REMEDIAL INVESTIGATION – APRIL/MAY 2015 GROUNDWATER AND SUBSURFACE LANDFILL GAS MONITORING REPORT

Henderson Co. Landfill
154 Moonstone Lane
Hendersonville, Henderson County, NC
ID No. NCD980557961

Task No. 7961DP-8
State Contract No. N13001S

Prepared for:

North Carolina Department of Environment and Natural Resources
Division of Waste Management
Inactive Hazardous Sites Branch
Pre-Regulatory Landfill Unit
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TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 INSTALLATION OF GROUNDWATER MONITORING WELLS 1

2.1 ADVANCEMENT OF SOIL BORINGS 1

2.2 GROUNDWATER MONITORING WELL INSTALLATION 3

2.3 GROUNDWATER MONITORING WELL DEVELOPMENT 4

3.0 GROUNDWATER SAMPLING AND ANALYSIS 4

3.1 COLLECTION OF GROUNDWATER SAMPLES 4

3.2 GROUNDWATER LABORATORY ANALYSIS 5

4.0 SURVEYED COORDINATES AND ELEVATIONS 6

5.0 WATER LEVEL SURVEY 6

6.0 GROUNDWATER SAMPLE ANALYTICAL RESULTS 7

6.1 ANALYTICAL RESULTS 7

6.2 QUALITY ASSURANCE/QUALITY CONTROL 8

6.2.1 Equipment Decontamination 8

6.2.2 Quality Control Samples 9

6.2.3 Analytical Data Completeness Review 10

7.0 INVESTIGATION DERIVED WASTE 10

8.0 SUBSURFACE LANDFILL GAS SCREENING 11

8.1 SUBSURFACE LANDFILL GAS SCREENING PROCEDURES 11

8.2 SUBSURFACE LANDFILL GAS SCREENING RESULTS 12

9.0 REFERENCES 13

10.0 CERTIFICATION 14

TABLE OF CONTENTS (Continued)

FIGURES

Figure 1 Monitoring Well and Gas Probe Locations Map
Figure 2 Groundwater Surface Contour Map (May 4, 2015)
Figure 3 Groundwater Contaminant Concentration Map

TABLES

Table 1 Monitoring Well Construction and Gauging Data
Table 2 Groundwater Sampling Field Parameters
Table 3 Summary of Groundwater Analytical Results
Table 4 Subsurface Landfill Gas Screening Results

APPENDICES

Appendix A Boring Logs, Permanent Monitoring Well Diagrams, and Well Construction Records (Form GW-1)
Appendix B Field Documentation
Appendix C Surveyor's Report
Appendix D Laboratory Analytical Reports

1.0 INTRODUCTION

This Remedial Investigation – April/May 2015 Groundwater and Subsurface Landfill Gas Monitoring Report has been prepared by ESP Associates, P.A. (ESP) to present the results of groundwater monitoring well installation, groundwater sampling/analysis, and subsurface landfill gas screening activities performed at the Henderson Co. Landfill (NCD980557961) located at 154 Moonstone Lane, Hendersonville, Henderson County, North Carolina (hereinafter referred to as the Site). The groundwater monitoring well installation, groundwater sampling/analysis, and subsurface landfill gas screening activities presented in this report were performed in accordance with ESP's work plan for Task Order 7961DP-7 dated March 19, 2015, and ESP's Standard Operating Procedures (SOP) and Quality Assurance (QA) Manual dated April 18, 2013, both approved by the Pre-Regulatory Landfill Unit of the North Carolina Department of Environment and Natural Resources (NCDENR). Any deviations from the work plan or SOP and QA Manual are noted in the respective sections of this report.

A field logbook, boring logs, permanent monitoring well diagrams, well development forms, water level survey form, groundwater sampling forms, subsurface landfill gas screening form, and field instrument calibration forms were completed in the field to document the field activities. The boring logs, permanent monitoring well diagrams, and GW-1 Forms are provided in Appendix A. The field documentation (including field-generated boring logs and permanent monitoring well diagrams) is provided in Appendix B.

2.0 INSTALLATION OF GROUNDWATER MONITORING WELLS

2.1 Advancement of Soil Borings

From April 27 - 28, 2015, ESP subcontracted with a North Carolina-licensed drilling firm to advance four soil borings for installation of four groundwater monitoring wells (see Section 2.2). Figure 1 depicts the locations of the four soil borings (designated as MW-A2, MW-A4, MW-A5, and MW-A8).

The four soil borings were each advanced to a depth of approximately 10 feet (ft) below the depth at which the first water-bearing zone was encountered using a track-mounted Geoprobe® 7822 DT drill rig which provided both direct push and hollow-stem auger capabilities. For each soil boring, continuous subsurface soil cores were collected from the ground surface until sampler refusal (or desired depth) using a 5-foot long Macro-Core® sampling device equipped with dedicated disposable acetate liners. During advancement of the Macro-Core sampling device, retrieved soil samples were visually classified and logged in general accordance with the Unified Soil Classification System. In addition, retrieved soil samples were field screened for volatile organic compounds (VOCs) with a MiniRAE 3000 photoionization detector (PID). As noted on the boring logs in Appendix A, encountered soils consisted predominantly of silts and fine to coarse sands.

The four soil borings were subsequently over-drilled using 8-inch outer diameter (OD) hollow-stem augers to produce an adequate boring diameter for installation of a 2-inch diameter groundwater monitoring well (see details regarding groundwater monitoring well installation in Section 2.2). As shown in the boring logs (see Appendix A), borehole termination depths ranged from 25 to 45 ft below ground surface (bgs).

Waste was encountered in each of the soil borings with the exception of MW-A8. The waste was typically described as paper, wood, rubber, metal scraps, plastic sheeting, cloth, tile, glass, and/or asphalt. The depth at which waste was encountered and the thickness of the waste varied at each location (refer to boring logs in Appendix A): 4 to 12 ft bgs at MW-A2; 3.5 to 8.5 ft bgs at MW-A4; and 3.5 to 12.5 ft bgs at MW-A5.

The highest levels of VOCs in the soil borings measured with the PID were detected from the approximate 5 to 10 ft bgs interval, within the waste-containing zone. Maximum VOC levels measured with the PID in each of the waste-containing borings were: 75.7 parts per million (ppm) in MW-A2; 70.2 ppm in MW-A4; and 31.2 ppm in MW-A5.

2.2 Groundwater Monitoring Well Installation

From April 27 - 28, 2015, four groundwater monitoring wells (designated MW-A2, MW-A4, MW-A5, and MW-A8 [see locations on Figure 1]) were installed in the corresponding boreholes as noted above.

The groundwater monitoring wells were constructed using flush joint threaded 2-inch inside diameter (ID) Schedule 40 polyvinyl chloride (PVC) riser with a 10-foot section of 2-inch ID 0.010-slot PVC screen, in accordance with the most current 15A North Carolina Administrative Code (NCAC) 2C well construction standards. Filter sand sized for 0.010-inch slot screen was placed in the annular space around the screen to approximately 2 ft above the top of the well screen. Approximately 2 ft of bentonite pellets were placed on top of the filter pack and hydrated, followed by a cement/bentonite grout to the ground surface. All four groundwater monitoring wells were completed at ground surface with flush-mount protective covers. The top of each PVC riser was finished with a locking cap. Construction diagrams for the groundwater monitoring wells are provided in Appendix A. As required, the licensed driller submitted a Well Construction Record (Form GW-1) for each of the newly-installed groundwater monitoring wells to the NCDENR Division of Water Resources (copies provided in Appendix A).

All four of the groundwater monitoring wells were screened within the shallow, unconfined aquifer. Table 1 summarizes the well construction information from the boring logs and permanent monitoring well diagrams in Appendix A. As anticipated based on the topographic relief at the site, groundwater monitoring well bottom depths decreased moving from east (40 ft bgs for MW-A4) to west (25 ft bgs for MW-A5 and MW-A8).

There was one deviation from the work plan. Applications for groundwater monitoring well permits (Form GW-22MR) were not required. The NCDENR Pre-Regulatory Landfill Unit made the necessary advance notification to the NCDENR Division of Water Resources.

2.3 Groundwater Monitoring Well Development

Each newly-installed groundwater monitoring well was developed no sooner than 24 hours following completion of its installation. Prior to development, groundwater depth and bottom of well measurements were collected with a decontaminated electronic water level indicator to determine the water column thickness. The water column thickness was used to calculate the minimum volume of water to be removed during well development. The four newly-installed groundwater monitoring wells were developed using a decontaminated Grundfos® submersible pump (in place of the proposed Monsoon pump) and dedicated disposable polyethylene tubing. During development, stabilization parameters including pH, temperature, conductivity and turbidity were recorded. Well development continued until at least three well volumes had been removed; pH, temperature, and conductivity had stabilized; and turbidity had decreased to below 10 nephelometric turbidity units (NTUs) (see groundwater sampling forms in Appendix B).

