/26/16 08:15	05/26/16 15:29	6050611
Selenium	EPA 6020B	EPA 3005A	5.33	10.0	1	ug/L	J	0.85	7782-49-2	05/26/16 08:15	05/26/16 15:29	6050611
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/26/16 08:15	05/26/16 15:29	6050611
Thallium	EPA 6020B	EPA 3005A	0.08	5.50	1	ug/L	J	0.06	7440-28-0	05/26/16 08:15	05/26/16 15:29	6050611

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Environmental Monitoring & Laboratory Analysis
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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-SW1
Lab No: AZE0544-15
Matrix: Surface Water

Project: Cabarrus Co-Unit 1
Date/Time Sampled: 05/19/16 09:18
Date/Time Received: 05/19/16 15:05

Report No.: AZE0544

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Vanadium	EPA 6020B	EPA 3005A	65.2	25.0	1	ug/L		1.57	7440-62-2	05/26/16 08:15	05/26/16 15:29	6050611
Zinc	EPA 6020B	EPA 3005A	64.0	10.0	1	ug/L		1.30	7440-66-6	05/26/16 08:15	05/26/16 15:29	6050611
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/20/16 12:00	05/20/16 22:16	6050503
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/20/16 12:00	05/20/16 22:16	6050503
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/20/16 12:00	05/20/16 22:16	6050503
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/20/16 12:00	05/20/16 22:16	6050503
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/20/16 12:00	05/20/16 22:16	6050503
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/20/16 12:00	05/20/16 22:16	6050503
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/20/16 12:00	05/20/16 22:16	6050503
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/20/16 12:00	05/20/16 22:16	6050503
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/20/16 12:00	05/20/16 22:16	6050503
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/20/16 12:00	05/20/16 22:16	6050503
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/20/16 12:00	05/20/16 22:16	6050503
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/20/16 12:00	05/20/16 22:16	6050503
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/20/16 12:00	05/20/16 22:16	6050503
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/20/16 12:00	05/20/16 22:16	6050503
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/20/16 12:00	05/20/16 22:16	6050503
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/20/16 12:00	05/20/16 22:16	6050503
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/20/16 12:00	05/20/16 22:16	6050503
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/20/16 12:00	05/20/16 22:16	6050503

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-SW1
Lab No: AZE0544-15
Matrix: Surface Water

Project: Cabarrus Co-Unit 1
Date/Time Sampled: 05/19/16 09:18
Date/Time Received: 05/19/16 15:05

Report No.: AZE0544

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/20/16 12:00	05/20/16 22:16	6050503
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/20/16 12:00	05/20/16 22:16	6050503
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/20/16 12:00	05/20/16 22:16	6050503
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/20/16 12:00	05/20/16 22:16	6050503
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/20/16 12:00	05/20/16 22:16	6050503
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/20/16 12:00	05/20/16 22:16	6050503
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/20/16 12:00	05/20/16 22:16	6050503
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/20/16 12:00	05/20/16 22:16	6050503
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/20/16 12:00	05/20/16 22:16	6050503
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/20/16 12:00	05/20/16 22:16	6050503
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/20/16 12:00	05/20/16 22:16	6050503
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/20/16 12:00	05/20/16 22:16	6050503
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/20/16 12:00	05/20/16 22:16	6050503
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/20/16 12:00	05/20/16 22:16	6050503
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/20/16 12:00	05/20/16 22:16	6050503
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/20/16 12:00	05/20/16 22:16	6050503
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/20/16 12:00	05/20/16 22:16	6050503
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/20/16 12:00	05/20/16 22:16	6050503
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/20/16 12:00	05/20/16 22:16	6050503
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/20/16 12:00	05/20/16 22:16	6050503
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/20/16 12:00	05/20/16 22:16	6050503

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-SW1
Lab No: AZE0544-15
Matrix: Surface Water

Project: Cabarrus Co-Unit 1
Date/Time Sampled: 05/19/16 09:18
Date/Time Received: 05/19/16 15:05

Report No.: AZE0544

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/20/16 12:00	05/20/16 22:16	6050503
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/20/16 12:00	05/20/16 22:16	6050503
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/20/16 12:00	05/20/16 22:16	6050503
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/20/16 12:00	05/20/16 22:16	6050503
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/20/16 12:00	05/20/16 22:16	6050503
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/20/16 12:00	05/20/16 22:16	6050503
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/20/16 12:00	05/20/16 22:16	6050503
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/20/16 12:00	05/20/16 22:16	6050503
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	92 %		80-120				1868-53-7	05/20/16 12:00	05/20/16 22:16	6050503
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	102 %		78-120				17060-07-0	05/20/16 12:00	05/20/16 22:16	6050503
Surr: Toluene-d8	EPA 8260B	EPA 5030B	102 %		80-120				2037-26-5	05/20/16 12:00	05/20/16 22:16	6050503
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	108 %		80-120				460-00-4	05/20/16 12:00	05/20/16 22:16	6050503

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-SW2
Lab No: AZE0544-16
Matrix: Surface Water

Project: Cabarrus Co-Unit 1
Date/Time Sampled: 05/19/16 09:11
Date/Time Received: 05/19/16 15:05

Report No.: AZE0544

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
On Site												
Field - Specific Conductance	EPA 9050A	NA	241	1	1	umhos/cm		1	COND	05/19/16 09:11	05/19/16 09:11	6050530
Dissolved Oxygen	SM 4500-O G	NA	3510	0.0	1	ug/L		0.0	NA	05/19/16 09:11	05/19/16 09:11	6050530
Field - pH	EPA 9040C	NA	6.80		1	pH Units			PH	05/19/16 09:11	05/19/16 09:11	6050530
Field - Redox	NA	NA	181		1	mV			REDOX	05/19/16 09:11	05/19/16 09:11	6050530
Field - Temperature	SM 2550 B	NA	15.6		1	°C			TEMP	05/19/16 09:11	05/19/16 09:11	6050530
Field - Turbidity	EPA 180.1	NA	590	0.10	1	NTU		0.10	TURB	05/19/16 09:11	05/19/16 09:11	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	05/26/16 08:15	05/26/16 15:34	6050611
Arsenic	EPA 6020B	EPA 3005A	2.35	10.0	1	ug/L	J	0.75	7440-38-2	05/26/16 08:15	05/26/16 15:34	6050611
Barium	EPA 6020B	EPA 3005A	89.0	100	1	ug/L	J	0.30	7440-39-3	05/26/16 08:15	05/26/16 15:34	6050611
Beryllium	EPA 6020B	EPA 3005A	0.94	1.00	1	ug/L	J	0.09	7440-41-7	05/26/16 08:15	05/26/16 15:34	6050611
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	05/26/16 08:15	05/26/16 15:34	6050611
Chromium	EPA 6020B	EPA 3005A	12.2	10.0	1	ug/L		0.43	7440-47-3	05/26/16 08:15	05/26/16 15:34	6050611
Cobalt	EPA 6020B	EPA 3005A	7.21	10.0	1	ug/L	J	0.29	7440-48-4	05/26/16 08:15	05/26/16 15:34	6050611
Copper	EPA 6020B	EPA 3005A	11.9	10.0	1	ug/L		0.41	7440-50-8	05/26/16 08:15	05/26/16 15:34	6050611
Lead	EPA 6020B	EPA 3005A	8.73	10.0	1	ug/L	J	0.08	7439-92-1	05/26/16 08:15	05/26/16 15:34	6050611
Nickel	EPA 6020B	EPA 3005A	8.33	50.0	1	ug/L	J	0.48	7440-02-0	05/26/16 08:15	05/26/16 15:34	6050611
Selenium	EPA 6020B	EPA 3005A	3.40	10.0	1	ug/L	J	0.85	7782-49-2	05/26/16 08:15	05/26/16 15:34	6050611
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	05/26/16 08:15	05/26/16 15:34	6050611
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	05/26/16 08:15	05/26/16 15:34	6050611

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-SW2
Lab No: AZE0544-16
Matrix: Surface Water

Project: Cabarrus Co-Unit 1
Date/Time Sampled: 05/19/16 09:11
Date/Time Received: 05/19/16 15:05

Report No.: AZE0544

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Vanadium	EPA 6020B	EPA 3005A	32.7	25.0	1	ug/L		1.57	7440-62-2	05/26/16 08:15	05/26/16 15:34	6050611
Zinc	EPA 6020B	EPA 3005A	35.0	10.0	1	ug/L		1.30	7440-66-6	05/26/16 08:15	05/26/16 15:34	6050611
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/20/16 12:00	05/20/16 22:41	6050503
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/20/16 12:00	05/20/16 22:41	6050503
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/20/16 12:00	05/20/16 22:41	6050503
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/20/16 12:00	05/20/16 22:41	6050503
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/20/16 12:00	05/20/16 22:41	6050503
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/20/16 12:00	05/20/16 22:41	6050503
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/20/16 12:00	05/20/16 22:41	6050503
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/20/16 12:00	05/20/16 22:41	6050503
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/20/16 12:00	05/20/16 22:41	6050503
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/20/16 12:00	05/20/16 22:41	6050503
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/20/16 12:00	05/20/16 22:41	6050503
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/20/16 12:00	05/20/16 22:41	6050503
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/20/16 12:00	05/20/16 22:41	6050503
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/20/16 12:00	05/20/16 22:41	6050503
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/20/16 12:00	05/20/16 22:41	6050503
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/20/16 12:00	05/20/16 22:41	6050503
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/20/16 12:00	05/20/16 22:41	6050503
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/20/16 12:00	05/20/16 22:41	6050503

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-SW2
Lab No: AZE0544-16
Matrix: Surface Water

Project: Cabarrus Co-Unit 1
Date/Time Sampled: 05/19/16 09:11
Date/Time Received: 05/19/16 15:05

Report No.: AZE0544

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/20/16 12:00	05/20/16 22:41	6050503
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/20/16 12:00	05/20/16 22:41	6050503
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/20/16 12:00	05/20/16 22:41	6050503
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/20/16 12:00	05/20/16 22:41	6050503
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/20/16 12:00	05/20/16 22:41	6050503
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/20/16 12:00	05/20/16 22:41	6050503
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/20/16 12:00	05/20/16 22:41	6050503
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/20/16 12:00	05/20/16 22:41	6050503
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/20/16 12:00	05/20/16 22:41	6050503
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/20/16 12:00	05/20/16 22:41	6050503
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/20/16 12:00	05/20/16 22:41	6050503
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/20/16 12:00	05/20/16 22:41	6050503
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/20/16 12:00	05/20/16 22:41	6050503
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/20/16 12:00	05/20/16 22:41	6050503
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/20/16 12:00	05/20/16 22:41	6050503
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/20/16 12:00	05/20/16 22:41	6050503
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/20/16 12:00	05/20/16 22:41	6050503
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/20/16 12:00	05/20/16 22:41	6050503
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/20/16 12:00	05/20/16 22:41	6050503
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/20/16 12:00	05/20/16 22:41	6050503
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/20/16 12:00	05/20/16 22:41	6050503

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-SW2
Lab No: AZE0544-16
Matrix: Surface Water

Project: Cabarrus Co-Unit 1
Date/Time Sampled: 05/19/16 09:11
Date/Time Received: 05/19/16 15:05

Report No.: AZE0544

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/20/16 12:00	05/20/16 22:41	6050503
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/20/16 12:00	05/20/16 22:41	6050503
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/20/16 12:00	05/20/16 22:41	6050503
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/20/16 12:00	05/20/16 22:41	6050503
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/20/16 12:00	05/20/16 22:41	6050503
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/20/16 12:00	05/20/16 22:41	6050503
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/20/16 12:00	05/20/16 22:41	6050503
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/20/16 12:00	05/20/16 22:41	6050503
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	92 %		80-120				1868-53-7	05/20/16 12:00	05/20/16 22:41	6050503
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	102 %		78-120				17060-07-0	05/20/16 12:00	05/20/16 22:41	6050503
Surr: Toluene-d8	EPA 8260B	EPA 5030B	103 %		80-120				2037-26-5	05/20/16 12:00	05/20/16 22:41	6050503
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	109 %		80-120				460-00-4	05/20/16 12:00	05/20/16 22:41	6050503

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-Equipment Blank
Lab No: AZE0545-46
Matrix: Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 13:32
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	ND	6.00	1	ug/L		0.25	7440-36-0	06/02/16 09:30	06/03/16 13:38	6060033
Arsenic	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.75	7440-38-2	06/02/16 09:30	06/03/16 13:38	6060033
Barium	EPA 6020B	EPA 3005A	0.65	100	1	ug/L	J	0.30	7440-39-3	06/02/16 09:30	06/03/16 13:38	6060033
Beryllium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.09	7440-41-7	06/02/16 09:30	06/03/16 13:38	6060033
Cadmium	EPA 6020B	EPA 3005A	ND	1.00	1	ug/L		0.10	7440-43-9	06/02/16 09:30	06/03/16 13:38	6060033
Chromium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.43	7440-47-3	06/02/16 09:30	06/03/16 13:38	6060033
Cobalt	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.29	7440-48-4	06/02/16 09:30	06/03/16 13:38	6060033
Copper	EPA 6020B	EPA 3005A	0.69	10.0	1	ug/L	J	0.41	7440-50-8	06/02/16 09:30	06/03/16 13:38	6060033
Lead	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.08	7439-92-1	06/02/16 09:30	06/03/16 13:38	6060033
Nickel	EPA 6020B	EPA 3005A	ND	50.0	1	ug/L		0.48	7440-02-0	06/02/16 09:30	06/03/16 13:38	6060033
Selenium	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.85	7782-49-2	06/02/16 09:30	06/03/16 13:38	6060033
Silver	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		0.22	7440-22-4	06/02/16 09:30	06/03/16 13:38	6060033
Thallium	EPA 6020B	EPA 3005A	ND	5.50	1	ug/L		0.06	7440-28-0	06/02/16 09:30	06/03/16 13:38	6060033
Vanadium	EPA 6020B	EPA 3005A	ND	25.0	1	ug/L		1.57	7440-62-2	06/02/16 09:30	06/03/16 13:38	6060033
Zinc	EPA 6020B	EPA 3005A	ND	10.0	1	ug/L		1.30	7440-66-6	06/02/16 09:30	06/03/16 13:38	6060033
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/20/16 05:15	05/20/16 09:13	6050502
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/20/16 05:15	05/20/16 09:13	6050502
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/20/16 05:15	05/20/16 09:13	6050502
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/20/16 05:15	05/20/16 09:13	6050502
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/20/16 05:15	05/20/16 09:13	6050502

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-Equipment Blank
Lab No: AZE0545-46
Matrix: Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 13:32
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/20/16 05:15	05/20/16 09:13	6050502
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/20/16 05:15	05/20/16 09:13	6050502
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/20/16 05:15	05/20/16 09:13	6050502
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/20/16 05:15	05/20/16 09:13	6050502
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/20/16 05:15	05/20/16 09:13	6050502
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/20/16 05:15	05/20/16 09:13	6050502
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/20/16 05:15	05/20/16 09:13	6050502
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/20/16 05:15	05/20/16 09:13	6050502
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/20/16 05:15	05/20/16 09:13	6050502
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/20/16 05:15	05/20/16 09:13	6050502
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/20/16 05:15	05/20/16 09:13	6050502
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/20/16 05:15	05/20/16 09:13	6050502
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/20/16 05:15	05/20/16 09:13	6050502
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/20/16 05:15	05/20/16 09:13	6050502
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/20/16 05:15	05/20/16 09:13	6050502
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/20/16 05:15	05/20/16 09:13	6050502
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/20/16 05:15	05/20/16 09:13	6050502
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/20/16 05:15	05/20/16 09:13	6050502
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/20/16 05:15	05/20/16 09:13	6050502
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/20/16 05:15	05/20/16 09:13	6050502
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/20/16 05:15	05/20/16 09:13	6050502
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/20/16 05:15	05/20/16 09:13	6050502

PACE ANALYTICAL SERVICES, INC.

