Cabarrus County C&D Landfill Semi-Annual Sampling Report Facility Permit # 13-02

(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- CDMSmith Inc.

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

Name: Mathew F. Colone Phone:

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 C&D Landfill	4441 Irish Potato Rd Concord, North Carolina 28025	13-02	.0500	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)
☐ 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

Facility Representative Address

F-0412

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

Revised 6/2009

5400 Glenwood Avenue, Suite 400
Raleigh, North Carolina 27612
tel: 919 325-3500
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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 C&D Landfill
Facility Permit No. 13-02

Dear Ms. Drummond:

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

The approved monitoring well network for the C&D Landfill consists of background wells CD-1s and -1d; compliance wells CD-2, -3, -4 Rep, -7, and -8; and surface water sample location SW-3. CD-4 Rep was installed in January 2009 as part of the proposed Phase 1 C&D Landfill expansion. Monitoring wells CD-7 and -8, formerly piezometers B-7 and -19 respectively, were added to the monitoring program in July 2014 as part of the Phase 2 C&D Landfill expansion. Field activities and sampling results for the groundwater and surface water samples are discussed below.

Field Activities

Groundwater samples from the Cabarrus County C&D 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 locations and the surface water location for the C&D Landfill are provided on **Figure 1**.

Groundwater elevations were measured at each well prior to sampling and are presented in **Table 1**. Well construction details for each monitoring well are also provided in Table 1. These groundwater elevations were used to construct potentiometric contours for this sampling event and are presented on **Figure 1**. After depth to groundwater was measured, each well was purged prior to sampling to provide fresh formation water within the well water column. Each purge volume was measured for pH, conductivity, turbidity, temperature, dissolved oxygen, and oxidation-reduction potential using a YSI-556

multi-parameter water quality meter and Oakton T100 or Lamotte 2020 turbidity meters. The water quality parameters at the time of sampling are presented in **Table 2**.

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) plus tetrahydrofuran, North Carolina Appendix I metals plus iron, mercury, and manganese, alkalinity, total dissolved solids, chloride, and sulfate with the exception of CD-4 Rep. Samples collected from CD-4 Rep were analyzed for North Carolina Appendix I VOCs and metals.

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 the C&D Landfill had detections of analytes above the MDL but below the SWSL. These detections were qualified as estimated or "J" flags.

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 .0202 (NC 2L) Groundwater Quality Standard, Groundwater Protection Standard, or the 15A NCAC 02B Surface Water Quality Standard for Class C Waters.

CD-1s (Background)

Metals:	Iron
Volatile Organic Compounds:	None Detected

CD-1d (Background)

Metals:	Copper, Iron, Manganese, Vanadium, Zinc
Volatile Organic Compounds:	None Detected

CD-2

Metals:	Iron, Manganese
Volatile Organic Compounds:	None Detected

CD-3

Metals:	Barium, Iron, Manganese
Volatile Organic Compounds:	None Detected

CD-4 Rep

Metals:	None Detected
Volatile Organic Compounds:	None Detected

CD-7

Metals:	Iron, Manganese
Volatile Organic Compounds:	None Detected

CD-8

Metals:	Barium, Copper, Iron, Manganese, Zinc
Volatile Organic Compounds:	None Detected

SW-3

Metals:	Arsenic, Barium, Beryllium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Selenium, 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.

Cobalt:	CD-1d, -2, -3, -4 Rep, and -8
Vanadium:	CD-1s, -2, -3, -4 Rep, -7, and -8

A duplicate sample, identified as Dup, was collected from CD-8 and had similar analyte concentrations as those detected in CD-8. An equipment blank was not collected due to an oversight by the sampling team. Similar sampling equipment and supplies were used for the May 2016 sampling event compared to historical events. Historical analytical data has never shown impacts from sampling equipment or supplies. No analytes were detected above laboratory MDLs in the trip blank.

Total dissolved solids for SW-3 was analyzed outside of hold time due to laboratory error. The analysis was performed in duplicate and showed similar concentrations in each. The data is interpreted to have not been affected.

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. No VOCs were detected above the NC 2L Standard. General chemistry results were below the NC 2L Standards. A complete summary of all detected constituents from the May 2016 sampling event is presented in **Table 3**. The laboratory analytical report is provided in Appendix A. The next semi-annual 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 and Groundwater Elevations
May 2016 Semi-Annual Sampling Event
Cabarrus County C&D Landfill

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)	Groundwater Elevations - Measured 5/16/2016		
							Screen Interval	Filter Interval	Seal Interval		TOC Elevation	Depth to Groundwater (feet BTOC)	Groundwater Elevation
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	755.00	23.90	731.10
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	757.40	26.51	730.89
13-02	CD-2	9/12/2006	35.47698	80.52494	Saprolite	25.69	9.0-24.0	7.0-24.0	5.0-7.0	2.0	733.00	14.00	719.00
13-02	CD-3	7/1/2014	35.47580	80.52502	Saprolite/PWR	53.50	35.0-50.0	32.0-50.0	30.0-32.0	2.0	744.48	38.25	706.23
13-02	CD-4 Rep	1/15/2009	35.47656	80.52210	Saprolite	19.41	6.0-16.0	4.0-16.0	2.0-4.0	2.0	739.15	8.70	730.45
13-02	CD-7	11/25/2002	35.47567	80.52551	Bedrock	46.31	34.0-44.0	32.0-44.0	30.0-32.0	2.0	744.81	39.65	705.16
13-02	CD-8	7/1/2014	35.47518	80.52497	PWR	43.40	33.0-43.0	31.0-43.0	29.0-31.0	2.0	738.39	31.98	706.41

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

Table 2
Water Quality Measurements
May 2016 Semi-Annual Sampling Event
Cabarrus County C&D Landfill

Monitoring Well Code	Water Quality Measurements					
	pH (S.U.)	Conductivity (µS/cm)	Temperature (degrees Celsius)	Dissolved Oxygen (mg/L)	ORP (mVs)	Turbidity (NTUs)
CD-1s (background well)	5.91	103	15.7	3.45	244.7	3.6
CD-1d (background well)	6.06	115	15.8	4.50	210.3	20
CD-2	5.28	71	14.9	3.31	162.6	64
CD-3*	6.28	434	16.8	2.40	23.7	6.3
CD-4 Rep	6.90	242	14.2	2.68	-53.5	28
CD-7	6.16	317	15.8	2.02	40.2	13
CD-8	7.48	262	17.4	3.01	81.7	25
Surface Water Sample Location						
SW-3	6.40	200	15.7	5.99	139.3	671

Notes:

1. CD-4 Rep was installed as part of the proposed Phase 1 C&D Landfill expansion in November 2010.
2. * CD-3 was relocated on July 1, 2014, as part of the Phase 2 C&D Landfill Expansion.
3. µS/cm - Microsiemens per centimeter
4. mg/L - Milligrams per liter
5. ORP - Oxidation-Reduction Potential
6. NTUs - Nephelometric Turbidity Units
7. mVs - Millivolts
8. S.U. - Standard Unit

Table 3a
Detected Groundwater Constituents - General Chemistry and Metals
May 2016 Semi-Annual Sampling Event
Cabarrus County C&D Landfill

Facility Permit Number	Monitoring Well Code	Sample Date	General Chemistry							Metals																	
			Alkalinity	Chemical Oxygen Demand	Chloride	Ferrous Iron	Nitrate	Sulfate	Total Dissolved Solids	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Iron	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard			NE	NE	250,000	NE	10,000	250,000	500,000	1*	10	700	4*	2	10	1*	1,000	15	300	50	1	100	20	20	0.2*	0.3*	1,000
Solid Waste Section Limit			NE	NE	NE	NE	10,000	250,000	NE	6	10	100	1	1	10	10	10	10	300	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	50,000		3,400			1,000	114,000			29.8J				0.15J			284	13.5		1.04J					5.74J
	CD-1s	3-Nov-10	48,300		3,800			1,200J			0.63J	60.4J	0.17J		3.43J	**2.53J**	10.9	3.87J	**5,870**	**129**	0.023J	4.73J		0.02J	0.07J	**22.6J**	26.9
13-02	CD-1s	3-May-11	47,000		3,600			1,200J	146,000			81.4J	0.19J		5.45JB	**4.23J**	16.0	2.32J	**7,770**	**190**		5.93J			0.14J	**20.6J**	26.5
	CD-1s	8-Nov-11	40,000		4,000			1,100J	65,000			59.7J	0.25JB		4.46J	**2.67J**	12.4	1.9J	**5,350**	**127**		4.41J			0.08J	**11.2J**	18.2
	CD-1s	7-May-12	46,000		3,900				158,000			45.5J			3.30J	**1.19J**	8.75J	1.12J	**3,120**	**63.4**		3.01J				**12.7J**	12.6B
	CD-1s	28-Nov-12	39,000		4,100	0			110,000			63.8J	0.11J		5.65J	**3.05J**	11.6	1.43J	**5,210**	**139**		4.66J				**17.1J**	16.9
	CD-1s	7-May-13	42,000		4,000	220			120,000	0.94J	2.4JB	35.6J			0.88J	0.67J	4.04J	0.39J	**1,340**	37.7		1.78J			0.13J	**6.06J**	5.08J
	CD-1s	5-Nov-13	30,000		3,800	2,420			80,500			46.8J	0.12J		3.59J	**1.63J**	10.2	1.35J	**4,200**	**82.2**		3.50J				**18.4JB**	15.4B
	CD-1s	6-May-14	42,000		3,800	0			111,000			28.8J			4.14JB		1.48J	0.11J	**347B**	10.1B		1.03J			**0.31J**	**3.40J**	2.98JB
	CD-1s	4-Nov-14	41,000		3,900	0			102,000			28.7J		0.13J			1.31J	0.06J	118	6.6J		1.04J			0.11J	**2.57JB**	1.58J
	CD-1s	5-May-15	38,000		3,800	0		<5,000	113,000		1.63J	29.5JB					1.33J	0.15J	**371**	13.8	0.103JB	1.17J				**2.40J**	2.75JB
	CD-1s	27-Oct-15	43,000	30,600	3,800	0	130J		110,000	**1.00J**		28.4J			0.80J	0.39J	0.75J	0.12J	234	35.9		1.21J		4.19CN,J	0.15J	**4.10J**	3.36B-01,J
	CD-1s	17-May-16	43,000	<10,000	3,700	0	79J	1,000J	130,000			23.9J			0.94J		0.99J	0.12J	**446**	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	40,000		2,400			2,400	132,000		2.21J	359			**23**	**32.6**	175	**22.5**	**81,800**	**1,230**		34			**0.43J**	**168**	175
	CD-1d	2-Nov-10	48,300		2,800			2,800J		0.46J	0.97J	33.1J		0.15J	1.17J	0.85J	6.56J	1.09J	**1,730**	47.7	0.046J	2.51J			0.05J	**14.3J**	23
13-02	CD-1d	3-May-11	57,000		2,600			3,000J	206,000		2.44J	231	2.03		**16.7**	**18.6**	112	14.0	**49,400**	**659**		22.3J			0.11J	**101**	103
	CD-1d	8-Nov-11	30,000		2,900			3,000J	98,000			74.5J	0.51J		4.08J	**4.27J**	27	2.84J	**9,190**	**144**		5.68J				**24.6J**	26.3
	CD-1d	7-May-12	50,000		2,800				150,000			72.4J	0.58J		3.91J	**4.67J**	25	2.81J	**9,380**	**170**		5.58J				**26**	27.9B
	CD-1d	28-Nov-12	46,000		3,000	0			128,000	0.33J		37.7J		0.07J	2.38J	0.94J	12.6	1.14J	**1,900**	41.4		2.50J				**8.90J**	13
	CD-1d	7-May-13	52,000		3,000	560			125,000	0.88J	1.02JB	31.2J		0.07J		0.78J	4.5J	0.49J	**1,080**	25.5		1.92J				**6.18J**	13.1
	CD-1d	5-Nov-13	42,000		3,000	700			104,000			35.0J			0.86J	**4.34J**	1.13J	1.90J	**812**	46.2						**17.1JB**	10.8B
	CD-1d	6-May-14	46,000		2,900				119,000		1.14J	37.8J	0.07J	0.05J	3.22JB	**1.16J**	7.34J	0.81J	**1,610B**	49.6B		2.74J			0.12J	**6.16J**	9.41JB
	CD-1d	4-Nov-14	43,000		3,100	0			101,000			43.1J	0.16J	0.11J		**2.25J**	9.09J	0.87J	**3,400**	**88.5**		2.88J				**10.2JB**	10.7
	CD-1d	5-May-15	44,000		2,900	0		<5000	115,000			34.5JB				0.84J	3.63J	0.39J	**1,320**	32.5		1.42J				**5.18J**	3.68JB
	CD-1d	27-Oct-15	46,000		2,900	0			120,000	0.42J		42.3J	0.13J		1.87J	**2.15J**	8.18J	0.97J	**3,170**	**87.4**		2.49J		4.37CN,J	0.06J	**10.9J**	14.0B-01
	CD-1d	17-May-16	96,000		18,000	0	<50	14,000J	202,000			81.3J	0.46J		4.86J	**7.42J**	26.0	3.13J	**12,000**	**287**		7.11J	2.11J		0.07J	**29.3**	29.7

Table 3a
Detected Groundwater Constituents - General Chemistry and Metals
May 2016 Semi-Annual Sampling Event
Cabarrus County C&D Landfill