3.0 GROUNDWATER SAMPLING AND ANALYSIS

3.1 Collection of Groundwater Samples

From May 4 - 5, 2015, groundwater samples were collected from the four newly-installed groundwater monitoring wells (MW-A2, MW-A4, MW-A5, and MW-A8) and three existing Henderson County groundwater monitoring wells (MW-9, MW-12, and MW-13). In addition, field duplicate groundwater samples, designated Duplicate 1 and Duplicate 2, were collected from MW-13 and MW-A4, respectively. Well locations are depicted on Figure 1. All seven wells are 2-inch diameter PVC wells that are screened within the shallow, unconfined aquifer (see available well construction information in Table 1).

Groundwater monitoring wells MW-12 and MW-13 are used by the County to monitor water quality downgradient of the closed Henderson County Construction and Demolition (C&D) Landfill, while groundwater monitoring well MW-9 is used by the County to monitor water quality associated with the closed Tennessee Valley Authority (TVA) Landfill (Golder

Associates NC, Inc., 2013). The approximate locations of the closed Henderson County C&D Landfill and the closed TVA Landfill are depicted on Figure 1.

The newly-installed groundwater monitoring wells were sampled no sooner than 24 hours following completion of well development. Groundwater samples were collected using a decontaminated Grundfos submersible pump, dedicated disposable Teflon® tubing, and the low-flow sampling technique. Groundwater quality measurements (pH, temperature, conductivity and turbidity) were recorded at approximately 10 minute intervals during purging, and groundwater samples were collected once pH, temperature, and conductivity stabilized and turbidity decreased to below 10 NTUs (see groundwater sampling forms in Appendix B). Groundwater quality field parameters at the time of sampling for each groundwater monitoring well are summarized in Table 2. Depth to water measurements were also recorded on the groundwater sampling forms (see Appendix B) during well purging to monitor recharge rates and control pumping rates so as to minimize drawdown to the extent practicable.

Once water quality parameters stabilized, the groundwater samples were pumped directly from the dedicated Teflon tubing into labeled laboratory-provided sample containers with appropriate preservatives.

3.2 Groundwater Laboratory Analysis

The collected groundwater samples (MW-A2, MW-A4, MW-A5, MW-A8, MW-9, MW-12, and MW-13, collected from May 4 -5, 2015) were analyzed for the following parameters by a North Carolina-certified laboratory:

- Target compound list (TCL) VOCs by U.S. Environmental Protection Agency (USEPA) SW-846 Method 8260B;
- 1,4-Dioxane by USEPA SW-846 Method 8260SIM;

- TCL semivolatile organic compounds (SVOCs) by USEPA SW-846 Method 8270D-LL;
- Target analyte list (TAL) metals by USEPA SW-846 Method 3030/6020A (i.e., antimony, arsenic, beryllium, cadmium, chromium, copper, iron, lead, manganese, nickel, selenium, silver, thallium, and zinc);
- Mercury by USEPA SW-846 Method 7470A;
- Ammonia by USEPA Method 350.1; and
- Sulfate and nitrate by USEPA SW-846 Method 300.0.

4.0 SURVEYED COORDINATES AND ELEVATIONS

The coordinate locations of the seven sampled groundwater monitoring wells were determined by a professional land surveyor registered in North Carolina. The well location coordinates were reported in latitude and longitude by decimal degrees using the North American Datum of 1983 (NAD83) to an accuracy of 0.1 ft. Locations were not provided using the World Geodetic System of 1984 (WGS84) per NCDENR's direction. Additionally, ground surface/top of concrete pad/top of flush-mount protective cover (as appropriate and hereinafter referred to as ground surface) elevations and top of casing (TOC) elevations were recorded by the professional land surveyor using the North American Vertical Datum of 1988 to an accuracy of 0.01 ft. The surveyor's report is provided in Appendix C.

5.0 WATER LEVEL SURVEY

On May 4, 2015, prior to initiation of groundwater sampling, depths to groundwater were gauged within the seven groundwater monitoring wells sampled during this field effort (MW-A2, MW-A4, MW-A5, MW-A8, MW-9, MW-12, and MW-13) using a decontaminated electronic water level meter. Depth to water was measured from a marked reference point located at each well's TOC. Results of the gauging event are summarized in Table 1. Groundwater depth was measured to range from 11.64 ft bgs in MW-A8 to 48.92 ft bgs in MW-12.

The calculated static water level elevations shown in Table 1 were used to produce a groundwater surface contour map (see Figure 2) which depicts the general direction of groundwater flow as west/southwest toward the unnamed perennial stream.

6.0 GROUNDWATER SAMPLE ANALYTICAL RESULTS

6.1 Analytical Results

Detected groundwater sample analytical results are tabulated in Table 3. The laboratory analytical reports are provided in Appendix D. The groundwater sample results are compared to the 15A NCAC 2L.0202 groundwater standards (a.k.a., NC 2L standards) also shown in Table 3. The following six analytes were detected at concentrations exceeding their respective NC 2L standard in one or more of the groundwater samples:

- Vinyl chloride was only detected in the groundwater samples from Henderson County groundwater monitoring wells MW-12 and MW-13 at concentrations ranging from 0.77J to 2.2 µg/L, both of which are above the NC 2L standard of 0.03 µg/L. The presence of vinyl chloride in these wells appears to be associated with the closed Henderson County C&D Landfill.

- 1,4-Dioxane was detected in the groundwater sample from only one of the Site groundwater monitoring wells (MW-A8) at a concentration of 1.9 µg/L, which is below the NC 2L standard of 3 µg/L. 1,4-Dioxane was detected in the groundwater samples from two of the Henderson County groundwater monitoring wells (MW-12 and MW-13) at concentrations ranging from 0.44J to 3.5 µg/L, of which only MW-12 was above the NC 2L standard. The presence of 1,4-dioxane above its NC 2L standard in MW-12 appears to be associated with the closed Henderson County C&D Landfill.

- Iron was detected in all of the sampled groundwater monitoring wells, with the exception of Henderson County groundwater monitoring well MW-9, at concentrations ranging

from 38J to 170,000 µg/L, of which only MW-A2, MW-A5, and MW-A8 were above the NC 2L standard of 300 µg/L. The highest iron detection occurred at MW-A8.

- Manganese was detected in all of the groundwater samples at concentrations ranging from 67 to 3,000 µg/L, all of which were above the NC 2L standard of 50 µg/L. The highest manganese detection occurred at MW-A8.

- Thallium was only detected in the groundwater samples from groundwater monitoring wells MW-A5 and MW-A8 at concentrations of 0.35 and 0.24 µg/L, respectively, both of which are above the NC 2L standard of 0.2 µg/L.

- Ammonia was detected in the groundwater samples from three of the groundwater monitoring wells at concentrations ranging from 400 to 19,000 µg/L, of which MW-A5 and MW-A8 were above the NC 2L standard of 1,500 µg/L. The highest ammonia detection occurred at MW-A8.

Table 3 and Figure 3 identify which of these analytes exceeded the NC 2L standards at each groundwater sampling location.

Low concentrations of 2-nitrophenol, for which an NC 2L standard has not been established, were detected in the groundwater samples from Henderson County groundwater monitoring wells MW-9 (0.16J µg/L) and MW-13 (0.14J µg/L). 2-Nitrophenol was detected at comparable levels in the equipment rinsate blank suggesting that the presence of 2-nitrophenol in these groundwater samples is not site-related.

6.2 Quality Assurance/Quality Control

6.2.1 Equipment Decontamination

Downhole drilling equipment was decontaminated prior to initiation of field work, between soil borings, and at the completion of the field effort to minimize the potential for cross-

contamination between boring locations. The Grundfos submersible pump used to develop the newly-installed groundwater monitoring wells and to collect groundwater samples from the groundwater monitoring wells was decontaminated prior to use at each well to minimize the potential for cross-contamination between groundwater samples. Groundwater samples were collected from the monitoring wells using dedicated disposable Teflon tubing and pumped directly into laboratory-provided sample containers.