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-Equipment Blank
Lab No: AZE0545-46
Matrix: Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 13:32
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/20/16 05:15	05/20/16 09:13	6050502
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/20/16 05:15	05/20/16 09:13	6050502
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/20/16 05:15	05/20/16 09:13	6050502
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/20/16 05:15	05/20/16 09:13	6050502
Methylene Chloride	EPA 8260B	EPA 5030B	0.8	1.0	1	ug/L	J	0.5	75-09-2	05/20/16 05:15	05/20/16 09:13	6050502
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/20/16 05:15	05/20/16 09:13	6050502
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/20/16 05:15	05/20/16 09:13	6050502
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/20/16 05:15	05/20/16 09:13	6050502
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/20/16 05:15	05/20/16 09:13	6050502
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/20/16 05:15	05/20/16 09:13	6050502
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/20/16 05:15	05/20/16 09:13	6050502
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/20/16 05:15	05/20/16 09:13	6050502
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/20/16 05:15	05/20/16 09:13	6050502
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/20/16 05:15	05/20/16 09:13	6050502
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/20/16 05:15	05/20/16 09:13	6050502
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/20/16 05:15	05/20/16 09:13	6050502
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/20/16 05:15	05/20/16 09:13	6050502
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/20/16 05:15	05/20/16 09:13	6050502
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/20/16 05:15	05/20/16 09:13	6050502
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/20/16 05:15	05/20/16 09:13	6050502
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	91 %		80-120				1868-53-7	05/20/16 05:15	05/20/16 09:13	6050502

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-Equipment Blank
Lab No: AZE0545-46
Matrix: Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/18/16 13:32
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	100 %		78-120				17060-07-0	05/20/16 05:15	05/20/16 09:13	6050502
Surr: Toluene-d8	EPA 8260B	EPA 5030B	102 %		80-120				2037-26-5	05/20/16 05:15	05/20/16 09:13	6050502
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	106 %		80-120				460-00-4	05/20/16 05:15	05/20/16 09:13	6050502

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-Trip Blank
Lab No: AZE0545-47
Matrix: Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/16/16 00:00
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	ND	100	1	ug/L		4.9	67-64-1	05/20/16 05:15	05/20/16 09:38	6050502
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/20/16 05:15	05/20/16 09:38	6050502
Benzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	71-43-2	05/20/16 05:15	05/20/16 09:38	6050502
Bromochloromethane	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	74-97-5	05/20/16 05:15	05/20/16 09:38	6050502
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/20/16 05:15	05/20/16 09:38	6050502
Bromoform	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.7	75-25-2	05/20/16 05:15	05/20/16 09:38	6050502
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/20/16 05:15	05/20/16 09:38	6050502
Carbon Disulfide	EPA 8260B	EPA 5030B	ND	100	1	ug/L		0.6	75-15-0	05/20/16 05:15	05/20/16 09:38	6050502
Carbon Tetrachloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	56-23-5	05/20/16 05:15	05/20/16 09:38	6050502
Chlorobenzene	EPA 8260B	EPA 5030B	ND	3.0	1	ug/L		0.4	108-90-7	05/20/16 05:15	05/20/16 09:38	6050502
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/20/16 05:15	05/20/16 09:38	6050502
Chloroform	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.3	67-66-3	05/20/16 05:15	05/20/16 09:38	6050502
Chloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	74-87-3	05/20/16 05:15	05/20/16 09:38	6050502
Dibromochloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	124-48-1	05/20/16 05:15	05/20/16 09:38	6050502
1,2-Dibromo-3-chloropropane	EPA 8260B	EPA 5030B	ND	13	1	ug/L		2.0	96-12-8	05/20/16 05:15	05/20/16 09:38	6050502
1,2-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/20/16 05:15	05/20/16 09:38	6050502
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/20/16 05:15	05/20/16 09:38	6050502
1,2-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	95-50-1	05/20/16 05:15	05/20/16 09:38	6050502
1,4-Dichlorobenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	106-46-7	05/20/16 05:15	05/20/16 09:38	6050502
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.5	110-57-6	05/20/16 05:15	05/20/16 09:38	6050502
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/20/16 05:15	05/20/16 09:38	6050502
1,2-Dichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	107-06-2	05/20/16 05:15	05/20/16 09:38	6050502

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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-Trip Blank
Lab No: AZE0545-47
Matrix: Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/16/16 00:00
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
1,1-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	75-35-4	05/20/16 05:15	05/20/16 09:38	6050502
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.5	156-59-2	05/20/16 05:15	05/20/16 09:38	6050502
trans-1,2-Dichloroethene	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	156-60-5	05/20/16 05:15	05/20/16 09:38	6050502
1,2-Dichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	78-87-5	05/20/16 05:15	05/20/16 09:38	6050502
cis-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-01-5	05/20/16 05:15	05/20/16 09:38	6050502
trans-1,3-Dichloropropene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	10061-02-6	05/20/16 05:15	05/20/16 09:38	6050502
Ethylbenzene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.2	100-41-4	05/20/16 05:15	05/20/16 09:38	6050502
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/20/16 05:15	05/20/16 09:38	6050502
Methyl Butyl Ketone (2-Hexanone)	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.9	591-78-6	05/20/16 05:15	05/20/16 09:38	6050502
Methylene Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-09-2	05/20/16 05:15	05/20/16 09:38	6050502
Methyl Ethyl Ketone (2-Butanone)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.1	78-93-3	05/20/16 05:15	05/20/16 09:38	6050502
4-Methyl-2-pentanone (MIBK)	EPA 8260B	EPA 5030B	ND	100	1	ug/L		1.7	108-10-1	05/20/16 05:15	05/20/16 09:38	6050502
Styrene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	100-42-5	05/20/16 05:15	05/20/16 09:38	6050502
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.6	630-20-6	05/20/16 05:15	05/20/16 09:38	6050502
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/20/16 05:15	05/20/16 09:38	6050502
Tetrachloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	127-18-4	05/20/16 05:15	05/20/16 09:38	6050502
Toluene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.3	108-88-3	05/20/16 05:15	05/20/16 09:38	6050502
1,1,1-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	71-55-6	05/20/16 05:15	05/20/16 09:38	6050502
1,1,2-Trichloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.8	79-00-5	05/20/16 05:15	05/20/16 09:38	6050502
Trichloroethene	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.4	79-01-6	05/20/16 05:15	05/20/16 09:38	6050502
Trichlorofluoromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	75-69-4	05/20/16 05:15	05/20/16 09:38	6050502

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-Trip Blank
Lab No: AZE0545-47
Matrix: Water

Project: Cabarrus Co - 2 & 3
Date/Time Sampled: 05/16/16 00:00
Date/Time Received: 05/19/16 15:05

Report No.: AZE0545

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Volatile Organic Compounds by EPA 8260												
1,2,3-Trichloropropane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	96-18-4	05/20/16 05:15	05/20/16 09:38	6050502
Vinyl Acetate	EPA 8260B	EPA 5030B	ND	50	1	ug/L		0.8	108-05-4	05/20/16 05:15	05/20/16 09:38	6050502
Vinyl Chloride	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	75-01-4	05/20/16 05:15	05/20/16 09:38	6050502
Xylenes, total	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	1330-20-7	05/20/16 05:15	05/20/16 09:38	6050502
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	94 %		80-120				1868-53-7	05/20/16 05:15	05/20/16 09:38	6050502
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	100 %		78-120				17060-07-0	05/20/16 05:15	05/20/16 09:38	6050502
Surr: Toluene-d8	EPA 8260B	EPA 5030B	101 %		80-120				2037-26-5	05/20/16 05:15	05/20/16 09:38	6050502
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	107 %		80-120				460-00-4	05/20/16 05:15	05/20/16 09:38	6050502

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Attention: Mr. Mat Colone

June 09, 2016

General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050434 - SM 5210 B										
Blank (6050434-BLK1)							Prepared: 05/18/16 Analyzed: 05/23/16			
Biochemical Oxygen Demand	ND	2000	ug/L							
LCS (6050434-BS1)							Prepared: 05/18/16 Analyzed: 05/23/16			
Biochemical Oxygen Demand	200000	2000	ug/L	198000		101	85-115			
Duplicate (6050434-DUP1)		**Source: AZE0504-01**					Prepared: 05/18/16 Analyzed: 05/23/16			
Biochemical Oxygen Demand	ND	10000	ug/L		ND				20	
Batch 6050450 - SM 2320 B										
Blank (6050450-BLK1)							Prepared & Analyzed: 05/19/16			
Alkalinity as CaCO3	ND	1000	ug/L							
LCS (6050450-BS1)							Prepared & Analyzed: 05/19/16			
Alkalinity as CaCO3	100000	1000	ug/L	100000		100	85-115			
Duplicate (6050450-DUP1)		**Source: AZE0540-01**					Prepared & Analyzed: 05/19/16			
Alkalinity as CaCO3	85000	1000	ug/L		85000			0	10	
Batch 6050461 - SM 5210 B										
Blank (6050461-BLK1)							Prepared: 05/19/16 Analyzed: 05/24/16			
Biochemical Oxygen Demand	ND	2000	ug/L							
LCS (6050461-BS1)							Prepared: 05/19/16 Analyzed: 05/24/16			
Biochemical Oxygen Demand	191000	2000	ug/L	198000		96	85-115			

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June 09, 2016

General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050461 - SM 5210 B										
Duplicate (6050461-DUP1)		**Source: AZE0564-01**					Prepared: 05/19/16	Analyzed: 05/24/16		
Biochemical Oxygen Demand	189000	43000	ug/L		182000			4	20	
Batch 6050485 - SM 5210 B										
Blank (6050485-BLK1)							Prepared: 05/20/16	Analyzed: 05/25/16		
Biochemical Oxygen Demand	ND	2000	ug/L							
LCS (6050485-BS1)							Prepared: 05/20/16	Analyzed: 05/25/16		
Biochemical Oxygen Demand	200000	2000	ug/L	198000		101	85-115			
Duplicate (6050485-DUP1)		**Source: AZE0594-01**					Prepared: 05/20/16	Analyzed: 05/25/16		
Biochemical Oxygen Demand	187000	13000	ug/L		220000			16	20	
Batch 6050491 - SM 2320 B										
Blank (6050491-BLK1)							Prepared & Analyzed: 05/20/16			
Alkalinity as CaCO3	ND	1000	ug/L							
LCS (6050491-BS1)							Prepared & Analyzed: 05/20/16			
Alkalinity as CaCO3	100000	1000	ug/L	100000		100	85-115			
Duplicate (6050491-DUP1)		**Source: AZE0545-06**					Prepared & Analyzed: 05/20/16			
Alkalinity as CaCO3	420000	1000	ug/L		425000			1	10	
Batch 6050505 - EPA 9060A										
Blank (6050505-BLK1)							Prepared & Analyzed: 05/21/16			
Total Organic Carbon	ND	1000	ug/L							

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Attention: Mr. Mat Colone

June 09, 2016

General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050505 - EPA 9060A										
LCS (6050505-BS1)							Prepared & Analyzed: 05/21/16			
Total Organic Carbon	19700	1000	ug/L	20000		98	88-112			
Matrix Spike (6050505-MS1)		**Source: AZE0475-01**					Prepared & Analyzed: 05/21/16			
Total Organic Carbon	21000	1000	ug/L	20000	1060	100	67-141			
Matrix Spike Dup (6050505-MSD1)		**Source: AZE0475-01**					Prepared & Analyzed: 05/21/16			
Total Organic Carbon	20800	1000	ug/L	20000	1060	99	67-141	1	16	
Batch 6050509 - SM 5220 D										
Blank (6050509-BLK1)							Prepared & Analyzed: 05/23/16			
Chemical Oxygen Demand	ND	10000	ug/L							
LCS (6050509-BS1)							Prepared & Analyzed: 05/23/16			
Chemical Oxygen Demand	204000	10000	ug/L	200000		102	90-110			
Matrix Spike (6050509-MS1)		**Source: AZE0494-01RE1**					Prepared & Analyzed: 05/23/16			
Chemical Oxygen Demand	4660000	160000	ug/L	800000	488000	521	90-110			QM-05
Matrix Spike (6050509-MS2)		**Source: AZE0618-01**					Prepared & Analyzed: 05/23/16			
Chemical Oxygen Demand	237000	10000	ug/L	200000	ND	119	90-110			QM-05
Matrix Spike Dup (6050509-MSD1)		**Source: AZE0494-01RE1**					Prepared & Analyzed: 05/23/16			
Chemical Oxygen Demand	4660000	160000	ug/L	800000	488000	521	90-110	0	10	QM-05
Batch 6050522 - SM 2540 C										
Blank (6050522-BLK1)							Prepared & Analyzed: 05/23/16			
Total Dissolved Solids	ND	10000	ug/L							

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Attention: Mr. Mat Colone

June 09, 2016

General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050522 - SM 2540 C										
LCS (6050522-BS1)							Prepared & Analyzed: 05/23/16			
Total Dissolved Solids	400000	10000	ug/L	400000		100	84-108			
Duplicate (6050522-DUP1)		**Source: AZE0540-03**					Prepared & Analyzed: 05/23/16			
Total Dissolved Solids	96000	10000	ug/L		103000			7	10	
Duplicate (6050522-DUP2)		**Source: AZE0540-10**					Prepared & Analyzed: 05/23/16			
Total Dissolved Solids	141000	10000	ug/L		128000			10	10	
Batch 6050561 - SM 4500-S D										
Blank (6050561-BLK1)							Prepared & Analyzed: 05/24/16			
Total Sulfide	ND	200	ug/L							
LCS (6050561-BS1)							Prepared & Analyzed: 05/24/16			
Total Sulfide	499	200	ug/L	538.80		92.6	80-120			
Matrix Spike (6050561-MS1)		**Source: AZE0468-01**					Prepared & Analyzed: 05/24/16			
Total Sulfide	608	200	ug/L	538.80	ND	113	30-129			
Matrix Spike Dup (6050561-MSD1)		**Source: AZE0468-01**					Prepared & Analyzed: 05/24/16			
Total Sulfide	591	200	ug/L	538.80	ND	110	30-129	2.84	10	

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Attention: Mr. Mat Colone

June 09, 2016

Inorganic Anions - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050405 - EPA 300.0										
Blank (6050405-BLK1)							Prepared & Analyzed: 05/18/16			
Chloride	ND	1000	ug/L							
Nitrate as N	ND	50	ug/L							
Sulfate	ND	5000	ug/L							
LCS (6050405-BS1)							Prepared & Analyzed: 05/18/16			
Chloride	9760	1000	ug/L	10010		98	90-110			
Nitrate as N	9810	50	ug/L	10010		98	90-110			
Sulfate	10000	5000	ug/L	10010		100	90-110			
Matrix Spike (6050405-MS1)	**Source: AZE0497-01**						Prepared & Analyzed: 05/18/16			
Chloride	73200	1000	ug/L	10010	67500	58	90-110			QM-02
Nitrate as N	9700	50	ug/L	10010	177	95	90-110			
Sulfate	18500	5000	ug/L	10010	9040	94	90-110			
Matrix Spike (6050405-MS2)	**Source: AZE0544-01**						Prepared & Analyzed: 05/18/16			
Chloride	13400	1000	ug/L	10010	3730	97	90-110			
Nitrate as N	9610	50	ug/L	10010	79.0	95	90-110			
Sulfate	10700	5000	ug/L	10010	1040	96	90-110			
Matrix Spike Dup (6050405-MSD1)	**Source: AZE0497-01**						Prepared & Analyzed: 05/18/16			
Chloride	73200	1000	ug/L	10010	67500	57	90-110	0.06	15	QM-02
Nitrate as N	9710	50	ug/L	10010	177	95	90-110	0.1	15	
Sulfate	18500	5000	ug/L	10010	9040	95	90-110	0.09	15	
Batch 6050469 - EPA 300.0										
Blank (6050469-BLK1)							Prepared & Analyzed: 05/19/16			
Chloride	ND	1000	ug/L							

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Attention: Mr. Mat Colone

June 09, 2016

Inorganic Anions - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050469 - EPA 300.0										
Blank (6050469-BLK1)							Prepared & Analyzed: 05/19/16			
Nitrate as N	ND	50	ug/L							
Sulfate	ND	5000	ug/L							
LCS (6050469-BS1)							Prepared & Analyzed: 05/19/16			
Chloride	9900	1000	ug/L	10010		99	90-110			
Nitrate as N	9880	50	ug/L	10010		99	90-110			
Sulfate	9960	5000	ug/L	10010		100	90-110			
Matrix Spike (6050469-MS1)		**Source: AZE0572-06**					Prepared & Analyzed: 05/19/16			
Chloride	52800	1000	ug/L	10010	47800	49	90-110			QM-02
Nitrate as N	10100	50	ug/L	10010	444	96	90-110			
Sulfate	20100	5000	ug/L	10010	11000	91	90-110			
Matrix Spike (6050469-MS2)		**Source: AZE0545-29**					Prepared & Analyzed: 05/19/16			
Chloride	12400	1000	ug/L	10010	2790	96	90-110			
Nitrate as N	9770	50	ug/L	10010	ND	98	90-110			
Sulfate	11000	5000	ug/L	10010	1380	96	90-110			
Matrix Spike Dup (6050469-MSD1)		**Source: AZE0572-06**					Prepared & Analyzed: 05/19/16			
Chloride	52500	1000	ug/L	10010	47800	47	90-110	0.4	15	QM-02
Nitrate as N	10100	50	ug/L	10010	444	96	90-110	0.06	15	
Sulfate	20100	5000	ug/L	10010	11000	91	90-110	0.3	15	
Batch 6050603 - EPA 9056A										
Blank (6050603-BLK1)							Prepared & Analyzed: 05/25/16			
Chloride	ND	1000	ug/L							
Nitrate as N	ND	50	ug/L							