Facility Permit Number	Monitoring Well Code	Sample Date	General Chemistry							Metals																	
			Alkalinity	Chemical Oxygen Demand	Chloride	Ferrous Iron	Nitrate	Sulfate	Total Dissolved Solids	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Iron	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard			NE	NE	250,000	NE	10,000	250,000	500,000	1*	10	700	4*	2	10	1*	1,000	15	300	50	1	100	20	20	0.2*	0.3*	1,000
Solid Waste Section Limit			NE	NE	NE	NE	10,000	250,000	NE	6	10	100	1	1	10	10	10	10	300	50	0.2	50	10	10	5.5	25	10
	CD-2	25-Sep-06																									
	CD-2	1-Nov-06																									
	CD-2	24-Apr-07										35J		0.02J	1.1J	**3.6J**	1.5J	0.86J				2.6J					
	CD-2	29-Oct-07										48J		0.01J	3J	**4.9J**	2.6J	1.1J				2.7J					
	CD-2	23-Apr-08										33J		0.34J	0.93J			1.0J				2.7J		0.12J			0.12J
	CD-2	18-Nov-08										46.7J		0.04J				3.0J									
	CD-2	9-Apr-09										25J		0.01J				0.32J									
	CD-2	13-Oct-09										31.9J						1.37J									
	CD-2	11-May-10	11,000		7,800			990J	98,000		1.73J	48.8J				**3.99J**	3.43J	1.32J	**2,290**	**99**		2.86J				**8.83J**	9.40J
	CD-2	3-Nov-10	17,300		6,900			2,100J			1.49J	48.1J	0.22J		2.77J	**3.58J**	5.69J	2.06J	**5,030**	**103**	0.026J	2.96J				**21.4J**	9.90J
13-02	CD-2	3-May-11	2,850		6,800			1,300J	209,000		1.78J	55.9J	0.23J		3.04JB	**3.62J**	7.91J	2.75J	**5,560**	**92.2**	0.031J	3.60J				**22.2J**	12B
	CD-2	8-Nov-11	9,000		7,500			1,400J	41,500			22.1J	0.21JB		1.41J	**2.15J**	3.53J	1.07J	**1,660**	47.4		1.9J					4.99J
	CD-2	7-May-12	21,000		7,200				104,000			36.4J	0.19J		2.71J	**3.38J**	5.03J	1.94J	**2,760**	**74.1**		2.95J				**9.8J**	16.5B
	CD-2	28-Nov-12	25,000		6,700				(1)			39.5J	0.13J		2.89J	**2.95J**	4.40J	1.42J	**2,720**	**67.2**		2.72J				**10.1J**	7.92J
	CD-2	7-May-13	20,000		7,200				80,000	0.34J	1.25JB	39.4J	0.23J		1.32J	**2.8J**	4.44J	1.34J	**2,450**	**57.8**		2.59J			0.08J	**9.02J**	8.79J
	CD-2	5-Nov-13	28,000		6,600				55,000			45.1J	0.20J		0.64J	**3.31J**	4.01J	1.60J	**1,600**	**68.8**	0.087J	2.38J				**14J**	7.77JB
	CD-2	7-May-14	16,000		8,200				135,000			37.5J	0.10J		1.98JB	**2.48J**	2.26J	0.78JB	**1,130B**	49.3	0.105J	2.00J					5.00J
	CD-2	5-Nov-14	25,000		7,500				330,000	0.07J		46.0J			2.21JB	**2.69J**	3.59J	1.10J	**2,000B**	**59.6**	(1)	2.47J				**7.23J**	6.92JB
	CD-2	6-May-15	16,000		8,100				136,000			52.0JB	0.18J		2.10JB	**2.90J**	5.91J	1.37J	**2240**	**57.6**	0.158JB	3.74J				**6.97J**	8.02JB
	CD-2	27-Oct-15	7,750		7,300			5,900J	178,000		0.83J	60.0J	0.42J		3.94B-01,J	**3.71J**	8.71J	2.67J	**5,150**	**83.8**	0.073J	5.50J		4.05CN,J	0.08J	**16.3J**	13.3
	CD-2	18-May-16	20,000		7,900			<5,000	147,000			49.8J	0.22J		2.32J	**3.41J**	3.56J	1.20J	**2,350**	**71.7**	0.189J	2.68J				**8.34J**	7.62J
	CD-3	26-Sep-06										175			**190**												
	CD-3	1-Nov-06																									
	CD-3	24-Apr-07										38J		0.01J	2.0J	0.83J	2.7J	0.44J				2.5J	1.1J				
	CD-3	29-Oct-07										667J	0.19J	0.04J	3.9J	**3.9J**	10	1.5J				3.1J	1.4J				
	CD-3	23-Apr-08										46J		0.03J	1.1J			0.79J						0.12J			0.12J
	CD-3	18-Nov-08										121		0.05J	0.74J			1.75J									
	CD-3	9-Apr-09										41.7J		0.12J				0.84J						0.02J			0.02J
	CD-3	13-Oct-09										47.3J						0.90J									
	CD-3	11-May-10	95,000		3,800			2,700	168,000			35.5J				0.49J	2.51J	0.32J	**680**	19.8		1.36J					5.79J
	CD-3	3-Nov-10	84,600		4,100			2,700J			0.63J	33.3J		0.03J		0.74J	3.67J	0.44J	**1,160**	28.3	0.09J	1.68J				**5.99J**	5.59J
13-02	CD-3	3-May-11	105,000		4,300			3,200J	404,000			48.9J	0.11J			**2.36J**	7.57J	1.30J	**3,580**	**93.6**		2.48J				**12.2J**	8.64JB
	CD-3	8-Nov-11	85,000		5,400			3,900J	144,000			25.5J				0.65J	1.01J		178	24.9		1.48J					5.16J
	CD-3	7-May-12	75,000		4,500				177,000			41.7J			0.84J	**1.27J**	3.84J	0.54J	**1,170**	32.6		3.37J				**6.18J**	6.81J,B
	CD-3	28-Nov-12	104,000		5,100				(1)			46.7J			1.41J	**1.90J**	4.35J	0.82J	**1,740**	**68.9**		1.86J				**9.52J**	6.93J
	CD-3	7-May-13	122,000		4,800				181,000			33.8J				**1.20J**	2.35J	0.42J	**880**	**56.3**		1.41J				**5.86J**	2.89J
	CD-3	5-Nov-13	59,000		4,500				121,000			64J	0.21J		0.74J	**3.47J**	10.6	2.06J	**5,170**	**139**		3.25J				**21.2J**	12.2B
	CD-3	7-May-14	61,600		4,200				127,000			28.7J			1.66JB		0.72J		83.2B	4.4J		1.14J				**2.42J**	
	CD-3	5-Nov-14	82,000		13,000			13,000J	425,000			162	0.14J		1.85JB	**3.00J**	6.22J	1.21J	**3,770B**	**1,030**	(1)	8.65J				**12.9J**	9.94JB
	CD-3	6-May-15	89,000		13,000			22,000J	280,000		1.38J	159	0.11J			**1.26J**	2.84J	0.42J	**1,230B**	**1,090**	0.102JB	7.25J				**5.29J**	5.93J
	CD-3	27-Oct-15	95,000		13,000			23,000J	255,000			155	0.10J		1.02B-01,J	**1.82J**	3.91J	0.68J	**2,010**	**936**		7.72J		2.60CN,J		**6.03J**	6.81J
	CD-3	18-May-16	100,000		14,000			26,000J	311,000			194	0.12J			**1.60J**	1.35J	0.24J	**607**	**1,010**		7.88J	1.19J			**4.02J**	3.73J

Table 3a
Detected Groundwater Constituents - General Chemistry and Metals
May 2016 Semi-Annual Sampling Event
Cabarrus County C&D Landfill

Facility Permit Number	Monitoring Well Code	Sample Date	General Chemistry							Metals																	
			Alkalinity	Chemical Oxygen Demand	Chloride	Ferrous Iron	Nitrate	Sulfate	Total Dissolved Solids	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Iron	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
North Carolina 2L or Groundwater Protection Standard			NE	NE	250,000	NE	10,000	250,000	500,000	1*	10	700	4*	2	10	1*	1,000	15	300	50	1	100	20	20	0.2*	0.3*	1,000
Solid Waste Section Limit			NE	NE	NE	NE	10,000	250,000	NE	6	10	100	1	1	10	10	10	10	300	50	0.2	50	10	10	5.5	25	10
	CD-4 Rep	4-Nov-10	86,300		6,100	1,570		16,000J				136			5.62J	**8.37J**	0.84J					5.90J				**16.3J**	2.31J
	CD-4 Rep	3-May-11	124,000		9,700	160J		`				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	27-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
	CD-7	1-Jul-14	66,000		7,600			15,000J	420,000			53.1J	0.131J						**669**	8.74J						**4.11J**	4.06J
	CD-7	5-Nov-14	77,000		8,500			18,000J	**1,170,000**		1.32J	118	3.74		**15.1B**	**3.71J**	40.0	13.6	**21,100B**	**341**	(1)	8.91J		0.24J		**75.8**	19.4B
13-02	CD-7	6-May-15	86,000		9,800			25,000J	**660,000**		1.71J	66.8J	0.28J			0.45J	4.36J	0.86J	**1,630B**	43.4		3.36J				**4.14J**	3.33J
	CD-7	27-Oct-15	81,000		11,000			28,000J	291,000			87.2J	1.12		5.33B-01,J	**1.52J**	16.6	4.69J	**6,560**	**145**	0.138J	6.61J		3.81CN,J		**23.4J**	11.3
	CD-7	18-May-16	90,000		10,000			29,000J	282,000			74.8J	0.43J		2.18J	0.36J	4.74J	1.20J	**2,160**	**59.4**	0.164J	4.90J				**10.2J**	4.03J
	CD-8	1-Jul-14	75,000		3,900			3,700J	120,000	0.256J		421	0.191J		**14.4**	**12.6**	78	6.55J	**26,600**	**1,360**		13.8J			**0.238J**	**93.3**	79.6
	CD-8	5-Nov-14	86,000		3,500				253,000			83.4J			1.64JB	**1.20J**	7.15J	0.59J	**2,360B**	**131**	(1)	3.34J				**8.18J**	11.0B
	CD-8	6-May-15	57,000		3,300			<5000	138,000	0.36J		53.8JB				0.48J	4.13J	0.27J	**1,030**	**58.5**	0.095JB	2.43J				**4.03J**	9.73JB
13-02	CD-8	27-Oct-15	72,000		3,600			1,100J	132,000	0.75J	1.79J	162	0.32J	0.21J	5.88B-01,J	**1.90J**	38.6	2.29J	**2,960**	**95.2**		9.53J		3.65CN,J		**11.2J**	**1,430**
	CD-8 (dup)	27-Oct-15	70,000		3,500				130,000	0.40J	1.72J	160	0.33J	0.21J	5.54B-01,J	**1.80J**	36.3	2.12J	**2,630**	**82.4**		8.69J		4.20CN,J		**10.6J**	**1,310**
	CD-8	19-May-16	115,000		2,000			<5,000	205,000	0.49J	1.52J	133	0.20J		3.54J	**1.40J**	28.1	1.28J	**2,320**	**123**		8.72J				**13.2J**	**1,250**
	CD-8 (dup)	19-May-16	110,000		2,000			<5,000	215,000	**1.27J**	1.55J	136	0.23J	0.10J	4.41J	**1.63J**	31.2	1.87J	**3,230**	**129**		9.76J				**14.8J**	**1,600**

Notes:

1. All units are in micrograms per liter (parts per billion).
2. * - Groundwater Protection Standard
3. NE - Standard Not Established; dup - Duplicate Sample
4. J - Indicates the analytical result is an estimated concentration between the method detection limit and the Solid Waste Section Reporting Limit.
5. B, B-01 - The analyte concentration detected in the method blank was greater than the method detection limit.
6. CN - Detected silver concentrations were determined to be the result of contamination from the preservative acid used.
7. CD-4 Rep was installed as part of the proposed Phase 1 C&D Landfill expansion in January 2009. Beginning November 2011 samples collected from CD-4 Rep are only analyzed for Appendix I metals.
8. Alkalinity, chloride, ferrous iron, sulfate, and total dissolved solids were added to the sampling program in May 2010.
9. (1) - Not analyzed due to laboratory oversight.
10. CD-3 was relocated on July 1, 2014, as part of the Phase 2 C&D Landfill expansion.
11. CD-7 and -8 (formerly piezometers B-7 and -19) were added to the monitoring program in July 2014 as part of the Phase 2 C&D Landfill expansion.
12. Ferrous iron results for CD-1s and -1d are based on field testing and results for CD-4 Rep are laboratory derived.