6.2.2 Quality Control Samples

The following field quality control (QC) samples were collected:

- Equipment Rinsate Blank – On May 4, 2015, one equipment rinsate blank (RB-1) was collected from the Grundfos submersible pump used to collect the groundwater samples. RB-1 was analyzed for the parameters listed in Section 3.2 (see laboratory analytical reports in Appendix D). RB-1 contained trace levels of acetone (9.0J µg/L) and acetophenone (2.0 µg/L) which were not detected in the groundwater samples; 2-nitrophenol (0.12J µg/L) which was detected at comparable levels in MW-9 and MW-13; and naphthalene (0.36 µg/L) which was detected at comparable levels in MW-A2, MW-A8, MW-12, and MW-13. These equipment rinsate blank results suggest that the presence of 2-nitrophenol and naphthalene in the groundwater samples is not site-related.

- Trip Blanks - One trip blank was included in each cooler containing VOC samples. The trip blanks were analyzed for TCL VOCs and 1,4-dioxane. No VOCs were detected in the trip blanks (see laboratory analytical reports in Appendix D).

- Field Duplicate Samples - One field duplicate groundwater sample (Duplicate 1) was collected on May 4, 2015, from Henderson County groundwater monitoring well MW-13, and one field duplicate groundwater sample (Duplicate 2) was collected on May 5, 2015, from groundwater monitoring well MW-A4. The field duplicates were analyzed for the parameters listed in Section 3.2. Detected analytical results for the field

duplicate samples are tabulated in Table 3. As shown, the detected analytical results for each of the two duplicate pairs were consistent.

6.2.3 Analytical Data Completeness Review

ESP conducted a completeness check for the analytical results reported by the laboratory. Samples were received intact and properly preserved. Samples were analyzed using the specified analytical methods, and were prepared and analyzed within their respective holding times. QC results that did not meet laboratory specifications are discussed in the Case Narratives of the laboratory analytical reports (see Appendix D), and the effect on reported sample results discussed. Sample results are flagged in the laboratory analytical reports due to trace analyte concentrations (J-flag). Based on ESP's review, the laboratory data for the samples collected are useable for their intended purpose.

7.0 INVESTIGATION DERIVED WASTE

PID readings and visual observation of the waste removed from the soil borings during this investigation did not suggest the presence of potentially contaminated material; therefore, drumming of waste cuttings was not conducted. Waste and soil cuttings from each of the four soil borings, in which groundwater monitoring wells MW-A2, MW-A4, MW-A5, and MW-A8 were installed, were spread on the surface of the waste disposal area in a location that was not covered with grass.

Well development/purge water and decontamination water (from Grundfos submersible pump decontamination) were discharged on the ground adjacent to each well location. Used personal protective equipment, plastic sheeting, disposable sampling equipment (e.g., acetate liners and polyethylene/Teflon tubing), and other sampling materials were disposed offsite at an appropriate location (e.g., a municipal landfill).

8.0 SUBSURFACE LANDFILL GAS SCREENING

8.1 Subsurface Landfill Gas Screening Procedures

On April 24, 2015, ESP conducted landfill gas screening at the six existing subsurface landfill gas probes associated with the Site (GP-1 through G-6 [although not planned, GP-3 was included in the screening]), at three existing subsurface landfill gas probes associated with the nearby County landfill (LFG-101 through LFG-103), and at a background location (above ground ambient air). Duplicate readings were recorded for each of the subsurface landfill gas probes. The locations of the subsurface landfill gas probes are shown on Figure 1. The subsurface landfill gas probes (GP-1 through GP-6) were equipped with temporary slip caps through which tubing extended to the screened interval to facilitate the gas screening. The County's subsurface landfill gas probes (LFG-101 through LFG-103) were equipped with a nipple for this same purpose.

During subsurface landfill gas screening, weather conditions were calm with no precipitation and steady barometric pressure. Instrumentation used included a Landtec GEM 2000 Plus (Serial Number: GM2K4-E010-L) for methane, oxygen, carbon dioxide, and hydrogen sulfide; and a RAE Systems MiniRAE 3000 PID (Serial Number: PGM7320) for VOCs. Barometric pressure, ambient temperature, and humidity were obtained from the National Oceanic and Atmospheric Administration (NOAA) Station Hendersonville. Gas measurements were recorded on a landfill gas screening form (provided in Appendix B).

The Landtec GEM 2000 Plus and the MiniRAE 3000 PID were field calibrated before and after the landfill gas screening. The results of these calibrations, along with the calibration gases used and their expiration dates, were recorded on field instrument calibration forms (provided in Appendix B). Factory calibration certifications for the Landtec GEM 2000 Plus, MiniRAE 3000 PID, and associated calibration gases are also provided in Appendix B.

8.2 Subsurface Landfill Gas Screening Results

The subsurface landfill gas screening results are tabulated in Table 4. Table 4 presents the results for methane, hydrogen sulfide, and Total VOCs using both the units recorded in the field and micrograms per cubic meter (calculated using the compound's [or calibration compound's] molecular weight). The first and second readings at each subsurface landfill gas probe were generally consistent.

Hydrogen sulfide, the only gas having a soil gas screening level as indicated in Table 4, was detected in the three subsurface landfill gas probes located within the waste disposal area (GP-1, GP-2, and GP-4). The concentrations of hydrogen sulfide in these three gas probes during the initial screening ranged from 2 ppm to 9 ppm, all of which exceeded the soil gas screening level of 1.047 ppm.

Methane was detected in the three subsurface landfill gas probes located within the waste disposal area (GP-1, GP-2, and GP-4) at levels exceeding the lower explosive limit (LEL) for methane (i.e., 5% methane by volume). Methane in these three gas probes also exceeded the upper explosive limit (UEL) for methane (15% methane by volume). Methane was not detected in any of the subsurface landfill gas probes located outside the waste disposal area.

Total VOCs were detected at trace levels potentially attributable to anthropogenic conditions in all of the subsurface landfill gas probes except GP-4. Total VOCs were detected at concentrations ranging from 0.6 ppm to 4.2 ppm in subsurface landfill gas probes during the initial screening. There is no soil gas screening level for "Total VOCs".

Carbon dioxide in the subsurface landfill gas probes ranged from 0.3% to 29.5% by volume during the initial screening, with the highest concentrations occurring in the three subsurface landfill gas probes located within the waste disposal area (GP-1, GP-2, and GP-4).

Oxygen in the subsurface landfill gas probes ranged from 0% to 19.2% by volume, with the zero concentrations occurring in the three subsurface landfill gas probes located within the waste disposal area (GP-1, GP-2, and GP-4).

Background gas readings were non-detect for hydrogen sulfide, methane, carbon dioxide, and Total VOCs.

9.0 REFERENCES

Water Quality Monitoring Report for the First Semi-Annual 2013 Sampling Event, Closed Henderson County Landfill, Permit No. 45-01, Henderson County, North Carolina, Prepared by Golder Associates NC, Inc., July 2013.

10.0 CERTIFICATION

Document Name: Remedial Investigation – April/May 2015 Groundwater and Subsurface Landfill Gas Monitoring Report

Site Name: Henderson Co. Landfill

Site ID: NCD980557961

Task Order: 7961DP-8

I certify that, to the best of my knowledge, after thorough investigation, the information contained in or accompanying this certification is true, accurate, and complete.

Christopher Ward, P.G., RSM
ESP Associates, P.A.

6-11-15
Date

I, MARY M. BEARE, a Notary Public of said County and State, do hereby certify that CHRISTOPHER WARD did personally appear before me this day, produced proper identification in the form of SC LICENSE, was duly sworn to be the authorized person referenced above, and signed this certification in my presence.

Witness my hand and official seal this 11 day of June, 2015.