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Inorganic Anions - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050603 - EPA 9056A										
Blank (6050603-BLK1)							Prepared & Analyzed: 05/25/16			
Sulfate	ND	5000	ug/L							
LCS (6050603-BS1)							Prepared & Analyzed: 05/25/16			
Chloride	9670	1000	ug/L	10010		97	90-110			
Nitrate as N	9960	50	ug/L	10010		100	90-110			
Sulfate	9770	5000	ug/L	10010		98	90-110			
Matrix Spike (6050603-MS1)	**Source: AZE0694-01**						Prepared & Analyzed: 05/25/16			
Chloride	73100	1000	ug/L	10010	86100	0	90-110			QM-02
Nitrate as N	9920	50	ug/L	10010	126	98	90-110			
Sulfate	18300	5000	ug/L	10010	ND	183	90-110			QM-05
Matrix Spike (6050603-MS2)	**Source: AZE0540-09**						Prepared: 05/25/16 Analyzed: 05/26/16			
Chloride	14900	1000	ug/L	10010	5010	99	90-110			
Nitrate as N	10000	50	ug/L	10010	520	95	90-110			
Sulfate	12800	5000	ug/L	10010	3330	94	90-110			
Matrix Spike Dup (6050603-MSD1)	**Source: AZE0694-01**						Prepared & Analyzed: 05/25/16			
Chloride	73000	1000	ug/L	10010	86100	0	90-110	0.1	15	QM-02
Nitrate as N	9900	50	ug/L	10010	126	98	90-110	0.2	15	
Sulfate	18300	5000	ug/L	10010	ND	183	90-110	0.1	15	QM-05

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Metals, Total - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050611 - EPA 3005A										
Blank (6050611-BLK1)							Prepared & Analyzed: 05/26/16			
Antimony	ND	6.00	ug/L							
Arsenic	ND	10.0	ug/L							
Barium	ND	100	ug/L							
Beryllium	ND	1.00	ug/L							
Cadmium	ND	1.00	ug/L							
Chromium	ND	10.0	ug/L							
Cobalt	ND	10.0	ug/L							
Copper	ND	10.0	ug/L							
Iron	ND	40.0	ug/L							
Lead	ND	10.0	ug/L							
Manganese	ND	10.0	ug/L							
Nickel	ND	50.0	ug/L							
Selenium	ND	10.0	ug/L							
Silver	ND	10.0	ug/L							
Thallium	ND	5.50	ug/L							
Vanadium	ND	25.0	ug/L							
Zinc	ND	10.0	ug/L							
LCS (6050611-BS1)							Prepared & Analyzed: 05/26/16			
Antimony	98.6	6.00	ug/L	100.00		99	80-120			
Arsenic	98.7	10.0	ug/L	100.00		99	80-120			
Barium	99.8	100	ug/L	100.00		100	80-120			J
Beryllium	98.6	1.00	ug/L	100.00		99	80-120			
Cadmium	96.9	1.00	ug/L	100.00		97	80-120			
Chromium	100	10.0	ug/L	100.00		100	80-120			
Cobalt	97.2	10.0	ug/L	100.00		97	80-120			
Copper	96.4	10.0	ug/L	100.00		96	80-120			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050611 - EPA 3005A										
LCS (6050611-BS1)							Prepared & Analyzed: 05/26/16			
Iron	1000	40.0	ug/L	1000.0		100	80-120			
Lead	95.9	10.0	ug/L	100.00		96	80-120			
Manganese	104	10.0	ug/L	100.00		104	80-120			
Nickel	99.2	50.0	ug/L	100.00		99	80-120			
Selenium	102	10.0	ug/L	100.00		102	80-120			
Silver	100	10.0	ug/L	100.00		100	80-120			
Thallium	97.4	5.50	ug/L	100.00		97	80-120			
Vanadium	99.9	25.0	ug/L	100.00		100	80-120			
Zinc	99.1	10.0	ug/L	100.00		99	80-120			
Matrix Spike (6050611-MS1)	**Source: AZE0540-01**						Prepared & Analyzed: 05/26/16			
Antimony	99.4	6.00	ug/L	100.00	1.32	98	75-125			
Arsenic	95.9	10.0	ug/L	100.00	ND	96	75-125			
Barium	176	100	ug/L	100.00	68.4	107	75-125			
Beryllium	98.7	1.00	ug/L	100.00	ND	99	75-125			
Cadmium	93.9	1.00	ug/L	100.00	ND	94	75-125			
Chromium	102	10.0	ug/L	100.00	ND	102	75-125			
Cobalt	98.3	10.0	ug/L	100.00	ND	98	75-125			
Copper	96.5	10.0	ug/L	100.00	1.03	95	75-125			
Iron	1010	40.0	ug/L	1000.0	37.8	97	75-125			
Lead	96.0	10.0	ug/L	100.00	ND	96	75-125			
Manganese	108	10.0	ug/L	100.00	6.13	102	75-125			
Nickel	95.9	50.0	ug/L	100.00	ND	96	75-125			
Selenium	95.5	10.0	ug/L	100.00	0.95	95	75-125			
Silver	98.9	10.0	ug/L	100.00	ND	99	75-125			
Thallium	98.2	5.50	ug/L	100.00	0.12	98	75-125			
Vanadium	105	25.0	ug/L	100.00	4.10	101	75-125			

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Metals, Total - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050611 - EPA 3005A										
Matrix Spike (6050611-MS1)		**Source: AZE0540-01**					Prepared & Analyzed: 05/26/16			
Zinc	98.6	10.0	ug/L	100.00	ND	99	75-125			
Matrix Spike Dup (6050611-MSD1)		**Source: AZE0540-01**					Prepared & Analyzed: 05/26/16			
Antimony	96.1	6.00	ug/L	100.00	1.32	95	75-125	3	20	
Arsenic	96.7	10.0	ug/L	100.00	ND	97	75-125	0.8	20	
Barium	173	100	ug/L	100.00	68.4	105	75-125	1	20	
Beryllium	102	1.00	ug/L	100.00	ND	102	75-125	4	20	
Cadmium	97.7	1.00	ug/L	100.00	ND	98	75-125	4	20	
Chromium	105	10.0	ug/L	100.00	ND	105	75-125	3	20	
Cobalt	102	10.0	ug/L	100.00	ND	102	75-125	3	20	
Copper	97.9	10.0	ug/L	100.00	1.03	97	75-125	1	20	
Iron	1040	40.0	ug/L	1000.0	37.8	100	75-125	3	20	
Lead	96.7	10.0	ug/L	100.00	ND	97	75-125	0.8	20	
Manganese	109	10.0	ug/L	100.00	6.13	103	75-125	1	20	
Nickel	100	50.0	ug/L	100.00	ND	100	75-125	4	20	
Selenium	98.7	10.0	ug/L	100.00	0.95	98	75-125	3	20	
Silver	99.2	10.0	ug/L	100.00	ND	99	75-125	0.3	20	
Thallium	98.2	5.50	ug/L	100.00	0.12	98	75-125	0.06	20	
Vanadium	106	25.0	ug/L	100.00	4.10	101	75-125	0.7	20	
Zinc	97.6	10.0	ug/L	100.00	ND	98	75-125	1	20	
Post Spike (6050611-PS1)		**Source: AZE0540-01**					Prepared & Analyzed: 05/26/16			
Antimony	90.5		ug/L	100.00	1.32	89	80-120			
Arsenic	95.0		ug/L	100.00	0.58	94	80-120			
Barium	174		ug/L	100.00	68.4	105	80-120			
Beryllium	104		ug/L	100.00	0.02	104	80-120			
Cadmium	97.7		ug/L	100.00	0.007	98	80-120			

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Metals, Total - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050611 - EPA 3005A										
Post Spike (6050611-PS1)		**Source: AZE0540-01**					Prepared & Analyzed: 05/26/16			
Chromium	101		ug/L	100.00	0.15	101	80-120			
Cobalt	102		ug/L	100.00	0.03	102	80-120			
Copper	96.9		ug/L	100.00	1.03	96	80-120			
Iron	1020		ug/L	1000.0	37.8	98	80-120			
Lead	95.0		ug/L	100.00	0.01	95	80-120			
Manganese	109		ug/L	100.00	6.13	103	80-120			
Nickel	99.3		ug/L	100.00	0.11	99	80-120			
Selenium	99.5		ug/L	100.00	0.95	99	80-120			
Silver	99.4		ug/L	100.00	0.10	99	80-120			
Thallium	97.1		ug/L	100.00	0.12	97	80-120			
Vanadium	107		ug/L	100.00	4.10	103	80-120			
Zinc	97.4		ug/L	100.00	0.52	97	80-120			
Batch 6050664 - EPA 3005A										
Blank (6050664-BLK1)							Prepared & Analyzed: 05/31/16			
Antimony	ND	6.00	ug/L							
Arsenic	ND	10.0	ug/L							
Barium	ND	100	ug/L							
Beryllium	ND	1.00	ug/L							
Cadmium	ND	1.00	ug/L							
Chromium	ND	10.0	ug/L							
Cobalt	ND	10.0	ug/L							
Copper	ND	10.0	ug/L							
Lead	ND	10.0	ug/L							
Nickel	ND	50.0	ug/L							
Selenium	ND	10.0	ug/L							

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050664 - EPA 3005A										
Blank (6050664-BLK1)							Prepared & Analyzed: 05/31/16			
Silver	ND	10.0	ug/L							
Thallium	ND	5.50	ug/L							
Vanadium	ND	25.0	ug/L							
Zinc	ND	10.0	ug/L							
LCS (6050664-BS1)							Prepared & Analyzed: 05/31/16			
Antimony	112	6.00	ug/L	100.00		112	80-120			
Arsenic	102	10.0	ug/L	100.00		102	80-120			
Barium	107	100	ug/L	100.00		107	80-120			
Beryllium	108	1.00	ug/L	100.00		108	80-120			
Cadmium	102	1.00	ug/L	100.00		102	80-120			
Chromium	104	10.0	ug/L	100.00		104	80-120			
Cobalt	103	10.0	ug/L	100.00		103	80-120			
Copper	103	10.0	ug/L	100.00		103	80-120			
Lead	103	10.0	ug/L	100.00		103	80-120			
Nickel	102	50.0	ug/L	100.00		102	80-120			
Selenium	102	10.0	ug/L	100.00		102	80-120			
Silver	104	10.0	ug/L	100.00		104	80-120			
Thallium	102	5.50	ug/L	100.00		102	80-120			
Vanadium	106	25.0	ug/L	100.00		106	80-120			
Zinc	106	10.0	ug/L	100.00		106	80-120			
Matrix Spike (6050664-MS1)	**Source: AZE0545-10**						Prepared & Analyzed: 05/31/16			
Antimony	111	6.00	ug/L	100.00	ND	111	75-125			
Arsenic	103	10.0	ug/L	100.00	ND	103	75-125			
Barium	136	100	ug/L	100.00	26.2	110	75-125			
Beryllium	97.6	1.00	ug/L	100.00	ND	98	75-125			

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Metals, Total - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050664 - EPA 3005A										
Matrix Spike (6050664-MS1)		**Source: AZE0545-10**					Prepared & Analyzed: 05/31/16			
Cadmium	104	1.00	ug/L	100.00	ND	104	75-125			
Chromium	107	10.0	ug/L	100.00	1.46	106	75-125			
Cobalt	104	10.0	ug/L	100.00	ND	104	75-125			
Copper	103	10.0	ug/L	100.00	ND	103	75-125			
Lead	100	10.0	ug/L	100.00	0.35	100	75-125			
Nickel	105	50.0	ug/L	100.00	0.99	104	75-125			
Selenium	102	10.0	ug/L	100.00	ND	102	75-125			
Silver	99.8	10.0	ug/L	100.00	ND	100	75-125			
Thallium	99.4	5.50	ug/L	100.00	ND	99	75-125			
Vanadium	109	25.0	ug/L	100.00	3.48	106	75-125			
Zinc	107	10.0	ug/L	100.00	2.10	105	75-125			
Matrix Spike Dup (6050664-MSD1)		**Source: AZE0545-10**					Prepared & Analyzed: 05/31/16			
Antimony	108	6.00	ug/L	100.00	ND	108	75-125	2	20	
Arsenic	99.4	10.0	ug/L	100.00	ND	99	75-125	3	20	
Barium	132	100	ug/L	100.00	26.2	106	75-125	3	20	
Beryllium	96.4	1.00	ug/L	100.00	ND	96	75-125	1	20	
Cadmium	101	1.00	ug/L	100.00	ND	101	75-125	3	20	
Chromium	103	10.0	ug/L	100.00	1.46	102	75-125	4	20	
Cobalt	101	10.0	ug/L	100.00	ND	101	75-125	3	20	
Copper	101	10.0	ug/L	100.00	ND	101	75-125	2	20	
Lead	99.3	10.0	ug/L	100.00	0.35	99	75-125	0.9	20	
Nickel	101	50.0	ug/L	100.00	0.99	100	75-125	4	20	
Selenium	98.5	10.0	ug/L	100.00	ND	98	75-125	3	20	
Silver	99.2	10.0	ug/L	100.00	ND	99	75-125	0.6	20	
Thallium	97.9	5.50	ug/L	100.00	ND	98	75-125	2	20	
Vanadium	107	25.0	ug/L	100.00	3.48	104	75-125	2	20	

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050664 - EPA 3005A										
Matrix Spike Dup (6050664-MSD1)		**Source: AZE0545-10**					Prepared & Analyzed: 05/31/16			
Zinc	104	10.0	ug/L	100.00	2.10	102	75-125	3	20	
Post Spike (6050664-PS1)		**Source: AZE0545-10**					Prepared & Analyzed: 05/31/16			
Antimony	96.4		ug/L	100.00	0.11	96	80-120			
Arsenic	98.2		ug/L	100.00	0.36	98	80-120			
Barium	127		ug/L	100.00	26.2	101	80-120			
Beryllium	96.5		ug/L	100.00	0.09	96	80-120			
Cadmium	99.5		ug/L	100.00	0.006	99	80-120			
Chromium	103		ug/L	100.00	1.46	101	80-120			
Cobalt	99.3		ug/L	100.00	0.10	99	80-120			
Copper	98.1		ug/L	100.00	0.35	98	80-120			
Lead	97.1		ug/L	100.00	0.35	97	80-120			
Nickel	99.5		ug/L	100.00	0.99	99	80-120			
Selenium	101		ug/L	100.00	0.22	100	80-120			
Silver	95.4		ug/L	100.00	0.004	95	80-120			
Thallium	96.9		ug/L	100.00	0.006	97	80-120			
Vanadium	104		ug/L	100.00	3.48	101	80-120			
Zinc	101		ug/L	100.00	2.10	99	80-120			
Batch 6060013 - EPA 7470A										
Blank (6060013-BLK1)							Prepared: 06/01/16 Analyzed: 06/02/16			
Mercury	ND	0.200	ug/L							
LCS (6060013-BS1)							Prepared: 06/01/16 Analyzed: 06/02/16			
Mercury	2.13	0.200	ug/L	2.5000		85	80-120			

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June 09, 2016

Metals, Total - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6060013 - EPA 7470A										
Duplicate (6060013-DUP1)		**Source: AZE0475-19RE1**					Prepared: 06/01/16	Analyzed: 06/02/16		
Mercury	1.35	0.200	ug/L		1.19			12	20	
Duplicate (6060013-DUP2)		**Source: AZE0475-57RE1**					Prepared: 06/01/16	Analyzed: 06/02/16		
Mercury	0.659	0.200	ug/L		0.675			2	20	
Matrix Spike (6060013-MS1)		**Source: AZE0546-06**					Prepared: 06/01/16	Analyzed: 06/02/16		
Mercury	1.84	0.200	ug/L	2.5000	ND	74	75-125			QM-05
Matrix Spike Dup (6060013-MSD1)		**Source: AZE0546-06**					Prepared: 06/01/16	Analyzed: 06/02/16		
Mercury	1.77	0.200	ug/L	2.5000	ND	71	75-125	4	20	QM-05
Post Spike (6060013-PS1)		**Source: AZE0546-06**					Prepared: 06/01/16	Analyzed: 06/02/16		
Mercury	1.30		ug/L	1.6667	0.074	73	80-120			QM-05
Batch 6060033 - EPA 3005A										
Blank (6060033-BLK1)							Prepared: 06/02/16	Analyzed: 06/03/16		
Antimony	0.29	6.00	ug/L							J
Arsenic	ND	10.0	ug/L							
Barium	ND	100	ug/L							
Beryllium	ND	1.00	ug/L							
Cadmium	ND	1.00	ug/L							
Chromium	ND	10.0	ug/L							
Cobalt	ND	10.0	ug/L							
Copper	ND	10.0	ug/L							
Lead	ND	10.0	ug/L							
Nickel	ND	50.0	ug/L							
Selenium	ND	10.0	ug/L							

PACE ANALYTICAL SERVICES, INC.