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

Table 3b
Detected Groundwater Constituents - Volatile Organic Compounds
May 2016 Semi-Annual Sampling Event
Cabarrus County C&D Landfill

Facility Permit Number	Monitoring Well Code	Sample Date	Acetone	Benzene	Bromoform	2-Butanone	Chlorobenzene	Chloroethane	1,1,1-Trichloroethane	1,2-Dichlorobenzene	1,4-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloropropane	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene Chloride	Dichlorodifluoromethane	Toluene	Trichlorofluoromethane	Chloromethane	Tetrachloroethene	Trichloroethene	Total Xylenes	Vinyl Chloride	Carbon Disulfide	Tetrahydrofuran
North Carolina 2L Standard			6,000	1	4	4,000	50	3,000	200	20	6	6	0.4	7	0.6	70	100	5	1,000	600	2,000	3	0.7	3	500	0.03	700	NE
Solid Waste Section Limit			100	1	3	100	3	10	1	5	1	5	1	5	1	5	5	1	5	1	1	1	1	1	5	1	100	NE
13-02	CD-1s	25-Sep-06																										
	CD-1s	31-Oct-06																										
	CD-1s	23-Apr-07																										
	CD-1s	29-Oct-07																										
	CD-1s	23-Apr-08																		0.40J								
	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																										

Table 3b
Detected Groundwater Constituents - Volatile Organic Compounds
May 2016 Semi-Annual Sampling Event
Cabarrus County C&D Landfill

Facility Permit Number	Monitoring Well Code	Sample Date	Acetone	Benzene	Bromoform	2-Butanone	Chlorobenzene	Chloroethane	1,1,1-Trichloroethane	1,2-Dichlorobenzene	1,4-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloropropane	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene Chloride	Dichlorodifluoromethane	Toluene	Trichlorofluoromethane	Chloromethane	Tetrachloroethene	Trichloroethene	Total Xylenes	Vinyl Chloride	Carbon Disulfide	Tetrahydrofuran
North Carolina 2L Standard			6,000	1	4	4,000	50	3,000	200	20	6	6	0.4	7	0.6	70	100	5	1,000	600	2,000	3	0.7	3	500	0.03	700	NE
Solid Waste Section Limit			100	1	3	100	3	10	1	5	1	5	1	5	1	5	5	1	5	1	1	1	1	1	5	1	100	NE
13-02	CD-2	25-Sep-06																										
	CD-2	31-Oct-06																										
	CD-2	23-Apr-07																										
	CD-2	29-Oct-07																										
	CD-2	22-Apr-08								0.57J	0.29J									0.34J								
	CD-2	18-Nov-08																1.2B										
	CD-2	8-Apr-09																										
	CD-2	13-Oct-09																										
	CD-2	11-May-10																										
	CD-2	2-Nov-10																										
	CD-2	3-May-11																										
	CD-2	8-Nov-11																										
	CD-2	7-May-12																										
	CD-2	27-Nov-12					0.4J																					
	CD-2	7-May-13																										
	CD-2	5-Nov-13																										
	CD-2	6-May-14																										
	CD-2	4-Nov-14																										
	CD-2	7-May-15																										
	CD-2	27-Oct-15																										
	CD-2	17-May-16																										
13-02	CD-3	26-Sep-06			1																							
	CD-3	31-Oct-06																										
	CD-3	23-Apr-07																										
	CD-3	29-Oct-07																										
	CD-3	22-Apr-08								0.32J										0.35J								
	CD-3	18-Nov-08																1.2B										
	CD-3	8-Apr-09																										
	CD-3	13-Oct-09																		0.5J								
	CD-3	11-May-10																										
	CD-3	2-Nov-10																										
	CD-3	3-May-11																										
	CD-3	8-Nov-11				16J																						
	CD-3	7-May-12																										
	CD-3	27-Nov-12					0.4J																					
	CD-3	7-May-13																										
	CD-3	5-Nov-13																										
	CD-3	6-May-14																										
	CD-3	4-Nov-14																										
	CD-3	6-May-15																										2.4J
	CD-3	27-Oct-15																										1.6J
	CD-3	17-May-16																			0.6J							2.1J

Table 3b
Detected Groundwater Constituents - Volatile Organic Compounds
May 2016 Semi-Annual Sampling Event
Cabarrus County C&D Landfill

Facility Permit Number	Monitoring Well Code	Sample Date	Acetone	Benzene	Bromoform	2-Butanone	Chlorobenzene	Chloroethane	1,1,1-Trichloroethane	1,2-Dichlorobenzene	1,4-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloropropane	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene Chloride	Dichlorodifluoromethane	Toluene	Trichlorofluoromethane	Chloromethane	Tetrachloroethene	Trichloroethene	Total Xylenes	Vinyl Chloride	Carbon Disulfide	Tetrahydrofuran
North Carolina 2L Standard			6,000	1	4	4,000	50	3,000	200	20	6	6	0.4	7	0.6	70	100	5	1,000	600	2,000	3	0.7	3	500	0.03	700	NE
Solid Waste Section Limit			100	1	3	100	3	10	1	5	1	5	1	5	1	5	5	1	5	1	1	1	1	1	5	1	100	NE
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-7 (B-7)	22-Mar-12																										
	CD-7 (B-7)	3-May-12												0.65J		0.67J												
	CD-7	1-Jul-14																										
	CD-7	4-Nov-14																										
	CD-7	6-May-15										0.4J																
	CD-7	27-Oct-15										0.4J				0.5J												
	CD-7	17-May-16										0.7J				1.0J												1.9J
13-02	CD-8 (B-19)	22-Jan-09									0.22J	3.34J				2.84J		0.89J				1.21	**2.2**	1.21				
	CD-8 (B-19)	22-Mar-12										1.13				2.24							**1.03**					
	CD-8 (B-19)	3-May-12									0.18J	0.80J				1.51							**0.90J**					
	CD-8	1-Jul-14										3.2J				0.57J							**1.5**	0.45J				
	CD-8	4-Nov-14																					**0.8J**					
	CD-8	6-May-15																					0.5J					
	CD-8	27-Oct-15																					0.6J					
	CD-8 (dup)	27-Oct-15																					0.5J					
	CD-8	18-May-16																										
	CD-8 (dup)	18-May-16																										

Notes:
1. All units are in micrograms per liter (parts per billion).
2. dup - Duplicate Sample
3. J - Indicates the analytical result is an estimated concentration between the method detection limit and the Solid Waste Section Reporting Limit.
4. B - The analyte concentration detected in the method blank was greater than the method detection limit.
5. NE - Standard Not Established
6. CD-4 Rep was installed as part of the proposed Phase 1 C&D Landfill expansion in January 2009.
7. CD-3 was relocated on July 1, 2014, as part of the Phase 2 C&D Landfill expansion.
8. CD-7 and -8 (formerly piezometers B-7 and -19) were added to the monitoring program in July 2014 as part of the Phase 2 C&D Landfill expansion.

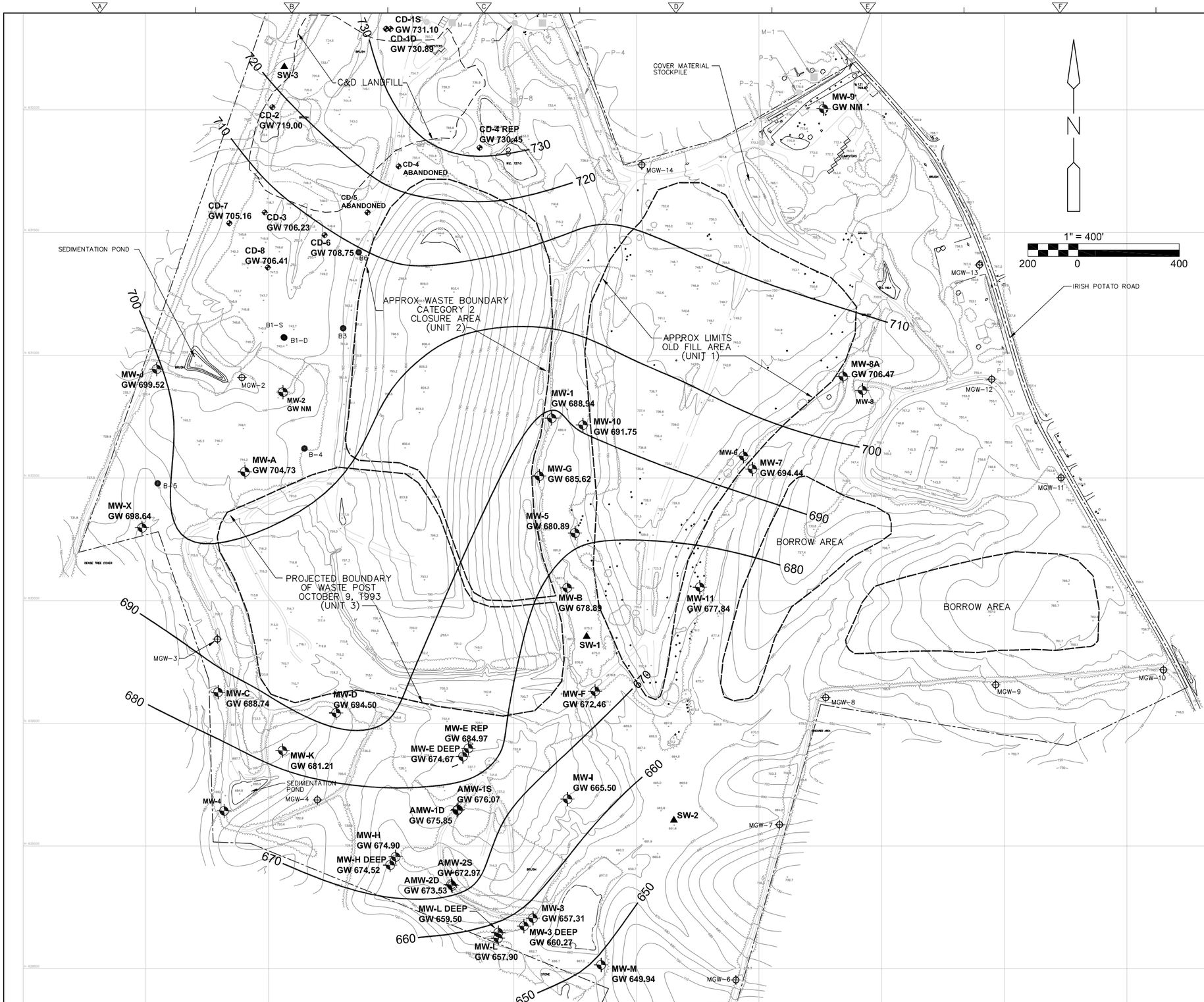
- Concentration exceeds the 15A NCAC 02L .0202 or Groundwater Protection Standard
- Indicates the result is below the detection limit

Table 3c
Detected Surface Water Constituents - Metals, Volatile Organic Compounds, and General Chemistry
May 2016 Semi-Annual Sampling Event
Cabarrus County C&D Landfill

Facility Permit Number	Surface Water Code	Sample Date	Metals																		Volatile Organic Compounds					General Chemistry			
			Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Acetone	Benzene	Chlorobenzene	1,4-Dichlorobenzene	Tetrahydrofuran	Alkalinity	Chloride	Sulfate	Total Dissolved Solids
North Carolina 2B Human Health or Freshwater Aquatic Life Standard			640*	10*	200,000*	6.5**	0.15**	24**	4*	2.7**	NS	0.54**	NS	0.012**	16**	5**	0.06**	0.47*	NS	36**	2,000**	51*	140**	100**	NS	NS	230**	NS	NS
Solid Waste Section Limit			6	10	100	1	1	10	10	10	300	10	50	0.2	50	10	10	5.5	25	10	100	1	3	1	NE	1	NE	250	NE
13-02	SW-3	9-Nov-11	DRY																		DRY					DRY			
	SW-3	9-May-12	DRY																		DRY					DRY			
	SW-3	29-Nov-12	DRY																		DRY					DRY			
	SW-3	10-May-13	0.27J		152			2.23J	3.07J	**4.30J**	996	0.49J	887B		4.68J			0.10J	3.01J	33.4						60	20	240J	482
	SW-3	5-Nov-13	DRY																		DRY					DRY			
	SW-3	6-May-14		7.70J	301	2.41	**0.22J**	**30.1B**	**58.3**	**39.9**	67,600B	**21.4B**	9,250		**29.4J**	3.71J		0.23J	101	**354**	22J				8.5J	530	71	440	1,430
	SW-3	4-Nov-14	DRY																		DRY					DRY			
	SW-3	5-May-15	DRY																		DRY					DRY			
	SW-3	27-Oct-15	DRY																		DRY					DRY			
	SW-3	19-May-16		**11.1**	200	5.95		**38.1**	**17.1**	**22.4**	59,700	**48.1**	576		15.5J	**18.0**		0.31J	180	**85.3**	5.6J					25	3.2	47J	908H-02

Notes:
1. Metal and volatile organic compound concentrations are in micrograms per liter (parts per billion).
2. General chemistry concentrations are in milligrams per liter (parts per million).
3. Standards obtained from section 15A NCAC 02B .0211 (North Carolina 2B) Surface Water Standards for Class C Waters (June 2016).
4. * - Human Health Standard
5. ** - Freshwater Aquatic Life
6. NS - No Standard; NE - Not Established
7. J - Indicates the analytical result is an estimated concentration between the method detection limit and the Solid Waste Section Reporting Limit.
8. B - The analyte concentration detected in the method blank was greater than the method detection limit.
9. H-02 - Total dissolved solids analysis was analyzed outside of hold time for SW-3.