Mary M. Beare
Notary Public (signature)

4/11/16
My Commission Expires On

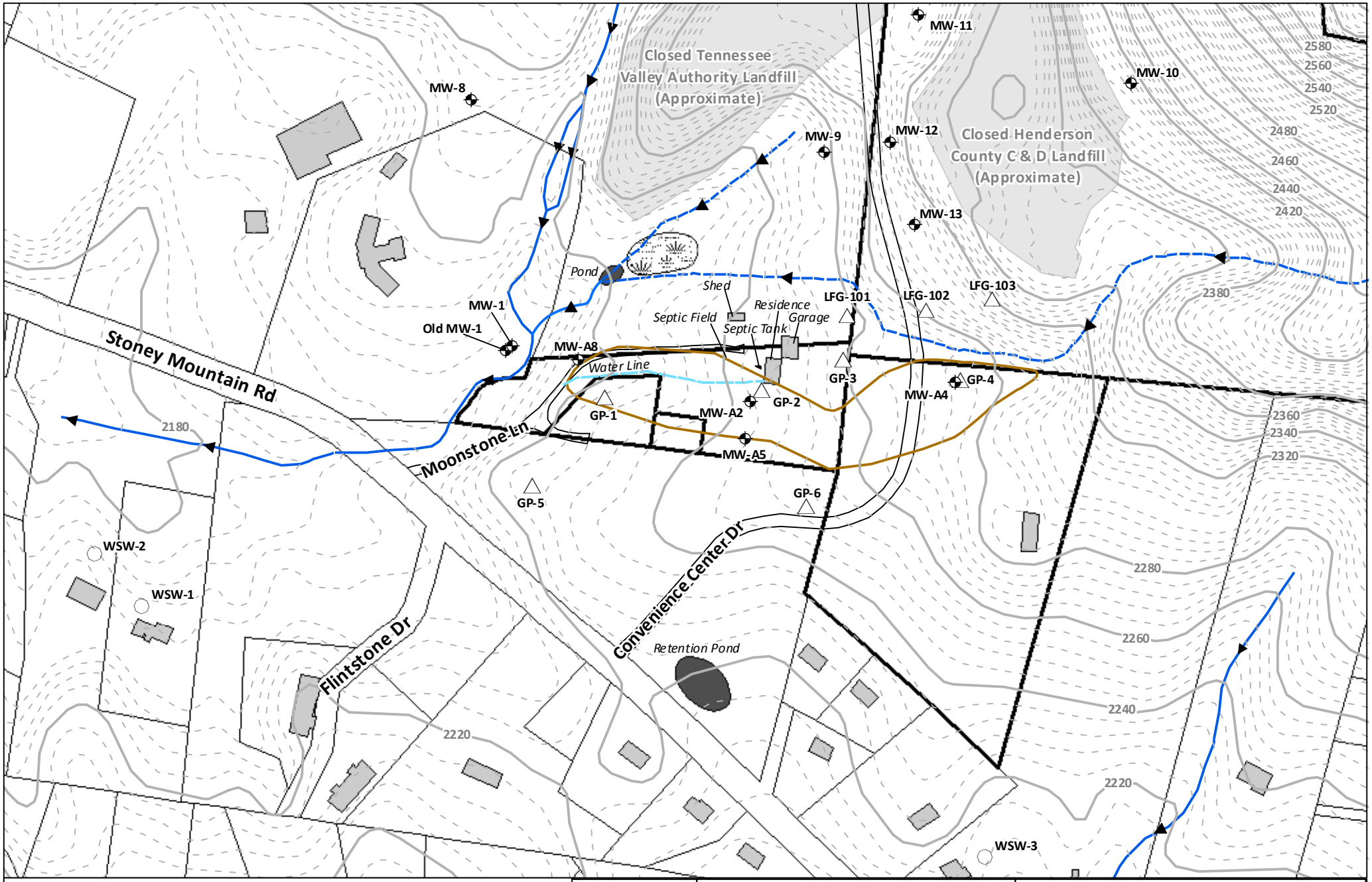
NC
State

Mecklenburg
County

(OFFICIAL SEAL)

MARY M. BEARE
NOTARY
PUBLIC
MECKLENBURG COUNTY, NC

FIGURES



Waste Disposal Boundary Based on Soil Borings, May 2013
Water Line
Intermittent Stream
Perennial Stream
Building Footprints
Ponds
Swamp
Closed Landfills
Groundwater Monitoring Well
Water Supply Well
Subsurface Landfill Gas Probe
Topographic Contour at 20ft
Topographic Contour at 4ft
Tax Parcels
Property Lines

*Source: Parcel and topographic information provided by NC Department of Public Safety (NCDPS).

N W E S

0 45 90 180 Feet

PROJECT NO.	BN12.602.003
SCALE	As Shown
DRAWN BY	GW
CHECKED BY	NZ
DATE	6/10/15

SHEET TITLE

Figure 1

Monitoring Well and Gas Probe Locations Map

PROJECT

HENDERSON CO. LANDFILL

NCD980557961

Hendersonville, Henderson County, NC

ESP Associates, P.A.

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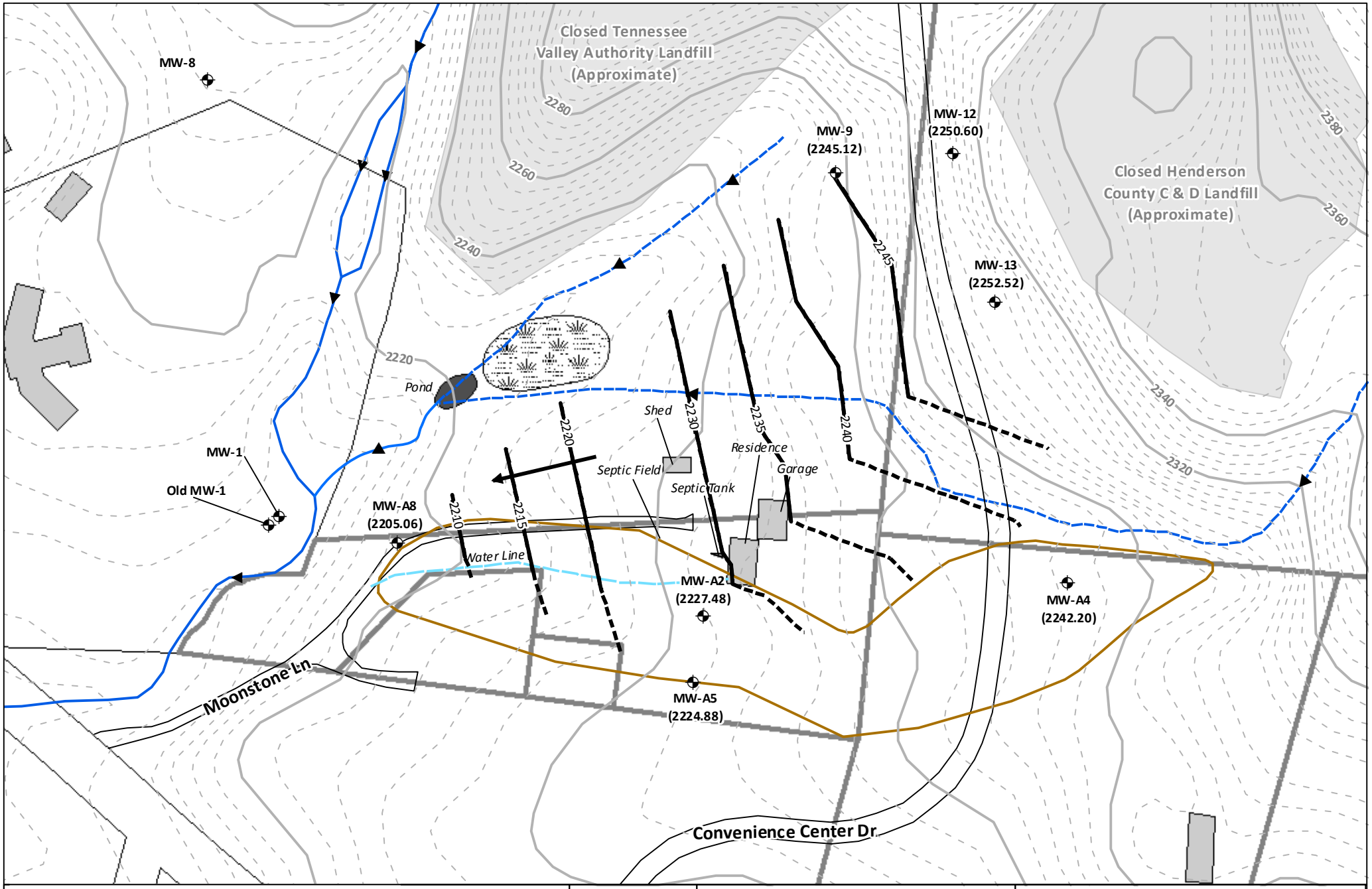

Waste Disposal Boundary Based on Soil Borings, May 2013
Water Line
Intermittent Stream
Perennial Stream
Building Footprints
Ponds
Swamp
Property Lines
Closed Landfills
Groundwater Monitoring Well (Static Water Level Elevation - ft MSL)
Direction of Groundwater Flow
Groundwater Surface Contour
Topographic Contour at 20ft
Topographic Contour at 4ft
Tax Parcels

*Source: Parcel and topographic information provided by NC Department of Public Safety (NCDPS).

