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):

Joyce Engineering, Inc.

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

Name: G. Van Ness Burbach, Ph.D., P.G. Phone: (336) 323-0092

E-mail: vburbach@joyceengineering.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
OmniSource Landfill	1426 W. Mountain St. Kernersville, NC 27284	34-20	.0500	October 14, 2015

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.

G. VanNess Burbach, Ph.D., PG — Technical Consultant — (336) 323-0092

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

Signature — 1/19/16 Date

Affix NC Licensed/ Professional Geologist Seal

NORTH CAROLINA LICENSED SEAL 1349 GEOLOGIST G. VAN NESS BURBACH

2211 W. Meadowview Rd., Ste. 101 Greensboro, NC 27407

Facility Representative Address

C-0782

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

Revised 6/2009

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January 29, 2016

Ms. Jaclynne Drummond
Compliance Hydrogeologist
NC Department of Environmental Quality
Division of Waste Management – Solid Waste Section
1646 Mail Service Center
Raleigh, North Carolina 27699-1646

RE: Second Semiannual Water Quality Monitoring Report of 2015
OmniSource Kernersville Landfill, Permit No. 34-20
Kernersville, North Carolina
JOYCE Project No. 00799.1501.12 Task No. 02

Dear Ms. Drummond:

On behalf of OmniSource Southeast, Joyce Engineering is submitting the *Second Semiannual Water Quality Monitoring Report of 2015* for the OmniSource Kernersville Landfill, Permit No. 34-20. The attached report contains electronic versions of the complete report and all appendices for the October 2015 sampling event. Also attached is the North Carolina Environmental Monitoring Reporting Form and the associated laboratory EDDs.

If you wish to have a hard copy of the report, drawings, or appendices, we will be happy to provide it upon your request. Please feel free to contact me or Alex Everhart at (336) 323-0092 if you have any questions regarding this report.

Sincerely,
JOYCE ENGINEERING

Van Burbach, Ph.D., P.G.
Senior Technical Consultant

Attachment

C: James Winegar, OmniSource Southeast, LLC
Gary Cosentino, OmniSource Kernersville

PREPARED FOR:

OMNISOURCE SOUTHEAST, LLC
2233 WAL-PAT ROAD
SMITHFIELD, NC 27577

OMNISOURCE SOUTHEAST
KERNERSVILLE LANDFILL
PERMIT NO. 34-20

SECOND SEMIANNUAL WATER QUALITY MONITORING REPORT OF 2015

JANUARY 2016

PREPARED BY:

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JOYCE PROJECT NO. 799.1501.12

Second Semiannual Water Quality Monitoring Report of 2015
OmniSource Southeast Landfill, Permit No. 34-20
Kernersville, North Carolina

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Drawing

Drawing 1	Groundwater Potentiometric Surface Map

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1.0 INTRODUCTION

1.1 Site Information

The OmniSource Landfill is owned and operated by OmniSource Southeast, LLC and is located in Kernersville, Forsyth County, North Carolina. The existing landfill was initially permitted in the early 1970's by the state of North Carolina as a private industrial landfill used to dispose of residue from the automobile shredder under Permit Number 34-17, and was owned and operated by Atlantic Scrap and Processing, LLC. The landfill received automotive shredder residue (ASR, or "fluff") consisting of plastic, glass, rubber, foam, fabric, etc., that was generated by the on-site operations. The landfill stopped receiving waste and was closed in the mid-1990s. In 2005, the facility received a permit for a mining operation to recover additional metal from the ASR waste. Currently the facility is operating a landfill mining operation under Permit Number 34-20.

The OmniSource Landfill includes approximately 14 acres located within OmniSource-Southeast property located at 1426 West Mountain Street in Kernersville, North Carolina. Access to the landfill area is limited from the southern end by means of the fenced scrap processing area and from other directions by berms, topography, and the side-slopes of the landfill. The site location is shown on Figure 1 on an excerpt from the 7.5-minute USGS topographic map for the area.

1.2 Site Geology and Hydrogeology

The OmniSource Landfill is located in the Piedmont physiographic providence of North Carolina and is underlain by intrusive granitic rocks of Pennsylvanian to Permian age, which are part of the Carolina Slate Belt Geologic Unit.

The groundwater level measurements taken on October 14, 2015 were used to construct the groundwater surface contours shown in Drawing 1. Historical static water levels are provided in Table 1. Groundwater flow at the site is toward the northeast.

Using the hydraulic gradients along the flow paths shown on Drawing 1, the linear flow velocity (**V**) was estimated using the modified Darcy equation: **V=Ki/n**. The average hydraulic gradient (**i**) based on the flow paths shown on Drawing 1 is 0.0633 ft/ft. An effective porosity (**n**) of 30% was estimated based on typical values for piedmont aquifers. Hydraulic conductivity (**K**) of 1.73 ft/day was estimated from slug testing done by JOYCE at nearby site is Kernersville, NC in November of 2013. The calculated groundwater flow rate averages approximately 133.2 ft/yr. A summary of the hydraulic gradients and linear flow velocities is provided in Table 2.

1.3 Regulatory Status

The OmniSource Landfill is currently monitoring groundwater in accordance with criteria set forth in Title 15A Subchapter 13B .0500 of the North Carolina Solid Waste Management Rules (NCSWMR) as well as, the approved sampling and analysis plan dated October 2011.

2.0 FACILITY MONITORING PROGRAM

2.1 Groundwater Monitoring Program

The original groundwater monitoring network consisted of 4 monitoring wells installed in 1989; MW-1, MW-2, MW-3 and MW-4. In 2001, MW-4R was installed to replace MW-4 and MW-1R replaced MW-1 to further expanding scrap metal processing activities. Monitoring wells MW-2, MW-3, MW-4, and MW-4R were destroyed during mining operations. Replacement wells MW-12, MW-13, and MW-14 were installed in 2012.

The current groundwater compliance monitoring network consists of four monitoring wells, including one upgradient well (MW-1R) and three downgradient wells (MW-12, MW-13, and MW-14). These wells are summarized below, along with their current monitoring program status. The locations of the monitoring wells are shown on Drawing No. 1.

Monitoring Well	Classification	Monitoring Program	Total Depth from TOC (ft)
MW-1R	Upgradient	Detection	104.73
MW-12	Downgradient	Detection	28.82
MW-13	Downgradient	Detection	26.15
MW-14	Downgradient	Detection	33.68

TOC = Top of casing.

Groundwater samples are collected semiannually during the second and fourth quarters. Samples are analyzed for all constituents listed in the NCSWMR Appendix I during the first and second semiannual events.

2.2 Surface Water Monitoring Program

Surface water at the OmniSource Kernersville Landfill is monitored semiannually in conjunction with the groundwater sampling events. Samples are collected from two surface water monitoring points (SW-1 and SW-2). The locations of the surface water monitoring points are shown on Drawing 1.

Surface water samples are collected and analyzed for the NCSWMR Appendix I list of constituents during both semiannual monitoring events. The results are compared to the 15A NCAC 2B (NC 2B) Surface Water Standards in a value-to-value comparison. These surface water monitoring points are summarized below, along with their current monitoring program status.

Surface Point	Classification	Monitoring Program
SW-1 SW-2	Upstream/Compliance Downstream/Compliance	Surface Water Surface Water

3.0 SECOND SEMIANNUAL SAMPLING EVENT OF 2015

3.1 Field Work and Visual Inspection

In order to detect potential releases of leachate in a timely manner, a visual inspection program has been implemented at the OmniSource Kernersville Landfill. This inspection program involves field personnel making the following observations:

- Observation of stress induced on the biological community (e.g., dead or dying vegetation);
- Indications of leachate impact (e.g., seeps, impacted surface water);
- Observations of erosion; and
- Negative changes around the waste facility.

On October 14, 2015, Joyce Engineering (JOYCE) personnel visited the facility to purge and sample the facility's monitoring wells MW-1R, MW-12, MW-13, and MW-14. Prior to purging, the depth to static water level was measured for all monitoring wells with an electronic water level indicator, accurate to 0.01 foot.

Monitoring wells were purged and sampled, in accordance with the October 2011 *Sampling & Analysis Plan*, using either a 12-volt submersible pump or disposable bailer. Measurements of temperature, pH, specific conductivity, and turbidity were recorded in the site log book prior to purging, after each purge volume, and during sampling. Prior to sampling, laboratory-supplied containers were prepared with the following information:

- Monitoring well number (completed by field personnel);
- Date and time of sample collection (completed by field personnel);
- Initials of sampling personnel (completed by field personnel);
- Project name and number (completed by the laboratory);
- Chemical preservative (completed by the laboratory); and
- Requested chemical analysis (completed by the laboratory).

Groundwater samples from each monitoring well were collected directly from the 12-volt pump or disposable bailers in the provided laboratory containers either immediately after purging or within 24 hours of the final purge volume. Immediately after collection, the samples were placed in a laboratory-provided cooler and chilled on ice. Field data logs are provided in Appendix A.

Surface water samples from SW-1 and SW-2 were collected directly from stream flow, by lowering the prepared sample containers into the stream flow. Care was taken not to overflow the sample containers (which could lead to preservative loss) and to avoid sampling-induced turbidity. At the time of sampling, surface water was also measured for temperature, pH, specific conductivity, and turbidity. After sample collection, the sampled were placed in a laboratory-provided cooler and chilled on ice. Field data logs are provided in Appendix A.

3.2 Laboratory Analysis and Quality Control

The October 14, 2015, groundwater and surface water samples were submitted to Pace Analytical Services of Huntersville, North Carolina. The samples were analyzed for the NCSWMR Appendix I constituents. JOYCE requested a Level II data report for the final laboratory report. The samples were received by the laboratory on October 15, 2015, in good condition, properly preserved, and within analysis hold times.

In addition to samples collected for compliance monitoring at the OmniSource Kernersville Landfill, a Field Blank was collected by JOYCE personnel as part of the October 2015 sampling event. Also, a Trip Blank was prepared by the laboratory to accompany the volatile sampling containers during shipment to and from the laboratory. The October 2015 Field Blank was analyzed for the NCSWMR Appendix I constituents while the October 2015 Trip Blank was analyzed for the NCSWMR Appendix I volatile organics only.

Upon receipt of the laboratory data package, the data was reviewed by JOYCE personnel for the following:

- General typographical errors;
- Correct analyses performed and within method specified hold times;
- Biased data results based on Surrogate Recoveries, Matrix Spike, Matrix Spike Duplicate; and Laboratory Control Samples;
- Blank qualified data (B-flags);
- Detections above the groundwater and surface water standards; and
- Detections that are above historical levels.

3.3 Verification Sampling

Due to a detection of benzene in the October 2015 sample, the facility background well, MW-1R, was resampled on November 11, 2015. The sample was sent to Pace Analytical to be analyzed for benzene. Field data logs are provided in Appendix A.

4.0 DATA ANALYSIS

4.1 Groundwater Data Analysis and Comparisons to Standards

The Laboratory Analytical Report from the October 2015 sampling event was received November 19, 2015 from Pace Analytical and is included in Appendix B with the chains-of-custody. Constituents that were detected at quantified concentrations above the North Carolina Department of Environmental Quality (NCDEQ) Solid Waste Section Limits (SWSL) in groundwater during the October 2015 sampling event are summarized in Table 3.

Analytical results from monitoring wells were compared directly to the North Carolina Groundwater Standards found in 15A NCAC 02L.0202 (NC 2L Standards) or the NCDEQ Solid Waste Section Groundwater Protection Standards (GWPS) for constituents with no listed NC 2L standard. Analytical results for surface water samples were compared directly to either the Freshwater Aquatic Surface Water Standards or Human Health Surface Water Standards (whichever is lower) found in 15A NCAC 02B (NC 2B Standards). Constituents in exceedance of the appropriate standards are summarized in Table 4. Field parameter data for the October 2015 sampling event are summarized in Table 5.

Benzene was detected at 1.8 µg/L in the October 2015 sample from the facility background well, MW-1R, which exceeds the NC 2L standard of 1.0 µg/L. A resampling event was conducted on November 11, 2015, and the results found benzene at 1.0 µg/L (equal to, but not exceeding the NC2L standard.) The results of the November resampling event did not indicate an exceedance of the NC 2L standard.

Well MW-1R is located approximately 345 feet upgradient from the edge of waste for the landfill; therefore, it is very unlikely that the landfill is the source of the benzene detected in MW-1R. This is an old industrial site with a long history of various activities, as well as ongoing activities, which could be the source of the benzene. A reconnaissance of the area immediately surrounding MW-1R observed semi-trailers, discarded equipment, and small piles of debris, but no obvious spills, stained soil, or other indications of a recent release; therefore, the specific source of the benzene is unknown.

With the exception of the benzene detected in MW-1R, the organic and inorganic groundwater results are consistent with historical data. Historical groundwater data can be found in Table 6.

4.2 Surface Water Data Analysis and Comparisons to Standards

The results for the upstream surface water sample, SW-1, indicated one inorganic constituent with a quantified concentration above the SWSL during the October 2015 sampling event. Zinc was quantified at a concentration of 52 µg/L, which is above the respective NC 2B standard for freshwater aquatic life that is 50 µg/L. In addition, three organic constituents were detected in SW-1. Carbon Tetrachloride, Chloroform, and Tetrachloroethene (PCE) were detected above the SWSL. Carbon Tetrachloride was found at a concentration of 4.5 µg/L and PCE was found at a

concentration of 4.4 µg/L, which puts both constituents above their NC 2B human health standards. The NC 2B human health standard for Carbon Tetrachloride is 1.6 µg/L. The NC 2B human health standard for PCE is 3.3 µg/L.

Since surface water sampling point SW-1 is upstream of the OmniSource landfill, it is highly unlikely that the constituents detected in SW-1 are due to a release from the landfill. The most likely source of the PCE detected in SW-1 is the former Destructo-Chemway/ChemLawn property, which is directly upstream of the SW-1 location. This property is a NC Inactive Hazardous Site, which was the source of a major spill of hazardous material, including chlorinated solvents, in 1977. The spill flowed down the creek where SW-1 is located and eventually contaminated the Kernersville Reservoir. We believe the PCE and possibly some of the inorganic constituents detected in SW-1 are residuals from this incident.

Barium and Zinc were the only constituents detected in the downstream surface water sample, SW-2, at quantified concentrations above their respective SWSL during the October 2015 sampling event. Neither of the constituents detected were higher than the NC2B standard for freshwater aquatic life. The October 2015 result is not higher than historical values for zinc in SW-2 and it is lower than the concentration of zinc detected in the upstream sample, SW-1, which had a zinc concentration of 52 µg/L. Historical surface water data can be found in Table 7.

5.0 CONCLUSIONS

Benzene was detected above the NC 2L Groundwater Standard in the upgradient monitoring well MW-1R and a resampling event did not indicate an exceedance of the NC 2L standard. JOYCE recommends continued semiannual monitoring to determine whether the benzene concentrations remain below the NC 2L standard or return to exceedance levels before determining whether further action or investigation is necessary. Since we do not believe the landfill to be the source of the benzene, we recommend that the landfill remain in detection monitoring.

There were no exceedances of groundwater protection standards in any of the downgradient monitoring wells during the October 2015 sampling event. The next scheduled semiannual sampling event is tentatively scheduled for April 2016.

6.0 REFERENCES

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USEPA, 1981. Neely, N., D. Gillespie, F. Schauf, and J. Walsh. Remedial Actions at Hazardous Sites, Survey and Case Studies: Section 5, Site D – Destructo/CaroLawn, Kernersville, NC. EPA-430-9-81-005. January 1981.

USEPA, 1986. *RCRA Ground Water Monitoring Technical Enforcement Guidance Document* (TEGD).

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Tables

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TABLE 1:
HISTORICAL GROUNDWATER ELEVATION DATA

	Background	Downgradient		
	MW-1R	**MW-12**	**MW-13**	**MW-14**
Well TOC Elev.:	988.67	855.85	838.45	847.45
Well Total Depth:	104.73	28.82	26.15	33.68
10-Apr-13	952.17	847.73	832.84	835.05
11-Sep-13	949.72	847.69	832.55	834.20
24-Apr-14	953.02	847.60	833.12	834.96
02-Oct-14	949.11	847.80	832.76	834.22
29-Apr-15	950.99	847.82	833.13	835.29
14-Oct-15	946.27	847.85	832.90	834.73

Notes:
TOC = top of casing.
Water levels are measured from TOC.
All elevations are in feet above mean sea level.

TABLE 2:
GROUNDWATER GRADIENTS AND CALCULATED FLOW RATES

October 14, 2015							
GRADIENT CALCULATION SEGMENT	FLOW LINE LENGTH (feet)	FLOW DIRECTION	GROUND-WATER ELEVATION (feet)	HORIZ. GRADIENT, ***i*** (ft/ft)	HYDRAULIC CONDUCTIVITY, ***K*** (ft/day)	EFFECTIVE POROSITY n_e	LINEAR VELOCITY, ***V*** (ft/year)
i_1	1347	NE	940 860	0.0594	1.73E+00	0.30	125.1
i_2	1192	NE	940 860	0.0671	1.73E+00	0.30	141.4
			Average:	0.0633		Average:	133.2

Notes:

Linear flow velocity is caculated by: $V = Ki/n_e$

Hydraulic conductivity (***K***) value based on slug tests at another site locaed approxiamtely 10 miles from the facility in a simialr geologic seting.