- Concentration exceeds the North Carolina 2B Human Health or Freshwater Aquatic Life Standard for Class C Waters.
- Blank cell indicates the analyte was not detected



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

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. C&D Landfill

ASI Report No.: AZE0546
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-2	25.64	14.00	5.69	5.75	5.28	71	14.9	64	3.31	162.6	Cloudy (orange); no odor
CD-3	53.52	38.25	7.47	7.50	6.28	434	16.8	6.29	2.40	23.7	Cloudy; no odor
CD-7	46.29	39.65	3.25	3.25	6.16	317	15.8	13	2.02	40.2	Cloudy (orange); no odor
CD-8	43.34	31.98	5.56	5.75	7.48	262	17.4	25	3.01	81.7	Cloudy; no odor

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 Dissolved Oxygen (mg/L)
10 ORP mV

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

Reviewed By: Jonathan 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 - 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

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. C&D Landfill

ASI Report No.: AZE0546
Sampling Date: 5/16/16

Well ID	DTW
CD-1D	26.51
CD-1S	23.90

Well ID	DTW
CD-2	14.00
CD-3	38.25

Well ID	DTW
CD-7	39.65
CD-8	31.98

Note:

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

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

Reviewed By:
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. C&D Landfill

ASI Report No.: AZE0546
Sampling Date: 5/16/16

Well ID	% Vol[1]
CD-1D	0
CD-1S	0

Well ID	% Vol[1]
CD-2	0
CD-3	0

Well ID	% Vol[1]
CD-7	0
CD-8	0

Note:

1 % Vol - Volume of Methane Gas in Headspace

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

Reviewed By: Jonathan 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. C&D Landfill

ASI Report No.: AZE0546
Sampling Date: 5/19/16

Point ID	pH[1]	SC[2]	Temp[3]	Turb[4]	DO[5]	ORP	Comments
SW-3	6.40	200	15.7	671	5.99	139.3	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 Dissolved Oxygen (mg/L)

Sampled By: R. Powe
Field Specialist(s)

Reviewed By: Jonathan Scott
Field Services Manager

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

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, CSD	Dedicated Pump:	No
Well ID #:	CD-15 (1302)		
Date:	5/17/16		
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:	5/17/16 @ 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	6.00	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	3.51	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/Hz~~ 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: 5/17/16

By: [signature]

RP

Page 1 of 2

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, CxD	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL ~~WILLIAMS~~	Dedicated Pump:	No
Well ID #:	1302-CD-10		
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

waited on turb

waited 20 min for turb to stabilize and sampled

Fe2+ = 0.0 mg/L

Date: 5/17/16

By: [signature]

RP

Page 2 of 2

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 C&D	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #: CD-2 1302			
Date: 5/18/16			
Weather Conditions: Rain		Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) = 25.64		Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) = 14.00		Well Yield (subjective):	Good
		Sample Date and Time:	5/17/16 @ 0859
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 = 1.90		PSI:	Metals 5/18/16 @ 0820
		Recharge:	
Standard Evacuation Volume (3 casing volumes) = 5.69		Discharge:	
Total Volume of Water Removed (gallons): 5.75			

Time (military)	0851	0853	0857	0859			
Volume Purged (Gallons)	0	2.00	4.00	5.75			
Water Level (ft.) stable	—	—	—	—			
pH (s.u.) ± .2	6.99	5.36	5.25	5.28			
Sp. Cond. (µmhos/cm) ± 10 %	78	70	69	71			
Water Temp. (°C) constant	15.0	14.7	14.8	14.9			
Turbidity (NTU) ±10 % or ≤ 5 NTU	37	800+	800+	800+			
Dissolved Oxygen (mg/L) ±10 %	4.01	2.90	3.30	3.31			
RedOx Potential/ORP (mV) ±10 mV	149.7	166.4	166.8	162.6			
GPM/Hz	—	—	—	—			

COMMENTS/OBSERVATIONS: Cloudy (orange); no odor
Metals 5/18/16 @ 0820 NTU = 64

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 CxD	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #: 1302-CD-3			
Date: 5/17/16			
Weather Conditions: Rain		Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) = 53.52		Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) = 38.25		Well Yield (subjective):	Good
		Sample Date and Time:	5/17/16 @ 1027
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 = 2.49		PSI:	Metals 5/18/16 @ 0846
		Recharge:	
Standard Evacuation Volume (3 casing volumes) = 7.47		Discharge:	
Total Volume of Water Removed (gallons): 7.50			

Time (military)	1011	1018	1023	1027			
Volume Purged (Gallons)	0	2.50	5.00	7.50			
Water Level (ft.) stable	—	—	—	—			
pH (s.u.) ± .2	6.14	6.22	6.24	6.28			
Sp. Cond. (µmhos/cm) ± 10 %	387	410	428	434			
Water Temp. (°C) constant	16.6	16.7	16.8	16.8			
Turbidity (NTU) ±10 % or ≤ 5 NTU	30	380	299	403			
Dissolved Oxygen (mg/L) ±10 %	2.09	2.16	2.24	2.40			
RedOx Potential/ORP (mV) ±10 mV	39.9	25.1	25.2	23.7			
GPM/Hz	—	—	—	—			

COMMENTS/OBSERVATIONS: Cloudy, no odor
Metals 5/18/16 @ 0846 NTU = 6.29

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 C&D	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #: 1302-CD-7			
Date: 5/17/16			
Weather Conditions: Rain		Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) = 46.29		Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) = 39.65		Well Yield (subjective):	Good
		Sample Date and Time:	5/17/16 @ 0957
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 = 1.08		PSI:	Metals 5/18/16 @ 0852
		Recharge:	
Standard Evacuation Volume (3 casing volumes) = 3.25		Discharge:	
Total Volume of Water Removed (gallons): 3.25			

Time (military)	0949	0952	0955	0957			
Volume Purged (Gallons)	0	1.25	2.50	3.25			
Water Level (ft.) stable	—	—	—	—			
pH (s.u.) ± .2	6.11	6.00	6.07	6.16			
Sp. Cond. (µmhos/cm) ± 10 %	304	317	316	317			
Water Temp. (°C) constant	15.9	15.9	15.8	15.8			
Turbidity (NTU) ±10 % or ≤ 5 NTU	1003	800+	800+	800+			
Dissolved Oxygen (mg/L) ±10 %	2.58	1.90	2.23	2.02			
RedOx Potential/ORP (mV) ±10 mV	15.4	33.9	37.9	40.2			
GPM/Hz	—	—	—	—			

COMMENTS/OBSERVATIONS: Cloudy (orange); no odor
Metals 5/18/16 @ 0852 NTU = 13

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 CxD	Casing Material:	PVC
Field Personnel:	RAY POWE MARSHALL WILLIAMS	Dedicated Pump:	No
Well ID #: 1302 CD-8			
Date: 5/18/16			
Weather Conditions: Overcast, cool		Method of Well Evacuation:	Grundfos/Bailer/Peristaltic/BP
Total Well Depth in feet (TWD) = 43.34		Method of Sample Collection:	Grundfos/Bailer/Peristaltic/BP
Depth to Ground Water in feet (DGW) = 31.98		Well Yield (subjective):	Good
		Sample Date and Time:	5/18/16 @ 1119
2" Well: 1 Casing Volume in gallons (CV) = LWC x 0.163 = 1.85		PSI:	Metals 5/19/16 @ 0823
		Recharge:	
Standard Evacuation Volume (3 casing volumes) = 5.56		Discharge:	
Total Volume of Water Removed (gallons): 5.75			

Time (military)	1108	1112	1115	1119			
Volume Purged (Gallons)	0	2.00	4.00	5.75			
Water Level (ft.) stable	—	—	—	—			
pH (s.u.) ± .2	6.91	7.21	7.18	7.48			
Sp. Cond. (µmhos/cm) ± 10 %	234	195	265	262			
Water Temp. (°C) constant	17.9	17.6	17.5	17.4			
Turbidity (NTU) ±10 % or ≤ 5 NTU	530	800+	800+	800+			
Dissolved Oxygen (mg/L) ±10 %	3.26	2.83	2.94	3.01			
RedOx Potential/ORP (mV) ±10 mV	116.2	96.5	100.7	81.7			
GPM/Hz	—	—	—	—			

COMMENTS/OBSERVATIONS: Cloudy, no odor DUP 3 here
Metals 5/19/16 @ 0823 NTU = 25

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 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
B

FIELD INFORMATION LOG

Facility: Cabarrus LF C&D (SA SWs) Sample Point ID: ~~B02~~ SW-3

Location: Concord, NC Field Representatives: RP

Sample Matrix: Groundwater Weather: Rain

Time	pH (Std Units)	Conduct. (OS/cm)	Temp (°C)	Turbidity . (NTU's)	ORP (mV)	DO (mg/L)
0836	6.40	200	15.7	6.71	139.3	5.99

ANALYTE COLLECTION ORDER, CONTAINERS, PRESERVATIVES AND TESTS PERFORMED:

App I VOC – 3 40mL VOA w/ HCL+THF Metals – 1 500 mL HDPE w/ HNO3 Chloride, Sulfate, ALK, TDS

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

Date: 5/19/16 By: Rory Pace Company: ASI

20 of 22

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 = _____

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: AZE0546

Project: Cabarrus Co - C&D

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-CD1S	AZE0546-01	Ground Water	05/17/16 08:59	05/18/16 12:45
1302-CD1D	AZE0546-02	Ground Water	05/17/16 10:14	05/18/16 12:45
1302-CD2	AZE0546-03	Ground Water	05/17/16 08:59	05/19/16 09:30
1302-CD2	AZE0546-04	Ground Water	05/18/16 08:20	05/19/16 09:30
1302-CD3	AZE0546-05	Ground Water	05/17/16 10:27	05/19/16 09:30
1302-CD3	AZE0546-06	Ground Water	05/18/16 08:46	05/19/16 09:30
1302-CD7	AZE0546-07	Ground Water	05/17/16 09:57	05/19/16 09:30
1302-CD7	AZE0546-08	Ground Water	05/18/16 08:52	05/19/16 09:30
1302-CD8	AZE0546-09	Ground Water	05/18/16 11:19	05/19/16 15:05
1302-CD8	AZE0546-10	Ground Water	05/19/16 08:23	05/19/16 15:05
1302-Duplicate	AZE0546-11	Ground Water	05/18/16 00:00	05/19/16 15:05
1302-Duplicate	AZE0546-12	Ground Water	05/19/16 00:00	05/19/16 15:05
1302-SW3	AZE0546-13	Surface Water	05/19/16 08:36	05/19/16 15:05
1302-Trip Blank	AZE0546-14	Water	05/16/16 00:00	05/19/16 15:05

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

Case Narrative

Total Dissolved Solids Analysis by Standard Method 2540C (H-02 Qualifier):
Due to a miscommunication between analyst and Project Manager, sample AZE0546-13 (1302-SW3) was analyzed outside the method-recommended holding time of 7 days. The TDS analysis was performed in duplicate; the data was consistent with history for that sampling point and the relative percent difference between the duplicate values was good. Data does not seem to be impacted by the missed holding time.

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: AZE0546-01
Matrix: Ground Water

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

Report No.: AZE0546

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

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-CD1S
Lab No: AZE0546-01
Matrix: Ground Water

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

Report No.: AZE0546

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

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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: AZE0546-01
Matrix: Ground Water

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

Report No.: AZE0546

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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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD1S
Lab No: AZE0546-01
Matrix: Ground Water

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

Report No.: AZE0546

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: AZE0546-01
Matrix: Ground Water

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

Report No.: AZE0546

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
Tetrahydrofuran	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.5	109-99-9	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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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD1D
Lab No: AZE0546-02
Matrix: Ground Water

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

Report No.: AZE0546

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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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD1D
Lab No: AZE0546-02
Matrix: Ground Water

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

Report No.: AZE0546

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

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-CD1D
Lab No: AZE0546-02
Matrix: Ground Water

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

Report No.: AZE0546

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

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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-CD1D
Lab No: AZE0546-02
Matrix: Ground Water

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

Report No.: AZE0546

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
Tetrahydrofuran	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.5	109-99-9	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: AZE0546-02
Matrix: Ground Water

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

Report No.: AZE0546

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: Dibromofluoromethane	EPA 8260B	EPA 5030B	91 %		80-120				1868-53-7	05/20/16 12:00	05/20/16 19:19	6050503
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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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD2
Lab No: AZE0546-03
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/17/16 08:59
Date/Time Received: 05/19/16 09:30

Report No.: AZE0546

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	71	1	1	umhos/cm		1	COND	05/17/16 08:59	05/17/16 08:59	6050530
Dissolved Oxygen	SM 4500-O G	NA	3310	0.0	1	ug/L		0.0	NA	05/17/16 08:59	05/17/16 08:59	6050530
Field - pH	EPA 9040C	NA	5.28		1	pH Units			PH	05/17/16 08:59	05/17/16 08:59	6050530
Field - Redox	NA	NA	163		1	mV			REDOX	05/17/16 08:59	05/17/16 08:59	6050530
Field - Temperature	SM 2550 B	NA	14.9		1	°C			TEMP	05/17/16 08:59	05/17/16 08:59	6050530
Field - Turbidity	EPA 180.1	NA	800	0.10	1	NTU	>	0.10	TURB	05/17/16 08:59	05/17/16 08:59	6050530
Field - Water Level	NA	NA	14.00		1	feet			WL	05/17/16 08:59	05/17/16 08:59	6050530
Field - Well Depth	NA	NA	25.64		1	feet				05/17/16 08:59	05/17/16 08:59	6050530
General Chemistry												
Alkalinity as CaCO3	SM 2320 B	SM 2320 B	20000	1000	1	ug/L		1000	ALK	05/20/16 14:00	05/20/16 14:00	6050491
Total Dissolved Solids	SM 2540 C	SM 2540 C	147000	10000	1	ug/L		10000	E-10173	05/24/16 18:50	05/24/16 18:50	6050523
Inorganic Anions												
Chloride	EPA 9056A	EPA 9056A	7900	1000	1	ug/L		1000	16887-00-6	05/25/16 13:58	05/26/16 04:16	6050603
Sulfate	EPA 9056A	EPA 9056A	ND	5000	1	ug/L		5000	14808-79-8	05/25/16 13:58	05/26/16 04:16	6050603
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 09:31	6050513
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/23/16 05:30	05/23/16 09:31	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 09:31	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 09:31	6050513