0 25 50 100 Feet

PROJECT NO. BN12.602.003	SHEET TITLE **Figure 2** *Groundwater Surface Contour Map (May 4, 2015)*
SCALE As Shown	
DRAWN BY GW	PROJECT **HENDERSON CO. LANDFILL** *NCD980557961* *Hendersonville, Henderson County, NC*
DATE 6/10/15	CHECKED BY NZ

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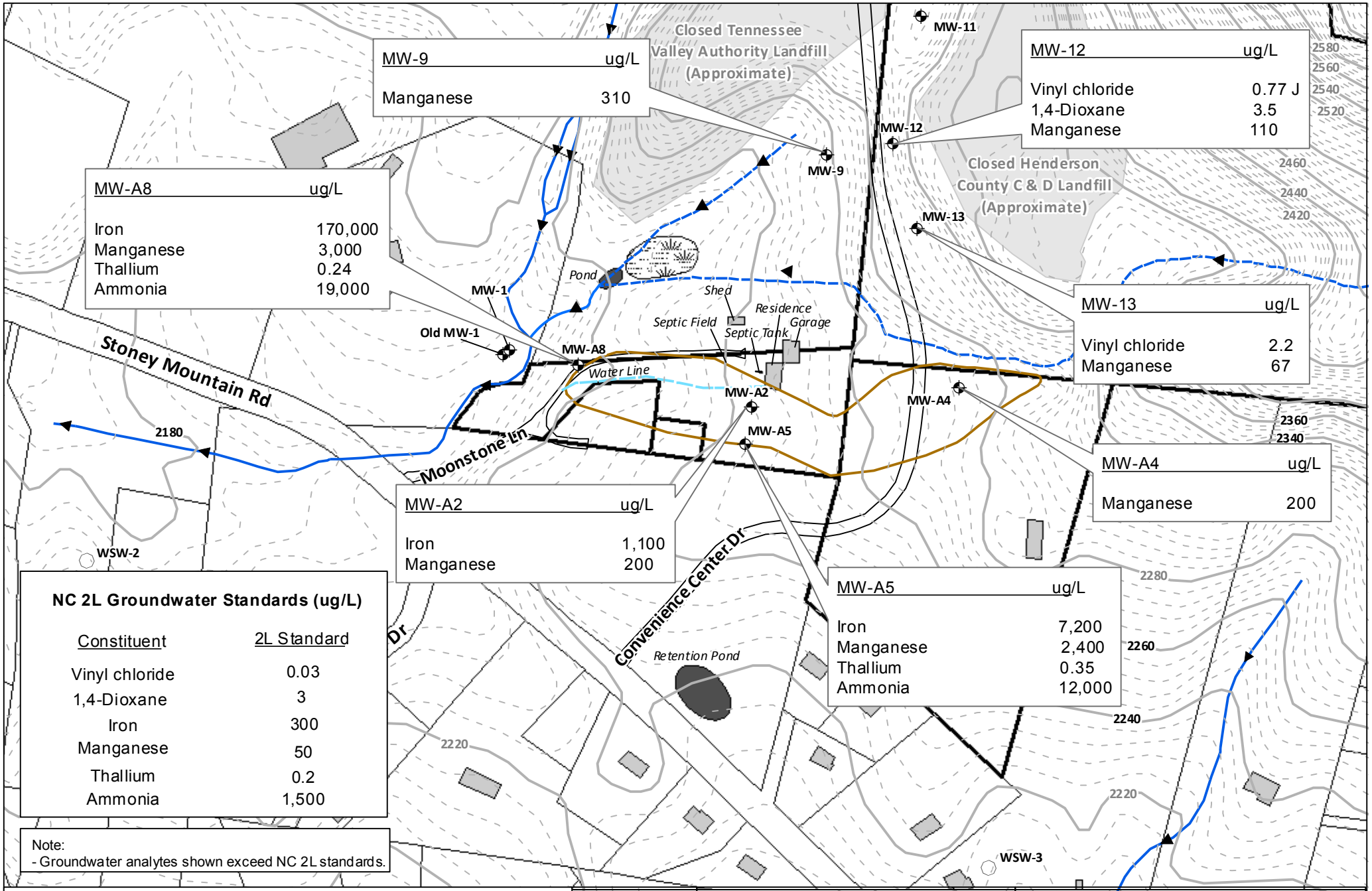

NC 2L Groundwater Standards (ug/L)

Constituent	2L Standard
Vinyl chloride	0.03
1,4-Dioxane	3
Iron	300
Manganese	50
Thallium	0.2
Ammonia	1,500

Note:
- Groundwater analytes shown exceed NC 2L standards.

Waste Disposal Boundary Based on Soil Borings, May 2013
Water Line
Intermittent Stream
Perennial Stream
Building Footprints
Ponds
Swamp
Closed Landfills
Groundwater Monitoring Well
Water Supply Well
Topographic Contour at 20ft
Topographic Contour at 4ft
Tax Parcels
Property Lines

*Source: Parcel and topographic information provided by NC Department of Public Safety (NCDPS).

N W E S

0 45 90 180 Feet

PROJECT NO.	BN12.602.003
SCALE	As Shown
DRAWN BY	GW
CHECKED BY	NZ
DATE	6/10/15

SHEET TITLE
Figure 3
Groundwater Contaminant Concentration Map

PROJECT
HENDERSON CO. LANDFILL
NCD980557961
Hendersonville, Henderson County, NC

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TABLES

Table 1
Monitoring Well Construction and Gauging Data
Henderson Co. Landfill

Monitoring Well No.	Well Install Date	Well Depth (ft)	Screen Interval Depth (ft bgs)	Screen Interval Elevation (ft MSL)	Ground Surface Elevation (ft MSL)[a]	Stickup Height (ft ags)	Top of Casing Elevation (ft MSL)[b]	5/4/2015		
								Depth to Water (ft TOC)	Static Water Level Depth (ft bgs)	Static Water Level Elevation (ft MSL)
MW-A2[d]	4/28/2015	30	20 - 30	2212.59 - 2222.59	2242.59	-0.36	2242.23	14.75	15.11	2227.48
MW-A4[d]	4/27/2015	40	30 - 40	2230.92 - 2240.92	2270.92	-0.37	2270.55	28.35	28.72	2242.20
MW-A5[d]	4/28/2015	25	15 - 25	2217.79 - 2227.79	2242.79	-0.19	2242.60	17.72	17.91	2224.88
MW-A8[d]	4/28/2015	25	15 - 25	2191.70 - 2201.70	2216.70	-0.24	2216.46	11.40	11.64	2205.06
MW-9[e]	NK	28.42[c]	NK	NK	2257.05	2.46	2259.51	14.39	11.93	2245.12
MW-12	NK	62.9[c]	NK	NK	2299.52	0.91	2300.43	49.83	48.92	2250.60
MW-13[e]	NK	91.11[c]	NK	NK	2294.83	2.05	2296.88	44.36	42.31	2252.52

[a] Ground surface elevations were recorded in the field by a professional land surveyor.
[b] Top of casing elevations were recorded in the field by a professional land surveyor.
[c] Well depths were obtained from the groundwater sampling forms in the *Water Quality Monitoring Report for the First Semi-Annual 2013 Sampling Event, Closed Henderson County Landfill, Permit No. 45-01, Henderson County, North Carolina* (Golder Associates NC, Inc., July 2013).
[d] Ground surface elevation represents top of flush-mount well cover.
[e] Ground surface elevation represents top of concrete.
ft - Feet.
ft ags - Feet above ground surface.
ft bgs - Feet below ground surface.
ft MSL - Feet above mean sea level.
ft TOC - Feet below top of PVC casing.
NK - Not known.
PVC - Polyvinyl chloride.

Table 2
Groundwater Sampling Field Parameters
Henderson Co. Landfill

Monitoring Well No.	Sampling Date	pH	Temperature (^{o}C)	Conductivity (µS/cm)	Turbidity (NTU)
MW-A2	5/5/2015	4.42	18.4	80	8.79
MW-A4	5/5/2015	4.84	16.7	46	9.70
MW-A5	5/5/2015	5.04	17.0	292	7.32
MW-A8	5/5/2015	5.74	16.5	912	8.98
MW-9	5/4/2015	3.79	19.2	150	0.81
MW-12	5/4/2015	5.07	20.1	347	0.59
MW-13	5/4/2015	4.85	18.0	278	1.15

µS/cm - micro-Siemens per centimeter.
^{o}C - Degree Celsius.
NTU - Nephelometric Turbidity Units.