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Attention: Mr. Mat Colone

June 09, 2016

Metals, Total - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6060033 - EPA 3005A										
Blank (6060033-BLK1)							Prepared: 06/02/16 Analyzed: 06/03/16			
Silver	ND	10.0	ug/L							
Thallium	ND	5.50	ug/L							
Vanadium	ND	25.0	ug/L							
Zinc	ND	10.0	ug/L							
LCS (6060033-BS1)							Prepared: 06/02/16 Analyzed: 06/03/16			
Antimony	104	6.00	ug/L	100.00		104	80-120			
Arsenic	97.3	10.0	ug/L	100.00		97	80-120			
Barium	97.1	100	ug/L	100.00		97	80-120			J
Beryllium	103	1.00	ug/L	100.00		103	80-120			
Cadmium	101	1.00	ug/L	100.00		101	80-120			
Chromium	104	10.0	ug/L	100.00		104	80-120			
Cobalt	102	10.0	ug/L	100.00		102	80-120			
Copper	101	10.0	ug/L	100.00		101	80-120			
Lead	95.9	10.0	ug/L	100.00		96	80-120			
Nickel	99.9	50.0	ug/L	100.00		100	80-120			
Selenium	99.0	10.0	ug/L	100.00		99	80-120			
Silver	98.8	10.0	ug/L	100.00		99	80-120			
Thallium	95.8	5.50	ug/L	100.00		96	80-120			
Vanadium	102	25.0	ug/L	100.00		102	80-120			
Zinc	103	10.0	ug/L	100.00		103	80-120			
Matrix Spike (6060033-MS1)	**Source: AZE0545-37**						Prepared: 06/02/16 Analyzed: 06/03/16			
Antimony	102	6.00	ug/L	100.00	0.37	101	75-125			
Arsenic	98.2	10.0	ug/L	100.00	ND	98	75-125			
Barium	122	100	ug/L	100.00	20.7	101	75-125			
Beryllium	90.6	1.00	ug/L	100.00	0.20	90	75-125			

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Metals, Total - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6060033 - EPA 3005A										
Matrix Spike (6060033-MS1)		**Source: AZE0545-37**					Prepared: 06/02/16 Analyzed: 06/03/16			
Cadmium	101	1.00	ug/L	100.00	ND	101	75-125			
Chromium	105	10.0	ug/L	100.00	1.07	104	75-125			
Cobalt	99.9	10.0	ug/L	100.00	ND	100	75-125			
Copper	98.8	10.0	ug/L	100.00	ND	99	75-125			
Lead	93.8	10.0	ug/L	100.00	0.33	93	75-125			
Nickel	99.8	50.0	ug/L	100.00	1.75	98	75-125			
Selenium	102	10.0	ug/L	100.00	ND	102	75-125			
Silver	96.9	10.0	ug/L	100.00	ND	97	75-125			
Thallium	96.0	5.50	ug/L	100.00	ND	96	75-125			
Vanadium	105	25.0	ug/L	100.00	3.09	102	75-125			
Zinc	101	10.0	ug/L	100.00	2.42	99	75-125			
Matrix Spike Dup (6060033-MSD1)		**Source: AZE0545-37**					Prepared: 06/02/16 Analyzed: 06/03/16			
Antimony	105	6.00	ug/L	100.00	0.37	105	75-125	3	20	
Arsenic	99.9	10.0	ug/L	100.00	ND	100	75-125	2	20	
Barium	127	100	ug/L	100.00	20.7	106	75-125	4	20	
Beryllium	94.9	1.00	ug/L	100.00	0.20	95	75-125	5	20	
Cadmium	104	1.00	ug/L	100.00	ND	104	75-125	3	20	
Chromium	108	10.0	ug/L	100.00	1.07	106	75-125	2	20	
Cobalt	102	10.0	ug/L	100.00	ND	102	75-125	3	20	
Copper	102	10.0	ug/L	100.00	ND	102	75-125	3	20	
Lead	97.9	10.0	ug/L	100.00	0.33	98	75-125	4	20	
Nickel	104	50.0	ug/L	100.00	1.75	102	75-125	4	20	
Selenium	99.7	10.0	ug/L	100.00	ND	100	75-125	3	20	
Silver	100	10.0	ug/L	100.00	ND	100	75-125	3	20	
Thallium	98.1	5.50	ug/L	100.00	ND	98	75-125	2	20	
Vanadium	108	25.0	ug/L	100.00	3.09	105	75-125	4	20	

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June 09, 2016

Metals, Total - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6060033 - EPA 3005A										
Matrix Spike Dup (6060033-MSD1)		**Source: AZE0545-37**					Prepared: 06/02/16	Analyzed: 06/03/16		
Zinc	105	10.0	ug/L	100.00	2.42	103	75-125	4	20	
Post Spike (6060033-PS1)		**Source: AZE0545-37**					Prepared: 06/02/16	Analyzed: 06/03/16		
Antimony	87.5		ug/L	100.00	0.37	87	80-120			
Arsenic	98.4		ug/L	100.00	-0.04	98	80-120			
Barium	122		ug/L	100.00	20.7	101	80-120			
Beryllium	93.2		ug/L	100.00	0.20	93	80-120			
Cadmium	101		ug/L	100.00	0.006	101	80-120			
Chromium	104		ug/L	100.00	1.07	103	80-120			
Cobalt	101		ug/L	100.00	0.08	101	80-120			
Copper	98.8		ug/L	100.00	0.26	99	80-120			
Lead	94.6		ug/L	100.00	0.33	94	80-120			
Nickel	99.8		ug/L	100.00	1.75	98	80-120			
Selenium	98.2		ug/L	100.00	-0.34	99	80-120			
Silver	96.1		ug/L	100.00	0.004	96	80-120			
Thallium	95.3		ug/L	100.00	0.02	95	80-120			
Vanadium	106		ug/L	100.00	3.09	103	80-120			
Zinc	104		ug/L	100.00	2.42	102	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 6050502 - EPA 5030B										
Blank (6050502-BLK1)							Prepared & Analyzed: 05/20/16			
Acetone	ND	100	ug/L							
Acrylonitrile	ND	200	ug/L							
Benzene	ND	1.0	ug/L							
Bromochloromethane	ND	3.0	ug/L							
Bromodichloromethane	ND	1.0	ug/L							
Bromoform	ND	3.0	ug/L							
Bromomethane	ND	10	ug/L							
Carbon Disulfide	ND	100	ug/L							
Carbon Tetrachloride	ND	1.0	ug/L							
Chlorobenzene	ND	3.0	ug/L							
Chloroethane	ND	10	ug/L							
Chloroform	ND	5.0	ug/L							
Chloromethane	ND	1.0	ug/L							
Dibromochloromethane	ND	1.0	ug/L							
1,2-Dibromo-3-chloropropane	ND	13	ug/L							
1,2-Dibromoethane	ND	1.0	ug/L							
Dibromomethane	ND	10	ug/L							
1,2-Dichlorobenzene	ND	5.0	ug/L							
1,4-Dichlorobenzene	ND	1.0	ug/L							
trans-1,4-Dichloro-2-butene	ND	100	ug/L							
1,1-Dichloroethane	ND	5.0	ug/L							
1,2-Dichloroethane	ND	1.0	ug/L							
1,1-Dichloroethene	ND	5.0	ug/L							
cis-1,2-Dichloroethene	ND	5.0	ug/L							
trans-1,2-Dichloroethene	ND	5.0	ug/L							
1,2-Dichloropropane	ND	1.0	ug/L							
cis-1,3-Dichloropropene	ND	1.0	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 6050502 - EPA 5030B										
Blank (6050502-BLK1)							Prepared & Analyzed: 05/20/16			
trans-1,3-Dichloropropene	ND	1.0	ug/L							
Ethylbenzene	ND	1.0	ug/L							
Iodomethane	ND	10	ug/L							
Methyl Butyl Ketone (2-Hexanone)	ND	50	ug/L							
Methylene Chloride	ND	1.0	ug/L							
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L							
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L							
Styrene	ND	1.0	ug/L							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							
Tetrachloroethene	ND	1.0	ug/L							
Toluene	ND	1.0	ug/L							
1,1,1-Trichloroethane	ND	1.0	ug/L							
1,1,2-Trichloroethane	ND	1.0	ug/L							
Trichloroethene	ND	1.0	ug/L							
Trichlorofluoromethane	ND	1.0	ug/L							
1,2,3-Trichloropropane	ND	1.0	ug/L							
Vinyl Acetate	ND	50	ug/L							
Vinyl Chloride	ND	1.0	ug/L							
Xylenes, total	ND	4.0	ug/L							
Surr: Dibromofluoromethane	*46*		*ug/L*	*50.000*		*93*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*50*		*ug/L*	*50.000*		*100*	*78-120*			
Surr: Toluene-d8	*51*		*ug/L*	*50.000*		*102*	*80-120*			
Surr: 4-Bromofluorobenzene	*53*		*ug/L*	*50.000*		*107*	*80-120*			
LCS (6050502-BS1)							Prepared & Analyzed: 05/20/16			

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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 6050502 - EPA 5030B										
LCS (6050502-BS1)							Prepared & Analyzed: 05/20/16			
Benzene	51		ug/L	50.000		101	67-134			
Chlorobenzene	51		ug/L	50.000		103	69-122			
1,1-Dichloroethene	49		ug/L	50.000		98	58-142			
Toluene	50		ug/L	50.000		101	68-127			
Trichloroethene	53		ug/L	50.000		106	72-132			
Surr: Dibromofluoromethane	*48*		*ug/L*	*50.000*		*95*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*50*		*ug/L*	*50.000*		*101*	*78-120*			
Surr: Toluene-d8	*51*		*ug/L*	*50.000*		*101*	*80-120*			
Surr: 4-Bromofluorobenzene	*53*		*ug/L*	*50.000*		*106*	*80-120*			
Matrix Spike (6050502-MS1)		**Source: AZE0496-20**					Prepared & Analyzed: 05/20/16			
Benzene	51		ug/L	50.000	ND	101	67-134			
Chlorobenzene	50		ug/L	50.000	ND	101	69-122			
1,1-Dichloroethene	52		ug/L	50.000	ND	103	58-142			
Toluene	50		ug/L	50.000	ND	100	68-127			
Trichloroethene	53		ug/L	50.000	ND	107	72-132			
Surr: Dibromofluoromethane	*46*		*ug/L*	*50.000*		*91*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*51*		*ug/L*	*50.000*		*102*	*78-120*			
Surr: Toluene-d8	*51*		*ug/L*	*50.000*		*101*	*80-120*			
Surr: 4-Bromofluorobenzene	*53*		*ug/L*	*50.000*		*107*	*80-120*			
Matrix Spike Dup (6050502-MSD1)		**Source: AZE0496-20**					Prepared & Analyzed: 05/20/16			
Benzene	52		ug/L	50.000	ND	104	67-134	3	9	
Chlorobenzene	52		ug/L	50.000	ND	104	69-122	3	13	
1,1-Dichloroethene	53		ug/L	50.000	ND	105	58-142	2	9	

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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 6050502 - EPA 5030B										
Matrix Spike Dup (6050502-MSD1)	**Source: AZE0496-20**						Prepared & Analyzed: 05/20/16			
Toluene	50		ug/L	50.000	ND	101	68-127	0.6	9	
Trichloroethene	54		ug/L	50.000	ND	109	72-132	2	11	
Surr: Dibromofluoromethane	*47*		*ug/L*	*50.000*		*93*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*51*		*ug/L*	*50.000*		*102*	*78-120*			
Surr: Toluene-d8	*50*		*ug/L*	*50.000*		*101*	*80-120*			
Surr: 4-Bromofluorobenzene	*53*		*ug/L*	*50.000*		*107*	*80-120*			
Batch 6050503 - EPA 5030B										
Blank (6050503-BLK1)							Prepared & Analyzed: 05/20/16			
Acetone	ND	100	ug/L							
Acrylonitrile	ND	200	ug/L							
Benzene	ND	1.0	ug/L							
Bromochloromethane	ND	3.0	ug/L							
Bromodichloromethane	ND	1.0	ug/L							
Bromoform	ND	3.0	ug/L							
Bromomethane	ND	10	ug/L							
Carbon Disulfide	ND	100	ug/L							
Carbon Tetrachloride	ND	1.0	ug/L							
Chlorobenzene	ND	3.0	ug/L							
Chloroethane	ND	10	ug/L							
Chloroform	ND	5.0	ug/L							
Chloromethane	ND	1.0	ug/L							
Dibromochloromethane	ND	1.0	ug/L							
1,2-Dibromo-3-chloropropane	ND	13	ug/L							
1,2-Dibromoethane	ND	1.0	ug/L							

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050503 - EPA 5030B										
Blank (6050503-BLK1)							Prepared & Analyzed: 05/20/16			
Dibromomethane	ND	10	ug/L							
1,2-Dichlorobenzene	ND	5.0	ug/L							
1,4-Dichlorobenzene	ND	1.0	ug/L							
trans-1,4-Dichloro-2-butene	ND	100	ug/L							
1,1-Dichloroethane	ND	5.0	ug/L							
1,2-Dichloroethane	ND	1.0	ug/L							
1,1-Dichloroethene	ND	5.0	ug/L							
cis-1,2-Dichloroethene	ND	5.0	ug/L							
trans-1,2-Dichloroethene	ND	5.0	ug/L							
1,2-Dichloropropane	ND	1.0	ug/L							
cis-1,3-Dichloropropene	ND	1.0	ug/L							
trans-1,3-Dichloropropene	ND	1.0	ug/L							
Ethylbenzene	ND	1.0	ug/L							
Iodomethane	ND	10	ug/L							
Methyl Butyl Ketone (2-Hexanone)	ND	50	ug/L							
Methylene Chloride	ND	1.0	ug/L							
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L							
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L							
Styrene	ND	1.0	ug/L							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							
Tetrachloroethene	ND	1.0	ug/L							
Toluene	ND	1.0	ug/L							
1,1,1-Trichloroethane	ND	1.0	ug/L							
1,1,2-Trichloroethane	ND	1.0	ug/L							
Trichloroethene	ND	1.0	ug/L							
Trichlorofluoromethane	ND	1.0	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 6050503 - EPA 5030B										
Blank (6050503-BLK1)							Prepared & Analyzed: 05/20/16			
1,2,3-Trichloropropane	ND	1.0	ug/L							
Vinyl Acetate	ND	50	ug/L							
Vinyl Chloride	ND	1.0	ug/L							
Xylenes, total	ND	4.0	ug/L							
Surr: Dibromofluoromethane	*47*		*ug/L*	*50.000*		*94*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*51*		*ug/L*	*50.000*		*101*	*78-120*			
Surr: Toluene-d8	*51*		*ug/L*	*50.000*		*103*	*80-120*			
Surr: 4-Bromofluorobenzene	*53*		*ug/L*	*50.000*		*105*	*80-120*			
LCS (6050503-BS1)							Prepared & Analyzed: 05/20/16			
Benzene	52		ug/L	50.000		104	67-134			
Chlorobenzene	55		ug/L	50.000		109	69-122			
1,1-Dichloroethene	53		ug/L	50.000		105	58-142			
Toluene	51		ug/L	50.000		101	68-127			
Trichloroethene	53		ug/L	50.000		106	72-132			
Surr: Dibromofluoromethane	*47*		*ug/L*	*50.000*		*94*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*51*		*ug/L*	*50.000*		*101*	*78-120*			
Surr: Toluene-d8	*51*		*ug/L*	*50.000*		*103*	*80-120*			
Surr: 4-Bromofluorobenzene	*53*		*ug/L*	*50.000*		*106*	*80-120*			
Matrix Spike (6050503-MS1)	**Source: AZE0540-10**						Prepared & Analyzed: 05/20/16			
Benzene	51		ug/L	50.000	ND	103	67-134			
Chlorobenzene	52		ug/L	50.000	ND	104	69-122			
1,1-Dichloroethene	51		ug/L	50.000	ND	103	58-142			
Toluene	50		ug/L	50.000	ND	100	68-127			