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD2
Lab No: AZE0546-03
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/17/16 08:59
Date/Time Received: 05/19/16 09:30

Report No.: AZE0546

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												
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/23/16 05:30	05/23/16 09:31	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 09:31	6050513
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/23/16 05:30	05/23/16 09:31	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 09:31	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 09:31	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 09:31	6050513
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/23/16 05:30	05/23/16 09:31	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 09:31	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 09:31	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 09:31	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 09:31	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 09:31	6050513
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/23/16 05:30	05/23/16 09:31	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 09:31	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 09:31	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 09:31	6050513
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/23/16 05:30	05/23/16 09:31	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 09:31	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 09:31	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 09:31	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 09:31	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 09:31	6050513

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD2
Lab No: AZE0546-03
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/17/16 08:59
Date/Time Received: 05/19/16 09:30

Report No.: AZE0546

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												
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 09:31	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 09:31	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 09:31	6050513
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/23/16 05:30	05/23/16 09:31	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 09:31	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 09:31	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 09:31	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 09:31	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 09:31	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 09:31	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 09:31	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 09:31	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 09:31	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 09:31	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 09:31	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 09:31	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 09:31	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 09:31	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 09:31	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 09:31	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 09:31	6050513

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-CD2
Lab No: AZE0546-03
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/17/16 08:59
Date/Time Received: 05/19/16 09:30

Report No.: AZE0546

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												
Tetrahydrofuran	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.5	109-99-9	05/23/16 05:30	05/23/16 09:31	6050513
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	91 %		80-120				1868-53-7	05/23/16 05:30	05/23/16 09:31	6050513
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	100 %		78-120				17060-07-0	05/23/16 05:30	05/23/16 09:31	6050513
Surr: Toluene-d8	EPA 8260B	EPA 5030B	103 %		80-120				2037-26-5	05/23/16 05:30	05/23/16 09:31	6050513
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	105 %		80-120				460-00-4	05/23/16 05:30	05/23/16 09:31	6050513

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-CD2
Lab No: AZE0546-04
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/18/16 08:20
Date/Time Received: 05/19/16 09:30

Report No.: AZE0546

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	64.0	0.10	1	NTU		0.10	TURB	05/18/16 08:20	05/18/16 08:20	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 13:43	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 13:43	6060033
Barium	EPA 6020B	EPA 3005A	49.8	100	1	ug/L	J	0.30	7440-39-3	06/02/16 09:30	06/03/16 13:43	6060033
Beryllium	EPA 6020B	EPA 3005A	0.22	1.00	1	ug/L	J	0.09	7440-41-7	06/02/16 09:30	06/03/16 13:43	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 13:43	6060033
Chromium	EPA 6020B	EPA 3005A	2.32	10.0	1	ug/L	J	0.43	7440-47-3	06/02/16 09:30	06/03/16 13:43	6060033
Cobalt	EPA 6020B	EPA 3005A	3.41	10.0	1	ug/L	J	0.29	7440-48-4	06/02/16 09:30	06/03/16 13:43	6060033
Copper	EPA 6020B	EPA 3005A	3.56	10.0	1	ug/L	J	0.41	7440-50-8	06/02/16 09:30	06/03/16 13:43	6060033
Lead	EPA 6020B	EPA 3005A	1.20	10.0	1	ug/L	J	0.08	7439-92-1	06/02/16 09:30	06/03/16 13:43	6060033
Nickel	EPA 6020B	EPA 3005A	2.68	50.0	1	ug/L	J	0.48	7440-02-0	06/02/16 09:30	06/03/16 13:43	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 13:43	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 13:43	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 13:43	6060033
Vanadium	EPA 6020B	EPA 3005A	8.34	25.0	1	ug/L	J	1.57	7440-62-2	06/02/16 09:30	06/03/16 13:43	6060033
Zinc	EPA 6020B	EPA 3005A	7.62	10.0	1	ug/L	J	1.30	7440-66-6	06/02/16 09:30	06/03/16 13:43	6060033
Iron	EPA 6020A	EPA 3005A	2350	40.0	1	ug/L		5.7	7439-89-6	06/02/16 09:30	06/03/16 13:43	6060033
Manganese	EPA 6020A	EPA 3005A	71.7	10.0	1	ug/L		1.0	7439-96-5	06/02/16 09:30	06/03/16 13:43	6060033
Mercury	EPA 7470A	EPA 7470A	0.189	0.200	1	ug/L	J	0.132	7439-97-6	06/01/16 15:00	06/02/16 16:06	6060013

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-CD3
Lab No: AZE0546-05
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/17/16 10:27
Date/Time Received: 05/19/16 09:30

Report No.: AZE0546

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	434	1	1	umhos/cm		1	COND	05/17/16 10:27	05/17/16 10:27	6050530
Dissolved Oxygen	SM 4500-O G	NA	2400	0.0	1	ug/L		0.0	NA	05/17/16 10:27	05/17/16 10:27	6050530
Field - pH	EPA 9040C	NA	6.28		1	pH Units			PH	05/17/16 10:27	05/17/16 10:27	6050530
Field - Redox	NA	NA	24		1	mV			REDOX	05/17/16 10:27	05/17/16 10:27	6050530
Field - Temperature	SM 2550 B	NA	16.8		1	°C			TEMP	05/17/16 10:27	05/17/16 10:27	6050530
Field - Turbidity	EPA 180.1	NA	403	0.10	1	NTU		0.10	TURB	05/17/16 10:27	05/17/16 10:27	6050530
Field - Water Level	NA	NA	38.25		1	feet			WL	05/17/16 10:27	05/17/16 10:27	6050530
Field - Well Depth	NA	NA	53.52		1	feet				05/17/16 10:27	05/17/16 10:27	6050530
General Chemistry												
Alkalinity as CaCO3	SM 2320 B	SM 2320 B	100000	1000	1	ug/L		1000	ALK	05/20/16 14:00	05/20/16 14:00	6050491
Total Dissolved Solids	SM 2540 C	SM 2540 C	311000	10000	1	ug/L		10000	E-10173	05/24/16 18:50	05/24/16 18:50	6050523
Inorganic Anions												
Chloride	EPA 9056A	EPA 9056A	14000	1000	1	ug/L		1000	16887-00-6	05/25/16 13:58	05/26/16 04:36	6050603
Sulfate	EPA 9056A	EPA 9056A	26000	5000	1	ug/L		5000	14808-79-8	05/25/16 13:58	06/01/16 20:16	6050603
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 09:56	6050513
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/23/16 05:30	05/23/16 09:56	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 09:56	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 09:56	6050513

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD3
Lab No: AZE0546-05
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/17/16 10:27
Date/Time Received: 05/19/16 09:30

Report No.: AZE0546

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												
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/23/16 05:30	05/23/16 09:56	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 09:56	6050513
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/23/16 05:30	05/23/16 09:56	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 09:56	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 09:56	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 09:56	6050513
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/23/16 05:30	05/23/16 09:56	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 09:56	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 09:56	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 09:56	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 09:56	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 09:56	6050513
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/23/16 05:30	05/23/16 09:56	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 09:56	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 09:56	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 09:56	6050513
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/23/16 05:30	05/23/16 09:56	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 09:56	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 09:56	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 09:56	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 09:56	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 09:56	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-CD3
Lab No: AZE0546-05
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/17/16 10:27
Date/Time Received: 05/19/16 09:30

Report No.: AZE0546

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												
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 09:56	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 09:56	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 09:56	6050513
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/23/16 05:30	05/23/16 09:56	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 09:56	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 09:56	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 09:56	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 09:56	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 09:56	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 09:56	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 09:56	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 09:56	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 09:56	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 09:56	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 09:56	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 09:56	6050513
Trichlorofluoromethane	EPA 8260B	EPA 5030B	0.6	1.0	1	ug/L	J	0.5	75-69-4	05/23/16 05:30	05/23/16 09:56	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 09:56	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 09:56	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 09:56	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 09:56	6050513

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-CD3
Lab No: AZE0546-05
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/17/16 10:27
Date/Time Received: 05/19/16 09:30

Report No.: AZE0546

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												
Tetrahydrofuran	EPA 8260B	EPA 5030B	2.1	10	1	ug/L	J	1.5	109-99-9	05/23/16 05:30	05/23/16 09:56	6050513
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	95 %		80-120				1868-53-7	05/23/16 05:30	05/23/16 09:56	6050513
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	100 %		78-120				17060-07-0	05/23/16 05:30	05/23/16 09:56	6050513
Surr: Toluene-d8	EPA 8260B	EPA 5030B	100 %		80-120				2037-26-5	05/23/16 05:30	05/23/16 09:56	6050513
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	108 %		80-120				460-00-4	05/23/16 05:30	05/23/16 09:56	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-CD3
Lab No: AZE0546-06
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/18/16 08:46
Date/Time Received: 05/19/16 09:30

Report No.: AZE0546

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	6.29	0.10	1	NTU		0.10	TURB	05/18/16 08:46	05/18/16 08:46	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 13:48	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 13:48	6060033
Barium	EPA 6020B	EPA 3005A	194	100	1	ug/L		0.30	7440-39-3	06/02/16 09:30	06/03/16 13:48	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 13:48	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 13:48	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 13:48	6060033
Cobalt	EPA 6020B	EPA 3005A	1.60	10.0	1	ug/L	J	0.29	7440-48-4	06/02/16 09:30	06/03/16 13:48	6060033
Copper	EPA 6020B	EPA 3005A	1.35	10.0	1	ug/L	J	0.41	7440-50-8	06/02/16 09:30	06/03/16 13:48	6060033
Lead	EPA 6020B	EPA 3005A	0.24	10.0	1	ug/L	J	0.08	7439-92-1	06/02/16 09:30	06/03/16 13:48	6060033
Nickel	EPA 6020B	EPA 3005A	7.88	50.0	1	ug/L	J	0.48	7440-02-0	06/02/16 09:30	06/03/16 13:48	6060033
Selenium	EPA 6020B	EPA 3005A	1.19	10.0	1	ug/L	J	0.85	7782-49-2	06/02/16 09:30	06/03/16 13:48	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 13:48	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 13:48	6060033
Vanadium	EPA 6020B	EPA 3005A	4.02	25.0	1	ug/L	J	1.57	7440-62-2	06/02/16 09:30	06/03/16 13:48	6060033
Zinc	EPA 6020B	EPA 3005A	3.73	10.0	1	ug/L	J	1.30	7440-66-6	06/02/16 09:30	06/03/16 13:48	6060033
Iron	EPA 6020A	EPA 3005A	607	40.0	1	ug/L		5.7	7439-89-6	06/02/16 09:30	06/03/16 13:48	6060033
Manganese	EPA 6020A	EPA 3005A	1010	50.0	5	ug/L		5.2	7439-96-5	06/02/16 09:30	06/07/16 11:18	6060033
Mercury	EPA 7470A	EPA 7470A	ND	0.200	1	ug/L		0.132	7439-97-6	06/01/16 15:00	06/02/16 16:09	6060013

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-CD7
Lab No: AZE0546-07
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/17/16 09:57
Date/Time Received: 05/19/16 09:30

Report No.: AZE0546

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	317	1	1	umhos/cm		1	COND	05/17/16 09:57	05/17/16 09:57	6050530
Dissolved Oxygen	SM 4500-O G	NA	2020	0.0	1	ug/L		0.0	NA	05/17/16 09:57	05/17/16 09:57	6050530
Field - pH	EPA 9040C	NA	6.16		1	pH Units			PH	05/17/16 09:57	05/17/16 09:57	6050530
Field - Redox	NA	NA	40		1	mV			REDOX	05/17/16 09:57	05/17/16 09:57	6050530
Field - Temperature	SM 2550 B	NA	15.8		1	°C			TEMP	05/17/16 09:57	05/17/16 09:57	6050530
Field - Turbidity	EPA 180.1	NA	800	0.10	1	NTU	>	0.10	TURB	05/17/16 09:57	05/17/16 09:57	6050530
Field - Water Level	NA	NA	39.65		1	feet			WL	05/17/16 09:57	05/17/16 09:57	6050530
Field - Well Depth	NA	NA	46.29		1	feet				05/17/16 09:57	05/17/16 09:57	6050530
General Chemistry												
Alkalinity as CaCO3	SM 2320 B	SM 2320 B	90000	1000	1	ug/L		1000	ALK	05/20/16 14:00	05/20/16 14:00	6050491
Total Dissolved Solids	SM 2540 C	SM 2540 C	282000	10000	1	ug/L		10000	E-10173	05/24/16 18:50	05/24/16 18:50	6050523
Inorganic Anions												
Chloride	EPA 9056A	EPA 9056A	10000	2000	2	ug/L		2000	16887-00-6	05/25/16 13:58	05/26/16 04:57	6050603
Sulfate	EPA 9056A	EPA 9056A	29000	10000	2	ug/L		10000	14808-79-8	05/25/16 13:58	05/26/16 04:57	6050603
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 10:21	6050513
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/23/16 05:30	05/23/16 10:21	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 10:21	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 10:21	6050513

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD7
Lab No: AZE0546-07
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/17/16 09:57
Date/Time Received: 05/19/16 09:30

Report No.: AZE0546

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												
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/23/16 05:30	05/23/16 10:21	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 10:21	6050513
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/23/16 05:30	05/23/16 10:21	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 10:21	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 10:21	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 10:21	6050513
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/23/16 05:30	05/23/16 10:21	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 10:21	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 10:21	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 10:21	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 10:21	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 10:21	6050513
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/23/16 05:30	05/23/16 10:21	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 10:21	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 10:21	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 10:21	6050513
1,1-Dichloroethane	EPA 8260B	EPA 5030B	0.7	5.0	1	ug/L	J	0.4	75-34-3	05/23/16 05:30	05/23/16 10:21	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 10:21	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 10:21	6050513
cis-1,2-Dichloroethene	EPA 8260B	EPA 5030B	1.0	5.0	1	ug/L	J	0.5	156-59-2	05/23/16 05:30	05/23/16 10:21	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 10:21	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 10:21	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-CD7
Lab No: AZE0546-07
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/17/16 09:57
Date/Time Received: 05/19/16 09:30

Report No.: AZE0546

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												
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 10:21	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 10:21	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 10:21	6050513
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/23/16 05:30	05/23/16 10:21	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 10:21	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 10:21	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 10:21	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 10:21	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 10:21	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 10:21	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 10:21	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 10:21	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 10:21	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 10:21	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 10:21	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 10:21	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 10:21	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 10:21	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 10:21	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 10:21	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 10:21	6050513

PACE ANALYTICAL SERVICES, INC.