Effective porosity (n_e) is estimated at 30% (0.30), which is typical for saprolite aquifiers in the North Carolina Piedmont.

Refer to Drawling 1 for gradient calculation segments.

TABLE 3:
Quantified Detections (October- November 2015)

WELL ID	PARAMETER	RESULT	UNITS	SWSL	DATE
3420-MW1R	Benzene	1.80	µg/L	1	10/14/2015
3420-MW1R*	Benzene	1.00	µg/L	1	11/11/2015
3420-MW12	Barium	179	µg/L	100	10/14/2015
3420-MW14	Barium	121	µg/L	100	10/14/2015
3420-MW14	Beryllium	1.4	µg/L	1	10/14/2015
3420-SW1	Zinc	52	µg/L	10	10/14/2015
3420-SW1	Carbon Tetrachloride	4.5	µg/L	1	10/14/2015
3420-SW1	Chloroform	13.9	µg/L	5	10/14/2015
3420-SW1	Tetrachloroethene	4.4	µg/L	1	10/14/2015
3420-SW2	Barium	101	µg/L	100	10/14/2015
3420-SW2	Zinc	29.7	µg/L	10	10/14/2015

NOTES: All results in micorgrams per liter (µg/L).
SWSL = NC Soild Waste Section Reporting Limit.
* = Resample 11/11/15

TABLE 4:
Exceedances (October-November 2015)

WELL ID	PARAMETER	RESULT	UNITS	SWSL	NC 2L / GWPS / NC 2B	GPS	DATE
3420-MW1R	Benzene	**1.8**	µg/L	1.0	1	1	10/14/2015
3420-MW1R*	Benzene	1.0	µg/L	1.0	1	1	10/15/2015
3420-SW1	Carbon tetrachloride	**4.5**	µg/L	1.0	1.6 HH		10/14/2015
3420-SW1	Tetrachloroethene	**4.4**	µg/L	1.0	3.3 HH		10/14/2015
3420-SW1	Zinc	**52**	µg/L	10.0	50 FAL		10/14/2015

NOTES: All results in micorgrams per liter (µg/L).
SWSL = NC Soild Waste Section Reporting Limit.
NC 2L = NC Groundwater Standard from 15A NCAC 2L.0202.
GWPS = NC Solid Waste Section Groundwater Protection Standard (for constituents with no NC2L).
NC 2B = NC Surface Water Standard from 15A NCAC 2B.
FAL = Freshwater Aquatic Life Standard.
HH = Human Health Standard.
GPS = Groundwater Protection Standard as defined by 15A NCAC 13B.1634(g).
Bold results are in exceednace of the pertinent standard.
An ASD for Iron and Manganese approved by DENR-SWS on June 9, 2011.
*= Resample Event 11/11/2015

TABLE 5:
Summary of Field Parameter Data

WELL ID	PARAMETER	RESULT	UNITS	COLLECT DATE
3420-MW1R	pH	10.84	S.U.	10/14/2015
3420-MW1R	Temperature	18.3	°C	10/14/2015
3420-MW1R	Conductivity	232	µS	10/14/2015
3420-MW1R	Turbididty	13.60	NTU	10/14/2015
3420-MW1R	Static Water Level	42.40	ft	10/14/2015
3420-MW1R	Well Depth	104.73	ft	10/14/2015
3420-MW1R*	pH	9.92	S.U.	11/11/2015
3420-MW1R*	Temperature	14.5	°C	11/11/2015
3420-MW1R*	Conductivity	214	µS	11/11/2015
3420-MW1R*	Turbididty	20.70	NTU	11/11/2015
3420-MW1R*	Static Water Level	47.83	ft	11/11/2015
3420-MW1R*	Well Depth	104.73	ft	11/11/2015
3420-MW12	pH	6.70	S.U.	10/14/2015
3420-MW12	Temperature	19.9	°C	10/14/2015
3420-MW12	Conductivity	291	µS	10/14/2015
3420-MW12	Turbididty	35.90	NTU	10/14/2015
3420-MW12	Static Water Level	20.82	ft	10/14/2015
3420-MW12	Well Depth	28.82	ft	10/14/2015
3420-MW13	pH	6.20	S.U.	10/14/2015
3420-MW13	Temperature	20.5	°C	10/14/2015
3420-MW13	Conductivity	568	µS	10/14/2015
3420-MW13	Turbididty	10.26	NTU	10/14/2015
3420-MW13	Static Water Level	20.6	ft	10/14/2015
3420-MW13	Well Depth	26.15	ft	10/14/2015

TABLE 5:
Summary of Field Parameter Data

WELL ID	PARAMETER	RESULT	UNITS	COLLECT DATE
3420-MW14	pH	5.48	S.U.	10/14/2015
3420-MW14	Temperature	14.9	°C	10/14/2015
3420-MW14	Conductivity	170	µS	10/14/2015
3420-MW14	Turbididty	11.16	NTU	10/14/2015
3420-MW14	Static Water Level	12.72	ft	10/14/2015
3420-MW14	Well Depth	33.68	ft	10/14/2015
3420-SW1	pH	7.05	S.U.	10/14/2015
3420-SW1	Temperature	16.5	°C	10/14/2015
3420-SW1	Conductivity	113	µS	10/14/2015
3420-SW1	Turbididty	8.61	NTU	10/14/2015
3420-SW2	pH	6.74	S.U.	10/14/2015
3420-SW2	Temperature	16.0	°C	10/14/2015
3420-SW2	Conductivity	406	µS	10/14/2015
3420-SW2	Turbididty	6.59	NTU	10/14/2015

NOTES:

ºC	= degrees Centigrade
S.U.	= Standard Units
µS	= microsemens
NTU	= Nephelometric Turbidity Units
*	= Resample November 2015

TABLE 6:
HISTORICAL DETECTED GROUND WATER CONSTITUENTS

Analyte	Sample Collection Date	DL	QL	MW-1R	MW-12	MW-13	MW-14	Blanks
Inorganic Compounds								
Antimony	12-Apr-12	---	---	ND	ND	ND	ND	---
	10-Oct-12	---	---	7.70	ND	ND	ND	---
GWPS = 1 µg/L (10/01/10)	10-Apr-13	---	---	ND	ND	ND	ND	---
	11-Sep-13	---	---	ND	ND	ND	ND	---
	24-Apr-14	5.0	6.0	ND	ND	ND	ND	ND
	2-Oct-14	5.0	6.0	6.5	ND	ND	ND	ND
	29-Apr-15	0.5	6.0	1.01 J	ND	ND	ND	ND
	14-Oct-15	3.8	6.0	ND	ND	ND	ND	ND
Arsenic	12-Apr-12	---	---	ND	ND	ND	ND	---
	10-Oct-12	---	---	10.7	ND	3.40	ND	---
NC 2L = 100 µg/L (1/01/10)	10-Apr-13	---	---	ND	ND	ND	ND	---
	11-Sep-13	---	---	ND	ND	ND	ND	---
	24-Apr-14	5.0	10.0	ND	ND	ND	ND	ND
	2-Oct-14	5.0	10.0	ND	ND	ND	ND	ND
	29-Apr-15	0.25	10.0	1.59 J	ND	ND	ND	ND
	14-Oct-15	2.50	10.0	ND	ND	ND	ND	ND
Barium	12-Apr-12	---	---	41.5	166	41.0	118	---
	10-Oct-12	---	---	37.6	170	26.9	107	---
NC 2L = 700 µg/L (1/01/10)	10-Apr-13	---	---	26.9	166	27.5	98.2	---
	11-Sep-13	---	---	39.4	196	29.8	100	---
	24-Apr-14	5.0	100	21.2 J	184	39.3 J	88.8 J	ND
	2-Oct-14	5.0	100	15.5 J	195	43.5 J	106	ND
	29-Apr-15	0.25	100	27.2 J	181	46.1 J	125	ND
	14-Oct-15	2.50	100	17.2 J	179	43.1 J	121	ND
Beryllium	12-Apr-12	---	---	ND	ND	ND	ND	---
	10-Oct-12	---	---	ND	ND	ND	1.10	---
GWPS = 4 µg/L (10/23/07)	10-Apr-13	---	---	ND	ND	ND	1.10	---
	11-Sep-13	---	---	ND	ND	ND	0.800	---
	24-Apr-14	1.0	1.0	ND	ND	ND	1.1	ND
	2-Oct-14	1.0	1.0	ND	ND	1.2	1.4	ND
	29-Apr-15	0.25	1.0	ND	0.30 J	0.38 J	1.26	ND
	14-Oct-15	0.50	1.0	ND	ND	ND	1.4	ND
Chromium	12-Apr-12	---	---	ND	ND	ND	ND	---
	10-Oct-12	---	---	2.50	ND	ND	ND	---
NC2B= 50 µg/L (05/01/07)	10-Apr-13	---	---	2.30	ND	ND	ND	---
	11-Sep-13	---	---	1.80	ND	ND	ND	---
	24-Apr-14	5.0	10.0	ND	ND	ND	ND	ND
	2-Oct-14	5.0	10.0	ND	ND	ND	ND	ND
	29-Apr-15	0.25	10.0	ND	0.73 J	1.34 J	ND	---
	14-Oct-15	2.50	10.0	ND	ND	2.8 J	ND	ND

TABLE 6:
HISTORICAL DETECTED GROUND WATER CONSTITUENTS

Analyte	Sample Collection Date	DL	QL	MW-1R	MW-12	MW-13	MW-14	Blanks
Cobalt	12-Apr-12	---	---	ND	ND	ND	ND	---
	10-Oct-12	---	---	0.700	**3.10**	**3.90**	**5.70**	---
GWPS = 1 µg/L (10/01/10)	10-Apr-13	---	---	ND	**1.90**	**2.80**	**3.80**	---
	11-Sep-13	---	---	ND	**2.60**	**4.10**	ND	---
	24-Apr-14	5.0	10.0	ND	ND	5.5 J	ND	ND
	2-Oct-14	5.0	10.0	ND	ND	**10.4**	5.2 J	ND
	29-Apr-15	0.25	10.0	ND	3.02 J	7.91 J	5.08 J	ND
	14-Oct-15	2.50	10.0	ND	ND	7.2 J	5.4 J	ND
Copper	12-Apr-12	---	---	ND	ND	ND	ND	---
	10-Oct-12	---	---	ND	ND	ND	ND	---
NC 2L = 1,000 µg/L (10/23/07)	10-Apr-13	---	---	8.8	ND	ND	ND	---
	11-Sep-13	---	---	10.0	ND	ND	ND	---
	24-Apr-14	5.00	10.0	ND	ND	7.5 J	ND	ND
	2-Oct-14	5.00	10.0	ND	ND	8.9 J	ND	ND
	29-Apr-15	0.25	10.0	0.39 J	2.73 J	3.43 J	0.92 J	ND
	14-Oct-15	2.50	10.0	ND	3.5 J	4.3 J	ND	ND
Lead	12-Apr-12	---	---	ND	ND	ND	ND	---
	10-Oct-12	---	---	4.9	ND	ND	ND	---
NC 2L = 15 µg/L (10/23/07)	10-Apr-13	---	---	4.2	ND	ND	ND	---
	11-Sep-13	---	---	6.2	ND	ND	ND	---
	24-Apr-14	5.0	10.0	ND	ND	ND	ND	ND
	2-Oct-14	5.0	10.0	ND	ND	ND	ND	ND
	29-Apr-15	0.3	10.0	ND	1.60 J	1.26 J	ND	ND
	14-Oct-15	2.5	10.0	ND	3.5 J	ND	ND	ND
Nickel	12-Apr-12	---	---	ND	ND	ND	ND	---
	10-Oct-12	---	---	ND	2.30	ND	2.00	---
NC 2L = 100 µg/L (10/23/07)	10-Apr-13	---	---	ND	2.90	ND	ND	---
	11-Sep-13	---	---	ND	ND	ND	2.20	---
	24-Apr-14	5.0	50.0	ND	ND	ND	ND	ND
	2-Oct-14	5.0	50.0	ND	ND	ND	ND	ND
	29-Apr-15	0.5	50.0	ND	4.44 J	4.07 J	2.58 J	ND
	14-Oct-15	2.5	50.0	ND	5.8 J	4.9 J	2.6 J	ND
Selenium	12-Apr-12	---	---	ND	ND	ND	ND	---
	10-Oct-12	---	---	ND	ND	ND	ND	---
NC 2L = 20 µg/L (1/01/10)	10-Apr-13	---	---	ND	ND	ND	4.90	---
	11-Sep-13	---	---	ND	ND	ND	ND	---
	24-Apr-14	10.0	10.0	ND	ND	ND	ND	ND
	2-Oct-14	10.0	10.0	ND	ND	ND	ND	ND
	29-Apr-15	0.25	10.0	ND	ND	ND	ND	ND
	14-Oct-15	5.00	10.0	ND	ND	ND	ND	ND
Vanadium	12-Apr-12	---	---	ND	ND	ND	ND	---
	10-Oct-12	---	---	ND	ND	ND	ND	---
GWPS = 0.3 µg/L (10/01/10)	10-Apr-13	---	---	ND	ND	ND	ND	---
	11-Sep-13	---	---	ND	ND	ND	ND	---
	24-Apr-14	5.00	25.0	ND	ND	9.2 J	ND	ND
	2-Oct-14	5.00	25.0	ND	5.0 J	20.1 J	ND	ND
	29-Apr-15	0.25	25.0	4.12 J	2.54 J	5.42 J	0.31 J	ND
	14-Oct-15	2.50	25.0	ND	5.4 J	8.5 J	ND	ND

TABLE 6:
HISTORICAL DETECTED GROUND WATER CONSTITUENTS

Analyte	Sample Collection Date	DL	QL	MW-1R	MW-12	MW-13	MW-14	Blanks
Zinc	12-Apr-12	---	---	ND	ND	ND	ND	---
	10-Oct-12	---	---	27.3	ND	ND	ND	---
NC 2L = 1,000 µg/L (1/01/10)	10-Apr-13	---	---	ND	ND	ND	ND	---
	11-Sep-13	---	---	29.4	ND	ND	ND	---
	24-Apr-14	10.0	10.0	ND	15.3	ND	ND	ND
	2-Oct-14	10.0	10.0	ND	ND	ND	ND	ND
	29-Apr-15	5.0	10.0	20.2	24.3	23.1	26.2	ND
	14-Oct-15	5.0	10.0	7.1 J	8.9 J	7.6 J	5.1 J	ND
Organic Compounds								
Acetone	12-Apr-12	---	---	ND	ND	ND	ND	---
	10-Oct-12	---	---	12	20.9	ND	ND	---
NC 2L = 6,000 µg/L (1/01/10)	10-Apr-13	---	---	ND	ND	ND	ND	---
	11-Sep-13	---	---	ND	ND	ND	ND	---
	24-Apr-14	10.0	100	ND	ND	ND	ND	ND
	2-Oct-14	10.0	100	ND	ND	ND	ND	ND
	29-Apr-15	10.0	100	ND	ND	ND	ND	ND
	14-Oct-15	10.0	100	ND	ND	ND	ND	ND
Benzene	12-Apr-12	---	---	ND	ND	ND	ND	---
	10-Oct-12	---	---	ND	0.406	0.280	ND	---
NC 2L = 1 µg/L (10/23/07)	10-Apr-13	---	---	ND	0.365	ND	ND	---
	11-Sep-13	---	---	ND	0.411	0.203	ND	---
	24-Apr-14	0.25	1.0	ND	0.350 J	ND	ND	ND
	2-Oct-14	0.25	1.0	ND	ND	ND	ND	ND
	29-Apr-15	0.20	1.0	**1.43**	ND	ND	ND	ND
GCAL resample	27-May-15	0.20	1.0	**1.45**	---	---	---	---
Pace resample	24-Jun-15	0.25	1.0	0.88 J	---	---	---	---
GCAL resample	24-Jun-15	0.20	1.0	0.96 J	---	---	---	---
	14-Oct-15	0.25	1.0	**1.8**	ND	ND	ND	ND
Pace resample	11-Nov-15	0.30	1.0	1.0	---	---	---	ND
Carbon disulfide	12-Apr-12	---	---	ND	ND	ND	ND	---
	10-Oct-12	---	---	ND	ND	ND	1.9	---
NC 2L = 700 µg/L (10/23/07)	10-Apr-13	---	---	ND	ND	ND	ND	---
	11-Sep-13	---	---	ND	ND	ND	ND	---
	24-Apr-14	1.2	100	ND	ND	ND	ND	ND
	2-Oct-14	1.2	100	ND	ND	ND	ND	ND
	29-Apr-15	1.2	100	ND	ND	ND	ND	ND
	14-Oct-15	1.2	100	ND	ND	ND	ND	ND
Cis-1,2-Dichloroethene	12-Apr-12	---	---	ND	ND	ND	ND	---
	10-Oct-12	---	---	ND	ND	ND	ND	---
NC 2L = 70 µg/L (10/23/07)	10-Apr-13	---	---	ND	ND	ND	ND	---
	11-Sep-13	---	---	ND	ND	ND	ND	---
	24-Apr-14	0.19	5.0	ND	0.200 J	ND	ND	ND
	2-Oct-14	0.19	5.0	ND	ND	ND	ND	ND
	29-Apr-15	0.19	5.0	ND	ND	ND	ND	ND
	14-Oct-15	0.19	5.0	ND	0.20 J	ND	ND	ND