Table 3
Summary of Groundwater Analytical Results
Henderson Co. Landfill

ANALYTE	NC 2L	Analytical Results								
Sample ID		**MW-A2**	**MW-A4**	**Duplicate 2 [a]**	**MW-A5**	**MW-A8**	**MW-9**	**MW-12**	**MW-13**	**Duplicate 1 [b]**
Sampling Date		**5/5/2015**	**5/5/2015**	**5/5/2015**	**5/5/2015**	**5/5/2015**	**5/4/2015**	**5/4/2015**	**5/4/2015**	**5/4/2015**
Volatiles - 8260B (µg/L)										
1,4-Dichlorobenzene	6	ND	ND	ND	ND	ND	ND	ND	0.52 J	0.52 J
Benzene	1	ND	ND	ND	ND	0.75 J	ND	ND	ND	ND
Chlorobenzene	50	1.9	ND	ND	ND	2.1	ND	ND	ND	ND
cis-1,2-Dichloroethene	70	ND	ND	ND	ND	ND	ND	0.96 J	2.6	2.5
Isopropylbenzene	70	1.2	ND	ND	ND	0.74 J	ND	ND	ND	ND
Trichlorofluoromethane	2,000	ND	ND	ND	ND	ND	ND	ND	1.6	1.7
Vinyl chloride	0.03	ND	ND	ND	ND	ND	ND	**0.77 J**	**2.2**	**2.2**
Volatiles - 8260B SIM (µg/L)										
1,4-Dioxane	3	ND	ND	0.39 J	ND	1.9	ND	**3.5**	0.44 J	0.46 J
Semivolatiles - 8270D LL (µg/L)										
2-Methylphenol	400 [c]	ND	ND	ND	0.87 J	ND	ND	ND	ND	ND
2-Nitrophenol	NE	ND	ND	ND	ND	ND	0.16 J [h]	ND	0.14 J [h]	0.16 J [h]
3 & 4 Methylphenol	40 [d]	0.94 J	ND	ND	0.72 J	ND	ND	ND	ND	ND
Acenaphthene	80	ND	ND	ND	0.18 J	0.43	ND	ND	ND F1 F2	ND
Butyl benzyl phthalate	1,000	0.43 J F1	ND	ND	0.70 J	0.15 J	ND	ND	ND	ND
Caprolactam	4,000	ND	ND	ND	ND	ND	ND	ND	17 F1	40
Carbazole	2 [c]	ND	ND	ND	ND	0.23 J	ND	ND	ND	ND
Chrysene	5	ND	ND	ND	ND	0.049 J	ND	ND	ND	ND
Dibenzofuran	28 [e]	ND	ND	ND	ND	0.11 J	ND	ND	ND F1 F2	ND
Diethyl phthalate	6,000	0.28 J	ND	ND	ND	ND	ND	0.35 J	0.22 J	0.12 J
Fluorene	300	ND	ND	ND	ND	0.18 J	ND	ND	ND F1	ND
Isophorone	40	ND	ND	ND	0.23 J	ND	ND	ND	ND	ND
Naphthalene	6	0.14 J	ND	ND	ND	0.11 J	ND	0.12 J	0.58 F1 F2	0.8
Phenol	30	0.71 J	0.23 J	0.4 J	0.39 J	ND	ND	ND	ND	ND
Metals - 6020A (µg/L)										
Beryllium	4 [f]	0.39	0.17 J	0.12 J	ND	0.077 J	1.2	0.10 J	ND	0.082 J
Cadmium	2	0.22 J	ND	ND	0.39 J	ND	0.21 J	ND	ND	ND
Chromium	10	0.79 J	2.9	1.3	2.2	0.41 J	0.28 J	1.1	0.63 J	0.85 J
Copper	1,000	0.33 J	0.21 J	ND	0.81 J	0.22 J	ND	ND	ND	0.28 J
Iron	300	**1,100**	86	38 J	**7,200**	**170,000**	ND	57	66	83
Lead	15	0.27 J B	0.28 J B	0.098 J B	0.27 J B	0.13 J B	ND	ND	ND	0.098 J B
Manganese	50	**200**	**200**	**190**	**2,400**	**3,000**	**310**	**110**	**67**	**67**
Nickel	100	2.2	3.7	2.0	4.0	1.5	0.56 J	1.3	0.86 J	1.1
Selenium	20	0.35 J	0.29 J	0.27 J	0.42 J	ND	1.9	0.22 J	ND	ND
Thallium	0.2 [f]	ND	ND	ND	**0.35**	**0.24**	ND	ND	ND	ND
Zinc	1,000	42	4.6 J	4.5 J	17	6.0 J	2.6 J	5.2 J	4.2 J	5.4 J
Wet Chemistry - 350.1 (µg/L)										
Ammonia	1,500 [g]	400	ND	140 J	**12,000**	**19,000**	ND	ND	ND	ND
HPLC/IC - 300.0 (µg/L)										
Nitrate as N	10,000	160	1,000	1,100	ND	ND	1,300	350	ND	ND
Sulfate	250,000	710 J	ND	ND	1,100	ND	20,000	23,000	18,000	17,000

Bold values exceed the corresponding NC 2L standard.

[a] Duplicate of MW-A4.

[b] Duplicate of MW-13.

[c] Interim standard effective April 1, 2011.

[d] 4-Methylphenol standard.

[e] Interim standard effective May 24, 1999.

[f] Interim standard effective October 1, 2010.

[g] Interim standard effective August 1, 2010.

[h] 2-Nitrophenol was detected at comparable levels in the groundwater samples and the equipment rinsate blank.

µg/L - Micrograms per liter.

B - Compound was found in the method blank and the sample.

F1 - Matrix spike (MS) and/or matrix spike duplicate (MSD) recovery is outside acceptance limits.

F2 - MS/MSD relative percent difference (RPD) exceeds control limits.

J - Result is less than the reporting limit but greater than or equal to the method detection limit; the concentration is an approximate value.

NC 2L - Groundwater Standard (15A North Carolina Administrative Code 2L.0202, effective April 1, 2013 [unless indicated otherwise]).

ND - Not detected.

NE - Not established for this analyte.

Table 4
Subsurface Landfill Gas Screening Results
Henderson Co. Landfill

Gas Probe ID	Date	Time	Barometric Pressure (in Hg)	Temperature (F)	Humidity (%)	Methane (% by volume)	Methane ($\mu g/m^3$)	Methane (% LEL)	Oxygen (O_2) (% by volume)	Carbon Dioxide (CO_2) (% by volume)	Hydrogen Sulfide (H_2S) (ppm)	Hydrogen Sulfide (H_2S) ($\mu g/m^3$)	Total VOCs (ppm)	Total VOCs ($\mu g/m^3$) [a]
Soil Gas Screening Levels						**NE**	**NE**	**NE**	**NE**	**NE**	**1.047**	**1,460** [b]	**NE**	**NE**
GP-1	4/24/2015	1220	30.07	61	26	**17.0**	**1.12E+08**	**>100**	0	22.7	4	5,575	0.6	1.4E+03
	4/24/2015	1510	30.04	66	21	**17.1**	**1.12E+08**	**>100**	0	22.8	8	11,151	0.2	4.6E+02
GP-2	4/24/2015	1230	30.07	61	26	**22.8**	**1.50E+08**	**>100**	0	25.9	9	12,545	4.2	9.6E+03
	4/24/2015	1520	30.04	66	21	**22.9**	**1.50E+08**	**>100**	0	26.0	10	13,939	6.4	1.5E+04
GP-3	4/24/2015	1240	30.07	61	26	0	0	0	15.3	1.7	0	0	1.9	4.4E+03
	4/24/2015	1530	30.04	66	21	0	0	0	15.4	1.7	0	0	2.3	5.3E+03
GP-4	4/24/2015	1150	30.09	57	25	**18.6**	**1.22E+08**	**>100**	0	29.5	2	2,788	0	0
	4/24/2015	1420	30.08	67	20	**18.8**	**1.23E+08**	**>100**	0	29.6	3	4,182	0	0
GP-5	4/24/2015	1210	30.09	58	25	0	0	0	18.4	1.5	0	0	1.2	2.8E+03
	4/24/2015	1500	30.04	66	21	0	0	0	18.4	1.5	0	0	1.6	3.7E+03
GP-6	4/24/2015	1200	30.09	58	24	0	0	0	8.9	11.4	0	0	1.8	4.1E+03
	4/24/2015	1440	30.04	66	21	0	0	0	9.0	11.4	0	0	2.4	5.5E+03
LFG-101	4/24/2015	1140	30.09	57	25	0	0	0	19.2	0.3	0	0	0.9	2,065
	4/24/2015	1430	30.08	67	20	0	0	0	19.2	0.2	0	0	2.6	5,967
LFG-102	4/24/2015	1120	30.09	57	25	0	0	0	18.2	0.9	0	0	2.1	4,819
	4/24/2015	1410	30.08	67	20	0	0	0	18.0	1.1	0	0	1.2	2,754
LFG-103	4/24/2015	1130	30.09	57	25	0	0	0	10.0	7.6	0	0	3.1	7,114
	4/24/2015	1400	30.08	67	20	0	0	0	10.2	7.3	0	0	4.7	10,786
Background	4/24/2015	1100	30.14	53	28	0	0	0	21.0	0	0	0	0	0
Background	4/24/2015	1450	30.04	66	21	0	0	0	21.0	0	0	0	0	0

Bold values exceed methane LEL (5% by volume). NOTE: Methane in GP-1, GP-2 and GP-4 also exceed methane UEL (15% by volume).