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD7
Lab No: AZE0546-07
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/17/16 09:57
Date/Time Received: 05/19/16 09:30

Report No.: AZE0546

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												
Tetrahydrofuran	EPA 8260B	EPA 5030B	1.9	10	1	ug/L	J	1.5	109-99-9	05/23/16 05:30	05/23/16 10:21	6050513
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	95 %		80-120				1868-53-7	05/23/16 05:30	05/23/16 10:21	6050513
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	99 %		78-120				17060-07-0	05/23/16 05:30	05/23/16 10:21	6050513
Surr: Toluene-d8	EPA 8260B	EPA 5030B	102 %		80-120				2037-26-5	05/23/16 05:30	05/23/16 10:21	6050513
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	106 %		80-120				460-00-4	05/23/16 05:30	05/23/16 10:21	6050513

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD7
Lab No: AZE0546-08
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/18/16 08:52
Date/Time Received: 05/19/16 09:30

Report No.: AZE0546

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	13.0	0.10	1	NTU		0.10	TURB	05/18/16 08:52	05/18/16 08:52	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 13:53	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 13:53	6060033
Barium	EPA 6020B	EPA 3005A	74.8	100	1	ug/L	J	0.30	7440-39-3	06/02/16 09:30	06/03/16 13:53	6060033
Beryllium	EPA 6020B	EPA 3005A	0.43	1.00	1	ug/L	J	0.09	7440-41-7	06/02/16 09:30	06/03/16 13:53	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 13:53	6060033
Chromium	EPA 6020B	EPA 3005A	2.18	10.0	1	ug/L	J	0.43	7440-47-3	06/02/16 09:30	06/03/16 13:53	6060033
Cobalt	EPA 6020B	EPA 3005A	0.36	10.0	1	ug/L	J	0.29	7440-48-4	06/02/16 09:30	06/03/16 13:53	6060033
Copper	EPA 6020B	EPA 3005A	4.74	10.0	1	ug/L	J	0.41	7440-50-8	06/02/16 09:30	06/03/16 13:53	6060033
Lead	EPA 6020B	EPA 3005A	1.20	10.0	1	ug/L	J	0.08	7439-92-1	06/02/16 09:30	06/03/16 13:53	6060033
Nickel	EPA 6020B	EPA 3005A	4.90	50.0	1	ug/L	J	0.48	7440-02-0	06/02/16 09:30	06/03/16 13:53	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 13:53	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 13:53	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 13:53	6060033
Vanadium	EPA 6020B	EPA 3005A	10.2	25.0	1	ug/L	J	1.57	7440-62-2	06/02/16 09:30	06/03/16 13:53	6060033
Zinc	EPA 6020B	EPA 3005A	4.03	10.0	1	ug/L	J	1.30	7440-66-6	06/02/16 09:30	06/03/16 13:53	6060033
Iron	EPA 6020A	EPA 3005A	2160	40.0	1	ug/L		5.7	7439-89-6	06/02/16 09:30	06/03/16 13:53	6060033
Manganese	EPA 6020A	EPA 3005A	59.4	10.0	1	ug/L		1.0	7439-96-5	06/02/16 09:30	06/03/16 13:53	6060033
Mercury	EPA 7470A	EPA 7470A	0.164	0.200	1	ug/L	J	0.132	7439-97-6	06/01/16 15:00	06/02/16 16:11	6060013

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-CD8
Lab No: AZE0546-09
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/18/16 11:19
Date/Time Received: 05/19/16 15:05

Report No.: AZE0546

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	262	1	1	umhos/cm		1	COND	05/18/16 11:19	05/18/16 11:19	6050530
Dissolved Oxygen	SM 4500-O G	NA	3010	0.0	1	ug/L		0.0	NA	05/18/16 11:19	05/18/16 11:19	6050530
Field - pH	EPA 9040C	NA	7.48		1	pH Units			PH	05/18/16 11:19	05/18/16 11:19	6050530
Field - Redox	NA	NA	82		1	mV			REDOX	05/18/16 11:19	05/18/16 11:19	6050530
Field - Temperature	SM 2550 B	NA	17.4		1	°C			TEMP	05/18/16 11:19	05/18/16 11:19	6050530
Field - Turbidity	EPA 180.1	NA	800	0.10	1	NTU	>	0.10	TURB	05/18/16 11:19	05/18/16 11:19	6050530
Field - Water Level	NA	NA	31.98		1	feet			WL	05/18/16 11:19	05/18/16 11:19	6050530
Field - Well Depth	NA	NA	43.34		1	feet				05/18/16 11:19	05/18/16 11:19	6050530
General Chemistry												
Alkalinity as CaCO3	SM 2320 B	SM 2320 B	115000	1000	1	ug/L		1000	ALK	05/20/16 14:00	05/20/16 14:00	6050491
Total Dissolved Solids	SM 2540 C	SM 2540 C	205000	10000	1	ug/L		10000	E-10173	05/24/16 18:50	05/24/16 18:50	6050523
Inorganic Anions												
Chloride	EPA 9056A	EPA 9056A	2000	1000	1	ug/L		1000	16887-00-6	05/25/16 13:58	05/26/16 05:18	6050603
Sulfate	EPA 9056A	EPA 9056A	ND	5000	1	ug/L		5000	14808-79-8	05/25/16 13:58	05/26/16 05:18	6050603
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 10:47	6050513
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/23/16 05:30	05/23/16 10:47	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 10:47	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 10:47	6050513

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD8
Lab No: AZE0546-09
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/18/16 11:19
Date/Time Received: 05/19/16 15:05

Report No.: AZE0546

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												
Bromodichloromethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.6	75-27-4	05/23/16 05:30	05/23/16 10:47	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 10:47	6050513
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/23/16 05:30	05/23/16 10:47	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 10:47	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 10:47	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 10:47	6050513
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/23/16 05:30	05/23/16 10:47	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 10:47	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 10:47	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 10:47	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 10:47	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 10:47	6050513
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/23/16 05:30	05/23/16 10:47	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 10:47	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 10:47	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 10:47	6050513
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/23/16 05:30	05/23/16 10:47	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 10:47	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 10:47	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 10:47	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 10:47	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 10:47	6050513

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD8
Lab No: AZE0546-09
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/18/16 11:19
Date/Time Received: 05/19/16 15:05

Report No.: AZE0546

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												
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 10:47	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 10:47	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 10:47	6050513
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/23/16 05:30	05/23/16 10:47	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 10:47	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 10:47	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 10:47	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 10:47	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 10:47	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 10:47	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 10:47	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 10:47	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 10:47	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 10:47	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 10:47	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 10:47	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 10:47	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 10:47	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 10:47	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 10:47	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 10:47	6050513

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD8
Lab No: AZE0546-09
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/18/16 11:19
Date/Time Received: 05/19/16 15:05

Report No.: AZE0546

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												
Tetrahydrofuran	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.5	109-99-9	05/23/16 05:30	05/23/16 10:47	6050513
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	96 %		80-120				1868-53-7	05/23/16 05:30	05/23/16 10:47	6050513
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	102 %		78-120				17060-07-0	05/23/16 05:30	05/23/16 10:47	6050513
Surr: Toluene-d8	EPA 8260B	EPA 5030B	96 %		80-120				2037-26-5	05/23/16 05:30	05/23/16 10:47	6050513
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	106 %		80-120				460-00-4	05/23/16 05:30	05/23/16 10:47	6050513

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-CD8
Lab No: AZE0546-10
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/19/16 08:23
Date/Time Received: 05/19/16 15:05

Report No.: AZE0546

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	25.0	0.10	1	NTU		0.10	TURB	05/19/16 08:23	05/19/16 08:23	6050530
Metals, Total												
Antimony	EPA 6020B	EPA 3005A	0.49	6.00	1	ug/L	J, B-01	0.25	7440-36-0	06/02/16 09:30	06/03/16 13:58	6060033
Arsenic	EPA 6020B	EPA 3005A	1.52	10.0	1	ug/L	J	0.75	7440-38-2	06/02/16 09:30	06/03/16 13:58	6060033
Barium	EPA 6020B	EPA 3005A	133	100	1	ug/L		0.30	7440-39-3	06/02/16 09:30	06/03/16 13:58	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 13:58	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 13:58	6060033
Chromium	EPA 6020B	EPA 3005A	3.54	10.0	1	ug/L	J	0.43	7440-47-3	06/02/16 09:30	06/03/16 13:58	6060033
Cobalt	EPA 6020B	EPA 3005A	1.40	10.0	1	ug/L	J	0.29	7440-48-4	06/02/16 09:30	06/03/16 13:58	6060033
Copper	EPA 6020B	EPA 3005A	28.1	10.0	1	ug/L		0.41	7440-50-8	06/02/16 09:30	06/03/16 13:58	6060033
Lead	EPA 6020B	EPA 3005A	1.28	10.0	1	ug/L	J	0.08	7439-92-1	06/02/16 09:30	06/03/16 13:58	6060033
Nickel	EPA 6020B	EPA 3005A	8.72	50.0	1	ug/L	J	0.48	7440-02-0	06/02/16 09:30	06/03/16 13:58	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 13:58	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 13:58	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 13:58	6060033
Vanadium	EPA 6020B	EPA 3005A	13.2	25.0	1	ug/L	J	1.57	7440-62-2	06/02/16 09:30	06/03/16 13:58	6060033
Zinc	EPA 6020B	EPA 3005A	1250	50.0	5	ug/L		6.52	7440-66-6	06/02/16 09:30	06/07/16 11:22	6060033
Iron	EPA 6020A	EPA 3005A	2320	40.0	1	ug/L		5.7	7439-89-6	06/02/16 09:30	06/03/16 13:58	6060033
Manganese	EPA 6020A	EPA 3005A	123	10.0	1	ug/L		1.0	7439-96-5	06/02/16 09:30	06/03/16 13:58	6060033
Mercury	EPA 7470A	EPA 7470A	ND	0.200	1	ug/L		0.132	7439-97-6	06/01/16 15:00	06/02/16 16:13	6060013

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-Duplicate
Lab No: AZE0546-11
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/18/16 00:00
Date/Time Received: 05/19/16 15:05

Report No.: AZE0546

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
General Chemistry												
Alkalinity as CaCO3	SM 2320 B	SM 2320 B	110000	1000	1	ug/L		1000	ALK	05/20/16 14:00	05/20/16 14:00	6050491
Total Dissolved Solids	SM 2540 C	SM 2540 C	215000	50000	1	ug/L		50000	E-10173	05/24/16 18:50	05/24/16 18:50	6050523
Inorganic Anions												
Chloride	EPA 9056A	EPA 9056A	2000	1000	1	ug/L		1000	16887-00-6	05/25/16 13:58	05/26/16 07:04	6050603
Sulfate	EPA 9056A	EPA 9056A	ND	5000	1	ug/L		5000	14808-79-8	05/25/16 13:58	05/26/16 07:04	6050603
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 11:12	6050513
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/23/16 05:30	05/23/16 11:12	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 11:12	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 11:12	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 11:12	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 11:12	6050513
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/23/16 05:30	05/23/16 11:12	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 11:12	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 11:12	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 11:12	6050513
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/23/16 05:30	05/23/16 11:12	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 11:12	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 11:12	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 11:12	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 11:12	6050513

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-Duplicate
Lab No: AZE0546-11
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/18/16 00:00
Date/Time Received: 05/19/16 15:05