TABLE 6:
HISTORICAL DETECTED GROUND WATER CONSTITUENTS

Analyte	Sample Collection Date	DL	QL	MW-1R	MW-12	MW-13	MW-14	Blanks
Methylene Chloride	14-Oct-15	0.97	1	ND	ND	ND	ND	3.6
NC 2L = 5 µg/L (10/23/07)								
Styrene	12-Apr-12	---	---	ND	ND	ND	ND	---
	10-Oct-12	---	---	ND	ND	ND	ND	---
NC 2L = 70 µg/L (10/23/07)	10-Apr-13	---	---	0.515	ND	ND	ND	---
	11-Sep-13	---	---	ND	ND	ND	ND	---
	24-Apr-14	0.26	1.0	ND	ND	ND	ND	ND
	2-Oct-14	0.26	1.0	ND	ND	ND	ND	ND
	29-Apr-15	0.26	1.0	ND	ND	ND	ND	ND
	14-Oct-15	0.26	1.0	ND	ND	ND	ND	ND
Tetrachloroethene	12-Apr-12	---	---	ND	ND	ND	ND	---
	10-Oct-12	---	---	ND	0.319	ND	ND	---
NC 2L = 0.7 µg/L (10/23/07)	10-Apr-13	---	---	ND	0.525	ND	ND	---
	11-Sep-13	---	---	ND	ND	ND	ND	---
	24-Apr-14	0.46	1.0	ND	ND	ND	ND	ND
	2-Oct-14	0.46	1.0	ND	ND	ND	ND	ND
	29-Apr-15	0.20	1.0	ND	ND	ND	ND	ND
	14-Oct-15	0.46	1.0	ND	ND	ND	ND	ND

Notes:
All concentrations are in micrograms per liter (µg/L).
NC 2L = North Carolina Groundwater Standards established under 15A NCAC 2L.0202.
GWPS = Groundwater Protection Standards established by the DENR-SWS for constituents with ne NC 2L standard.
RL = Laboratory reporting limit (NC SWSL or lower).
DL = Laboratory detection limit.
J = Estimated value between the DL and the SWSL.
B = Blank-qualified data; result is expected to be biased high based on concentrations in the blanks.
ND = Not detected above the DL.
--- = Data not available.
Data prior to May 2014 provided by W.Z. Baumgartner & Associates, Inc.
Bold values are above the NC 2L Standards or GWPS.

TABLE 7:
HISTORICAL DETECTED SURFACE WATER CONSTITUENTS

Analyte	Sample Collection Date	DL	RL	SW-1	SW-2	Blanks
Inorganic Compounds						
Antimony	29-Apr-15	0.5	6	1.69 J	ND	ND
	14-Oct-15	3.8	6	ND	ND	ND
NC 2B = 640 µg/L (HH)						
Arsenic	12-Apr-12	---	---	ND	ND	---
	10-Oct-12	---	---	ND	**69.0**	---
NC 2B = 10 µg/L (HH)	10-Apr-13	---	---	**44.3**	ND	---
	11-Sep-13	---	---	ND	ND	---
	24-Apr-14	5.0	10.0	Dry	ND	ND
	2-Oct-14	5.0	10.0	Dry	ND	ND
	29-Apr-15	0.3	10.0	0.39 J	0.27 J	ND
	14-Oct-15	2.5	10.0	ND	ND	ND
Barium	12-Apr-12	---	---	52.4	79.1	---
	10-Oct-12	---	---	52.6	87.4	---
NC 2B = 200,000 µg/L (HH)	10-Apr-13	---	---	44.3	84.2	---
	11-Sep-13	---	---	52.7	99.3	---
	24-Apr-14	5.0	100	Dry	79.6 J	ND
	2-Oct-14	5.0	100	Dry	79.9 J	ND
	29-Apr-15	0.3	100	174	98.2 J	ND
	14-Oct-15	2.5	100	59.6 J	101	ND
Beryllium	12-Apr-12	---	---	ND	ND	---
	10-Oct-12	---	---	ND	ND	---
NC 2B = 6.5 µg/L (FAL)	10-Apr-13	---	---	ND	ND	---
	11-Sep-13	---	---	ND	ND	---
	24-Apr-14	1.0	1.0	Dry	ND	ND
	2-Oct-14	1.0	1.0	Dry	ND	ND
	29-Apr-15	0.3	1.0	0.43 J	ND	ND
	14-Oct-15	0.5	1.0	ND	ND	ND
Cadmium	29-Apr-15	0.3	1.0	1.40	ND	ND
	14-Oct-15	0.5	1.0	ND	ND	ND
NC 2B = 2 µg/L (05/01/07) (FAL)						
Chromium	12-Apr-12	---	---	ND	ND	---
	10-Oct-12	---	---	ND	ND	---
NC 2B = 50 µg/L (FAL)	10-Apr-13	---	---	1.6	2.1	---
	11-Sep-13	---	---	ND	ND	---
	24-Apr-14	5.0	10.0	Dry	ND	ND
	2-Oct-14	5.0	10.0	Dry	ND	ND
	29-Apr-15	0.3	10.0	5.40 J	0.39 J	ND
	14-Oct-15	2.5	10.0	ND	ND	ND

TABLE 7:
HISTORICAL DETECTED SURFACE WATER CONSTITUENTS

Analyte	Sample Collection Date	DL	RL	SW-1	SW-2	Blanks
Cobalt	12-Apr-12	---	---	ND	ND	---
	10-Oct-12	---	---	ND	1.0	---
NC 2B = 4 µg/L (HH)	10-Apr-13	---	---	ND	ND	---
	11-Sep-13	---	---	ND	ND	---
	24-Apr-14	5.0	10.0	Dry	ND	ND
	2-Oct-14	5.0	10.0	Dry	ND	ND
	29-Apr-15	0.3	10.0	1.83 J	1.39 J	ND
	14-Oct-15	2.5	10.0	ND	ND	ND
Copper	12-Apr-12	---	---	ND	ND	---
	10-Oct-12	---	---	**11.8**	**13.5**	---
NC 2B = 7 µg/L (FAL)	10-Apr-13	---	---	ND	ND	---
	11-Sep-13	---	---	ND	ND	---
	24-Apr-14	5.00	10.0	Dry	6.8 J	ND
	2-Oct-14	5.00	10.0	Dry	ND	ND
	29-Apr-15	0.25	10.0	**43.8**	4.72 J	ND
	14-Oct-15	2.50	10.0	2.8 J	3.2 J	ND
Lead	29-Apr-15	0.25	10.0	**69.2**	0.92 J	ND
	14-Oct-15	2.50	10.0	ND	ND	ND
NC 2B = 25 µg/L (05/01/07) (FAL)						
Nickel	12-Apr-12	---	---	ND	ND	---
	10-Oct-12	---	---	ND	7.6	---
NC 2B = 88 µg/L (FAL)	10-Apr-13	---	---	ND	5.1	---
	11-Sep-13	---	---	ND	4.5	---
	24-Apr-14	5.0	50.0	Dry	6.7 J	ND
	2-Oct-14	5.0	50.0	Dry	ND	ND
	29-Apr-15	0.5	50.0	9.67 J	5.43 J	ND
	14-Oct-15	2.5	50.0	ND	4.4 J	ND
Vanadium	29-Apr-15	0.25	25	3.01 J	0.40 J	ND
	14-Oct-15	2.5	25	ND	ND	ND
NC 2B = NE (05/01/07)						
Zinc	12-Apr-12	---	---	ND	ND	---
	10-Oct-12	---	---	0.051	24.2	---
NC 2B = 50 µg/L (FAL)	10-Apr-13	---	---	ND	29.4	---
	11-Sep-13	---	---	0.169	23.2	---
	24-Apr-14	10.0	10.0	Dry	27.7	ND
	2-Oct-14	10.0	10.0	Dry	10.6	ND
	29-Apr-15	5.0	10.0	**438**	**62.0**	ND
	14-Oct-15	5.0	10.0	**52.0**	29.7	ND

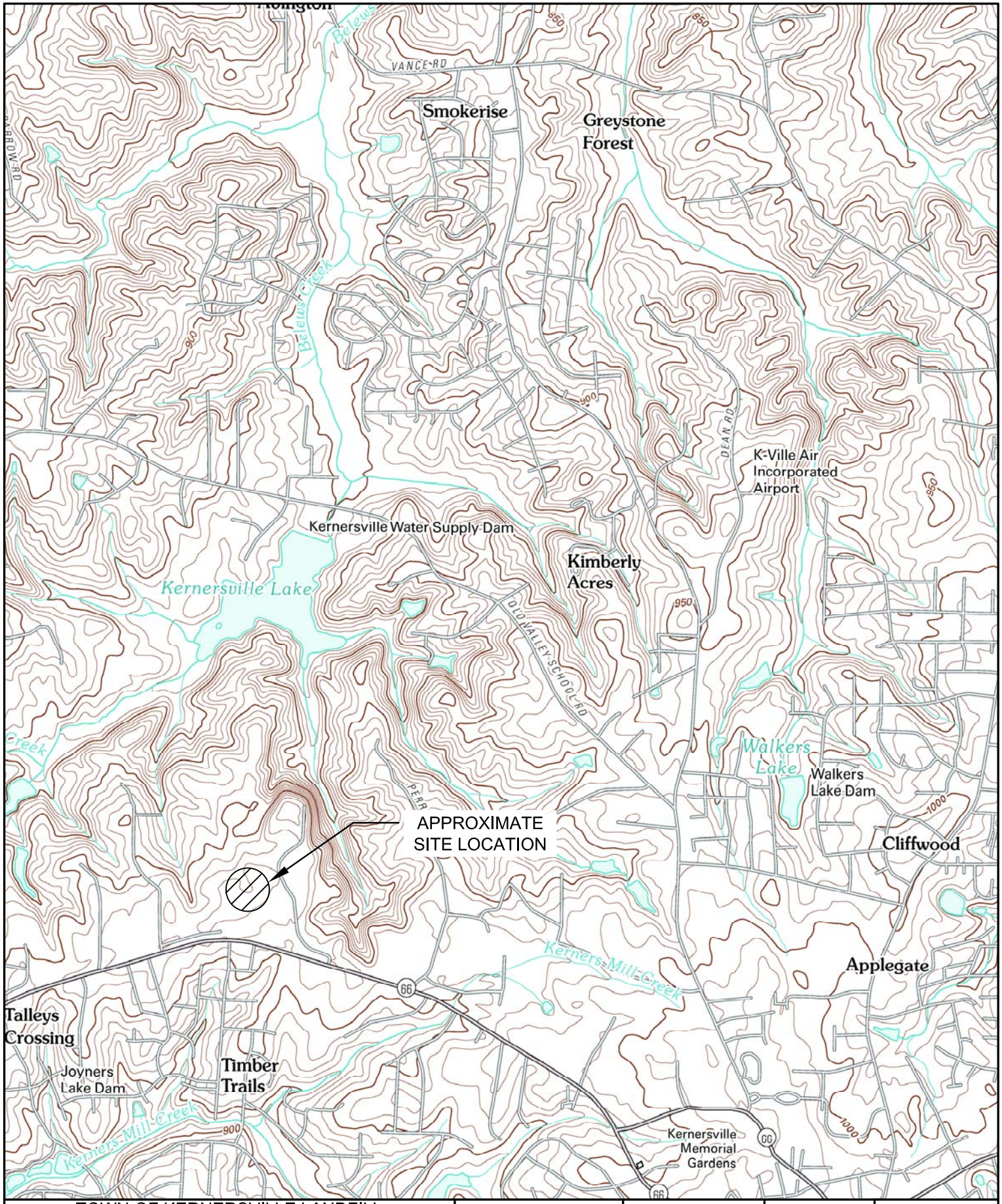
TABLE 7:
HISTORICAL DETECTED SURFACE WATER CONSTITUENTS

Analyte	Sample Collection Date	DL	RL	SW-1	SW-2	Blanks
Organic Compounds						
Acetone	12-Apr-12	---	---	ND	ND	---
	10-Oct-12	---	---	ND	2.88	---
NC 2B = 2,000 µg/L (FAL)	10-Apr-13	---	---	ND	8.34	---
	11-Sep-13	---	---	ND	ND	---
	24-Apr-14	10.0	100.0	Dry	ND	ND
	2-Oct-14	10.0	100.0	Dry	ND	ND
	29-Apr-15	0.5	100.0	ND	ND	ND
	14-Oct-15	10.0	100.0	ND	ND	ND
Benzene	12-Apr-12	---	---	ND	ND	---
	10-Oct-12	---	---	ND	0.509	---
NC 2B = 51 µg/L (HH)	10-Apr-13	---	---	ND	0.369	---
	11-Sep-13	---	---	ND	0.481	---
	24-Apr-14	1.2	1.0	Dry	0.31 J	ND
	2-Oct-14	0.3	1.0	Dry	ND	ND
	29-Apr-15	0.2	1.0	ND	ND	ND
	14-Oct-15	0.3	1.0	ND	0.45 J	ND
Carbon tetrachloride NC 2B = 1.6 µg/L (HH)	14-Oct-15	0.25	1.0	**4.5**	ND	ND
cis-1,2-Dichloroethene NC 2B = NE	14-Oct-15	0.19	5	0.7 J	ND	ND
Chloroform NC 2B = NE	14-Oct-15	0.14	5	13.9	ND	ND
Tetrachloroethene						
NC 2B = 3.3 µg/L (10/23/07) (HH)	29-Apr-15	0.2	1.0	**8.1**	ND	ND
Resample >	27-May-15	0.2	1.0	**3.5**	---	ND
	14-Oct-15	0.46	1.0	**4.4**	ND	ND
Toluene	12-Apr-12	---	---	ND	ND	---
	10-Oct-12	---	---	ND	0.257	---
NC 2B = 11 µg/L (HH)	10-Apr-13	---	---	ND	ND	---
	11-Sep-13	---	---	ND	ND	---
	24-Apr-14	0.26	1.0	Dry	ND	ND
	2-Oct-14	0.26	1.0	Dry	ND	ND
	29-Apr-15	0.20	1.0	ND	ND	ND
	14-Oct-15	0.26	1.0	ND	ND	ND

Notes:
All concentrations are in micrograms per liter (µg/L).
NC 2B = North Carolina Surface Water Standards established under 15A NCAC 2B.
(NC 2B shown is the lowest of "Freshwater Aquatic Life" (FAL) or "Human Health" (HH) standard.)
RL = Laboratory reporting limit (NC SWSL or lower).
DL = Laboratory detection limit.
J = Estimated value between the DL and the SWSL.
B = Blank-qualified data; result is suspected to be biased high based on concentrations in the blanks.
ND = Not detected above the DL.
--- = Data not available.
Data prior to May 2014 provided by W.Z. Baumgartner & Associates, Inc.
Bold values exceed the NC 2B standard.