Shaded values exceed Preliminary Acceptable Soil Gas Concentration for hydrogen sulfide.

[a] Converted from field measurement in ppm using a molecular weight for isobutylene (the gas used to calibrate the PID).

[b] Preliminary Acceptable Soil Gas Concentration from IHSB Residential Vapor Intrusion Screening Table dated July 2012.

$\mu g/m^3$ - Micrograms per cubic meter.

F = Degrees Fahrenheit.

IHSB - Inactive Hazardous Sites Branch.

in Hg - Inches of mercury.

LEL - Lower Explosive Limit.

NE - Not established.

PID - Photoionization detector.

ppm - Parts per million.

UEL - Upper Explosive Limit.

VOC - Volatile organic compound.

Note: Measurements were made with the following instruments: National Oceanic and Atmospheric Administration (NOAA) Station Hendersonville for barometric pressure, temperature, and humidity; Landtec GEM 2000 Plus for methane, oxygen, carbon dioxide, and hydrogen sulfide; and RAE Systems MiniRAE 3000 PID for VOCs.

APPENDIX A
BORING LOGS, PERMANENT MONITORING WELL DIAGRAMS, AND WELL CONSTRUCTION RECORDS (FORM GW-1)

PROJECT: Henderson Co. Landfill (T.O. 7961DP-7) Hendersonville, North Carolina			**Boring No. MW-A2**
PROJECT No.: BN12.602.003	**ELEVATION:** 2242.59 Feet	**DRILLING METHOD:** Hollow Stem Auger	**DRILLING COMPANY:** Geologic Exploration
LOGGED BY: Eddie Rogers	**BORING DEPTH:** 30 Feet	**DRILL RIG:** Geoprobe 7822 DT	**NOTES:** Waste debris encountered at 4 to 12 feet.
DATE DRILLED: 04/28/15	**WATER LEVEL:** ▽ 12.5 feet@ TOB		

DEPTH (ft)	SAMPLE	Blows/ft	Recovery (%)	PID (ppm)	USCS	GRAPHIC LOG	SOIL DESCRIPTION	WATER LEVEL	ELEV. (ft)
					ML		**TOPSOIL/GRASSMAT** Reddish Brown to Tannish **SILT**, with fine to coarse sand, rock fragments, trace organics		
				31.2					
					ML		Black **SILT**, stained, with fine to coarse sand, rock fragments Waste debris consisting of paper, wood, rubber, metal scraps, plastic sheeting, and cloth.		
5									2237.6
				75.7					
10									2232.6
				19.2	SM		**RESIDUUM**: Grayish Brown to Tannish Fine to Coarse **SAND**, micaceous with trace silt and rock fragments Soils moist at 12.5'	▽	
15									2227.6
				0.5					
20									2222.6
				0					
					SM		**WEATHERED ROCK**: Reddish Brown and Gray Fine to Coarse **SAND**, moderately micaceous, with quartz rock fragments, trace silt, relic structuring		
25									2217.6
				0					
30							Switch to HSA for well installation (set at 30'). Boring was terminated at 30 feet.		2212.6
35									2207.6

ELEVATIONS ARE DESIGNATED FOR COMPARISON PURPOSES ONLY. ELEVATIONS AT BORING LOCATIONS HAVE NOT BEEN SURVEYED AND ARE NOT ACCURATE. DEPTH MEASUREMENTS ARE SHOWN TO ILLUSTRATE THE GENERAL ARRANGEMENTS OF THE SOIL TYPES ENCOUNTERED AT THE BORING LOCATIONS.

DO NOT USE ELEVATIONS OR DEPTH MEASUREMENTS FOR DETERMINATION OF DISTANCES OR QUANTITIES.

ESP Associates, P.A.

0316

PROJECT: Henderson Co. Landfill (T.O. 7961DP-7) Hendersonville, North Carolina			**Boring No. MW-A4**
PROJECT No.: BN12.602.003	**ELEVATION:** 2270.92 Feet	**DRILLING METHOD:** Hollow Stem Auger	**DRILLING COMPANY:** Geologic Exploration
LOGGED BY: Eddie Rogers	**BORING DEPTH:** 45 Feet	**DRILL RIG:** Geoprobe 7822 DT	**NOTES:** Waste debris encountered at 3.5 to 8.5 feet.
DATE DRILLED: 04/27/15	**WATER LEVEL:** ▽ 34.0 feet@ TOB		

DEPTH (ft)	SAMPLE	Blows/ft	Recovery (%)	PID (ppm)	USCS	GRAPHIC LOG	SOIL DESCRIPTION	WATER LEVEL	ELEV. (ft)
							TOPSOIL/GRASSMAT		
					ML		Reddish Brown **SILT**, with organics, rock fragments, trace fine sand		
					ML		Grayish Brown **SILT**, trace of clay, fine sand, and rock fragments		
				12.5					
							Waste debris consisting of metal scraps, wood, plastic sheeting, abundant tile, glass, paper, cloth, and asphalt.		
5									2265.9
				70.2					
					SM		**POSSIBLE RESIDUUM**: Tannish Brown Fine to Coarse **SAND**, moderately micaceous, with silt and rock fragments		
10									2260.9
				15.8					
15									2255.9
				4.7	SM		**RESIDUUM**: Reddish Brown to Tannish Black Fine to Coarse **SAND**, moderately micaceous, trace silt, rock fragments, manganese staining		
20									2250.9
				2.3					
25									2245.9
				1.2	SM		Tannish Brown Orangish White Fine to Coarse **SAND**, highly micaceous, trace silt, rock fragments		
30									2240.9
				0					
							Soils moist at 34'.	▽	
35									2235.9

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ESP Associates, P.A.

0316

PROJECT: Henderson Co. Landfill (T.O. 7961DP-7) Hendersonville, North Carolina			**Boring No. MW-A4**
PROJECT No.: BN12.602.003	**ELEVATION:** 2270.92 Feet	**DRILLING METHOD:** Hollow Stem Auger	**DRILLING COMPANY:** Geologic Exploration
LOGGED BY: Eddie Rogers	**BORING DEPTH:** 45 Feet	**DRILL RIG:** Geoprobe 7822 DT	**NOTES:** Waste debris encountered at 3.5 to 8.5 feet.
DATE DRILLED: 04/27/15	**WATER LEVEL:** ▽ 34.0 feet@ TOB		

DEPTH (ft)	SAMPLE	Blows/ft	Recovery (%)	PID (ppm)	USCS	GRAPHIC LOG	SOIL DESCRIPTION	WATER LEVEL	ELEV. (ft)
					SM		**WEATHERED ROCK**: Tannish Brown Reddish White Fine to Coarse **SAND**, highly micaceous, with rock fragments, trace silt, relic structuring		
				0					
40									2230.9
				0					
45							Switch to HSA for well installation (set at 40'). Boring was terminated at 45 feet.		2225.9
50									2220.9
55									2215.9
60									2210.9
65									2205.9
70									2200.9

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0316

ESP_TBR_4 BN12.602.003.GPJ LOG-LAB.GDT 5/29/15

PROJECT: Henderson Co. Landfill (T.O. 7961DP-7) Hendersonville, North Carolina			**Boring No. MW-A5**
PROJECT No.: BN12.602.003	**ELEVATION:** 2242.79 Feet	**DRILLING METHOD:** Hollow Stem Auger	**DRILLING COMPANY:** Geologic Exploration
LOGGED BY: Eddie Rogers	**BORING DEPTH:** 30 Feet	**DRILL RIG:** Geoprobe 7822 DT	**NOTES:** Waste debris encountered at 3.5 to 12.5 feet.
DATE DRILLED: 04/28/15	**WATER LEVEL:** ▽ 16.0 feet@ TOB		