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

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 6050503 - EPA 5030B										
Matrix Spike (6050503-MS1)	**Source: AZE0540-10**						Prepared & Analyzed: 05/20/16			
Trichloroethene	53		ug/L	50.000	ND	105	72-132			
Surr: Dibromofluoromethane	*46*		*ug/L*	*50.000*		*93*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*51*		*ug/L*	*50.000*		*102*	*78-120*			
Surr: Toluene-d8	*51*		*ug/L*	*50.000*		*102*	*80-120*			
Surr: 4-Bromofluorobenzene	*53*		*ug/L*	*50.000*		*105*	*80-120*			
Matrix Spike Dup (6050503-MSD1)	**Source: AZE0540-10**						Prepared & Analyzed: 05/20/16			
Benzene	51		ug/L	50.000	ND	102	67-134	0.9	9	
Chlorobenzene	51		ug/L	50.000	ND	103	69-122	0.7	13	
1,1-Dichloroethene	51		ug/L	50.000	ND	102	58-142	0.4	9	
Toluene	49		ug/L	50.000	ND	99	68-127	1	9	
Trichloroethene	52		ug/L	50.000	ND	105	72-132	0.8	11	
Surr: Dibromofluoromethane	*47*		*ug/L*	*50.000*		*93*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*52*		*ug/L*	*50.000*		*104*	*78-120*			
Surr: Toluene-d8	*51*		*ug/L*	*50.000*		*102*	*80-120*			
Surr: 4-Bromofluorobenzene	*54*		*ug/L*	*50.000*		*107*	*80-120*			
Batch 6050511 - EPA 5030B										
Blank (6050511-BLK1)							Prepared & Analyzed: 05/21/16			
Acetone	ND	100	ug/L							
Acrylonitrile	ND	200	ug/L							
Benzene	ND	1.0	ug/L							
Bromochloromethane	ND	3.0	ug/L							
Bromodichloromethane	ND	1.0	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 6050511 - EPA 5030B										
Blank (6050511-BLK1)							Prepared & Analyzed: 05/21/16			
Bromoform	ND	3.0	ug/L							
Bromomethane	ND	10	ug/L							
Carbon Disulfide	ND	100	ug/L							
Carbon Tetrachloride	ND	1.0	ug/L							
Chlorobenzene	ND	3.0	ug/L							
Chloroethane	ND	10	ug/L							
Chloroform	ND	5.0	ug/L							
Chloromethane	ND	1.0	ug/L							
Dibromochloromethane	ND	1.0	ug/L							
1,2-Dibromo-3-chloropropane	ND	13	ug/L							
1,2-Dibromoethane	ND	1.0	ug/L							
Dibromomethane	ND	10	ug/L							
1,2-Dichlorobenzene	ND	5.0	ug/L							
1,4-Dichlorobenzene	ND	1.0	ug/L							
trans-1,4-Dichloro-2-butene	ND	100	ug/L							
1,1-Dichloroethane	ND	5.0	ug/L							
1,2-Dichloroethane	ND	1.0	ug/L							
1,1-Dichloroethene	ND	5.0	ug/L							
cis-1,2-Dichloroethene	ND	5.0	ug/L							
trans-1,2-Dichloroethene	ND	5.0	ug/L							
1,2-Dichloropropane	ND	1.0	ug/L							
cis-1,3-Dichloropropene	ND	1.0	ug/L							
trans-1,3-Dichloropropene	ND	1.0	ug/L							
Ethylbenzene	ND	1.0	ug/L							
Iodomethane	ND	10	ug/L							
Methyl Butyl Ketone (2-Hexanone)	ND	50	ug/L							
Methylene Chloride	ND	1.0	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 6050511 - EPA 5030B										
Blank (6050511-BLK1)							Prepared & Analyzed: 05/21/16			
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L							
4-Methyl-2-pentanone (MIBK)	ND	100	ug/L							
Styrene	ND	1.0	ug/L							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							
Tetrachloroethene	ND	1.0	ug/L							
Toluene	ND	1.0	ug/L							
1,1,1-Trichloroethane	ND	1.0	ug/L							
1,1,2-Trichloroethane	ND	1.0	ug/L							
Trichloroethene	ND	1.0	ug/L							
Trichlorofluoromethane	ND	1.0	ug/L							
1,2,3-Trichloropropane	ND	1.0	ug/L							
Vinyl Acetate	ND	50	ug/L							
Vinyl Chloride	ND	1.0	ug/L							
Xylenes, total	ND	5.0	ug/L							
Surr: Dibromofluoromethane	*45*		*ug/L*	*50.000*		*91*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*50*		*ug/L*	*50.000*		*100*	*78-120*			
Surr: Toluene-d8	*50*		*ug/L*	*50.000*		*100*	*80-120*			
Surr: 4-Bromofluorobenzene	*53*		*ug/L*	*50.000*		*107*	*80-120*			
LCS (6050511-BS1)							Prepared & Analyzed: 05/21/16			
Benzene	52		ug/L	50.000		103	67-134			
Chlorobenzene	53		ug/L	50.000		106	69-122			
1,1-Dichloroethene	51		ug/L	50.000		103	58-142			
Toluene	50		ug/L	50.000		101	68-127			
Trichloroethene	54		ug/L	50.000		108	72-132			

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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 6050511 - EPA 5030B										
LCS (6050511-BS1)							Prepared & Analyzed: 05/21/16			
Surr: Dibromofluoromethane	*46*		*ug/L*	*50.000*		*92*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*49*		*ug/L*	*50.000*		*98*	*78-120*			
Surr: Toluene-d8	*51*		*ug/L*	*50.000*		*101*	*80-120*			
Surr: 4-Bromofluorobenzene	*54*		*ug/L*	*50.000*		*108*	*80-120*			
Matrix Spike (6050511-MS1)	**Source: AZE0545-07**						Prepared & Analyzed: 05/21/16			
Benzene	50		ug/L	50.000	0.4	100	67-134			
Chlorobenzene	51		ug/L	50.000	0.8	101	69-122			
1,1-Dichloroethene	51		ug/L	50.000	ND	102	58-142			
Toluene	50		ug/L	50.000	0.5	99	68-127			
Trichloroethene	53		ug/L	50.000	ND	106	72-132			
Surr: Dibromofluoromethane	*46*		*ug/L*	*50.000*		*92*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*50*		*ug/L*	*50.000*		*100*	*78-120*			
Surr: Toluene-d8	*51*		*ug/L*	*50.000*		*102*	*80-120*			
Surr: 4-Bromofluorobenzene	*53*		*ug/L*	*50.000*		*106*	*80-120*			
Matrix Spike Dup (6050511-MSD1)	**Source: AZE0545-07**						Prepared & Analyzed: 05/21/16			
Benzene	48		ug/L	50.000	0.4	95	67-134	5	9	
Chlorobenzene	48		ug/L	50.000	0.8	94	69-122	7	13	
1,1-Dichloroethene	47		ug/L	50.000	ND	95	58-142	7	9	
Toluene	46		ug/L	50.000	0.5	92	68-127	7	9	
Trichloroethene	49		ug/L	50.000	ND	98	72-132	7	11	
Surr: Dibromofluoromethane	*46*		*ug/L*	*50.000*		*93*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*51*		*ug/L*	*50.000*		*102*	*78-120*			

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June 09, 2016

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 6050511 - EPA 5030B										
Matrix Spike Dup (6050511-MSD1)		**Source: AZE0545-07**					Prepared & Analyzed: 05/21/16			
Surr: Toluene-d8	*51*		*ug/L*	*50.000*		*102*	*80-120*			
Surr: 4-Bromofluorobenzene	*52*		*ug/L*	*50.000*		*104*	*80-120*			
Batch 6050513 - EPA 5030B										
Blank (6050513-BLK1)							Prepared & Analyzed: 05/23/16			
Acetone	ND	100	ug/L							
Acrylonitrile	ND	200	ug/L							
Benzene	ND	1.0	ug/L							
Bromochloromethane	ND	3.0	ug/L							
Bromodichloromethane	ND	1.0	ug/L							
Bromoform	ND	3.0	ug/L							
Bromomethane	ND	10	ug/L							
Carbon Disulfide	ND	100	ug/L							
Carbon Tetrachloride	ND	1.0	ug/L							
Chlorobenzene	ND	3.0	ug/L							
Chloroethane	ND	10	ug/L							
Chloroform	ND	5.0	ug/L							
Chloromethane	ND	1.0	ug/L							
Dibromochloromethane	ND	1.0	ug/L							
1,2-Dibromo-3-chloropropane	ND	13	ug/L							
1,2-Dibromoethane	ND	1.0	ug/L							
Dibromomethane	ND	10	ug/L							
1,2-Dichlorobenzene	ND	5.0	ug/L							
1,4-Dichlorobenzene	ND	1.0	ug/L							
trans-1,4-Dichloro-2-butene	ND	100	ug/L							

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050513 - EPA 5030B										
Blank (6050513-BLK1)							Prepared & Analyzed: 05/23/16			
1,1-Dichloroethane	ND	5.0	ug/L							
1,2-Dichloroethane	ND	1.0	ug/L							
1,1-Dichloroethene	ND	5.0	ug/L							
cis-1,2-Dichloroethene	ND	5.0	ug/L							
trans-1,2-Dichloroethene	ND	5.0	ug/L							
1,2-Dichloropropane	ND	1.0	ug/L							
cis-1,3-Dichloropropene	ND	1.0	ug/L							
trans-1,3-Dichloropropene	ND	1.0	ug/L							
Ethylbenzene	ND	1.0	ug/L							
Iodomethane	ND	10	ug/L							
Methyl Butyl Ketone (2-Hexanone)	ND	50	ug/L							
Methylene Chloride	ND	1.0	ug/L							
Methyl Ethyl Ketone (2-Butanone)	ND	100	ug/L							
4-Methyl-2-pentanone (MIBK)	ND	100	ug/L							
Styrene	ND	1.0	ug/L							
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							
Tetrachloroethene	ND	1.0	ug/L							
Toluene	ND	1.0	ug/L							
1,1,1-Trichloroethane	ND	1.0	ug/L							
1,1,2-Trichloroethane	ND	1.0	ug/L							
Trichloroethene	ND	1.0	ug/L							
Trichlorofluoromethane	ND	1.0	ug/L							
1,2,3-Trichloropropane	ND	1.0	ug/L							
Vinyl Acetate	ND	50	ug/L							
Vinyl Chloride	ND	1.0	ug/L							
Xylenes, total	ND	5.0	ug/L							

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050513 - EPA 5030B										
Blank (6050513-BLK1)							Prepared & Analyzed: 05/23/16			
Surr: Dibromofluoromethane	*46*		*ug/L*	*50.000*		*92*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*49*		*ug/L*	*50.000*		*98*	*78-120*			
Surr: Toluene-d8	*49*		*ug/L*	*50.000*		*98*	*80-120*			
Surr: 4-Bromofluorobenzene	*53*		*ug/L*	*50.000*		*106*	*80-120*			
LCS (6050513-BS1)							Prepared & Analyzed: 05/23/16			
Benzene	51		ug/L	50.000		103	67-134			
Chlorobenzene	52		ug/L	50.000		105	69-122			
1,1-Dichloroethene	48		ug/L	50.000		95	58-142			
Toluene	50		ug/L	50.000		100	68-127			
Trichloroethene	54		ug/L	50.000		108	72-132			
Surr: Dibromofluoromethane	*48*		*ug/L*	*50.000*		*95*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*50*		*ug/L*	*50.000*		*99*	*78-120*			
Surr: Toluene-d8	*49*		*ug/L*	*50.000*		*97*	*80-120*			
Surr: 4-Bromofluorobenzene	*53*		*ug/L*	*50.000*		*106*	*80-120*			
Matrix Spike (6050513-MS1)		**Source: AZE0545-40**					Prepared & Analyzed: 05/23/16			
Benzene	51		ug/L	50.000	0.2	101	67-134			
Chlorobenzene	53		ug/L	50.000	2.2	101	69-122			
1,1-Dichloroethene	49		ug/L	50.000	ND	99	58-142			
Toluene	49		ug/L	50.000	ND	99	68-127			
Trichloroethene	53		ug/L	50.000	ND	106	72-132			
Surr: Dibromofluoromethane	*48*		*ug/L*	*50.000*		*96*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*53*		*ug/L*	*50.000*		*107*	*78-120*			

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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 6050513 - EPA 5030B										
Matrix Spike (6050513-MS1)		**Source: AZE0545-40**					Prepared & Analyzed: 05/23/16			
Surr: Toluene-d8	*50*		*ug/L*	*50.000*		*101*	*80-120*			
Surr: 4-Bromofluorobenzene	*51*		*ug/L*	*50.000*		*101*	*80-120*			
Matrix Spike Dup (6050513-MSD1)		**Source: AZE0545-40**					Prepared & Analyzed: 05/23/16			
Benzene	53		ug/L	50.000	0.2	105	67-134	4	9	
Chlorobenzene	54		ug/L	50.000	2.2	105	69-122	3	13	
1,1-Dichloroethene	50		ug/L	50.000	ND	100	58-142	2	9	
Toluene	52		ug/L	50.000	ND	103	68-127	4	9	
Trichloroethene	55		ug/L	50.000	ND	111	72-132	4	11	
Surr: Dibromofluoromethane	*48*		*ug/L*	*50.000*		*96*	*80-120*			
Surr: 1,2-Dichloroethane-d4	*51*		*ug/L*	*50.000*		*102*	*78-120*			
Surr: Toluene-d8	*48*		*ug/L*	*50.000*		*97*	*80-120*			
Surr: 4-Bromofluorobenzene	*55*		*ug/L*	*50.000*		*110*	*80-120*			

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Base/Neutral Extractable Organic Compounds by EPA 8270 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050558 - EPA 3510C										
Blank (6050558-BLK1)							Prepared: 05/24/16 Analyzed: 05/27/16			
Bis(2-ethylhexyl)phthalate	ND	10	ug/L							
Surr: Nitrobenzene-d5	*32*		*ug/L*	*50.000*		*63*	*15-120*			
Surr: 2-Fluorobiphenyl	*32*		*ug/L*	*50.000*		*63*	*23-120*			
Surr: p-Terphenyl-dl4	*38*		*ug/L*	*50.000*		*76*	*53-121*			
LCS (6050558-BS1)							Prepared: 05/24/16 Analyzed: 05/27/16			
Acenaphthene	38	10	ug/L	50.000		76	47-120			
1,4-Dichlorobenzene	26	10	ug/L	50.000		53	25-120			
2,4-Dinitrotoluene	39	20	ug/L	50.000		77	55-120			
N-Nitrosodi-n-propylamine	40	10	ug/L	50.000		80	38-120			
Pyrene	41	10	ug/L	50.000		82	53-120			
1,2,4-Trichlorobenzene	31	10	ug/L	50.000		62	29-120			
Surr: Nitrobenzene-d5	*35*		*ug/L*	*50.000*		*70*	*15-120*			
Surr: 2-Fluorobiphenyl	*39*		*ug/L*	*50.000*		*78*	*23-120*			
Surr: p-Terphenyl-dl4	*47*		*ug/L*	*50.000*		*95*	*53-121*			
Matrix Spike (6050558-MS1)	**Source: AZE0545-01**						Prepared: 05/24/16 Analyzed: 05/27/16			
Acenaphthene	32	10	ug/L	50.000	ND	65	40-120			
1,4-Dichlorobenzene	21	10	ug/L	50.000	ND	42	10-120			
2,4-Dinitrotoluene	39	20	ug/L	50.000	ND	77	46-122			
N-Nitrosodi-n-propylamine	37	10	ug/L	50.000	ND	75	35-120			
Pyrene	44	10	ug/L	50.000	ND	87	54-120			
1,2,4-Trichlorobenzene	25	10	ug/L	50.000	ND	50	12-120			
Surr: Nitrobenzene-d5	*27*		*ug/L*	*50.000*		*55*	*15-120*			

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Base/Neutral Extractable Organic Compounds by EPA 8270 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050558 - EPA 3510C										
Matrix Spike (6050558-MS1)		**Source: AZE0545-01**					Prepared: 05/24/16 Analyzed: 05/27/16			
Surr: 2-Fluorobiphenyl	*31*		*ug/L*	*50.000*		*62*	*23-120*			
Surr: p-Terphenyl-dl4	*46*		*ug/L*	*50.000*		*91*	*53-121*			
Matrix Spike Dup (6050558-MSD1)		**Source: AZE0545-01**					Prepared: 05/24/16 Analyzed: 05/27/16			
Acenaphthene	27	10	ug/L	50.000	ND	54	40-120	18	29	
1,4-Dichlorobenzene	18	10	ug/L	50.000	ND	35	10-120	16	31	
2,4-Dinitrotoluene	28	20	ug/L	50.000	ND	56	46-122	31	26	QR-02
N-Nitrosodi-n-propylamine	28	10	ug/L	50.000	ND	55	35-120	30	28	QR-02
Pyrene	32	10	ug/L	50.000	ND	65	54-120	29	21	QR-02
1,2,4-Trichlorobenzene	21	10	ug/L	50.000	ND	43	12-120	16	32	
Surr: Nitrobenzene-d5	*23*		*ug/L*	*50.000*		*47*	*15-120*			
Surr: 2-Fluorobiphenyl	*27*		*ug/L*	*50.000*		*54*	*23-120*			
Surr: p-Terphenyl-dl4	*36*		*ug/L*	*50.000*		*72*	*53-121*			

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

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
NELDW	FL DOH NELAC (Drinking Water) Eff: 07/01/2015	E87315	06/30/2016
SC	South Carolina	98011001	06/30/2016
TX	Texas	T104704397-08-TX	03/31/2017
VA	Virginia	1340	12/14/2016

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June 09, 2016

Legend

Defination of Laboratory Terms

ND - Not Detected at levels greater than or equal to SWSL/RL
SWSL/RL - NC DENR Solid Waste Section LImit/Reporting Limit (Adjusted for DF/Prep Factor)
DF - Dilution Factor
MDL - Method Detection Limit

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.

QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD and/or PDS due to suspected matrix interference. Sample results for the QC batch were accepted based on acceptable LCS recoveries.

QM-02 The spike recovery is outside acceptance limits due to insignificant spike amount as compared to sample concentration.

J Estimated value less than Reporting Limit (RL) but greater than Method Detection Limit(MDL) (CLP J-Flag).

B-01 Analyte was detected in the associated method blank at an estimated level equal to or greater than the MDL. Sample values reported as greater than the MDL and less than 10x the method blank value are reported as estimated values.

> Greater than the result value reported.

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

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June 09, 2016

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110 TECHNOLOGY PARKWAY NORCROSS, GA 30092
(770) 734-4200 : FAX (770) 734-4201 : www.asi-lab.com

CHAIN OF CUSTODY RECORD

PAGE: 1 OF 5

CLIENT NAME: Camp Dresser & McKee - Raleigh

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 5400 Glenwood Ave. Raleigh, NC 27612 919/787-5620

ATTENTION: Mr. Mat Colone

CC:

REQUESTED COMPLETION DATE:

PO #:

PROJECT NAME/STATE: CABARRUS CO LANDFILL UNIT 2+3

PROJECT #:

ANALYSIS REQUESTED

DATE	TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	NC APPENDIX I VOC	NC APPENDIX I METALS	BOD, NO3	Cl, SO4, ALK	TOC	COD	SULFIDE	METHANE,ETHANE,ETHENE; DIS CO2, VOL. FATTY ACIDS	DISSOLVED HYDROGEN	BNA (Bis-2)	LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
5/17/16	1444	Gw		X	AMW-2D 1302	16	3	1	1	X	2	1	1	4	1	2	1	
5/17/16	1343	Gw		X	AMW-2S 1302	14	3	1	1	X	2	1	1	4	1		2	
5/17/16	1123	Gw		X	MW-A 1302	14	3	1	1	X	2	1	1	4	1		3	
5/17/16	0854	Gw		X	CD-1S 1302	16	3	1	1	X	2	1	1	4	1	2	4	
5/17/16	1014	Gw		X	CD-1D 1302	5	3	1		1							5	

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

PRESERVATION: 1 - HCl, 4°; 2 - H2SO4, 4°; 3 - HNO3, 4°; 4 - NaOH, 4°; 5 - NaOH/ZnAc, 4°; 6 - Na2S2O3, 4°; 7 - 4°

*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

SAMPLED BY AND TITLE: R. Powe, M. Williams — DATE/TIME: See Above

RECEIVED BY: — DATE/TIME:

RELINQUISHED BY: [signature] — DATE/TIME: 5/18/16

RELINQUISHED BY: — DATE/TIME:

RECEIVED BY LAB: Maalman — DATE/TIME: 05/18/16 1242

pH: Lab No Preserved — Ice: Yes or No

SAMPLE SHIPPED VIA: UPS FED-EX COURIER CLIENT OTHER FIELD SERVICES

Temperature: 1°C — Custody Seal: Intact Broken Missing — COOLER #:

FOR LAB USE ONLY

LAB #: AZE0545

In-house location:

Entered into LIMS: NR

Please use Black Ink to complete form

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Environmental Monitoring & Laboratory Analysis
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Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

ASI ANALYTICAL SERVICES, INC.
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CHAIN OF CUSTODY RECORD

PAGE: 2 OF 2

CLIENT NAME: Camp Dresser & McKee - Raleigh
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 5400 Glenwood Ave. Raleigh, NC 27612 919/787-5920
ATTENTION: Mr. Mat Colone
CC:
REQUESTED COMPLETION DATE:
PO #:
PROJECT NAME/STATE: CABARRUS CO LANDFILL UNIT 2 & 3
PROJECT #:

ANALYSIS REQUESTED

DATE	TIME	MATRIX CODE*	SAMPLE IDENTIFICATION	NC APPENDIX I VOC (1)	NC APPENDIX I METALS (3)	BOD, NO3 (7)	Cl, SO4, ALK (7)	TOC (1)	COD (1)	SULFIDE (2)	METHANE, ETHANE, ETHENE, DIS CO2, VOL. FATTY ACIDS (5)	DISSOLVED HYDROGEN (7)	BNA (BIS-2) (7)	REMARKS/ADDITIONAL INFORMATION
5/18/16	0900	GW	1302 MW-E	14	3	1	1	X	2	1	1	4		6
5/18/16	1010	GW	1302 MW-E deep	14	3	1	1	X	2	1	1	4	2	7
5/18/16	1333	GW	1302 MW-D	14	3	1	1	X	2	1	1	4	1	8
5/18/16	1232	GW	1302 MW-15	14	3	1	1	X	2	1	1	4	1	9
5/18/16	1509	GW	1302 MW-3	14	3	1	1	X	2	1	1	4		10
5/17/16	1055	GW	1302 MW-J	5	3								2	11
5/18/16	0900	GW	↳	1		1								12
5/17/16	1321	GW	1302 MW-K	3	3									13
5/18/16	0825	GW	↳	1		1								14
5/17/16	1415	GW	1302 MW-M	3	3									15
5/18/16	0940	GW	↳	1		1								16

Preservatives: 1 = 3 = 7 = 1 = 2 = 5 = 7 = 7 = A

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

PRESERVATION: 1 - HCl, 4°; 2 - H2SO4, 4°; 3 - HNO3, 4°; 4 - NaOH, 4°; 5 - NaOH/ZnAc, 4°; 6 - Na2S2O3, 4°; 7 - 4°

*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

SAMPLED BY AND TITLE: R. Powe M. Williams — DATE/TIME: See Above — RELINQUISHED BY: Rey Powe — DATE/TIME: 5/18/16 @ 1620
RECEIVED BY: — DATE/TIME: — RELINQUISHED BY: — DATE/TIME:
RECEIVED BY LAB: — DATE/TIME: 05/19/16 0930 — SAMPLE SHIPPED VIA: UPS FED-EX — COURIER: — CLIENT — OTHER: — FIELD SERVICES:
Labor/Phone/Fax: — Cooler No — Temperature — Custody Seal: Intact — Broken — Missing — COOLER #:

FOR LAB USE ONLY
LAB #: AZE0545
In-house location:
Entered into LIMS: MR

Please use Black Ink to complete form

PACE ANALYTICAL SERVICES, INC.

Environmental Monitoring & Laboratory Analysis
110 Technology Parkway, Peachtree Corners, GA 30092

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5400 Glenwood Ave., Suite 300
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Attention: Mr. Mat Colone

June 09, 2016

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CHAIN OF CUSTODY RECORD

PAGE: 3 OF 5

CLIENT NAME: Camp Dresser & McKee - Raleigh
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 5400 Glenwood Ave. Raleigh, NC 27612 919/787-5920
ATTENTION: Mr. Mat Colone
CC:
REQUESTED COMPLETION DATE:
PO #:
PROJECT NAME/STATE: CABARRUS CO LANDFILL UNIT 2 & 3
PROJECT #:

ANALYSIS REQUESTED

DATE	TIME	MATRIX CODE* (GW)	# of CONTAINERS	SAMPLE IDENTIFICATION	RCRA (8/5-2)	RC APPI Metals	RC APPI VOC	REMARKS/ADDITIONAL INFORMATION	LAB #
5/17/16	1129	GW	3	1302 MW-X	3	1			17
5/18/16	0910	GW	1	↳					18
5/17/16	1128	GW	3	1302 CD-4 Rep	3				19
5/18/16	0838	GW	1	↳		1			20
5/17/16	0956	GW	3	1302 CD-6	3				21
5/18/16	0841	GW	1	↳		1			22
5/17/16	1250	GW	3	1302 - MW-C	3	2			23
5/18/16	0917	GW	1	↳		1			24
5/17/16	1342	GW	3	1302 MW-D	3				25
5/18/16	0932	GW	1	↳		1			26
5/17/16	1442	GW	3	1302 MW-F	3				27
5/18/16	1237	GW	1	↳		1			28

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

PRESERVATION: 1 - HCL, 4°; 2 - H2SO4, 4°; 3 - HNO3, 4°; 4 - NaOH, 4°; 5 - NaOH/ZnAc, 4°; 6 - Na2S2O3, 4°; 7 - 4°

*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

SAMPLED BY AND TITLE: R. Dave M. Williams — DATE/TIME: See Above
RELINQUISHED BY: — DATE/TIME: 5/19/16 0930
RECEIVED BY: — DATE/TIME: 05/19/16 0930
RELINQUISHED BY: — DATE/TIME:
RECEIVED BY: — DATE/TIME:

SAMPLE SHIPPED VIA: UPS FED-EX COURIER CLIENT OTHER
Custody Seal: Intact: Yes or No
Temperature: 1.6
Broken Missing
FIELD SERVICES
COOLER #:

FOR LAB USE ONLY
LAB #: AZE0545
In-house location:
Entered into LIMS:

Please use Black Ink to complete form

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

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CHAIN OF CUSTODY RECORD

PAGE: 4 OF 5

CLIENT NAME: Camp Dresser & McKee - Raleigh
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 5400 Glenwood Ave. Raleigh, NC 27612 919/787-5620
ATTENTION: Mr. Mat Colone
CC:
REQUESTED COMPLETION DATE:
PO #:
PROJECT NAME/STATE: CABARRUS CO LANDFILL UNIT 283
PROJECT #:

ANALYSIS REQUESTED

DATE	TIME	MATRIX CODE*	# of containers	NC APPENDIX I VOC	NC APPENDIX I METALS	BOD, NO3	Cl, SO4, ALK	TOC	COD	SULFIDE	METHANE, ETHANE, ETHENE; DIS CO2	VOL. FATTY ACIDS	DISSOLVED HYDROGEN	BNA (Bis-2)	SAMPLE IDENTIFICATION
5/18/16	0849	GW	14	3	1	1	X	2	1	1		4	1		1302 MW-L
5/19/16	0922	GW	4	3	1										1302 MW-L Deep
5/19/16	0935	GW	4	3	1										1302 MW-3 Deep
5/19/16	1002	GW	5	3										2	1302 MW-H
5/19/16	0847	GW	1	1											↳
5/19/16	1037	GW	3	3											1302 MW-H deep
5/19/16	0850	GW	1	1											↳
5/19/16	1214	GW	5	3										2	1302 MW-7
5/19/16	0900	GW	3	3											1302 MW-3
5/18/16	1228	GW	3	3											1302 MW-B
5/19/16	0922	GW	3	3											↳
5/19/16	0920	GW	3	3											1302 MW-G
5/19/16	0925	GW	3	3											↳
5/18/16	1352	GW	3	3											1302 MW-1
5/18/16	0913	GW	3	3											↳
5/19/16	—	GW	3	3											1302 Duplicate
5/19/16	—	GW													↳

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

PRESERVATION: 1 - HCL, 4°; 2 - H2SO4, 4°; 3 - HNO3, 4°; 4 - NaOH, 4°; 5 - NaOH/ZnAc, 4°; 6 - Na2S2O3, 4°; 7 - 4°

*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: R. Powe M. Willems — DATE/TIME: See Above
RECEIVED BY: — DATE/TIME:
RELINQUISHED BY: — DATE/TIME: 5/19/16 1505
RECEIVED BY: — DATE/TIME:
RELINQUISHED BY: — DATE/TIME:
RECEIVED BY LAB: — DATE/TIME: 05/19/16 1505

SAMPLE SHIPPED VIA: UPS FED-EX COURIER CLIENT OTHER: FIELD SERVICES
Temperature: Custody Seal: Intact Broken Missing COOLER #:

FOR LAB USE ONLY
LAB #: AZE0545
In-house location:
Entered into LIMS:

Lab Preserved: Yes or No
Ice: Yes or No

Please use Black Ink to complete form

PACE ANALYTICAL SERVICES, INC.

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

Camp Dresser & McKee Inc. - Raleigh
5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

250205

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ENVIRONMENTAL MONITORING & LABORATORY ANALYSIS
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CHAIN OF CUSTODY RECORD

PAGE: 5 OF 5

CLIENT NAME: Camp Dresser & McKee - Raleigh
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 5400 Glenwood Ave Raleigh NC 27612 919-787-5620
REPORT TO: MS Mat Colone
CC:
REQUESTED COMPLETION DATE:
PO #:
PROJECT NAME/STATE: Cabarrus Landfill Water 2013
PROJECT #:

ANALYSIS REQUESTED: CONTAINER TYPE: VOA P; PRESERVATION: HCl; # of containers: 1 3

DATE	TIME	MATRIX CODE*	COMPOSITE OR GRAB	SAMPLE IDENTIFICATION	NC Reg. 1 VOC Reg. Metals	REMARKS/ADDITIONAL INFORMATION
5/18/16	1332	WS	G	X1302 Equip Blank	4 3	46
5/18/16	—	W	G	X1302 Trip Blank	3 3	47

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

PRESERVATION: 1 - HCl, ≥9°C; 2 - H_2SO_4, ≤9°C; 3 - HNO_3; 4 - NaOH, ≥9°C; 5 - NaOH/ZnAc, ≥9°C; 6 - $Na_2S_2O_3$, ≥9°C; 7 - ≤9°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

SAMPLED BY AND TITLE: E Dolce — DATE/TIME:
RELINQUISHED BY: [signature] — DATE/TIME: 5/19/16 @ 1505
RECEIVED BY:
RELINQUISHED BY: — DATE/TIME:
RECEIVED BY LAB: [signature] — DATE/TIME: 05/19/16 1505
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER FS
Cooler ID:
# of Coolers:
Custody Seal: Intact Broken Not Present
Temp Upon Rec: 4.2 °C
Misc:

FOR LAB USE ONLY
LAB #: AZE0545
Entered into LIMS: MR

Revised 2015-11-09

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: 6/9/2016 4:47:09PM**

Attn: Mr. Mat Colone

Client: Camp Dresser & McKee Inc. - Raleigh
Project: Cabarrus Co - 2 & 3
Date Received: 05/18/16 12:45
Work Order: AZE0545
Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 47 **#Containers:** 238

Minimum Temp(C): 4.0 **Maximum Temp(C):** 4.0 **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:

The samples were received over 2 days on 05/18/2016 @12:45 and 05/19/2016 @09:30 and @15:05. MMR

Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

May 31, 2016

Betsy McDaniel
Analytical Services Inc.
110 Technology Parkway
Norcross, GA 30092
USA

RE: **NC / AZE0545**
Pace Workorder: 19200

Dear Betsy McDaniel:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday, May 24, 2016. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ruth Welsh 05/31/2016
Ruth.Welsh@pacelabs.com

Customer Service Representative

Enclosures

As a valued client we would appreciate your comments on our service.
Please email info@microseeps.com.