Figure

Figure 1 Site Location Map

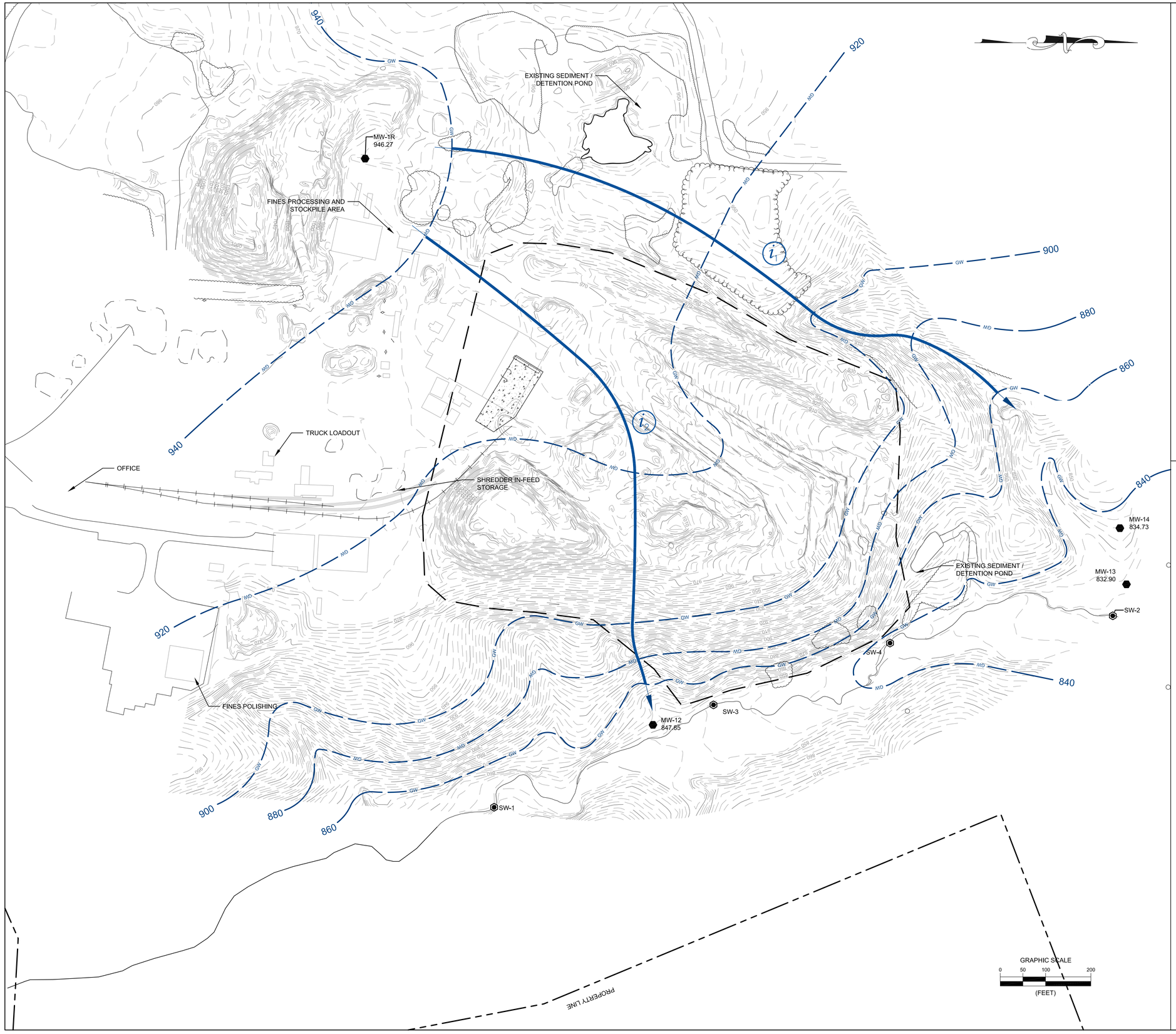


TOWN OF KERNERSVILLE LANDFILL FORSYTH COUNTY, NORTH CAROLINA	JOYCE ENGINEERING 2211 W. MEADOWVIEW ROAD GREENSBORO, NC 27407 PHONE: (336) 323-0092	DESIGNED RWH DRAWN RWH CHECKED ALF APPROVED ALF DATE 07/29/14	SCALE AS SHOWN	PROJECT NO. 799
SITE LOCATION MAP		© 2014 Joyce Engineering, Inc. All rights reserved.	NC CORP LIC: C-0782	FIGURE NO. 1

L:\OMNI SOURCE\KERNERSVILLE\GW EVENT MAP\, SITE LOCATION MAP.dwg

Drawing

Drawing 1 Groundwater Potentiometric Surface Map



LEGEND

- PROPERTY LINE
- EXISTING 10' TOPOGRAPHIC CONTOUR
- EXISTING 2' TOPOGRAPHIC CONTOUR
- EXISTING ROAD
- 1280 — GROUNDWATER SURFACE CONTOUR [FEET ABOVE MEAN SEA LEVEL (AMSL)]
- GROUNDWATER FLOW DIRECTION
- TREE LINE
- MW-12 847.85 — GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION WITH STATIC WATER LEVEL ELEVATION (FEET AMSL)
- SW-2 — SURFACE MONITORING POINT LOCATION AND IDENTIFICATION
- i_1 — SEGMENT USED FOR GRADIENT CALCULATION

FLOW PATH LENGTH

i_1 = 1,347 LF

i_2 = 1,192 LF

NOTES

1. TOPOGRAPHIC CONTOUR INTERVAL = 2 FEET
2. GROUNDWATER CONTOUR INTERVAL = 20 FEET
3. STATIC WATER LEVELS WERE MEASURED ON 10/14/15.
4. GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION BETWEEN AND EXTRAPOLATION FROM KNOWN DATA, TOPOGRAPHIC CONTOURS, AND KNOWN FIELD CONDITIONS. THEREFORE, GROUNDWATER CONTOURS MAY NOT REFLECT ACTUAL GROUNDWATER CONDITIONS.

DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP

DESIGNED	GE
DRAWN	RWH
CHECKED	VB
APPROVED	AE
DATE	10/16/15

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JOYCE ENGINEERING
2211 W. MEADOWVIEW ROAD
GREENSBORO, NC 27407
PHONE: (336) 323-0992
NC CORP LIC: C-0782

OMNISOURCE SOUTHEAST - KERNERSVILLE SITE
KERNERSVILLE, NORTH CAROLINA

GROUNDWATER CONTOUR MAP
OCTOBER 14,2015

PROJECT NO. 799

SCALE AS SHOWN

DRAWING NO. 1

L:\OMNI SOURCE\KERNERSVILLE\GW EVENT MAP\GW EVENT OCTOBER 2015.dwg Layout=Layout1

APPENDICES

Appendix A

Field Data Logs

DATE: 10/14/2015

JOYCE ENGINEERING

GROUND WATER SAMPLING LOG

Project Name: OmniSource - Kernersville **Project No. /Task No.:** 799.1501.12.02

Well ID: MW-1R **Sampler(s):** G. Eller / H. Seaton

Well Location: Off the secondary road that runs behind the trail storage lot and southwest side of the facility.

Well Diameter: 2 inches

Initial Depth to Water (DTW): 42.40 feet

Depth to Bottom (DTB): 104.73 feet

Water Column Thickness (WCT): 62.33 feet [DTB-DTW]

Calculation for One Well Volume (WV):

For 2" Well: WCT X 0.163 = 10.2 gallons

For 4" Well: WCT X 0.653 = _____ gallons

For THREE Well Volumes: WV X 3 = 30.6 gallons

Actual Amount Purged/Bailed: 12.0 gallons

Purged with: Disposable Bailer

Sampled with: Disposable Bailer

Depth to Water before Sampling: 88.77 feet

Gallons	Time	Temp(°C)	pH	Cond. (µS)	Turb.(ntu)	Initials
0	1213	15.7	8.61	135	8.85	HS
10.2	1237	15.5	10.44	210	9.80	HS
Dry @ 12.0						
Before Sampling	1400	18.3	10.84	232	13.6	HS

Comments (weather conditions, odor, color, silt, etc.): The weather was sunny with temperatures in the 70's on 10/14/2015.

Field Blank taken @ 1415

Signature: [signature] **Date:** 10/14/15

QA/QC Sign Off: [signature] **Date:** 10/16/15

DATE: 10/14/2015

JOYCE ENGINEERING

GROUND WATER SAMPLING LOG

Project Name: OmniSource - Kernersville **Project No. /Task No.:** 799.1501.12.02

Well ID: MW-12 **Sampler(s):** G. Eller / H. Seaton

Well Location: upstream from MW-13, at the end of the path through the woods

Well Diameter: 2 inches

Initial Depth to Water (DTW): 8.00 feet

Depth to Bottom (DTB): 28.82* feet

Water Column Thickness (WCT): 20.82 feet [DTB-DTW]

Calculation for One Well Volume (WV):

For 2" Well: WCT X 0.163 = 3.3 gallons

For 4" Well: WCT X 0.653 = _____ gallons

For THREE Well Volumes: WV X 3 = 9.9 gallons

Actual Amount Purged/Bailed: 9.9 gallons

Purged with: Disposable Bailer

Sampled with: Disposable Bailer

Depth to Water before Sampling: 7.8 feet

Gallons	Time	Temp(°C)	pH	Cond. (µS)	Turb.(ntu)	Initials
0	1030	17.9	5.39	263	9.08	GE
3.3	1035	16.6	5.47	269	88.0	GE
6.6	1042	16.2	5.53	267	87.8	GE
9.9	1046	16.2	5.52	271	76.8	GE
Before Sampling	1315	19.9	6.70	291	35.9	GE

Comments (weather conditions, odor, color, silt, etc.): The weather was sunny with temperatures in the 70's on 10/14/2015.

* Depth to bottom field gauged.

Signature: Gretta Eller **Date:** 10/14/15

QA/QC Sign Off: [illegible] **Date:** 10/16/15

DATE: 10/14/2015

JOYCE ENGINEERING

GROUND WATER SAMPLING LOG

Project Name: OmniSource - Kernersville **Project No. /Task No.:** 799.1501.12.02

Well ID: MW-13 **Sampler(s):** G. Eller / H. Seaton

Well Location: Northeast corner of the property, across from MW-14

Well Diameter: 2 inches

Initial Depth to Water (DTW): 5.55 feet

Depth to Bottom (DTB): 26.15* feet

Water Column Thickness (WCT): 20.60 feet [DTB-DTW]

Calculation for One Well Volume (WV):

For 2" Well: WCT X 0.163 = 3.4 gallons

For 4" Well: WCT X 0.653 = _____ gallons

For THREE Well Volumes: WV X 3 = 10.2 gallons

Actual Amount Purged/Bailed: 10.2 gallons

Purged with: Disposable Bailer

Sampled with: Disposable Bailer

Depth to Water before Sampling: 5.40 feet

Gallons	Time	Temp(°C)	pH	Cond. (µS)	Turb.(ntu)	Initials
0	1140	19.0	6.08	428	12.68	GE
3.4	1144	17.1	6.16	570	43.9	GE
6.8	1150	16.4	6.18	568	161	GE
10.2	1153	16.4	6.30	567	240	GE
Before Sampling	1344	20.5	6.20	568	10.26	GE

Comments (weather conditions, odor, color, silt, etc.): The weather was sunny with temperatures in the 70's on 10/14/2015.

* Depth to bottom field gauged.

Signature: [signature] **Date:** 10/14/15

QA/QC Sign Off: [signature] **Date:** 10/16/15

DATE: 10/14/2015

JOYCE ENGINEERING

GROUND WATER SAMPLING LOG

Project Name: OmniSource - Kernersville **Project No. /Task No.:** 799.1501.12.02

Well ID: MW-14 **Sampler(s):** G. Eller / H. Seaton

Well Location: Northeast corner of the property, across from MW-13

Well Diameter: 2 inches

Initial Depth to Water (DTW): 12.72 feet

Depth to Bottom (DTB): 33.68* feet

Water Column Thickness (WCT): 20.96 feet [DTB-DTW]

Calculation for One Well Volume (WV):

For 2" Well: WCT X 0.163 = 3.4 gallons

For 4" Well: WCT X 0.653 = _____ gallons

For THREE Well Volumes: WV X 3 = 10.2 gallons

Actual Amount Purged/Bailed: 10.2 gallons

Purged with: Disposable Bailer

Sampled with: Disposable Bailer

Depth to Water before Sampling: - feet

Gallons	Time	Temp(°C)	pH	Cond. (µS)	Turb.(ntu)	Initials
0	1109	17.8	5.42	156	13.83	GE
3.4	1113	15.9	5.53	167	13.85	GE
6.8	1117	15.1	5.54	169	16.26	GE
10.2	1125	14.9	5.48	170	11.16	GE
Before Sampling	1125	14.9	5.48	170	11.16	GE

Comments (weather conditions, odor, color, silt, etc.): The weather was sunny with temperatures in the 70's on 10/14/2015.

* Depth to bottom field gauged.

Signature: Gordon Eller **Date:** 10/14/15

QA/QC Sign Off: [illegible] **Date:** 10/16/15

DATE: 10/14/2015

JOYCE ENGINEERING

SURFACE WATER MONITORING LOG

Project Name: OmniSource - Kernersville **Project/Task No.:** 799.1501.12.02

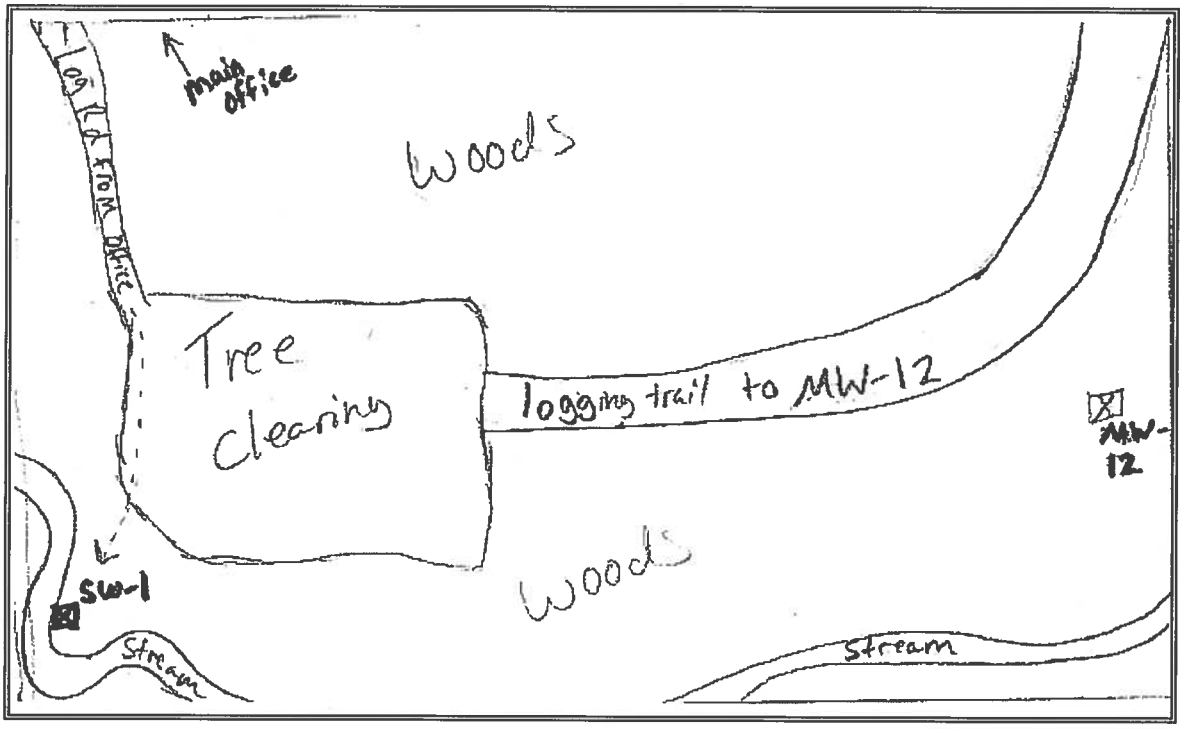
Surface Point ID: SW-1 (New Location) **Sampler(s):** G. Eller/ H. Seaton

Location: Upstream of the facility to the right of the clearing in the woods following the logging road to the right of the main office. Slightly upstream from MW-12 and is marked with while PVC pipe post.

Field Parameters:

Time of Sampling:	1330	
pH:	7.05	
Temperature:	16.5	(°C)
Conductivity:	113	(µS)
Turbidity:	8.61	(ntu)

Comments/Sample Description (weather conditions, odor, color, silt, etc.): The weather was sunny with temperatures in the 70's on 10/14/2015.



Signature: Gutty Eller **Date:** 10/14/15

QA/QC Sign Off: [illegible] **Date:** 10/16/15

DATE: 10/14/2015

JOYCE ENGINEERING

SURFACE WATER MONITORING LOG

Project Name: OmniSource - Kernersville **Project/Task No.:** 799.1501.12.02

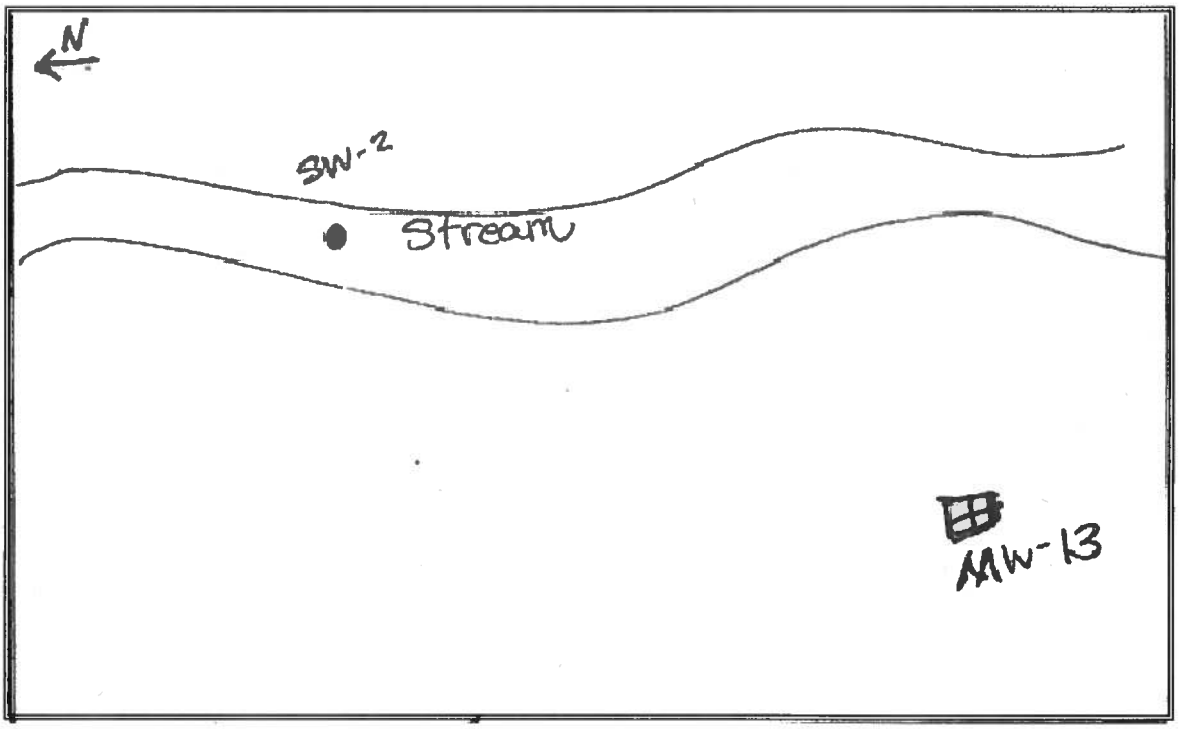
Surface Point ID: SW-2 **Sampler(s):** G. Eller / H. Seaton

Location: Downstream from MW-13

Field Parameters:

Time of Sampling:	1200	
pH:	6.74	
Temperature:	16.0	(°C)
Conductivity:	406	(µS)
Turbidity:	6.59	(ntu)

Comments/Sample Description (weather conditions, odor, color, silt, etc.): The weather was sunny with temperatures in the 70's on 10/14/2015.