Report No.: AZE0546

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-Dibromoethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.7	106-93-4	05/23/16 05:30	05/23/16 11:12	6050513
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/23/16 05:30	05/23/16 11:12	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 11:12	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 11:12	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 11:12	6050513
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/23/16 05:30	05/23/16 11:12	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 11:12	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 11:12	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 11:12	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 11:12	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 11:12	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 11:12	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 11:12	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 11:12	6050513
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/23/16 05:30	05/23/16 11:12	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 11:12	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 11:12	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 11:12	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 11:12	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 11:12	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 11:12	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-Duplicate
Lab No: AZE0546-11
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/18/16 00:00
Date/Time Received: 05/19/16 15:05

Report No.: AZE0546

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												
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 5030B	ND	1.0	1	ug/L		0.5	79-34-5	05/23/16 05:30	05/23/16 11:12	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 11:12	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 11:12	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 11:12	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 11:12	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 11:12	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 11:12	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 11:12	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 11:12	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 11:12	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 11:12	6050513
Tetrahydrofuran	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.5	109-99-9	05/23/16 05:30	05/23/16 11:12	6050513
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	92 %		80-120				1868-53-7	05/23/16 05:30	05/23/16 11:12	6050513
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	101 %		78-120				17060-07-0	05/23/16 05:30	05/23/16 11:12	6050513
Surr: Toluene-d8	EPA 8260B	EPA 5030B	98 %		80-120				2037-26-5	05/23/16 05:30	05/23/16 11:12	6050513
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	105 %		80-120				460-00-4	05/23/16 05:30	05/23/16 11:12	6050513

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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: AZE0546-12
Matrix: Ground Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/19/16 00:00
Date/Time Received: 05/19/16 15:05

Report No.: AZE0546

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	1.27	6.00	1	ug/L	J, B-01	0.25	7440-36-0	06/02/16 09:30	06/03/16 14:03	6060033
Arsenic	EPA 6020B	EPA 3005A	1.55	10.0	1	ug/L	J	0.75	7440-38-2	06/02/16 09:30	06/03/16 14:03	6060033
Barium	EPA 6020B	EPA 3005A	136	100	1	ug/L		0.30	7440-39-3	06/02/16 09:30	06/03/16 14:03	6060033
Beryllium	EPA 6020B	EPA 3005A	0.23	1.00	1	ug/L	J	0.09	7440-41-7	06/02/16 09:30	06/03/16 14:03	6060033
Cadmium	EPA 6020B	EPA 3005A	0.10	1.00	1	ug/L	J	0.10	7440-43-9	06/02/16 09:30	06/03/16 14:03	6060033
Chromium	EPA 6020B	EPA 3005A	4.41	10.0	1	ug/L	J	0.43	7440-47-3	06/02/16 09:30	06/03/16 14:03	6060033
Cobalt	EPA 6020B	EPA 3005A	1.63	10.0	1	ug/L	J	0.29	7440-48-4	06/02/16 09:30	06/03/16 14:03	6060033
Copper	EPA 6020B	EPA 3005A	31.2	10.0	1	ug/L		0.41	7440-50-8	06/02/16 09:30	06/03/16 14:03	6060033
Lead	EPA 6020B	EPA 3005A	1.87	10.0	1	ug/L	J	0.08	7439-92-1	06/02/16 09:30	06/03/16 14:03	6060033
Nickel	EPA 6020B	EPA 3005A	9.76	50.0	1	ug/L	J	0.48	7440-02-0	06/02/16 09:30	06/03/16 14:03	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 14:03	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 14:03	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 14:03	6060033
Vanadium	EPA 6020B	EPA 3005A	14.8	25.0	1	ug/L	J	1.57	7440-62-2	06/02/16 09:30	06/03/16 14:03	6060033
Zinc	EPA 6020B	EPA 3005A	1600	50.0	5	ug/L		6.52	7440-66-6	06/02/16 09:30	06/07/16 11:27	6060033
Iron	EPA 6020A	EPA 3005A	3230	40.0	1	ug/L		5.7	7439-89-6	06/02/16 09:30	06/03/16 14:03	6060033
Manganese	EPA 6020A	EPA 3005A	129	10.0	1	ug/L		1.0	7439-96-5	06/02/16 09:30	06/03/16 14:03	6060033
Mercury	EPA 7470A	EPA 7470A	ND	0.200	1	ug/L		0.132	7439-97-6	06/01/16 15:00	06/02/16 16:16	6060013

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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: AZE0545-19
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

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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

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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.

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: AZE0545-20
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

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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-SW3
Lab No: AZE0546-13
Matrix: Surface Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/19/16 08:36
Date/Time Received: 05/19/16 15:05

Report No.: AZE0546

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	200	1	1	umhos/cm		1	COND	05/19/16 08:36	05/19/16 08:36	6050530
Dissolved Oxygen	SM 4500-O G	NA	5990	0.0	1	ug/L		0.0	NA	05/19/16 08:36	05/19/16 08:36	6050530
Field - pH	EPA 9040C	NA	6.40		1	pH Units			PH	05/19/16 08:36	05/19/16 08:36	6050530
Field - Redox	NA	NA	139		1	mV			REDOX	05/19/16 08:36	05/19/16 08:36	6050530
Field - Temperature	SM 2550 B	NA	15.7		1	°C			TEMP	05/19/16 08:36	05/19/16 08:36	6050530
Field - Turbidity	EPA 180.1	NA	671	0.10	1	NTU		0.10	TURB	05/19/16 08:36	05/19/16 08:36	6050530
General Chemistry												
Alkalinity as CaCO3	SM 2320 B	SM 2320 B	25000	1000	1	ug/L		1000	ALK	05/20/16 14:00	05/20/16 14:00	6050491
Total Dissolved Solids	SM 2540 C	SM 2540 C	908000	40000	1	ug/L	H-02	40000	E-10173	06/03/16 10:40	06/03/16 10:40	6060067
Inorganic Anions												
Chloride	EPA 9056A	EPA 9056A	3200	1000	1	ug/L		1000	16887-00-6	05/25/16 13:58	05/26/16 07:26	6050603
Sulfate	EPA 9056A	EPA 9056A	47000	5000	1	ug/L		5000	14808-79-8	05/25/16 13:58	06/04/16 05:04	6050603
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 14:08	6060033
Arsenic	EPA 6020B	EPA 3005A	11.1	10.0	1	ug/L		0.75	7440-38-2	06/02/16 09:30	06/03/16 14:08	6060033
Barium	EPA 6020B	EPA 3005A	200	100	1	ug/L		0.30	7440-39-3	06/02/16 09:30	06/03/16 14:08	6060033
Beryllium	EPA 6020B	EPA 3005A	5.95	5.00	5	ug/L		0.47	7440-41-7	06/02/16 09:30	06/07/16 12:10	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 14:08	6060033
Chromium	EPA 6020B	EPA 3005A	38.1	10.0	1	ug/L		0.43	7440-47-3	06/02/16 09:30	06/03/16 14:08	6060033

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-SW3
Lab No: AZE0546-13
Matrix: Surface Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/19/16 08:36
Date/Time Received: 05/19/16 15:05

Report No.: AZE0546

Analyte	Analytical Method	Prep Method	Result	SWSL/ RL	DF	Units	Qual	MDL	CAS #	Prep Date/Time	Analysis Date/Time	Batch
Metals, Total												
Cobalt	EPA 6020B	EPA 3005A	17.1	10.0	1	ug/L		0.29	7440-48-4	06/02/16 09:30	06/03/16 14:08	6060033
Copper	EPA 6020B	EPA 3005A	22.4	10.0	1	ug/L		0.41	7440-50-8	06/02/16 09:30	06/03/16 14:08	6060033
Lead	EPA 6020B	EPA 3005A	41.8	10.0	1	ug/L		0.08	7439-92-1	06/02/16 09:30	06/03/16 14:08	6060033
Nickel	EPA 6020B	EPA 3005A	15.5	50.0	1	ug/L	J	0.48	7440-02-0	06/02/16 09:30	06/03/16 14:08	6060033
Selenium	EPA 6020B	EPA 3005A	18.0	10.0	1	ug/L		0.85	7782-49-2	06/02/16 09:30	06/03/16 14:08	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 14:08	6060033
Thallium	EPA 6020B	EPA 3005A	0.31	5.50	1	ug/L	J	0.06	7440-28-0	06/02/16 09:30	06/03/16 14:08	6060033
Vanadium	EPA 6020B	EPA 3005A	180	25.0	1	ug/L		1.57	7440-62-2	06/02/16 09:30	06/03/16 14:08	6060033
Zinc	EPA 6020B	EPA 3005A	85.3	10.0	1	ug/L		1.30	7440-66-6	06/02/16 09:30	06/03/16 14:08	6060033
Iron	EPA 6020A	EPA 3005A	59700	800	20	ug/L		114	7439-89-6	06/02/16 09:30	06/07/16 11:32	6060033
Manganese	EPA 6020A	EPA 3005A	576	10.0	1	ug/L		1.0	7439-96-5	06/02/16 09:30	06/03/16 14:08	6060033
Mercury	EPA 7470A	EPA 7470A	ND	0.200	1	ug/L		0.132	7439-97-6	06/01/16 15:00	06/02/16 16:18	6060013
Volatile Organic Compounds by EPA 8260												
Acetone	EPA 8260B	EPA 5030B	5.6	100	1	ug/L	J	4.9	67-64-1	05/23/16 05:30	05/23/16 11:37	6050513
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/23/16 05:30	05/23/16 11:37	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 11:37	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 11:37	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 11:37	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 11:37	6050513
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/23/16 05:30	05/23/16 11:37	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 11:37	6050513

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5400 Glenwood Ave., Suite 300
Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-SW3
Lab No: AZE0546-13
Matrix: Surface Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/19/16 08:36
Date/Time Received: 05/19/16 15:05

Report No.: AZE0546

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												
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 11:37	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 11:37	6050513
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/23/16 05:30	05/23/16 11:37	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 11:37	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 11:37	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 11:37	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 11:37	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 11:37	6050513
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/23/16 05:30	05/23/16 11:37	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 11:37	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 11:37	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 11:37	6050513
1,1-Dichloroethane	EPA 8260B	EPA 5030B	ND	5.0	1	ug/L		0.4	75-34-3	05/23/16 05:30	05/23/16 11:37	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 11:37	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 11:37	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 11:37	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 11:37	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 11:37	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 11:37	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 11:37	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 11:37	6050513
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/23/16 05:30	05/23/16 11:37	6050513

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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-SW3
Lab No: AZE0546-13
Matrix: Surface Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/19/16 08:36
Date/Time Received: 05/19/16 15:05

Report No.: AZE0546

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												
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 11:37	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 11:37	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 11:37	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 11:37	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 11:37	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 11:37	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 11:37	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 11:37	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 11:37	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 11:37	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 11:37	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 11:37	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 11:37	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 11:37	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 11:37	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 11:37	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 11:37	6050513
Tetrahydrofuran	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.5	109-99-9	05/23/16 05:30	05/23/16 11:37	6050513
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	93 %		80-120				1868-53-7	05/23/16 05:30	05/23/16 11:37	6050513
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	101 %		78-120				17060-07-0	05/23/16 05:30	05/23/16 11:37	6050513
Surr: Toluene-d8	EPA 8260B	EPA 5030B	96 %		80-120				2037-26-5	05/23/16 05:30	05/23/16 11:37	6050513

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-SW3
Lab No: AZE0546-13
Matrix: Surface Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/19/16 08:36
Date/Time Received: 05/19/16 15:05

Report No.: AZE0546

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: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	104 %		80-120				460-00-4	05/23/16 05:30	05/23/16 11:37	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-Trip Blank
Lab No: AZE0546-14
Matrix: Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/16/16 00:00
Date/Time Received: 05/19/16 15:05

Report No.: AZE0546

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 08:47	6050502
Acrylonitrile	EPA 8260B	EPA 5030B	ND	200	1	ug/L		1.8	107-13-1	05/20/16 05:15	05/20/16 08:47	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 08:47	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 08:47	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 08:47	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 08:47	6050502
Bromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.8	74-83-9	05/20/16 05:15	05/20/16 08:47	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 08:47	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 08:47	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 08:47	6050502
Chloroethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.4	75-00-3	05/20/16 05:15	05/20/16 08:47	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 08:47	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 08:47	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 08:47	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 08:47	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 08:47	6050502
Dibromomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.7	74-95-3	05/20/16 05:15	05/20/16 08:47	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 08:47	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 08:47	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 08:47	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 08:47	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 08:47	6050502

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Raleigh NC, 27612

Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-Trip Blank
Lab No: AZE0546-14
Matrix: Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/16/16 00:00
Date/Time Received: 05/19/16 15:05

Report No.: AZE0546

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 08:47	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 08:47	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 08:47	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 08:47	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 08:47	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 08:47	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 08:47	6050502
Iodomethane	EPA 8260B	EPA 5030B	ND	10	1	ug/L		0.6	74-88-4	05/20/16 05:15	05/20/16 08:47	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 08:47	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 08:47	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 08:47	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 08:47	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 08:47	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 08:47	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 08:47	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 08:47	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 08:47	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 08:47	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 08:47	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 08:47	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 08:47	6050502

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Attention: Mr. Mat Colone

June 09, 2016

Client ID: 1302-Trip Blank
Lab No: AZE0546-14
Matrix: Water

Project: Cabarrus Co - C&D
Date/Time Sampled: 05/16/16 00:00
Date/Time Received: 05/19/16 15:05