Total Number of Pages 34

CERTIFICATE OF ANALYSIS

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Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

LABORATORY ACCREDITATIONS & CERTIFICATIONS

Accreditor:	Pennsylvania Department of Environmental Protection, Bureau of Laboratories
Accreditation ID:	02-00538
Scope:	NELAP Non-Potable Water and Solid & Hazardous Waste
Accreditor:	South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification
Accreditation ID:	89009003
Scope:	Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: New Jersey, Department of Environmental Protection
Accreditation ID:	PA026
Scope:	Non-Potable Water; Solid and Chemical Materials
Accreditor:	NELAP: New York, Department of Health Wadsworth Center
Accreditation ID:	11815
Scope:	Non-Potable Water; Solid and Hazardous Waste
Accreditor:	State of Connecticut, Department of Public Health, Division of Environmental Health
Accreditation ID:	PH-0263
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: Texas, Commission on Environmental Quality
Accreditation ID:	T104704453-09-TX
Scope:	Non-Potable Water
Accreditor:	State of New Hampshire
Accreditation ID:	299409
Scope:	Non-potable water
Accreditor:	State of Georgia
Accreditation ID:	Chapter 391-3-26
Scope:	As per the Georgia EPD Rules and Regulations for Commercial Laboratories, PAES is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC).

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Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

SAMPLE SUMMARY

Workorder: 19200 NC / AZE0545

Lab ID	Sample ID	Matrix	Date Collected	Date Received
192000001	1302-AMW2D	Water	5/17/2016 14:44	5/24/2016 11:30
192000002	1302-AMW2D	Bubble Strip	5/17/2016 14:44	5/24/2016 11:30
192000003	1302-AMW2S	Water	5/17/2016 13:43	5/24/2016 11:30
192000004	1302-AMW2S	Bubble Strip	5/17/2016 13:43	5/24/2016 11:30
192000005	1302-MWA	Water	5/17/2016 11:23	5/24/2016 11:30
192000006	1302-MWA	Bubble Strip	5/17/2016 11:23	5/24/2016 11:30
192000007	1302-CD1S	Water	5/17/2016 08:59	5/24/2016 11:30
192000008	1302-CD1S	Bubble Strip	5/17/2016 08:59	5/24/2016 11:30
192000009	1302-MWE	Water	5/18/2016 09:00	5/24/2016 11:30
192000010	1302-MWE	Bubble Strip	5/18/2016 09:00	5/24/2016 11:30
192000011	1302-MWE DEEP	Water	5/18/2016 10:10	5/24/2016 11:30
192000012	1302-MWE DEEP	Bubble Strip	5/18/2016 10:10	5/24/2016 11:30
192000013	1302-AMW1D	Water	5/18/2016 13:33	5/24/2016 11:30
192000014	1302-AMW1D	Bubble Strip	5/18/2016 13:33	5/24/2016 11:30
192000015	1302-AMW1S	Water	5/18/2016 12:32	5/24/2016 11:30
192000016	1302-AMW1S	Bubble Strip	5/18/2016 12:32	5/24/2016 11:30
192000017	1302-MW3	Water	5/18/2016 15:09	5/24/2016 11:30
192000018	1302-MW3	Bubble Strip	5/18/2016 15:09	5/24/2016 11:30
192000019	1302-MWL	Water	5/19/2016 08:49	5/24/2016 11:30
192000020	1302-MWL	Bubble Strip	5/19/2016 08:49	5/24/2016 11:30

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PROJECT SUMMARY

Workorder: 19200 NC / AZE0545

Batch Comments

Batch: DISG/5401 - AM20GAX Water QC

The percent recovery for the laboratory control sample was above laboratory control limits. Analytes Carbon Dioxide and/or Oxygen. Results associated to the analytes in samples may be bias high.

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000001** Date Received: 5/24/2016 11:30 Matrix: Water

Sample ID: **1302-AMW2D** Date Collected: 5/17/2016 14:44

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	**0.20 U**	mg/l	0.20	0.0060	1	5/26/2016 10:33	KB	
Acetic Acid	**0.036J**	mg/l	0.10	0.0070	1	5/26/2016 10:33	KB	B
Propionic Acid	**0.10 U**	mg/l	0.10	0.0090	1	5/26/2016 10:33	KB	
Formic Acid	**0.095J**	mg/l	0.10	0.0050	1	5/26/2016 10:33	KB	B
Butyric Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 10:33	KB	
Pyruvic Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 10:33	KB	
i-Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 10:33	KB	
Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0060	1	5/26/2016 10:33	KB	
i-Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0040	1	5/26/2016 10:33	KB	
Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0070	1	5/26/2016 10:33	KB	
RISK - MICR								
Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	**0.49J**	ug/l	0.50	0.027	1	5/27/2016 17:27	GT	n
Ethane	**0.012J**	ug/l	0.10	0.0070	1	5/27/2016 17:27	GT	n
Ethene	**0.023J**	ug/l	0.10	0.0090	1	5/27/2016 17:27	GT	n
Carbon Dioxide	**160**	mg/l	5.0	0.24	1	5/27/2016 17:27	GT	M2,n

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000002** Date Received: 5/24/2016 11:30 Matrix: Bubble Strip
Sample ID: **1302-AMW2D** Date Collected: 5/17/2016 14:44

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Hydrogen	**1.0**	nM	0.60	0.075	1	5/27/2016 10:16	GT	n

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000003** Date Received: 5/24/2016 11:30 Matrix: Water

Sample ID: **1302-AMW2S** Date Collected: 5/17/2016 13:43

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	**0.20 U**	mg/l	0.20	0.0060	1	5/26/2016 11:27	KB	
Acetic Acid	**0.017J**	mg/l	0.10	0.0070	1	5/26/2016 11:27	KB	B
Propionic Acid	**0.10 U**	mg/l	0.10	0.0090	1	5/26/2016 11:27	KB	
Formic Acid	**0.038J**	mg/l	0.10	0.0050	1	5/26/2016 11:27	KB	B
Butyric Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 11:27	KB	
Pyruvic Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 11:27	KB	
i-Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 11:27	KB	
Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0060	1	5/26/2016 11:27	KB	
i-Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0040	1	5/26/2016 11:27	KB	
Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0070	1	5/26/2016 11:27	KB	
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**4.6**	ug/l	0.50	0.027	1	5/27/2016 17:39	GT	n
Ethane	**0.10 U**	ug/l	0.10	0.0070	1	5/27/2016 17:39	GT	n
Ethene	**0.012J**	ug/l	0.10	0.0090	1	5/27/2016 17:39	GT	n
Carbon Dioxide	**180**	mg/l	5.0	0.24	1	5/27/2016 17:39	GT	M2,n

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000004** Date Received: 5/24/2016 11:30 Matrix: Bubble Strip

Sample ID: **1302-AMW2S** Date Collected: 5/17/2016 13:43

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Hydrogen	**1.9**	nM	0.60	0.075	1	5/27/2016 10:38	GT	n

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000005** Date Received: 5/24/2016 11:30 Matrix: Water
Sample ID: **1302-MWA** Date Collected: 5/17/2016 11:23

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	**0.0075J**	mg/l	0.20	0.0060	1	5/26/2016 12:20	KB	
Acetic Acid	**0.21**	mg/l	0.10	0.0070	1	5/26/2016 12:20	KB	B
Propionic Acid	**0.10 U**	mg/l	0.10	0.0090	1	5/26/2016 12:20	KB	
Formic Acid	**0.032J**	mg/l	0.10	0.0050	1	5/26/2016 12:20	KB	B
Butyric Acid	**0.084J**	mg/l	0.10	0.0070	1	5/26/2016 12:20	KB	
Pyruvic Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 12:20	KB	
i-Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 12:20	KB	
Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0060	1	5/26/2016 12:20	KB	
i-Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0040	1	5/26/2016 12:20	KB	
Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0070	1	5/26/2016 12:20	KB	
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**11000**	ug/l	0.50	0.027	1	5/27/2016 17:53	GT	n
Ethane	**0.094J**	ug/l	0.10	0.0070	1	5/27/2016 17:53	GT	n
Ethene	**0.10 U**	ug/l	0.10	0.0090	1	5/27/2016 17:53	GT	n
Carbon Dioxide	**540**	mg/l	5.0	0.24	1	5/27/2016 17:53	GT	M2,n

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000006** Date Received: 5/24/2016 11:30 Matrix: Bubble Strip
Sample ID: **1302-MWA** Date Collected: 5/17/2016 11:23

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Hydrogen	1.3	nM	0.60	0.075	1	5/27/2016 10:58	GT	n

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000007** Date Received: 5/24/2016 11:30 Matrix: Water
Sample ID: **1302-CD1S** Date Collected: 5/17/2016 08:59

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	**0.011J**	mg/l	0.20	0.0060	1	5/26/2016 13:14	KB	
Acetic Acid	**0.020J**	mg/l	0.10	0.0070	1	5/26/2016 13:14	KB	B
Propionic Acid	**0.10 U**	mg/l	0.10	0.0090	1	5/26/2016 13:14	KB	
Formic Acid	**0.045J**	mg/l	0.10	0.0050	1	5/26/2016 13:14	KB	B
Butyric Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 13:14	KB	
Pyruvic Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 13:14	KB	
i-Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 13:14	KB	
Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0060	1	5/26/2016 13:14	KB	
i-Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0040	1	5/26/2016 13:14	KB	
Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0070	1	5/26/2016 13:14	KB	
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**0.048J**	ug/l	0.50	0.027	1	5/27/2016 18:05	GT	n
Ethane	**0.10 U**	ug/l	0.10	0.0070	1	5/27/2016 18:05	GT	n
Ethene	**0.10 U**	ug/l	0.10	0.0090	1	5/27/2016 18:05	GT	n
Carbon Dioxide	**46**	mg/l	5.0	0.24	1	5/27/2016 18:05	GT	M2,n

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000008** Date Received: 5/24/2016 11:30 Matrix: Bubble Strip
Sample ID: **1302-CD1S** Date Collected: 5/17/2016 08:59

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Hydrogen	**22**	nM	0.60	0.075	1	5/27/2016 11:11	GT	n

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000009** Date Received: 5/24/2016 11:30 Matrix: Water
Sample ID: **1302-MWE** Date Collected: 5/18/2016 09:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	**0.20 U**	mg/l	0.20	0.0060	1	5/26/2016 14:07	KB	
Acetic Acid	**0.21**	mg/l	0.10	0.0070	1	5/26/2016 14:07	KB	B
Propionic Acid	**0.021J**	mg/l	0.10	0.0090	1	5/26/2016 14:07	KB	
Formic Acid	**0.12**	mg/l	0.10	0.0050	1	5/26/2016 14:07	KB	B
Butyric Acid	**1.0**	mg/l	0.10	0.0070	1	5/26/2016 14:07	KB	
Pyruvic Acid	**0.014J**	mg/l	0.10	0.0070	1	5/26/2016 14:07	KB	
i-Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 14:07	KB	
Pentanoic Acid	**0.024J**	mg/l	0.10	0.0060	1	5/26/2016 14:07	KB	
i-Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0040	1	5/26/2016 14:07	KB	
Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0070	1	5/26/2016 14:07	KB	
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**680**	ug/l	0.50	0.027	1	5/28/2016 09:32	TD	n
Ethane	**3.3**	ug/l	0.10	0.0070	1	5/28/2016 09:32	TD	n
Ethene	**0.63**	ug/l	0.10	0.0090	1	5/28/2016 09:32	TD	n
Carbon Dioxide	**250**	mg/l	5.0	0.24	1	5/28/2016 09:32	TD	n

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000010** Date Received: 5/24/2016 11:30 Matrix: Bubble Strip
Sample ID: **1302-MWE** Date Collected: 5/18/2016 09:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Hydrogen	**1.0**	nM	0.60	0.075	1	5/27/2016 11:23	GT	n

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000011** Date Received: 5/24/2016 11:30 Matrix: Water

Sample ID: **1302-MWE DEEP** Date Collected: 5/18/2016 10:10

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	**0.20 U**	mg/l	0.20	0.0060	1	5/26/2016 15:00	KB	
Acetic Acid	**2.8**	mg/l	0.10	0.0070	1	5/26/2016 15:00	KB	B
Propionic Acid	**0.064J**	mg/l	0.10	0.0090	1	5/26/2016 15:00	KB	
Formic Acid	**0.064J**	mg/l	0.10	0.0050	1	5/26/2016 15:00	KB	B
Butyric Acid	**0.20**	mg/l	0.10	0.0070	1	5/26/2016 15:00	KB	
Pyruvic Acid	**0.012J**	mg/l	0.10	0.0070	1	5/26/2016 15:00	KB	
i-Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 15:00	KB	
Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0060	1	5/26/2016 15:00	KB	
i-Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0040	1	5/26/2016 15:00	KB	
Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0070	1	5/26/2016 15:00	KB	
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**16000**	ug/l	0.50	0.027	1	5/28/2016 10:44	TD	n
Ethane	**3.9**	ug/l	0.10	0.0070	1	5/28/2016 10:44	TD	n
Ethene	**0.021J**	ug/l	0.10	0.0090	1	5/28/2016 10:44	TD	n
Carbon Dioxide	**130**	mg/l	5.0	0.24	1	5/28/2016 10:44	TD	n

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000012** Date Received: 5/24/2016 11:30 Matrix: Bubble Strip

Sample ID: **1302-MWE DEEP** Date Collected: 5/18/2016 10:10

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Hydrogen	2.3	nM	0.60	0.075	1	5/27/2016 11:35	GT	n

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000013** Date Received: 5/24/2016 11:30 Matrix: Water
Sample ID: **1302-AMW1D** Date Collected: 5/18/2016 13:33

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	**0.20 U**	mg/l	0.20	0.0060	1	5/26/2016 15:54	KB	
Acetic Acid	**0.021J**	mg/l	0.10	0.0070	1	5/26/2016 15:54	KB	B
Propionic Acid	**0.10 U**	mg/l	0.10	0.0090	1	5/26/2016 15:54	KB	
Formic Acid	**0.040J**	mg/l	0.10	0.0050	1	5/26/2016 15:54	KB	B
Butyric Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 15:54	KB	
Pyruvic Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 15:54	KB	
i-Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 15:54	KB	
Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0060	1	5/26/2016 15:54	KB	
i-Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0040	1	5/26/2016 15:54	KB	
Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0070	1	5/26/2016 15:54	KB	
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**3700**	ug/l	0.50	0.027	1	5/28/2016 09:47	TD	n
Ethane	**2.0**	ug/l	0.10	0.0070	1	5/28/2016 09:47	TD	n
Ethene	**2.2**	ug/l	0.10	0.0090	1	5/28/2016 09:47	TD	n
Carbon Dioxide	**300**	mg/l	5.0	0.24	1	5/28/2016 09:47	TD	n

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000014** Date Received: 5/24/2016 11:30 Matrix: Bubble Strip
Sample ID: **1302-AMW1D** Date Collected: 5/18/2016 13:33

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Hydrogen	**1.8**	nM	0.60	0.075	1	5/27/2016 11:48	GT	n

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000015** Date Received: 5/24/2016 11:30 Matrix: Water
Sample ID: **1302-AMW1S** Date Collected: 5/18/2016 12:32

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	**0.0072J**	mg/l	0.20	0.0060	1	5/26/2016 16:47	KB	
Acetic Acid	**0.015J**	mg/l	0.10	0.0070	1	5/26/2016 16:47	KB	B
Propionic Acid	**0.10 U**	mg/l	0.10	0.0090	1	5/26/2016 16:47	KB	
Formic Acid	**0.030J**	mg/l	0.10	0.0050	1	5/26/2016 16:47	KB	B
Butyric Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 16:47	KB	
Pyruvic Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 16:47	KB	
i-Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 16:47	KB	
Pentanoic Acid	**0.012J**	mg/l	0.10	0.0060	1	5/26/2016 16:47	KB	
i-Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0040	1	5/26/2016 16:47	KB	
Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0070	1	5/26/2016 16:47	KB	
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**1000**	ug/l	0.50	0.027	1	5/28/2016 10:02	TD	n
Ethane	**0.17**	ug/l	0.10	0.0070	1	5/28/2016 10:02	TD	n
Ethene	**0.10 U**	ug/l	0.10	0.0090	1	5/28/2016 10:02	TD	n
Carbon Dioxide	**210**	mg/l	5.0	0.24	1	5/28/2016 10:02	TD	n