Signature: [signature] **Date:** 10/14/15

QA/QC Sign Off: [signature] **Date:** 10/16/15

DATE: 11/11/2015

JOYCE ENGINEERING

GROUND WATER SAMPLING LOG

Project Name: OmniSource - Kernersville **Project No. /Task No.:** 799.1501.12.01

Well ID: MW-1R **Sampler(s):** D. Girdner

Well Location: Off the secondary road that runs behind the trail storage lot and southwest side of the facility.

Well Diameter: 2 inches

Initial Depth to Water (DTW): 47.83 feet

Depth to Bottom (DTB): 104.73 feet

Water Column Thickness (WCT): 56.9 feet [DTB-DTW]

Calculation for One Well Volume (WV):

For 2" Well: WCT X 0.163 = 9.3 gallons

For 4" Well: WCT X 0.653 = _____ gallons

For THREE Well Volumes: WV X 3 = 27.9 gallons

Actual Amount Purged/Bailed: 15.3 gallons

Purged with: Disposable Bailer

Sampled with: Disposable Bailer

Depth to Water before Sampling: _____ feet

Gallons	Time	Temp(°C)	pH	Cond. (µS)	Turb.(ntu)	Initials
0	1432	14.8	8.79	148.7	11.44	DG
9.3	1509	14.6	9.67	200	31.0	DG
Dry @ 15.3						
Before Sampling	1550	14.5	9.92	214	20.7	DG

Comments (weather conditions, odor, color, silt, etc.): The weather was sunny with temperature 68°F. Odor.

Signature: Daniel Girdner **Date:** 11-11-2015

QA/QC Sign Off: [illegible] **Date:** 11-24-15

Appendix B

Laboratory Analytical Reports
and Chains of Custody

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

October 28, 2015

Mr. Alex Everhart
Joyce Engineering-NC
2211 W. Meadowview Road
Suite 101
Greensboro, NC 27407

RE: Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Dear Mr. Everhart:
Enclosed are the analytical results for sample(s) received by the laboratory on October 15, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kevin Godwin
kevin.godwin@pacelabs.com
Project Manager

Enclosures

cc: Mr. Van Burbach, Joyce Engineering-NC
Alex Everhart, Joyce Engineering-NC

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CERTIFICATIONS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Charlotte Certification IDs
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
West Virginia Certification #: 357
Virginia/VELAP Certification #: 460221

Asheville Certification IDs
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
West Virginia Certification #: 356
Virginia/VELAP Certification #: 460222

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SAMPLE SUMMARY

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92272115001	**3420-FIELD BLANK**	Water	10/14/15 14:15	10/15/15 11:29
92272115002	**3420-MW12**	Water	10/14/15 13:15	10/15/15 11:29
92272115003	**3420-MW13**	Water	10/14/15 13:44	10/15/15 11:29
92272115004	**3420-MW14**	Water	10/14/15 11:25	10/15/15 11:29
92272115005	**3420-MW1R**	Water	10/14/15 14:00	10/15/15 11:29
92272115006	**3420-SW1**	Water	10/14/15 13:30	10/15/15 11:29
92272115007	**3420-SW2**	Water	10/14/15 12:00	10/15/15 11:29
92272115008	**3420-TRIP BLANK**	Water	10/14/15 08:00	10/15/15 11:29

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SAMPLE ANALYTE COUNT

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92272115001	**3420-FIELD BLANK**	EPA 6010	CDF	15	PASI-A
		EPA 8260	NB	50	PASI-C
92272115002	**3420-MW12**	EPA 6010	CDF	15	PASI-A
		EPA 8260	NB	50	PASI-C
92272115003	**3420-MW13**	EPA 6010	CDF	15	PASI-A
		EPA 8260	NB	50	PASI-C
92272115004	**3420-MW14**	EPA 6010	CDF	15	PASI-A
		EPA 8260	NB	50	PASI-C
92272115005	**3420-MW1R**	EPA 6010	CDF	15	PASI-A
		EPA 8260	NB	50	PASI-C
92272115006	**3420-SW1**	EPA 6010	CDF	15	PASI-A
		EPA 8260	NB	50	PASI-C
92272115007	**3420-SW2**	EPA 6010	CDF	15	PASI-A
		EPA 8260	NB	50	PASI-C
92272115008	**3420-TRIP BLANK**	EPA 8260	NB	50	PASI-C

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SUMMARY OF DETECTION

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92272115001	**3420-FIELD BLANK**					
EPA 8260	Methylene Chloride	3.6	ug/L	1.0	10/27/15 03:06	
92272115002	**3420-MW12**					
EPA 6010	Barium	179	ug/L	100	10/20/15 21:04	
EPA 6010	Copper	3.5J	ug/L	10.0	10/20/15 21:04	
EPA 6010	Lead	3.5J	ug/L	10.0	10/20/15 21:04	
EPA 6010	Nickel	5.8J	ug/L	50.0	10/20/15 21:04	
EPA 6010	Vanadium	5.4J	ug/L	25.0	10/20/15 21:04	
EPA 6010	Zinc	8.9J	ug/L	10.0	10/20/15 21:04	
EPA 8260	cis-1,2-Dichloroethene	0.20J	ug/L	5.0	10/27/15 03:23	
92272115003	**3420-MW13**					
EPA 6010	Barium	43.1J	ug/L	100	10/20/15 21:07	
EPA 6010	Chromium	2.8J	ug/L	10.0	10/20/15 21:07	
EPA 6010	Cobalt	7.2J	ug/L	10.0	10/20/15 21:07	
EPA 6010	Copper	4.3J	ug/L	10.0	10/20/15 21:07	
EPA 6010	Nickel	4.9J	ug/L	50.0	10/20/15 21:07	
EPA 6010	Vanadium	8.5J	ug/L	25.0	10/20/15 21:07	
EPA 6010	Zinc	7.6J	ug/L	10.0	10/20/15 21:07	
92272115004	**3420-MW14**					
EPA 6010	Barium	121	ug/L	100	10/20/15 21:19	
EPA 6010	Beryllium	1.4	ug/L	1.0	10/20/15 21:19	
EPA 6010	Cobalt	5.4J	ug/L	10.0	10/20/15 21:19	
EPA 6010	Nickel	2.6J	ug/L	50.0	10/20/15 21:19	
EPA 6010	Zinc	5.1J	ug/L	10.0	10/20/15 21:19	
92272115005	**3420-MW1R**					
EPA 6010	Barium	17.2J	ug/L	100	10/20/15 21:22	
EPA 6010	Zinc	7.1J	ug/L	10.0	10/20/15 21:22	
EPA 8260	Benzene	1.8	ug/L	1.0	10/27/15 04:15	
92272115006	**3420-SW1**					
EPA 6010	Barium	59.6J	ug/L	100	10/20/15 21:25	
EPA 6010	Copper	2.8J	ug/L	10.0	10/20/15 21:25	
EPA 6010	Zinc	52.0	ug/L	10.0	10/20/15 21:25	
EPA 8260	Carbon tetrachloride	4.5	ug/L	1.0	10/27/15 04:32	
EPA 8260	Chloroform	13.9	ug/L	5.0	10/27/15 04:32	
EPA 8260	cis-1,2-Dichloroethene	0.70J	ug/L	5.0	10/27/15 04:32	
EPA 8260	Tetrachloroethene	4.4	ug/L	1.0	10/27/15 04:32	
92272115007	**3420-SW2**					
EPA 6010	Barium	101	ug/L	100	10/20/15 21:28	
EPA 6010	Copper	3.2J	ug/L	10.0	10/20/15 21:28	
EPA 6010	Nickel	4.4J	ug/L	50.0	10/20/15 21:28	
EPA 6010	Zinc	29.7	ug/L	10.0	10/20/15 21:28	
EPA 8260	Benzene	0.45J	ug/L	1.0	10/27/15 04:50	
92272115008	**3420-TRIP BLANK**					
EPA 8260	Methylene Chloride	1.7	ug/L	1.0	10/27/15 05:07	

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ANALYTICAL RESULTS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Sample: 3420-FIELD BLANK **Lab ID: 92272115001** Collected: 10/14/15 14:15 Received: 10/15/15 11:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	3.8	1	10/16/15 19:00	10/20/15 23:56	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	10/16/15 19:00	10/20/15 23:56	7440-38-2	
Barium	ND	ug/L	100	2.5	1	10/16/15 19:00	10/20/15 23:56	7440-39-3	
Beryllium	ND	ug/L	1.0	0.50	1	10/16/15 19:00	10/20/15 23:56	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	10/16/15 19:00	10/20/15 23:56	7440-43-9	
Chromium	ND	ug/L	10.0	2.5	1	10/16/15 19:00	10/20/15 23:56	7440-47-3	
Cobalt	ND	ug/L	10.0	2.5	1	10/16/15 19:00	10/20/15 23:56	7440-48-4	
Copper	ND	ug/L	10.0	2.5	1	10/16/15 19:00	10/20/15 23:56	7440-50-8	
Lead	ND	ug/L	10.0	2.5	1	10/16/15 19:00	10/20/15 23:56	7439-92-1	
Nickel	ND	ug/L	50.0	2.5	1	10/16/15 19:00	10/20/15 23:56	7440-02-0	
Selenium	ND	ug/L	10.0	5.0	1	10/16/15 19:00	10/20/15 23:56	7782-49-2	
Silver	ND	ug/L	10.0	2.5	1	10/16/15 19:00	10/20/15 23:56	7440-22-4	
Thallium	ND	ug/L	5.5	5.0	1	10/16/15 19:00	10/20/15 23:56	7440-28-0	
Vanadium	ND	ug/L	25.0	2.5	1	10/16/15 19:00	10/20/15 23:56	7440-62-2	
Zinc	ND	ug/L	10.0	5.0	1	10/16/15 19:00	10/20/15 23:56	7440-66-6	
8260 MSV Low Level Landfill	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	10.0	1		10/27/15 03:06	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		10/27/15 03:06	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		10/27/15 03:06	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		10/27/15 03:06	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		10/27/15 03:06	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		10/27/15 03:06	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		10/27/15 03:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		10/27/15 03:06	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		10/27/15 03:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		10/27/15 03:06	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		10/27/15 03:06	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		10/27/15 03:06	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		10/27/15 03:06	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		10/27/15 03:06	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.0	1		10/27/15 03:06	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		10/27/15 03:06	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		10/27/15 03:06	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		10/27/15 03:06	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		10/27/15 03:06	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		10/27/15 03:06	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		10/27/15 03:06	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		10/27/15 03:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		10/27/15 03:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		10/27/15 03:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		10/27/15 03:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		10/27/15 03:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		10/27/15 03:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		10/27/15 03:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		10/27/15 03:06	10061-02-6	

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ANALYTICAL RESULTS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Sample: 3420-FIELD BLANK **Lab ID: 92272115001** Collected: 10/14/15 14:15 Received: 10/15/15 11:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill	Analytical Method: EPA 8260								
Ethylbenzene	ND	ug/L	1.0	0.30	1		10/27/15 03:06	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		10/27/15 03:06	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		10/27/15 03:06	74-88-4	
Methylene Chloride	**3.6**	ug/L	1.0	0.97	1		10/27/15 03:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		10/27/15 03:06	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		10/27/15 03:06	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		10/27/15 03:06	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		10/27/15 03:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		10/27/15 03:06	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		10/27/15 03:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		10/27/15 03:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		10/27/15 03:06	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		10/27/15 03:06	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		10/27/15 03:06	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		10/27/15 03:06	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		10/27/15 03:06	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		10/27/15 03:06	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		10/27/15 03:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		10/27/15 03:06	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	70-130		1		10/27/15 03:06	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		10/27/15 03:06	2037-26-5	

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ANALYTICAL RESULTS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Sample: 3420-MW12 **Lab ID: 92272115002** Collected: 10/14/15 13:15 Received: 10/15/15 11:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	3.8	1	10/19/15 19:30	10/20/15 21:04	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:04	7440-38-2	
Barium	**179**	ug/L	100	2.5	1	10/19/15 19:30	10/20/15 21:04	7440-39-3	
Beryllium	ND	ug/L	1.0	0.50	1	10/19/15 19:30	10/20/15 21:04	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	10/19/15 19:30	10/20/15 21:04	7440-43-9	
Chromium	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:04	7440-47-3	
Cobalt	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:04	7440-48-4	
Copper	**3.5J**	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:04	7440-50-8	
Lead	**3.5J**	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:04	7439-92-1	
Nickel	**5.8J**	ug/L	50.0	2.5	1	10/19/15 19:30	10/20/15 21:04	7440-02-0	
Selenium	ND	ug/L	10.0	5.0	1	10/19/15 19:30	10/20/15 21:04	7782-49-2	
Silver	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:04	7440-22-4	
Thallium	ND	ug/L	5.5	5.0	1	10/19/15 19:30	10/20/15 21:04	7440-28-0	
Vanadium	**5.4J**	ug/L	25.0	2.5	1	10/19/15 19:30	10/20/15 21:04	7440-62-2	
Zinc	**8.9J**	ug/L	10.0	5.0	1	10/19/15 19:30	10/20/15 21:04	7440-66-6	
8260 MSV Low Level Landfill	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	10.0	1		10/27/15 03:23	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		10/27/15 03:23	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		10/27/15 03:23	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		10/27/15 03:23	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		10/27/15 03:23	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		10/27/15 03:23	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		10/27/15 03:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		10/27/15 03:23	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		10/27/15 03:23	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		10/27/15 03:23	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		10/27/15 03:23	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		10/27/15 03:23	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		10/27/15 03:23	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		10/27/15 03:23	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.0	1		10/27/15 03:23	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		10/27/15 03:23	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		10/27/15 03:23	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		10/27/15 03:23	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		10/27/15 03:23	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		10/27/15 03:23	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		10/27/15 03:23	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		10/27/15 03:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		10/27/15 03:23	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		10/27/15 03:23	75-35-4	
cis-1,2-Dichloroethene	**0.20J**	ug/L	5.0	0.19	1		10/27/15 03:23	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		10/27/15 03:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		10/27/15 03:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		10/27/15 03:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		10/27/15 03:23	10061-02-6	

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ANALYTICAL RESULTS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Sample: 3420-MW12 **Lab ID: 92272115002** Collected: 10/14/15 13:15 Received: 10/15/15 11:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill	Analytical Method: EPA 8260								
Ethylbenzene	ND	ug/L	1.0	0.30	1		10/27/15 03:23	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		10/27/15 03:23	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		10/27/15 03:23	74-88-4	
Methylene Chloride	ND	ug/L	1.0	0.97	1		10/27/15 03:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		10/27/15 03:23	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		10/27/15 03:23	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		10/27/15 03:23	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		10/27/15 03:23	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		10/27/15 03:23	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		10/27/15 03:23	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		10/27/15 03:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		10/27/15 03:23	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		10/27/15 03:23	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		10/27/15 03:23	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		10/27/15 03:23	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		10/27/15 03:23	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		10/27/15 03:23	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		10/27/15 03:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		10/27/15 03:23	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	70-130		1		10/27/15 03:23	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		10/27/15 03:23	2037-26-5	