Report No.: AZE0546

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 08:47	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 08:47	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 08:47	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 08:47	6050502
Tetrahydrofuran	EPA 8260B	EPA 5030B	ND	10	1	ug/L		1.5	109-99-9	05/20/16 05:15	05/20/16 08:47	6050502
Surr: Dibromofluoromethane	EPA 8260B	EPA 5030B	93 %		80-120				1868-53-7	05/20/16 05:15	05/20/16 08:47	6050502
Surr: 1,2-Dichloroethane-d4	EPA 8260B	EPA 5030B	100 %		78-120				17060-07-0	05/20/16 05:15	05/20/16 08:47	6050502
Surr: Toluene-d8	EPA 8260B	EPA 5030B	104 %		80-120				2037-26-5	05/20/16 05:15	05/20/16 08:47	6050502
Surr: 4-Bromofluorobenzene	EPA 8260B	EPA 5030B	107 %		80-120				460-00-4	05/20/16 05:15	05/20/16 08:47	6050502

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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 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 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			

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General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050491 - SM 2320 B										
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							
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

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General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050509 - SM 5220 D										
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							
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 6050523 - SM 2540 C										
Blank (6050523-BLK1)							Prepared & Analyzed: 05/24/16			
Total Dissolved Solids	ND	10000	ug/L							
LCS (6050523-BS1)							Prepared & Analyzed: 05/24/16			
Total Dissolved Solids	401000	10000	ug/L	400000		100	84-108			

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General Chemistry - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6050523 - SM 2540 C										
Duplicate (6050523-DUP1)		**Source: AZE0546-11**					Prepared & Analyzed: 05/24/16			
Total Dissolved Solids	230000	50000	ug/L		215000			7	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	
Batch 6060067 - SM 2540 C										
Blank (6060067-BLK1)							Prepared & Analyzed: 06/03/16			
Total Dissolved Solids	ND	10000	ug/L							
LCS (6060067-BS1)							Prepared & Analyzed: 06/03/16			
Total Dissolved Solids	404000	10000	ug/L	400000		101	84-108			
Duplicate (6060067-DUP1)		**Source: AZE0546-13**					Prepared & Analyzed: 06/03/16			
Total Dissolved Solids	844000	40000	ug/L		908000			7	10	

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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 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 6050603 - EPA 9056A										
Blank (6050603-BLK1)							Prepared & Analyzed: 05/25/16			
Chloride	ND	1000	ug/L							

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June 09, 2016

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			
Nitrate as N	ND	50	ug/L							
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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Raleigh NC, 27612

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 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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Metals, Total - Quality Control

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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June 09, 2016

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 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			
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	

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 6060013 - EPA 7470A										
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							
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							

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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										
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			
Iron	1050	40.0	ug/L	1000.0		105	80-120			
Lead	95.9	10.0	ug/L	100.00		96	80-120			
Manganese	102	10.0	ug/L	100.00		102	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			
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			

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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			
Iron	1370	40.0	ug/L	1000.0	293	108	75-125			
Lead	93.8	10.0	ug/L	100.00	0.33	93	75-125			
Manganese	108	10.0	ug/L	100.00	5.67	102	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	
Iron	1360	40.0	ug/L	1000.0	293	107	75-125	0.7	20	
Lead	97.9	10.0	ug/L	100.00	0.33	98	75-125	4	20	
Manganese	111	10.0	ug/L	100.00	5.67	106	75-125	3	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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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			
Iron	1310		ug/L	1000.0	293	101	80-120			
Lead	94.6		ug/L	100.00	0.33	94	80-120			
Manganese	108		ug/L	100.00	5.67	102	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							
Tetrahydrofuran	ND	10	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*			

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

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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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							
Tetrahydrofuran	ND	10	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			

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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			
Toluene	50		ug/L	50.000	ND	100	68-127			
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 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							

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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			
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							
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							

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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			
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							
Tetrahydrofuran	ND	10	ug/L							
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			

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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										
LCS (6050513-BS1)							Prepared & Analyzed: 05/23/16			
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*			
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	

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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 Dup (6050513-MSD1)		**Source: AZE0545-40**					Prepared & Analyzed: 05/23/16			
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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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

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

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

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).

H-02 Sample was prepared and/or analyzed outside of the EPA recommended holding time. See Case Narrative.

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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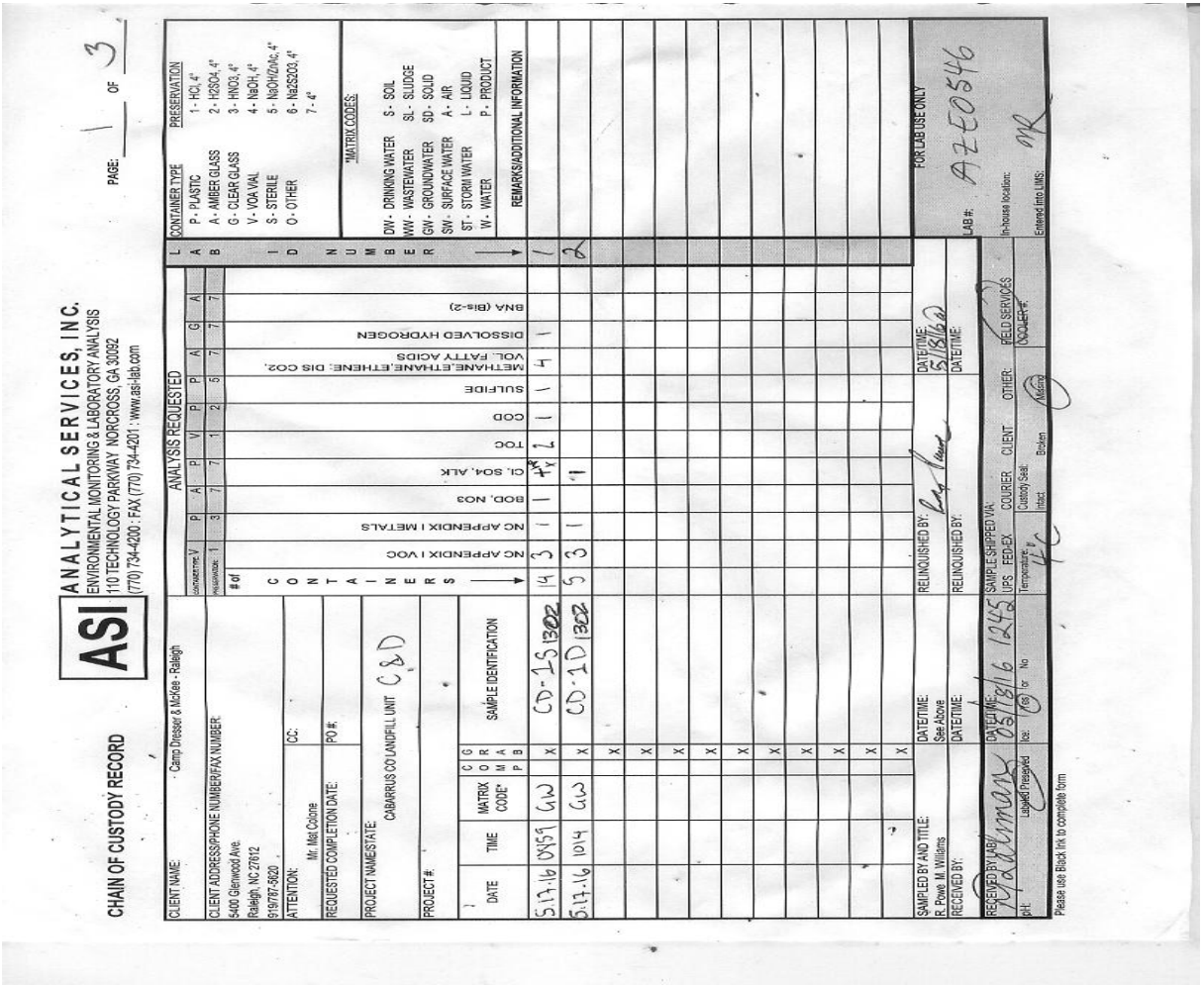
Attention: Mr. Mat Colone

June 09, 2016

CHAIN OF CUSTODY RECORD



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

PAGE: 1 OF 3

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 C&D

PROJECT #:

ANALYSIS REQUESTED

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)
CONTAINER TYPE	V	P	A	P	V	P	P	A	G	A
PRESERVATION	1	3	7	7	1	2	5	7	7	7

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
5.17.16	0959	GW		X	CD-1S 1302	14	3	1	1	+X	2	1	1	4	1		1
5.17.16	1014	GW		X	CD-1D 1302	5	3	1	1	1							2

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. Williams — DATE/TIME: See Above — RELINQUISHED BY: [signature] — DATE/TIME: 5/18/16 @

RECEIVED BY: — DATE/TIME: — RELINQUISHED BY: — DATE/TIME:

RECEIVED BY LAB: [signature] — DATE/TIME: 05/18/16 1245 — SAMPLE SHIPPED VIA: UPS FED-EX COURIER CLIENT OTHER: FIELD SERVICES

pH: Labeled Preserved — Ice: Yes or No — Temperature: 4°C — Custody Seal: Intact Broken Missing — COOLER #:

FOR LAB USE ONLY — LAB #: AZE0546 — In-house location: — Entered into LIMS: MR

Please use Black Ink to complete form

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Attention: Mr. Mat Colone

June 09, 2016

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CHAIN OF CUSTODY RECORD

PAGE: 2 OF 3

CLIENT NAME: Camp Dresser & McKee - Raleigh
CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER: 5400 Glenwood Ave. Raleigh, NC 27612 919/787-5820
ATTENTION: Mr. Mat Colone
CC:
REQUESTED COMPLETION DATE:
PO #:
PROJECT NAME/STATE: CABARRUS CO LANDFILL UNIT CYD
PROJECT #:

ANALYSIS REQUESTED

DATE	TIME	MATRIX CODE*	# of CONTAINERS	SAMPLE IDENTIFICATION	NC App.1 VOC Expanded + TTHM	NC App.1 Metals + Hg, Mn	Chloride, Sulfate, Alk, TDS	pH, Sc, Temp, Turb, DO, Cond, Sol, Sol (on site)	Fe (on site)
5/17/16	0839	GW	3	1302 CD-2	4 3	1	X		3
5/18/16	0820	GW	3	↳	1	1	X		4
5/17/16	1027	GW	3	1302 CD-3	4 3	1	X	X	5
5/18/16	0846	GW	3	↳	1	1		X	6
5/17/16	0857	GW	3	1302 CD-7	4 3	1	X		7
5/18/16	0852	GW	3	↳	1	1		X	8

SAMPLED BY AND TITLE: R. Powe M. Williams — DATE/TIME: See Above
RECEIVED BY: — DATE/TIME:
RELINQUISHED BY: Rory Powe — DATE/TIME: 5/18/16 2 1600
RELINQUISHED BY: — DATE/TIME:
RECEIVED BY/LAB: — DATE/TIME: 05/19/16 0930
SAMPLE SHIPPED VIA: UPS FED EX COURIER CLIENT OTHER: TRUE SERVICES
pH: Labels/Preserved Yes / No Ice: Yes / No Temperature: Intact / Broken Seals: Intact / Broken
Please use Black Ink to complete form

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; S - SOIL; WW - WASTEWATER; SL - SLUDGE; GW - GROUNDWATER; SD - SOLID; SW - SURFACE WATER; A - AIR; ST - STORM WATER; L - LIQUID; W - WATER; P - PRODUCT

REMARKS/ADDITIONAL INFORMATION

FOR LAB USE ONLY
LAB #: AZE0546
In-house location:
Entered into LIMS:

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Attention: Mr. Mat Colone

June 09, 2016

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CHAIN OF CUSTODY RECORD

PAGE: 3 OF 3

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 C&D

PROJECT #:

ANALYSIS REQUESTED

DATE	TIME	MATRIX CODE*	# of CONTAINERS	SAMPLE IDENTIFICATION	NC App 1 Metals + Hg, Mn, Fe, Al	Chloride, Sulfate, Alk, TDS	pH, SC, Temp, Turb, DO, Cond, Lab	pH, SC, Temp, Turb, DO, Cond, Cons.	Turb (on site)	REMARKS/ADDITIONAL INFORMATION
5/18/16	1119	GW	4	1302 CD-8	X	X				9
5/19/16	0823	GW	1	↳						10
5/19/16	—	GW	4	1302 Duplicate						11
5/19/16	—	GW	1	↳						12
5/19/16	0826	SW	5	1302 SW-3		X				13
5/19/16	—	W	3	1302 Trip Blank						14

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. Pope, M. Williams — 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

Upon Receipt: Ice: Yes or No; Temperature: 1°C; Custody Seal: Intact, Broken, Missing; COOLER #:

FOR LAB USE ONLY: LAB #: AZE0546; In-house location: MR; Entered into LIMS:

Please use Black Ink to complete form

PACE ANALYTICAL SERVICES, INC.

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LOG-IN CHECKLIST **Printed: 6/9/2016 4:51:58PM**

Attn: Mr. Mat Colone

Client: Camp Dresser & McKee Inc. - Raleigh
Project: Cabarrus Co - C&D
Date Received: 05/18/16 12:45

Work Order: AZE0546
Logged In By: Mohammad M. Rahman

OBSERVATIONS

#Samples: 14 **#Containers:** 47

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

CDM Smith

cdmsmith.com