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000016** Date Received: 5/24/2016 11:30 Matrix: Bubble Strip
Sample ID: **1302-AMW1S** Date Collected: 5/18/2016 12:32

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Hydrogen	1.5	nM	0.60	0.075	1	5/27/2016 12:02	GT	n

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000017** Date Received: 5/24/2016 11:30 Matrix: Water
Sample ID: **1302-MW3** Date Collected: 5/18/2016 15:09

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	**0.0092J**	mg/l	0.20	0.0060	1	5/26/2016 17:41	KB	
Acetic Acid	**0.015J**	mg/l	0.10	0.0070	1	5/26/2016 17:41	KB	B
Propionic Acid	**0.10 U**	mg/l	0.10	0.0090	1	5/26/2016 17:41	KB	
Formic Acid	**0.079J**	mg/l	0.10	0.0050	1	5/26/2016 17:41	KB	B
Butyric Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 17:41	KB	
Pyruvic Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 17:41	KB	
i-Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 17:41	KB	
Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0060	1	5/26/2016 17:41	KB	
i-Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0040	1	5/26/2016 17:41	KB	
Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0070	1	5/26/2016 17:41	KB	
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**0.87**	ug/l	0.50	0.027	1	5/28/2016 10:15	TD	n
Ethane	**0.10 U**	ug/l	0.10	0.0070	1	5/28/2016 10:15	TD	n
Ethene	**0.10 U**	ug/l	0.10	0.0090	1	5/28/2016 10:15	TD	n
Carbon Dioxide	**120**	mg/l	5.0	0.24	1	5/28/2016 10:15	TD	n

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000018** Date Received: 5/24/2016 11:30 Matrix: Bubble Strip
Sample ID: **1302-MW3** Date Collected: 5/18/2016 15:09

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Hydrogen	**9.6**	nM	0.60	0.075	1	5/27/2016 12:15	GT	n

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000019** Date Received: 5/24/2016 11:30 Matrix: Water
Sample ID: **1302-MWL** Date Collected: 5/19/2016 08:49

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	**0.0063J**	mg/l	0.20	0.0060	1	5/26/2016 18:34	KB	
Acetic Acid	**0.012J**	mg/l	0.10	0.0070	1	5/26/2016 18:34	KB	B
Propionic Acid	**0.10 U**	mg/l	0.10	0.0090	1	5/26/2016 18:34	KB	
Formic Acid	**0.033J**	mg/l	0.10	0.0050	1	5/26/2016 18:34	KB	B
Butyric Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 18:34	KB	
Pyruvic Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 18:34	KB	
i-Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0070	1	5/26/2016 18:34	KB	
Pentanoic Acid	**0.10 U**	mg/l	0.10	0.0060	1	5/26/2016 18:34	KB	
i-Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0040	1	5/26/2016 18:34	KB	
Hexanoic Acid	**0.20 U**	mg/l	0.20	0.0070	1	5/26/2016 18:34	KB	
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	**0.031J**	ug/l	0.50	0.027	1	5/28/2016 10:29	TD	n
Ethane	**0.10 U**	ug/l	0.10	0.0070	1	5/28/2016 10:29	TD	n
Ethene	**0.10 U**	ug/l	0.10	0.0090	1	5/28/2016 10:29	TD	n
Carbon Dioxide	**98**	mg/l	5.0	0.24	1	5/28/2016 10:29	TD	n

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ANALYTICAL RESULTS

Workorder: 19200 NC / AZE0545

Lab ID: **192000020** Date Received: 5/24/2016 11:30 Matrix: Bubble Strip
Sample ID: **1302-MWL** Date Collected: 5/19/2016 08:49

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Hydrogen	**0.63**	nM	0.60	0.075	1	5/27/2016 12:28	GT	n

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ANALYTICAL RESULTS QUALIFIERS

Workorder: 19200 NC / AZE0545

DEFINITIONS/QUALIFIERS

Disclaimer : The Pennsylvania Department of Environmental Protection (PADEP) has decided to no longer recognize analyses that do not produce data for primary compliance, for NELAP accreditation. The methods affected by this decision are AM20GAx, AM21G, SW846 7199 and AM4.02. The laboratory shall continue to administer the NELAP/TNI standard requirements in the performance of these methods.

MDL	Method Detection Limit. Can be used synonymously with LOD; Limit Of Detection.
PQL	Practical Quanitation Limit. Can be used synonymously with LOQ; Limit Of Quantitation.
ND	Not detected at or above reporting limit.
DF	Dilution Factor.
S	Surrogate.
RPD	Relative Percent Difference.
% Rec	Percent Recovery.
U	Indicates the compound was analyzed for, but not detected at or above the noted concentration.
J	Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (PQL).
n	The laboratory does not hold NELAP/TNI accreditation for this method or analyte.
B	The analyte was detected in the associated blank.
M2	The laboratory control sample recovery was outside laboratory control limits.

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QUALITY CONTROL DATA

Workorder: 19200 NC / AZE0545

QC Batch: EDON/2912 Analysis Method: AM23G

QC Batch Method: AM23G

Associated Lab Samples: 192000001, 192000003, 192000005, 192000007, 192000009, 192000011, 192000013, 192000015, 192000017, 192000019

METHOD BLANK: 42176

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
EDonors				
Lactic Acid	mg/l	0.20 U	0.20	
Acetic Acid	mg/l	0.011J	0.10	B
Propionic Acid	mg/l	0.10 U	0.10	
Formic Acid	mg/l	0.012J	0.10	B
Butyric Acid	mg/l	0.10 U	0.10	
Pyruvic Acid	mg/l	0.10 U	0.10	
i-Pentanoic Acid	mg/l	0.10 U	0.10	
Pentanoic Acid	mg/l	0.10 U	0.10	
i-Hexanoic Acid	mg/l	0.20 U	0.20	
Hexanoic Acid	mg/l	0.20 U	0.20	

LABORATORY CONTROL SAMPLE: 42177

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Lactic Acid	mg/l	2	2.0	101	70-130	
Acetic Acid	mg/l	2	2.0	100	70-130	B
Propionic Acid	mg/l	2	2.1	106	70-130	
Formic Acid	mg/l	2	1.9	95	70-130	B
Butyric Acid	mg/l	2	2.0	102	70-130	
Pyruvic Acid	mg/l	2	2.1	105	70-130	
i-Pentanoic Acid	mg/l	2	2.0	102	70-130	
Pentanoic Acid	mg/l	2	2.1	105	70-130	
i-Hexanoic Acid	mg/l	2	2.1	104	70-130	
Hexanoic Acid	mg/l	2	1.9	97	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 42178 42179 Original: 191960001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
EDonors											

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QUALITY CONTROL DATA

Workorder: 19200 NC / AZE0545

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 42178 42179 Original: 191960001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Lactic Acid	mg/l	0.011	2	2.0	2.0	101	101	70-130	0	30	
Acetic Acid	mg/l	0.023	2	2.0	2.0	101	101	70-130	0	30	B
Propionic Acid	mg/l	0.0017	2	2.1	2.1	107	107	70-130	0	30	
Formic Acid	mg/l	0.028	2	1.9	1.9	95	95	70-130	0	30	B
Butyric Acid	mg/l	0.0051	2	2.1	2.1	105	104	70-130	0.96	30	
Pyruvic Acid	mg/l	0	2	2.1	2.1	106	106	70-130	0	30	
i-Pentanoic Acid	mg/l	0	2	2.1	2.1	104	104	70-130	0	30	
Pentanoic Acid	mg/l	0.021	2	2.1	2.1	105	106	70-130	0.95	30	
i-Hexanoic Acid	mg/l	0	2	2.1	2.1	107	107	70-130	0	30	
Hexanoic Acid	mg/l	0	2	2.1	2.1	104	103	70-130	0.97	30	

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QUALITY CONTROL DATA

Workorder: 19200 NC / AZE0545

QC Batch: DISG/5401 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 192000001, 192000003, 192000005, 192000007

METHOD BLANK: 42180

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	0.50 U	0.50	n
Ethane	ug/l	0.10 U	0.10	n
Ethene	ug/l	0.10 U	0.10	n

METHOD BLANK: 42181

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Carbon Dioxide	mg/l	5.0 U	5.0	M2,n

LABORATORY CONTROL SAMPLE & LCSD: 42182 42184

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	800	780	107	105	80-120	1.9	20	n
Ethane	ug/l	38	39	39	102	104	80-120	1.9	20	n
Ethene	ug/l	35	37	37	105	105	80-120	0	20	n

LABORATORY CONTROL SAMPLE & LCSD: 42183 42185

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Carbon Dioxide	mg/l	120	140	130	121	110	80-120	9.5	20	M2,n

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QUALITY CONTROL DATA

Workorder: 19200 NC / AZE0545

QC Batch: DISG/5403 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 192000002, 192000004, 192000006, 192000008, 192000010, 192000012, 192000014, 192000016, 192000018, 192000020

METHOD BLANK: 42199

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Hydrogen	nM	0.60 U	0.60	n

LABORATORY CONTROL SAMPLE & LCSD: 42200 42201

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Hydrogen	nM	24	25	25	102	102	80-120	0	20	n

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QUALITY CONTROL DATA

Workorder: 19200 NC / AZE0545

QC Batch: DISG/5407 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 192000009, 192000011, 192000013, 192000015, 192000017, 192000019

METHOD BLANK: 42248

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	0.50 U	0.50	n
Ethane	ug/l	0.10 U	0.10	n
Ethene	ug/l	0.10 U	0.10	n

METHOD BLANK: 42249

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Carbon Dioxide	mg/l	5.0 U	5.0	n

LABORATORY CONTROL SAMPLE & LCSD: 42250 42252

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	800	810	107	108	80-120	0.93	20	n
Ethane	ug/l	38	42	43	111	113	80-120	1.8	20	n
Ethene	ug/l	35	39	40	110	114	80-120	3.6	20	n

LABORATORY CONTROL SAMPLE & LCSD: 42251 42253

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Carbon Dioxide	mg/l	120	130	140	110	118	80-120	7	20	n

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QUALITY CONTROL DATA QUALIFIERS

Workorder: 19200 NC / AZE0545

QUALITY CONTROL PARAMETER QUALIFIERS

B	The analyte was detected in the associated blank.
M2	The laboratory control sample recovery was outside laboratory control limits.
n	The laboratory does not hold NELAP/TNI accreditation for this method or analyte.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 19200 NC / AZE0545

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
192000001	1302-AMW2D			AM23G	EDON/2912
192000003	1302-AMW2S			AM23G	EDON/2912
192000005	1302-MWA			AM23G	EDON/2912
192000007	1302-CD1S			AM23G	EDON/2912
192000009	1302-MWE			AM23G	EDON/2912
192000011	1302-MWE DEEP			AM23G	EDON/2912
192000013	1302-AMW1D			AM23G	EDON/2912
192000015	1302-AMW1S			AM23G	EDON/2912
192000017	1302-MW3			AM23G	EDON/2912
192000019	1302-MWL			AM23G	EDON/2912
192000001	1302-AMW2D			AM20GAX	DISG/5401
192000003	1302-AMW2S			AM20GAX	DISG/5401
192000005	1302-MWA			AM20GAX	DISG/5401
192000007	1302-CD1S			AM20GAX	DISG/5401
192000002	1302-AMW2D			AM20GAX	DISG/5403
192000004	1302-AMW2S			AM20GAX	DISG/5403
192000006	1302-MWA			AM20GAX	DISG/5403
192000008	1302-CD1S			AM20GAX	DISG/5403
192000010	1302-MWE			AM20GAX	DISG/5403
192000012	1302-MWE DEEP			AM20GAX	DISG/5403
192000014	1302-AMW1D			AM20GAX	DISG/5403
192000016	1302-AMW1S			AM20GAX	DISG/5403
192000018	1302-MW3			AM20GAX	DISG/5403
192000020	1302-MWL			AM20GAX	DISG/5403
192000009	1302-MWE			AM20GAX	DISG/5407
192000011	1302-MWE DEEP			AM20GAX	DISG/5407
192000013	1302-AMW1D			AM20GAX	DISG/5407
192000015	1302-AMW1S			AM20GAX	DISG/5407
192000017	1302-MW3			AM20GAX	DISG/5407
192000019	1302-MWL			AM20GAX	DISG/5407

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

PAGE: 01 OF 01

CLIENT NAME:

CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:

REPORT TO: Betsy McDaniel
CC:

REQUESTED COMPLETION DATE: Std.
PO #: 46325

PROJECT NAME/STATE: NC

PROJECT #: AZE0545

ANALYSIS REQUESTED

CONTAINER TYPE:
PRESERVATION:

	DATE	TIME	MATRIX CODE*	COMP	GRAB	SAMPLE IDENTIFICATION	# of CONTAINERS	Methane, Ethane, Ethene	Dis. CO2	Volatile Fatty Acids	Diss. Hydrogen	LAB ID NUMBER	REMARKS/ADDITIONAL INFORMATION
1	5/17/16	1444	GW		X	1302-AMW2D	5	X	X	X	X		AZE0545-01
2	5/17/16	1343	GW		X	1302-AMW2S	5	X	X	X	X		" -02
3	5/17/16	1123	GW		X	1302-MWA	5	X	X	X	X		" -03
4	5/17/16	0859	GW		X	1302-CD1S	5	X	X	X	X		" -04
5	5/18/16	0900	GW		X	1302-MWE	5	X	X	X	X		" -06
6	5/18/16	1010	GW		X	1302-MWEDeep	5	X	X	X	X		" -07
7	5/18/16	1333	GW		X	1302-AMW1D	5	X	X	X	X		" -08
8	5/18/16	1232	GW		X	1302-AMW1S	5	X	X	X	X		" -09
9	5/18/16	1509	GW		X	1302-MW3	5	X	X	X	X		" -10
10	5/19/16	0849	GW		X	1302-MWL	5	X	X	X	X		" -29

report/invoice to bmcdaniel@asi-lab.com

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

SAMPLED BY AND TITLE: DATE/TIME:
RELINQUISHED BY: M Lalman DATE/TIME: 05/23/16

RECEIVED BY: DATE/TIME:
RELINQUISHED BY: DATE/TIME:

RECEIVED BY LAB: Lawrence PAES DATE/TIME: 5.24.16 11 30
SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER

pH checked: Yes No NA
Ice: Yes No NA
Temperature: Min: Max:
Custody Seal: Intact Broken Not Present
# of Coolers: 1
Cooler ID:

FOR LAB USE ONLY
LAB #:
Entered into LIMS:

BMcD 5/23/2016

Revised 2015-11-09

Cooler Receipt Form

Client Name: ASI **Project:** NC/AZE 0545 **Lab Work Order:** 19200

A. Shipping/Container Information (circle appropriate response)

Courier: (FedEx) UPS USPS Client Other:_____ **Air bill Present:** (Yes) No

Tracking Number: 8479477748 28

Custody Seal on Cooler/Box Present: (Yes) No **Seals Intact:** (Yes) No

Cooler/Box Packing Material: (Bubble Wrap) Absorbent Foam Other:_____

Type of Ice: (Wet) Blue None **Ice Intact:** (Yes) Melted

Cooler Temperature: 2°C **Radiation Screened:** Yes (No) **Chain of Custody Present:** (Yes) No

Comments:_____

B. Laboratory Assignment/Log-in (check appropriate response)

	YES	NO	N/A	Comment Reference non-Conformance
Chain of Custody properly filled out	✓			
Chain of Custody relinquished	✓			
Sampler Name & Signature on COC		✓		
Containers intact	✓			
Were samples in separate bags	✓			
Sample container labels match COC Sample name/date and time collected	✓			
Sufficient volume provided	✓			
PAES containers used	✓			
Are containers properly preserved for the requested testing? (as labeled)	✓			
If an unknown preservation state, were containers checked? Exception: VOA's coliform			✓	If yes, see pH form.
Was volume for dissolved testing field filtered, as noted on the COC? Was volume received in a preserved container?			✓	

Comments:_____

Cooler contents examined/received by : LY **Date:** 5.24.16

Project Manager Review : RW **Date:** 5-25-16

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