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ANALYTICAL RESULTS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Sample: 3420-MW13 **Lab ID: 92272115003** Collected: 10/14/15 13:44 Received: 10/15/15 11:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	3.8	1	10/19/15 19:30	10/20/15 21:07	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:07	7440-38-2	
Barium	**43.1J**	ug/L	100	2.5	1	10/19/15 19:30	10/20/15 21:07	7440-39-3	
Beryllium	ND	ug/L	1.0	0.50	1	10/19/15 19:30	10/20/15 21:07	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	10/19/15 19:30	10/20/15 21:07	7440-43-9	
Chromium	**2.8J**	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:07	7440-47-3	
Cobalt	**7.2J**	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:07	7440-48-4	
Copper	**4.3J**	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:07	7440-50-8	
Lead	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:07	7439-92-1	
Nickel	**4.9J**	ug/L	50.0	2.5	1	10/19/15 19:30	10/20/15 21:07	7440-02-0	
Selenium	ND	ug/L	10.0	5.0	1	10/19/15 19:30	10/20/15 21:07	7782-49-2	
Silver	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:07	7440-22-4	
Thallium	ND	ug/L	5.5	5.0	1	10/19/15 19:30	10/20/15 21:07	7440-28-0	
Vanadium	**8.5J**	ug/L	25.0	2.5	1	10/19/15 19:30	10/20/15 21:07	7440-62-2	
Zinc	**7.6J**	ug/L	10.0	5.0	1	10/19/15 19:30	10/20/15 21:07	7440-66-6	
8260 MSV Low Level Landfill	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	10.0	1		10/27/15 03:40	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		10/27/15 03:40	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		10/27/15 03:40	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		10/27/15 03:40	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		10/27/15 03:40	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		10/27/15 03:40	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		10/27/15 03:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		10/27/15 03:40	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		10/27/15 03:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		10/27/15 03:40	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		10/27/15 03:40	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		10/27/15 03:40	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		10/27/15 03:40	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		10/27/15 03:40	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.0	1		10/27/15 03:40	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		10/27/15 03:40	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		10/27/15 03:40	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		10/27/15 03:40	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		10/27/15 03:40	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		10/27/15 03:40	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		10/27/15 03:40	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		10/27/15 03:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		10/27/15 03:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		10/27/15 03:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		10/27/15 03:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		10/27/15 03:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		10/27/15 03:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		10/27/15 03:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		10/27/15 03:40	10061-02-6	

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ANALYTICAL RESULTS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Sample: 3420-MW13 **Lab ID: 92272115003** Collected: 10/14/15 13:44 Received: 10/15/15 11:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill	Analytical Method: EPA 8260								
Ethylbenzene	ND	ug/L	1.0	0.30	1		10/27/15 03:40	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		10/27/15 03:40	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		10/27/15 03:40	74-88-4	
Methylene Chloride	ND	ug/L	1.0	0.97	1		10/27/15 03:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		10/27/15 03:40	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		10/27/15 03:40	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		10/27/15 03:40	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		10/27/15 03:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		10/27/15 03:40	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		10/27/15 03:40	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		10/27/15 03:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		10/27/15 03:40	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		10/27/15 03:40	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		10/27/15 03:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		10/27/15 03:40	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		10/27/15 03:40	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		10/27/15 03:40	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		10/27/15 03:40	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		10/27/15 03:40	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	70-130		1		10/27/15 03:40	17060-07-0	
Toluene-d8 (S)	102	%	70-130		1		10/27/15 03:40	2037-26-5	

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ANALYTICAL RESULTS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Sample: 3420-MW14 **Lab ID: 92272115004** Collected: 10/14/15 11:25 Received: 10/15/15 11:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	3.8	1	10/19/15 19:30	10/20/15 21:19	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:19	7440-38-2	
Barium	**121**	ug/L	100	2.5	1	10/19/15 19:30	10/20/15 21:19	7440-39-3	
Beryllium	**1.4**	ug/L	1.0	0.50	1	10/19/15 19:30	10/20/15 21:19	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	10/19/15 19:30	10/20/15 21:19	7440-43-9	
Chromium	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:19	7440-47-3	
Cobalt	**5.4J**	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:19	7440-48-4	
Copper	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:19	7440-50-8	
Lead	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:19	7439-92-1	
Nickel	**2.6J**	ug/L	50.0	2.5	1	10/19/15 19:30	10/20/15 21:19	7440-02-0	
Selenium	ND	ug/L	10.0	5.0	1	10/19/15 19:30	10/20/15 21:19	7782-49-2	
Silver	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:19	7440-22-4	
Thallium	ND	ug/L	5.5	5.0	1	10/19/15 19:30	10/20/15 21:19	7440-28-0	
Vanadium	ND	ug/L	25.0	2.5	1	10/19/15 19:30	10/20/15 21:19	7440-62-2	
Zinc	**5.1J**	ug/L	10.0	5.0	1	10/19/15 19:30	10/20/15 21:19	7440-66-6	
8260 MSV Low Level Landfill	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	10.0	1		10/27/15 03:58	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		10/27/15 03:58	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		10/27/15 03:58	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		10/27/15 03:58	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		10/27/15 03:58	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		10/27/15 03:58	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		10/27/15 03:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		10/27/15 03:58	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		10/27/15 03:58	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		10/27/15 03:58	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		10/27/15 03:58	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		10/27/15 03:58	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		10/27/15 03:58	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		10/27/15 03:58	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.0	1		10/27/15 03:58	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		10/27/15 03:58	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		10/27/15 03:58	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		10/27/15 03:58	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		10/27/15 03:58	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		10/27/15 03:58	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		10/27/15 03:58	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		10/27/15 03:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		10/27/15 03:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		10/27/15 03:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		10/27/15 03:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		10/27/15 03:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		10/27/15 03:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		10/27/15 03:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		10/27/15 03:58	10061-02-6	

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ANALYTICAL RESULTS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Sample: 3420-MW14 **Lab ID: 92272115004** Collected: 10/14/15 11:25 Received: 10/15/15 11:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill	Analytical Method: EPA 8260								
Ethylbenzene	ND	ug/L	1.0	0.30	1		10/27/15 03:58	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		10/27/15 03:58	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		10/27/15 03:58	74-88-4	
Methylene Chloride	ND	ug/L	1.0	0.97	1		10/27/15 03:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		10/27/15 03:58	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		10/27/15 03:58	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		10/27/15 03:58	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		10/27/15 03:58	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		10/27/15 03:58	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		10/27/15 03:58	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		10/27/15 03:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		10/27/15 03:58	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		10/27/15 03:58	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		10/27/15 03:58	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		10/27/15 03:58	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		10/27/15 03:58	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		10/27/15 03:58	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		10/27/15 03:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		10/27/15 03:58	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	70-130		1		10/27/15 03:58	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		10/27/15 03:58	2037-26-5	

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ANALYTICAL RESULTS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Sample: 3420-MW1R **Lab ID: 92272115005** Collected: 10/14/15 14:00 Received: 10/15/15 11:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	3.8	1	10/19/15 19:30	10/20/15 21:22	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:22	7440-38-2	
Barium	**17.2J**	ug/L	100	2.5	1	10/19/15 19:30	10/20/15 21:22	7440-39-3	
Beryllium	ND	ug/L	1.0	0.50	1	10/19/15 19:30	10/20/15 21:22	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	10/19/15 19:30	10/20/15 21:22	7440-43-9	
Chromium	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:22	7440-47-3	
Cobalt	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:22	7440-48-4	
Copper	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:22	7440-50-8	
Lead	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:22	7439-92-1	
Nickel	ND	ug/L	50.0	2.5	1	10/19/15 19:30	10/20/15 21:22	7440-02-0	
Selenium	ND	ug/L	10.0	5.0	1	10/19/15 19:30	10/20/15 21:22	7782-49-2	
Silver	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:22	7440-22-4	
Thallium	ND	ug/L	5.5	5.0	1	10/19/15 19:30	10/20/15 21:22	7440-28-0	
Vanadium	ND	ug/L	25.0	2.5	1	10/19/15 19:30	10/20/15 21:22	7440-62-2	
Zinc	**7.1J**	ug/L	10.0	5.0	1	10/19/15 19:30	10/20/15 21:22	7440-66-6	
8260 MSV Low Level Landfill	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	10.0	1		10/27/15 04:15	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		10/27/15 04:15	107-13-1	
Benzene	**1.8**	ug/L	1.0	0.25	1		10/27/15 04:15	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		10/27/15 04:15	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		10/27/15 04:15	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		10/27/15 04:15	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		10/27/15 04:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		10/27/15 04:15	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		10/27/15 04:15	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		10/27/15 04:15	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		10/27/15 04:15	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		10/27/15 04:15	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		10/27/15 04:15	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		10/27/15 04:15	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.0	1		10/27/15 04:15	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		10/27/15 04:15	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		10/27/15 04:15	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		10/27/15 04:15	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		10/27/15 04:15	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		10/27/15 04:15	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		10/27/15 04:15	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		10/27/15 04:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		10/27/15 04:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		10/27/15 04:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		10/27/15 04:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		10/27/15 04:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		10/27/15 04:15	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		10/27/15 04:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		10/27/15 04:15	10061-02-6	

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ANALYTICAL RESULTS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Sample: 3420-MW1R **Lab ID: 92272115005** Collected: 10/14/15 14:00 Received: 10/15/15 11:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill	Analytical Method: EPA 8260								
Ethylbenzene	ND	ug/L	1.0	0.30	1		10/27/15 04:15	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		10/27/15 04:15	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		10/27/15 04:15	74-88-4	
Methylene Chloride	ND	ug/L	1.0	0.97	1		10/27/15 04:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		10/27/15 04:15	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		10/27/15 04:15	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		10/27/15 04:15	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		10/27/15 04:15	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		10/27/15 04:15	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		10/27/15 04:15	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		10/27/15 04:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		10/27/15 04:15	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		10/27/15 04:15	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		10/27/15 04:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		10/27/15 04:15	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		10/27/15 04:15	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		10/27/15 04:15	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		10/27/15 04:15	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		10/27/15 04:15	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	70-130		1		10/27/15 04:15	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		10/27/15 04:15	2037-26-5	

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ANALYTICAL RESULTS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Sample: 3420-SW1 **Lab ID: 92272115006** Collected: 10/14/15 13:30 Received: 10/15/15 11:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	3.8	1	10/19/15 19:30	10/20/15 21:25	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:25	7440-38-2	
Barium	**59.6J**	ug/L	100	2.5	1	10/19/15 19:30	10/20/15 21:25	7440-39-3	
Beryllium	ND	ug/L	1.0	0.50	1	10/19/15 19:30	10/20/15 21:25	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	10/19/15 19:30	10/20/15 21:25	7440-43-9	
Chromium	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:25	7440-47-3	
Cobalt	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:25	7440-48-4	
Copper	**2.8J**	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:25	7440-50-8	
Lead	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:25	7439-92-1	
Nickel	ND	ug/L	50.0	2.5	1	10/19/15 19:30	10/20/15 21:25	7440-02-0	
Selenium	ND	ug/L	10.0	5.0	1	10/19/15 19:30	10/20/15 21:25	7782-49-2	
Silver	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:25	7440-22-4	
Thallium	ND	ug/L	5.5	5.0	1	10/19/15 19:30	10/20/15 21:25	7440-28-0	
Vanadium	ND	ug/L	25.0	2.5	1	10/19/15 19:30	10/20/15 21:25	7440-62-2	
Zinc	**52.0**	ug/L	10.0	5.0	1	10/19/15 19:30	10/20/15 21:25	7440-66-6	
8260 MSV Low Level Landfill	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	10.0	1		10/27/15 04:32	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		10/27/15 04:32	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		10/27/15 04:32	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		10/27/15 04:32	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		10/27/15 04:32	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		10/27/15 04:32	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		10/27/15 04:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		10/27/15 04:32	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		10/27/15 04:32	75-15-0	
Carbon tetrachloride	**4.5**	ug/L	1.0	0.25	1		10/27/15 04:32	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		10/27/15 04:32	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		10/27/15 04:32	75-00-3	
Chloroform	**13.9**	ug/L	5.0	0.14	1		10/27/15 04:32	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		10/27/15 04:32	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.0	1		10/27/15 04:32	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		10/27/15 04:32	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		10/27/15 04:32	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		10/27/15 04:32	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		10/27/15 04:32	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		10/27/15 04:32	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		10/27/15 04:32	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		10/27/15 04:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		10/27/15 04:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		10/27/15 04:32	75-35-4	
cis-1,2-Dichloroethene	**0.70J**	ug/L	5.0	0.19	1		10/27/15 04:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		10/27/15 04:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		10/27/15 04:32	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		10/27/15 04:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		10/27/15 04:32	10061-02-6	

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ANALYTICAL RESULTS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Sample: 3420-SW1 **Lab ID: 92272115006** Collected: 10/14/15 13:30 Received: 10/15/15 11:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill	Analytical Method: EPA 8260								
Ethylbenzene	ND	ug/L	1.0	0.30	1		10/27/15 04:32	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		10/27/15 04:32	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		10/27/15 04:32	74-88-4	
Methylene Chloride	ND	ug/L	1.0	0.97	1		10/27/15 04:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		10/27/15 04:32	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		10/27/15 04:32	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		10/27/15 04:32	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		10/27/15 04:32	79-34-5	
Tetrachloroethene	**4.4**	ug/L	1.0	0.46	1		10/27/15 04:32	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		10/27/15 04:32	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		10/27/15 04:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		10/27/15 04:32	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		10/27/15 04:32	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		10/27/15 04:32	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		10/27/15 04:32	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		10/27/15 04:32	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		10/27/15 04:32	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		10/27/15 04:32	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		10/27/15 04:32	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	70-130		1		10/27/15 04:32	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		10/27/15 04:32	2037-26-5	

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ANALYTICAL RESULTS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Sample: 3420-SW2 **Lab ID: 92272115007** Collected: 10/14/15 12:00 Received: 10/15/15 11:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	3.8	1	10/19/15 19:30	10/20/15 21:28	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:28	7440-38-2	
Barium	**101**	ug/L	100	2.5	1	10/19/15 19:30	10/20/15 21:28	7440-39-3	
Beryllium	ND	ug/L	1.0	0.50	1	10/19/15 19:30	10/20/15 21:28	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	10/19/15 19:30	10/20/15 21:28	7440-43-9	
Chromium	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:28	7440-47-3	
Cobalt	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:28	7440-48-4	
Copper	**3.2J**	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:28	7440-50-8	
Lead	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:28	7439-92-1	
Nickel	**4.4J**	ug/L	50.0	2.5	1	10/19/15 19:30	10/20/15 21:28	7440-02-0	
Selenium	ND	ug/L	10.0	5.0	1	10/19/15 19:30	10/20/15 21:28	7782-49-2	
Silver	ND	ug/L	10.0	2.5	1	10/19/15 19:30	10/20/15 21:28	7440-22-4	
Thallium	ND	ug/L	5.5	5.0	1	10/19/15 19:30	10/20/15 21:28	7440-28-0	
Vanadium	ND	ug/L	25.0	2.5	1	10/19/15 19:30	10/20/15 21:28	7440-62-2	
Zinc	**29.7**	ug/L	10.0	5.0	1	10/19/15 19:30	10/20/15 21:28	7440-66-6	
8260 MSV Low Level Landfill	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	10.0	1		10/27/15 04:50	67-64-1	M1
Acrylonitrile	ND	ug/L	200	1.9	1		10/27/15 04:50	107-13-1	
Benzene	**0.45J**	ug/L	1.0	0.25	1		10/27/15 04:50	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		10/27/15 04:50	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		10/27/15 04:50	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		10/27/15 04:50	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		10/27/15 04:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		10/27/15 04:50	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		10/27/15 04:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		10/27/15 04:50	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		10/27/15 04:50	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		10/27/15 04:50	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		10/27/15 04:50	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		10/27/15 04:50	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.0	1		10/27/15 04:50	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		10/27/15 04:50	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		10/27/15 04:50	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		10/27/15 04:50	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		10/27/15 04:50	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		10/27/15 04:50	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		10/27/15 04:50	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		10/27/15 04:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		10/27/15 04:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		10/27/15 04:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		10/27/15 04:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		10/27/15 04:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		10/27/15 04:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		10/27/15 04:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		10/27/15 04:50	10061-02-6	

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ANALYTICAL RESULTS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Sample: 3420-SW2 **Lab ID: 92272115007** Collected: 10/14/15 12:00 Received: 10/15/15 11:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill	Analytical Method: EPA 8260								
Ethylbenzene	ND	ug/L	1.0	0.30	1		10/27/15 04:50	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		10/27/15 04:50	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		10/27/15 04:50	74-88-4	
Methylene Chloride	ND	ug/L	1.0	0.97	1		10/27/15 04:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		10/27/15 04:50	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		10/27/15 04:50	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		10/27/15 04:50	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		10/27/15 04:50	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		10/27/15 04:50	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		10/27/15 04:50	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		10/27/15 04:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		10/27/15 04:50	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		10/27/15 04:50	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		10/27/15 04:50	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		10/27/15 04:50	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		10/27/15 04:50	108-05-4	M1
Vinyl chloride	ND	ug/L	1.0	0.62	1		10/27/15 04:50	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		10/27/15 04:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		10/27/15 04:50	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	70-130		1		10/27/15 04:50	17060-07-0	
Toluene-d8 (S)	102	%	70-130		1		10/27/15 04:50	2037-26-5	

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ANALYTICAL RESULTS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Sample: 3420-TRIP BLANK **Lab ID: 92272115008** Collected: 10/14/15 08:00 Received: 10/15/15 11:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	10.0	1		10/27/15 05:07	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		10/27/15 05:07	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		10/27/15 05:07	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		10/27/15 05:07	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		10/27/15 05:07	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		10/27/15 05:07	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		10/27/15 05:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		10/27/15 05:07	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		10/27/15 05:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		10/27/15 05:07	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		10/27/15 05:07	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		10/27/15 05:07	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		10/27/15 05:07	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		10/27/15 05:07	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.0	1		10/27/15 05:07	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		10/27/15 05:07	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		10/27/15 05:07	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		10/27/15 05:07	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		10/27/15 05:07	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		10/27/15 05:07	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		10/27/15 05:07	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		10/27/15 05:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.24	1		10/27/15 05:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		10/27/15 05:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		10/27/15 05:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		10/27/15 05:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		10/27/15 05:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		10/27/15 05:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		10/27/15 05:07	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		10/27/15 05:07	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		10/27/15 05:07	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		10/27/15 05:07	74-88-4	
Methylene Chloride	**1.7**	ug/L	1.0	0.97	1		10/27/15 05:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		10/27/15 05:07	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		10/27/15 05:07	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		10/27/15 05:07	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		10/27/15 05:07	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		10/27/15 05:07	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		10/27/15 05:07	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		10/27/15 05:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		10/27/15 05:07	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		10/27/15 05:07	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		10/27/15 05:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		10/27/15 05:07	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		10/27/15 05:07	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		10/27/15 05:07	75-01-4	

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ANALYTICAL RESULTS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Sample: 3420-TRIP BLANK **Lab ID: 92272115008** Collected: 10/14/15 08:00 Received: 10/15/15 11:29 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill	Analytical Method: EPA 8260								
Xylene (Total)	ND	ug/L	5.0	0.66	1		10/27/15 05:07	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		10/27/15 05:07	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	70-130		1		10/27/15 05:07	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		10/27/15 05:07	2037-26-5	

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QUALITY CONTROL DATA

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

QC Batch: MPRP/19828
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET NC Groundwater
Associated Lab Samples: 92272115001

METHOD BLANK: 1584686
Matrix: Water
Associated Lab Samples: 92272115001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	ND	6.0	3.8	10/20/15 22:19	
Arsenic	ug/L	ND	10.0	2.5	10/20/15 22:19	
Barium	ug/L	ND	100	2.5	10/20/15 22:19	
Beryllium	ug/L	ND	1.0	0.50	10/20/15 22:19	
Cadmium	ug/L	ND	1.0	0.50	10/20/15 22:19	
Chromium	ug/L	ND	10.0	2.5	10/20/15 22:19	
Cobalt	ug/L	ND	10.0	2.5	10/20/15 22:19	
Copper	ug/L	ND	10.0	2.5	10/20/15 22:19	
Lead	ug/L	ND	10.0	2.5	10/20/15 22:19	
Nickel	ug/L	ND	50.0	2.5	10/20/15 22:19	
Selenium	ug/L	ND	10.0	5.0	10/20/15 22:19	
Silver	ug/L	ND	10.0	2.5	10/20/15 22:19	
Thallium	ug/L	ND	5.5	5.0	10/20/15 22:19	
Vanadium	ug/L	ND	25.0	2.5	10/20/15 22:19	
Zinc	ug/L	ND	10.0	5.0	10/20/15 22:19	

LABORATORY CONTROL SAMPLE: 1584687

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	468	94	80-120	
Arsenic	ug/L	500	450	90	80-120	
Barium	ug/L	500	468	94	80-120	
Beryllium	ug/L	500	464	93	80-120	
Cadmium	ug/L	500	466	93	80-120	
Chromium	ug/L	500	462	92	80-120	
Cobalt	ug/L	500	462	92	80-120	
Copper	ug/L	500	475	95	80-120	
Lead	ug/L	500	454	91	80-120	
Nickel	ug/L	500	463	93	80-120	
Selenium	ug/L	500	451	90	80-120	
Silver	ug/L	250	230	92	80-120	
Thallium	ug/L	500	451	90	80-120	
Vanadium	ug/L	500	459	92	80-120	
Zinc	ug/L	500	448	90	80-120	

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QUALITY CONTROL DATA

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1584688 1584689

Parameter	Units	92272094005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	ND	500	500	461	446	92	89	75-125	3	25	
Arsenic	ug/L	ND	500	500	449	440	90	88	75-125	2	25	
Barium	ug/L	41.2	500	500	513	501	94	92	75-125	2	25	
Beryllium	ug/L	ND	500	500	467	455	93	91	75-125	3	25	
Cadmium	ug/L	ND	500	500	465	453	93	91	75-125	3	25	
Chromium	ug/L	ND	500	500	464	455	92	91	75-125	2	25	
Cobalt	ug/L	ND	500	500	464	452	93	90	75-125	3	25	
Copper	ug/L	ND	500	500	474	469	94	93	75-125	1	25	
Lead	ug/L	ND	500	500	455	443	91	88	75-125	3	25	
Nickel	ug/L	ND	500	500	465	454	93	91	75-125	2	25	
Selenium	ug/L	ND	500	500	452	441	90	88	75-125	2	25	
Silver	ug/L	ND	250	250	227	223	91	89	75-125	2	25	
Thallium	ug/L	ND	500	500	450	440	90	88	75-125	2	25	
Vanadium	ug/L	4.3J	500	500	463	456	92	90	75-125	2	25	
Zinc	ug/L	5.5J	500	500	453	444	90	88	75-125	2	25	

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QUALITY CONTROL DATA

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

QC Batch: MPRP/19840 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET NC Groundwater
Associated Lab Samples: 92272115002, 92272115003, 92272115004, 92272115005, 92272115006, 92272115007

METHOD BLANK: 1585679 Matrix: Water
Associated Lab Samples: 92272115002, 92272115003, 92272115004, 92272115005, 92272115006, 92272115007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	ND	6.0	3.8	10/20/15 20:03	
Arsenic	ug/L	ND	10.0	2.5	10/20/15 20:03	
Barium	ug/L	ND	100	2.5	10/20/15 20:03	
Beryllium	ug/L	ND	1.0	0.50	10/20/15 20:03	
Cadmium	ug/L	ND	1.0	0.50	10/20/15 20:03	
Chromium	ug/L	ND	10.0	2.5	10/20/15 20:03	
Cobalt	ug/L	ND	10.0	2.5	10/20/15 20:03	
Copper	ug/L	ND	10.0	2.5	10/20/15 20:03	
Lead	ug/L	ND	10.0	2.5	10/20/15 20:03	
Nickel	ug/L	ND	50.0	2.5	10/20/15 20:03	
Selenium	ug/L	ND	10.0	5.0	10/20/15 20:03	
Silver	ug/L	ND	10.0	2.5	10/20/15 20:03	
Thallium	ug/L	ND	5.5	5.0	10/20/15 20:03	
Vanadium	ug/L	ND	25.0	2.5	10/20/15 20:03	
Zinc	ug/L	ND	10.0	5.0	10/20/15 20:03	

LABORATORY CONTROL SAMPLE: 1585680

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	511	102	80-120	
Arsenic	ug/L	500	488	98	80-120	
Barium	ug/L	500	514	103	80-120	
Beryllium	ug/L	500	510	102	80-120	
Cadmium	ug/L	500	509	102	80-120	
Chromium	ug/L	500	507	101	80-120	
Cobalt	ug/L	500	501	100	80-120	
Copper	ug/L	500	516	103	80-120	
Lead	ug/L	500	495	99	80-120	
Nickel	ug/L	500	505	101	80-120	
Selenium	ug/L	500	495	99	80-120	
Silver	ug/L	250	249	100	80-120	
Thallium	ug/L	500	491	98	80-120	
Vanadium	ug/L	500	495	99	80-120	
Zinc	ug/L	500	485	97	80-120	

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QUALITY CONTROL DATA

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1585681 1585682

Parameter	Units	92272154001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	ND	500	500	480	474	96	94	75-125	1	25	
Arsenic	ug/L	ND	500	500	478	470	95	93	75-125	2	25	
Barium	ug/L	70.7	500	500	551	535	96	93	75-125	3	25	
Beryllium	ug/L	ND	500	500	468	457	94	91	75-125	2	25	
Cadmium	ug/L	ND	500	500	477	471	95	94	75-125	1	25	
Chromium	ug/L	ND	500	500	474	465	94	93	75-125	2	25	
Cobalt	ug/L	5.2	500	500	485	478	96	95	75-125	1	25	
Copper	ug/L	6.7	500	500	495	487	98	96	75-125	2	25	
Lead	ug/L	ND	500	500	474	468	94	93	75-125	1	25	
Nickel	ug/L	ND	500	500	476	467	94	93	75-125	2	25	
Selenium	ug/L	ND	500	500	468	460	94	92	75-125	2	25	
Silver	ug/L	ND	250	250	235	231	94	92	75-125	2	25	
Thallium	ug/L	ND	500	500	457	453	91	90	75-125	1	25	
Vanadium	ug/L	6.9	500	500	483	473	95	93	75-125	2	25	
Zinc	ug/L	18.8	500	500	512	505	99	97	75-125	1	25	

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QUALITY CONTROL DATA

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

QC Batch: MSV/33996 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level Landfill
Associated Lab Samples: 92272115001, 92272115002, 92272115003, 92272115004, 92272115005, 92272115006, 92272115007, 92272115008

METHOD BLANK: 1591707 Matrix: Water
Associated Lab Samples: 92272115001, 92272115002, 92272115003, 92272115004, 92272115005, 92272115006, 92272115007, 92272115008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	0.33	10/27/15 02:31	
1,1,1-Trichloroethane	ug/L	ND	1.0	0.48	10/27/15 02:31	
1,1,2,2-Tetrachloroethane	ug/L	ND	3.0	0.40	10/27/15 02:31	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.29	10/27/15 02:31	
1,1-Dichloroethane	ug/L	ND	5.0	0.32	10/27/15 02:31	
1,1-Dichloroethene	ug/L	ND	5.0	0.56	10/27/15 02:31	
1,2,3-Trichloropropane	ug/L	ND	1.0	0.41	10/27/15 02:31	
1,2-Dibromo-3-chloropropane	ug/L	ND	13.0	2.0	10/27/15 02:31	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	0.27	10/27/15 02:31	
1,2-Dichlorobenzene	ug/L	ND	5.0	0.30	10/27/15 02:31	
1,2-Dichloroethane	ug/L	ND	1.0	0.24	10/27/15 02:31	
1,2-Dichloropropane	ug/L	ND	1.0	0.27	10/27/15 02:31	
1,4-Dichlorobenzene	ug/L	ND	1.0	0.33	10/27/15 02:31	
2-Butanone (MEK)	ug/L	ND	100	0.96	10/27/15 02:31	
2-Hexanone	ug/L	ND	50.0	0.46	10/27/15 02:31	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	0.33	10/27/15 02:31	
Acetone	ug/L	ND	100	10.0	10/27/15 02:31	
Acrylonitrile	ug/L	ND	200	1.9	10/27/15 02:31	
Benzene	ug/L	ND	1.0	0.25	10/27/15 02:31	
Bromochloromethane	ug/L	ND	3.0	0.17	10/27/15 02:31	
Bromodichloromethane	ug/L	ND	1.0	0.18	10/27/15 02:31	
Bromoform	ug/L	ND	3.0	0.26	10/27/15 02:31	
Bromomethane	ug/L	ND	10.0	0.29	10/27/15 02:31	
Carbon disulfide	ug/L	ND	100	1.2	10/27/15 02:31	
Carbon tetrachloride	ug/L	ND	1.0	0.25	10/27/15 02:31	
Chlorobenzene	ug/L	ND	3.0	0.23	10/27/15 02:31	
Chloroethane	ug/L	ND	10.0	0.54	10/27/15 02:31	
Chloroform	ug/L	ND	5.0	0.14	10/27/15 02:31	
Chloromethane	ug/L	ND	1.0	0.11	10/27/15 02:31	
cis-1,2-Dichloroethene	ug/L	ND	5.0	0.19	10/27/15 02:31	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.13	10/27/15 02:31	
Dibromochloromethane	ug/L	ND	3.0	0.21	10/27/15 02:31	
Dibromomethane	ug/L	ND	10.0	0.21	10/27/15 02:31	
Ethylbenzene	ug/L	ND	1.0	0.30	10/27/15 02:31	
Iodomethane	ug/L	ND	10.0	0.32	10/27/15 02:31	
Methylene Chloride	ug/L	ND	1.0	0.97	10/27/15 02:31	
Styrene	ug/L	ND	1.0	0.26	10/27/15 02:31	
Tetrachloroethene	ug/L	ND	1.0	0.46	10/27/15 02:31	
Toluene	ug/L	ND	1.0	0.26	10/27/15 02:31	
trans-1,2-Dichloroethene	ug/L	ND	5.0	0.49	10/27/15 02:31	

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QUALITY CONTROL DATA

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

METHOD BLANK: 1591707 Matrix: Water

Associated Lab Samples: 92272115001, 92272115002, 92272115003, 92272115004, 92272115005, 92272115006, 92272115007, 92272115008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.26	10/27/15 02:31	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	1.0	10/27/15 02:31	
Trichloroethene	ug/L	ND	1.0	0.47	10/27/15 02:31	
Trichlorofluoromethane	ug/L	ND	1.0	0.20	10/27/15 02:31	
Vinyl acetate	ug/L	ND	50.0	0.35	10/27/15 02:31	
Vinyl chloride	ug/L	ND	1.0	0.62	10/27/15 02:31	
Xylene (Total)	ug/L	ND	5.0	0.66	10/27/15 02:31	
1,2-Dichloroethane-d4 (S)	%	107	70-130		10/27/15 02:31	
4-Bromofluorobenzene (S)	%	100	70-130		10/27/15 02:31	
Toluene-d8 (S)	%	102	70-130		10/27/15 02:31	

LABORATORY CONTROL SAMPLE: 1591708

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	49.8	100	80-125	
1,1,1-Trichloroethane	ug/L	50	58.8	118	71-129	
1,1,2,2-Tetrachloroethane	ug/L	50	59.2	118	79-124	
1,1,2-Trichloroethane	ug/L	50	54.7	109	85-125	
1,1-Dichloroethane	ug/L	50	56.5	113	73-126	
1,1-Dichloroethene	ug/L	50	57.5	115	66-135	
1,2,3-Trichloropropane	ug/L	50	57.6	115	75-130	
1,2-Dibromo-3-chloropropane	ug/L	50	50.4	101	71-133	
1,2-Dibromoethane (EDB)	ug/L	50	57.5	115	83-124	
1,2-Dichlorobenzene	ug/L	50	54.7	109	80-133	
1,2-Dichloroethane	ug/L	50	52.3	105	67-128	
1,2-Dichloropropane	ug/L	50	53.8	108	75-132	
1,4-Dichlorobenzene	ug/L	50	54.8	110	78-130	
2-Butanone (MEK)	ug/L	100	123	123	61-144	
2-Hexanone	ug/L	100	133	133	68-143	
4-Methyl-2-pentanone (MIBK)	ug/L	100	122	122	72-135	
Acetone	ug/L	100	128	128	48-146	
Acrylonitrile	ug/L	250	306	122	40-160	
Benzene	ug/L	50	55.7	111	80-125	
Bromochloromethane	ug/L	50	59.8	120	71-125	
Bromodichloromethane	ug/L	50	52.0	104	78-124	
Bromoform	ug/L	50	43.5	87	71-128	
Bromomethane	ug/L	50	51.6	103	40-160	
Carbon disulfide	ug/L	50	52.5J	105	50-160	
Carbon tetrachloride	ug/L	50	49.5	99	69-131	
Chlorobenzene	ug/L	50	54.3	109	81-122	
Chloroethane	ug/L	50	53.9	108	39-148	
Chloroform	ug/L	50	58.4	117	73-127	
Chloromethane	ug/L	50	54.0	108	44-146	

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QUALITY CONTROL DATA

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

LABORATORY CONTROL SAMPLE: 1591708

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	50	54.1	108	74-124	
cis-1,3-Dichloropropene	ug/L	50	51.3	103	72-132	
Dibromochloromethane	ug/L	50	47.8	96	78-125	
Dibromomethane	ug/L	50	56.7	113	82-120	
Ethylbenzene	ug/L	50	56.0	112	79-121	
Iodomethane	ug/L	100	102	102	39-154	
Methylene Chloride	ug/L	50	53.3	107	64-133	
Styrene	ug/L	50	59.0	118	84-126	
Tetrachloroethene	ug/L	50	53.3	107	78-122	
Toluene	ug/L	50	54.8	110	80-121	
trans-1,2-Dichloroethene	ug/L	50	54.6	109	71-127	
trans-1,3-Dichloropropene	ug/L	50	50.3	101	69-141	
trans-1,4-Dichloro-2-butene	ug/L	50	55.6J	111	40-160	
Trichloroethene	ug/L	50	52.6	105	78-122	
Trichlorofluoromethane	ug/L	50	54.3	109	53-137	
Vinyl acetate	ug/L	100	121	121	40-160	
Vinyl chloride	ug/L	50	58.4	117	58-137	
Xylene (Total)	ug/L	150	170	113	81-126	
1,2-Dichloroethane-d4 (S)	%			102	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE SAMPLE: 1591709

Parameter	Units	92272115007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	20	21.0	105	70-130	
1,1,1-Trichloroethane	ug/L	ND	20	25.1	125	70-130	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	22.4	112	70-130	
1,1,2-Trichloroethane	ug/L	ND	20	21.6	108	70-130	
1,1-Dichloroethane	ug/L	ND	20	24.0	120	70-130	
1,1-Dichloroethene	ug/L	ND	20	25.4	127	70-166	
1,2,3-Trichloropropane	ug/L	ND	20	22.1	110	70-130	
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20.3	102	70-130	
1,2-Dibromoethane (EDB)	ug/L	ND	20	22.4	112	70-130	
1,2-Dichlorobenzene	ug/L	ND	20	22.5	112	70-130	
1,2-Dichloroethane	ug/L	ND	20	21.4	106	70-130	
1,2-Dichloropropane	ug/L	ND	20	21.7	108	70-130	
1,4-Dichlorobenzene	ug/L	ND	20	22.4	112	70-130	
2-Butanone (MEK)	ug/L	ND	40	48.0J	120	70-130	
2-Hexanone	ug/L	ND	40	50.2	125	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	40	46.3J	116	70-130	
Acetone	ug/L	ND	40	62.4J	156	70-130	M1
Acrylonitrile	ug/L	ND	100	116J	116	70-130	
Benzene	ug/L	0.45J	20	24.4	120	70-148	
Bromochloromethane	ug/L	ND	20	24.1	120	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

MATRIX SPIKE SAMPLE: 1591709

Parameter	Units	92272115007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromodichloromethane	ug/L	ND	20	21.6	108	70-130	
Bromoform	ug/L	ND	20	18.3	91	70-130	
Bromomethane	ug/L	ND	20	20.9	104	70-130	
Carbon disulfide	ug/L	ND	20	24.1J	120	70-130	
Carbon tetrachloride	ug/L	ND	20	22.1	111	70-130	
Chlorobenzene	ug/L	ND	20	22.7	114	70-146	
Chloroethane	ug/L	ND	20	23.9	120	70-130	
Chloroform	ug/L	ND	20	24.5	122	70-130	
Chloromethane	ug/L	ND	20	24.2	121	70-130	
cis-1,2-Dichloroethene	ug/L	ND	20	23.2	116	70-130	
cis-1,3-Dichloropropene	ug/L	ND	20	16.9	84	70-130	
Dibromochloromethane	ug/L	ND	20	19.8	99	70-130	
Dibromomethane	ug/L	ND	20	22.7	114	70-130	
Ethylbenzene	ug/L	ND	20	23.5	117	70-130	
Iodomethane	ug/L	ND	40	42.2	105	70-130	
Methylene Chloride	ug/L	ND	20	22.1	108	70-130	
Styrene	ug/L	ND	20	22.8	114	70-130	
Tetrachloroethene	ug/L	ND	20	22.6	113	70-130	
Toluene	ug/L	ND	20	23.3	116	70-155	
trans-1,2-Dichloroethene	ug/L	ND	20	23.3	116	70-130	
trans-1,3-Dichloropropene	ug/L	ND	20	16.7	83	70-130	
trans-1,4-Dichloro-2-butene	ug/L	ND	20	16.6J	83	70-130	
Trichloroethene	ug/L	ND	20	22.5	112	69-151	
Trichlorofluoromethane	ug/L	ND	20	23.8	119	70-130	
Vinyl acetate	ug/L	ND	40	11.6J	29	70-130	M1
Vinyl chloride	ug/L	ND	20	25.8	129	70-130	
1,2-Dichloroethane-d4 (S)	%				101	70-130	
4-Bromofluorobenzene (S)	%				100	70-130	
Toluene-d8 (S)	%				99	70-130	

SAMPLE DUPLICATE: 1591710

Parameter	Units	92272492003 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,1-Trichloroethane	ug/L	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/L	ND	ND		30	
1,1,2-Trichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethane	ug/L	ND	ND		30	
1,1-Dichloroethene	ug/L	ND	ND		30	
1,2,3-Trichloropropane	ug/L	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/L	ND	ND		30	
1,2-Dibromoethane (EDB)	ug/L	ND	ND		30	
1,2-Dichlorobenzene	ug/L	ND	ND		30	
1,2-Dichloroethane	ug/L	ND	ND		30	
1,2-Dichloropropane	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

SAMPLE DUPLICATE: 1591710

Parameter	Units	92272492003 Result	Dup Result	RPD	Max RPD	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	ND		30	
2-Butanone (MEK)	ug/L	ND	ND		30	
2-Hexanone	ug/L	ND	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	ND		30	
Acetone	ug/L	ND	ND		30	
Acrylonitrile	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Bromochloromethane	ug/L	ND	ND		30	
Bromodichloromethane	ug/L	ND	ND		30	
Bromoform	ug/L	ND	ND		30	
Bromomethane	ug/L	ND	ND		30	
Carbon disulfide	ug/L	ND	ND		30	
Carbon tetrachloride	ug/L	ND	ND		30	
Chlorobenzene	ug/L	ND	ND		30	
Chloroethane	ug/L	ND	ND		30	
Chloroform	ug/L	ND	ND		30	
Chloromethane	ug/L	ND	ND		30	
cis-1,2-Dichloroethene	ug/L	ND	ND		30	
cis-1,3-Dichloropropene	ug/L	ND	ND		30	
Dibromochloromethane	ug/L	ND	ND		30	
Dibromomethane	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
Iodomethane	ug/L	ND	ND		30	
Methylene Chloride	ug/L	ND	ND		30	
Styrene	ug/L	ND	ND		30	
Tetrachloroethene	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
trans-1,2-Dichloroethene	ug/L	ND	ND		30	
trans-1,3-Dichloropropene	ug/L	ND	ND		30	
trans-1,4-Dichloro-2-butene	ug/L	ND	ND		30	
Trichloroethene	ug/L	ND	ND		30	
Trichlorofluoromethane	ug/L	ND	ND		30	
Vinyl acetate	ug/L	ND	ND		30	
Vinyl chloride	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	111	111	0		
4-Bromofluorobenzene (S)	%	100	99	0		
Toluene-d8 (S)	%	102	101	1		

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether, Styrene, and Vinyl chloride.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A	Pace Analytical Services - Asheville
PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92272115

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92272115001	**3420-FIELD BLANK**	EPA 3010	MPRP/19828	EPA 6010	ICP/17882
92272115002	**3420-MW12**	EPA 3010	MPRP/19840	EPA 6010	ICP/17891
92272115003	**3420-MW13**	EPA 3010	MPRP/19840	EPA 6010	ICP/17891
92272115004	**3420-MW14**	EPA 3010	MPRP/19840	EPA 6010	ICP/17891
92272115005	**3420-MW1R**	EPA 3010	MPRP/19840	EPA 6010	ICP/17891
92272115006	**3420-SW1**	EPA 3010	MPRP/19840	EPA 6010	ICP/17891
92272115007	**3420-SW2**	EPA 3010	MPRP/19840	EPA 6010	ICP/17891
92272115001	**3420-FIELD BLANK**	EPA 8260	MSV/33996		
92272115002	**3420-MW12**	EPA 8260	MSV/33996		
92272115003	**3420-MW13**	EPA 8260	MSV/33996		
92272115004	**3420-MW14**	EPA 8260	MSV/33996		
92272115005	**3420-MW1R**	EPA 8260	MSV/33996		
92272115006	**3420-SW1**	EPA 8260	MSV/33996		
92272115007	**3420-SW2**	EPA 8260	MSV/33996		
92272115008	**3420-TRIP BLANK**	EPA 8260	MSV/33996		

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Pace Analytical	Document Name: **Sample Condition Upon Receipt (SCUR)**	Document Revised: May 18, 2015 Page 1 of 2*
	Document Number: **F-CHR-CS-003-rev.16**	Issuing Authority: Pace Huntersville Quality Office

Client Name: Joyce Engineering

* Page 2 of 2 is for Internal Use Only

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other_____

Optional
Proj. Due Date:
Proj. Name:

Custody Seal on Cooler/Box Present: ☐ yes ☐ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other_____

Thermometer Used: IR Gun T1402 **Type of Ice:** Wet Blue None ☑ Samples on ice, cooling process has begun

Temp Correction Factor **T1402** No Correction

Corrected Cooler Temp.: 2.8 °C **Biological Tissue is Frozen:** Yes No N/A

Temp should be above freezing to 6°C

Date and Initials of person examining contents: TH 10/15/15

Comments:

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☑No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☑No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: WT		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☑Yes ☐No	
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	15.
Trip Blank Present:	☐Yes ☐No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased):_____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

SCURF Review:	JJ	**Date:**	10/15/15
SRF Review:	JJ	**Date:**	10/16/15

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

WO# : 92272115

92272115

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A
Required Client Information:

Company:	Joyce Engineering-NC
Address:	2211 West Meadowview Rd,
	Greensboro, NC 27407
Email:	aeverhart@joyceengineering.com
Phone:	(910)465-9580 Fax
Requested Due Date:	

Section B
Required Project Information:

Report To:	Alex Everhart
Copy To:	
Purchase Order #:	
Project Name:	Omnisource / Kernersville LF
Project #:	

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	kevin.godwin@pacelabs.com,
Pace Profile #:	

Regulatory Agency

State / Location

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N): Metals by 6010	8260	Trip BLANK	DI Water	Residual Chlorine (Y/N)	92272115
1	3420-Field Blank 4	WT				10/14/15	14:15											X	X				001
2	3420-MW12 4	WT					13:15											X	X				002
3	3420-MW13 4	WT					13:44											X	X				003
4	3420-MW14 4	WT					11:25											X	X				004
5	3420-MW1R 4	WT					14:00											X	X				005
6	3420-SW1 4	WT					13:30											X	X				006
7	3420-SW2 4	WT					12:00											X	X				007
8	3420-Trip Blank 2	WT					08:00													X			008
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Gretta Ellen Joyce	10-15-15	1120	[signature]	10-15-15	1129				
	[signature]	10-15-15	1349	[signature] pace	10-15-15	1545	2.8	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Gretta Eller Haley Seaton

SIGNATURE of SAMPLER: Haley Seaton Gretta Eller

DATE Signed: 10-14-15

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

November 19, 2015

Mr. Alex Everhart
Joyce Engineering-NC
2211 W. Meadowview Road
Suite 101
Greensboro, NC 27407

RE: Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92275941

Dear Mr. Everhart:
Enclosed are the analytical results for sample(s) received by the laboratory on November 12, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kevin Godwin
kevin.godwin@pacelabs.com
Project Manager

Enclosures

cc: Mr. Van Burbach, Joyce Engineering-NC
Alex Everhart, Joyce Engineering-NC

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project:	OMNISOURCE/KERNERSVILLE LF
Pace Project No.:	92275941

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
West Virginia Certification #: 357
Virginia/VELAP Certification #: 460221

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SAMPLE SUMMARY

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92275941

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92275941001	**3420-MW1R**	Water	11/11/15 15:50	11/12/15 11:17
92275941002	**3420-TRIP BLANK**	Water	11/11/15 13:00	11/12/15 11:17

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SAMPLE ANALYTE COUNT

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92275941

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92275941001	**3420-MW1R**	EPA 8260	NB	4	PASI-C
92275941002	**3420-TRIP BLANK**	EPA 8260	NB	4	PASI-C

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SUMMARY OF DETECTION

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92275941

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92275941001	**3420-MW1R**					
EPA 8260	Benzene	1.0	ug/L	1.0	11/13/15 06:39	

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ANALYTICAL RESULTS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92275941

Sample: 3420-MW1R **Lab ID: 92275941001** Collected: 11/11/15 15:50 Received: 11/12/15 11:17 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill	Analytical Method: EPA 8260								
Benzene	**1.0**	ug/L	1.0	0.25	1		11/13/15 06:39	71-43-2	
Surrogates									
4-Bromofluorobenzene (S)	102	%	70-130		1		11/13/15 06:39	460-00-4	
1,2-Dichloroethane-d4 (S)	122	%	70-130		1		11/13/15 06:39	17060-07-0	
Toluene-d8 (S)	105	%	70-130		1		11/13/15 06:39	2037-26-5	

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ANALYTICAL RESULTS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92275941

Sample: 3420-TRIP BLANK **Lab ID: 92275941002** Collected: 11/11/15 13:00 Received: 11/12/15 11:17 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level Landfill	Analytical Method: EPA 8260								
Benzene	ND	ug/L	1.0	0.25	1		11/13/15 06:56	71-43-2	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		11/13/15 06:56	460-00-4	
1,2-Dichloroethane-d4 (S)	127	%	70-130		1		11/13/15 06:56	17060-07-0	
Toluene-d8 (S)	105	%	70-130		1		11/13/15 06:56	2037-26-5	

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QUALITY CONTROL DATA

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92275941

QC Batch: MSV/34262 | Analysis Method: EPA 8260
QC Batch Method: EPA 8260 | Analysis Description: 8260 MSV Low Level Landfill
Associated Lab Samples: 92275941001, 92275941002

METHOD BLANK: 1605472 | Matrix: Water
Associated Lab Samples: 92275941001, 92275941002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	0.25	11/13/15 01:09	
1,2-Dichloroethane-d4 (S)	%	118	70-130		11/13/15 01:09	
4-Bromofluorobenzene (S)	%	102	70-130		11/13/15 01:09	
Toluene-d8 (S)	%	104	70-130		11/13/15 01:09	

LABORATORY CONTROL SAMPLE: 1605473

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	51.9	104	80-125	
1,2-Dichloroethane-d4 (S)	%			112	70-130	
4-Bromofluorobenzene (S)	%			103	70-130	
Toluene-d8 (S)	%			103	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1605474 1605475

Parameter	Units	92275823005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	23.1	22.7	115	113	70-148	2	30	
1,2-Dichloroethane-d4 (S)	%						114	115	70-130			
4-Bromofluorobenzene (S)	%						102	101	70-130			
Toluene-d8 (S)	%						102	102	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92275941

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether, Styrene, and Vinyl chloride.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-C Pace Analytical Services - Charlotte

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OMNISOURCE/KERNERSVILLE LF
Pace Project No.: 92275941

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92275941001	**3420-MW1R**	EPA 8260	MSV/34262		
92275941002	**3420-TRIP BLANK**	EPA 8260	MSV/34262		

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Pace Analytical	Document Name: **Sample Condition Upon Receipt (SCUR)**	Document Revised: May 18, 2016 Page 1 of 2*
	Document Number: **F-CHR-CS-003-rev.16**	Issuing Authority: Pace Huntersville Quality Office

Client Name: Joyce

* Page 2 of 2 is for Internal Use Only

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other_____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Optional
Proj. Due Date:
Proj. Name:

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other_____

Thermometer Used: IR Gun T1402 **Type of Ice:** (Wet) Blue None ☑ Samples on ice, cooling process has begun

Temp Correction Factor **T1402** No Correction

Corrected Cooler Temp.: 38 **°C** **Biological Tissue is Frozen:** Yes No N/A

Temp should be above freezing to 6°C

Date and Initials of person examining contents: m 11/12

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: WT		
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):_____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

SCURF Review: [signature] **Date:** 11/12/15

SRF Review: [signature] **Date:** 11/12/15

WO# : 92275941

92275941

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A — Required Client Information:

Company: Joyce Engineering-Greensboro
Address: 2211 West Meadowview Rd
Greensboro, NC 27407
Email To: aeverhart@joyceengineering.com
Phone: (336) 323-0092 Fax
Requested Due Date/TAT: 10 Day (Default)

Section B — Required Project Information:

Report To: Van Burbach
Copy To: Alex Everhart
2211 W. Meadowview Rd, Greensboro, NC 27407
Purchase Order No.
Client Project ID: OmniSource/Kernersville LF
Container Order Number:

Section C — Invoice Information:

Attention: Lercia Jones
Company Name: Joyce Engineering
Address: 1604 Ownby Ln Richmond Va

Regulatory Agency

State / Location: NC

Requested Analysis Filtered (Y/N)

ITEM#	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	~~HNO3~~	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N): Benzene	Residual Chlorine (Y/N)	92275941
1	3420-MW1R	WT	G			11-11-15	1550		3				X					X		001
2	3420-Trip Blank	WT	G			11-11-15	1300		2				X					X		002
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Daniel Girdner / JOYCE	11-11-15	17:00	[illegible]	11-12-15	1117				
	[illegible]	11-12-15	1615	[illegible]	11-12	1615	38	Y	N	Y

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dan Girdner

SIGNATURE of SAMPLER: Daniel Girdner

DATE Signed: 11-11-15