DEPTH (ft)	SAMPLE	Blows/ft	Recovery (%)	PID (ppm)	USCS	GRAPHIC LOG	SOIL DESCRIPTION	WATER LEVEL	ELEV. (ft)
					ML		**TOPSOIL/GRASSMAT** Reddish Brown to Tannish **SILT**, with fine to coarse sand, rock fragments, some organics		
				12.6	SM		Brown Fine to Coarse **SAND**, moderately micaceous, with trace silt, rock fragments		
							Waste debris consisting of paper, wood, and plastic sheeting.		
5									2237.8
				31.2					
10									2232.8
				7.6	SM		**RESIDUUM**: Grayish Brown to Light Brown Fine to Coarse **SAND**, moderately micaceous, with trace silt, rock fragments Soils moist at 16'.		
15								▽	2227.8
				5.2					
20									2222.8
				2.8					
25									2217.8
				0					
					SM		**WEATHERED ROCK**: Reddish Brown Grayish White Fine to Coarse **SAND**, highly micaceous, with quartz rock fragments, relic structuring		
30							Switch to HSA for well installation (set at 25'). Boring was terminated at 30 feet.		2212.8
35									2207.8

ELEVATIONS ARE DESIGNATED FOR COMPARISON PURPOSES ONLY. ELEVATIONS AT BORING LOCATIONS HAVE NOT BEEN SURVEYED AND ARE NOT ACCURATE. DEPTH MEASUREMENTS ARE SHOWN TO ILLUSTRATE THE GENERAL ARRANGEMENTS OF THE SOIL TYPES ENCOUNTERED AT THE BORING LOCATIONS.

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ESP Associates, P.A.

0316

ESP_TBR_4 BN12.602.003.GPJ LOG-LAB.GDT 5/29/15

PROJECT: Henderson Co. Landfill (T.O. 7961DP-7) Hendersonville, North Carolina			**Boring No. MW-A8**
PROJECT No.: BN12.602.003	**ELEVATION:** 2216.70 Feet	**DRILLING METHOD:** Hollow Stem Auger	**DRILLING COMPANY:** Geologic Exploration
LOGGED BY: Eddie Rogers	**BORING DEPTH:** 25 Feet	**DRILL RIG:** Geoprobe 7822 DT	**NOTES:** No waste debris encountered.
DATE DRILLED: 04/28/15	**WATER LEVEL:** ▽ 13.0 feet@ TOB		

DEPTH (ft)	SAMPLE	Blows/ft	Recovery (%)	PID (ppm)	USCS	GRAPHIC LOG	SOIL DESCRIPTION	WATER LEVEL	ELEV. (ft)
					ML		**TOPSOIL/GRASSMAT** Reddish Brown to Tannish **SILT**, with fine to coarse sand, rock fragments, trace organics		
				0					
5					SM		**RESIDUUM**: Grayish Brown to Tannish Fine to Coarse **SAND**, moderately micaceous, with silt, rock fragments Soils moist at 13'.		2211.7
				0					
10									2206.7
				0.2				▽	
15									2201.7
				0.6	SM		**WEATHERED ROCK**: Reddish Brown Gray Fine to Coarse **SAND**, with quartz rock fragments, trace silt, relic structuring		
20									2196.7
				0					
25							Switch to HSA for well installation (set at 25'). Boring was terminated at 25 feet.		2191.7
30									2186.7
35									2181.7

ELEVATIONS ARE DESIGNATED FOR COMPARISON PURPOSES ONLY. ELEVATIONS AT BORING LOCATIONS HAVE NOT BEEN SURVEYED AND ARE NOT ACCURATE. DEPTH MEASUREMENTS ARE SHOWN TO ILLUSTRATE THE GENERAL ARRANGEMENTS OF THE SOIL TYPES ENCOUNTERED AT THE BORING LOCATIONS.

DO NOT USE ELEVATIONS OR DEPTH MEASUREMENTS FOR DETERMINATION OF DISTANCES OR QUANTITIES.

ESP Associates, P.A.

0316

INSTALL DATE: 04/28/15

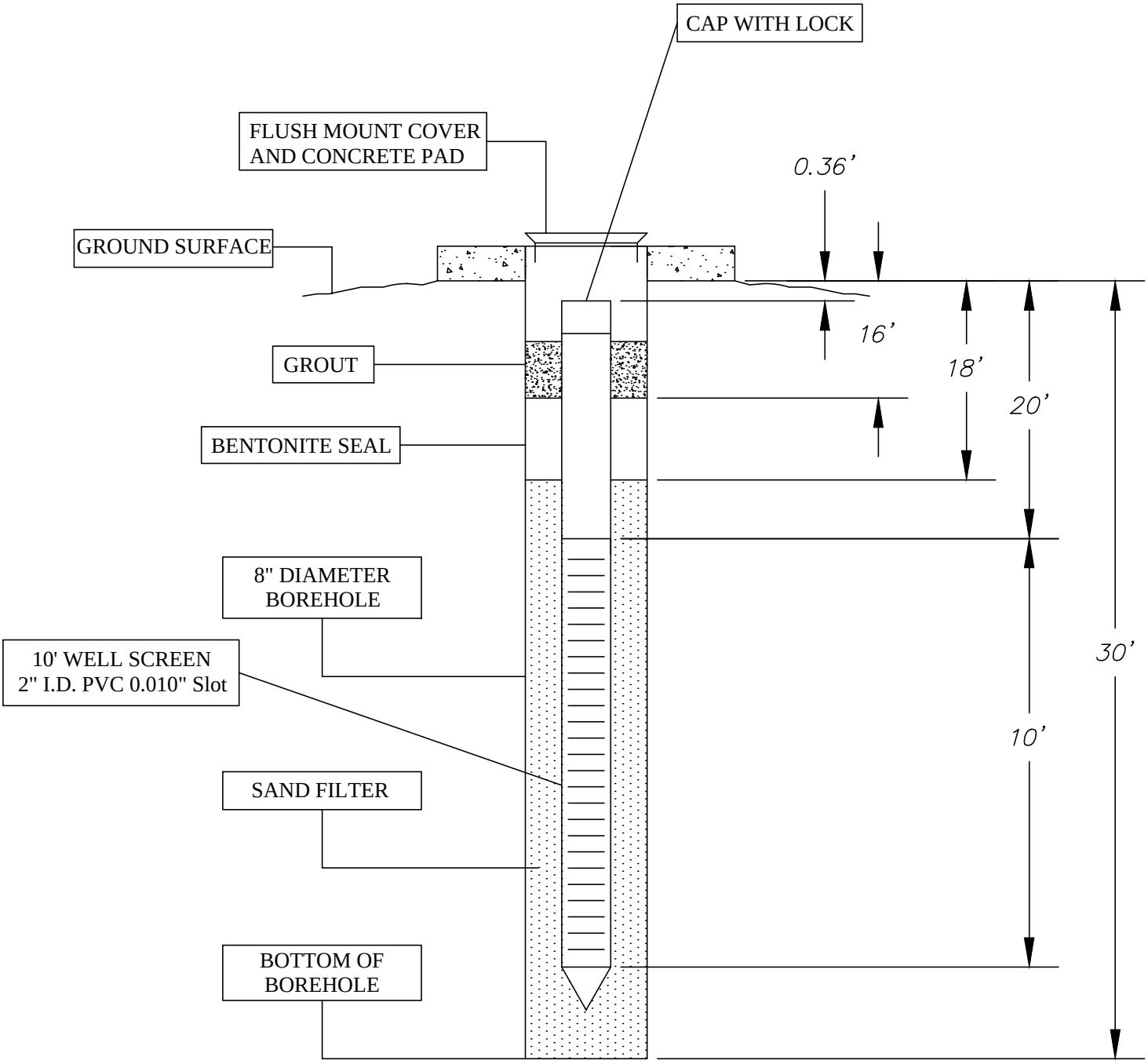
INSTALLED BY: GEOLOGIC EXPLORATION

ESP SITE PERSONNEL: EDDIE ROGERS

STATIC WATER DEPTH (FT) BELOW TOC: 19.0

TOC ELEVATION (FT MSL): 2242.23

GROUND SURFACE ELEVATION (FT MSL): 2242.59



PROJECT NO BN12.602.003	SHEET TITLE WELL # MW-A2 PERMANENT MONITORING WELL DIAGRAM	ESP Associates, P.A. P.O. Box 7030 Charlotte, NC 28241 3475 Lakemont Blvd. Fort Mill, SC 29708 704-583-4949 (NC) 803-802-2440 (SC) www.espassociates.com
SCALE NTS		
DATE 05/26/15		
DRAWN BY WB	PROJECT HENDERSON CO. LANDFILL HENDERSONVILLE, NORTH CAROLINA	
CHECKED BY NZ		

INSTALL DATE: 04/27/15

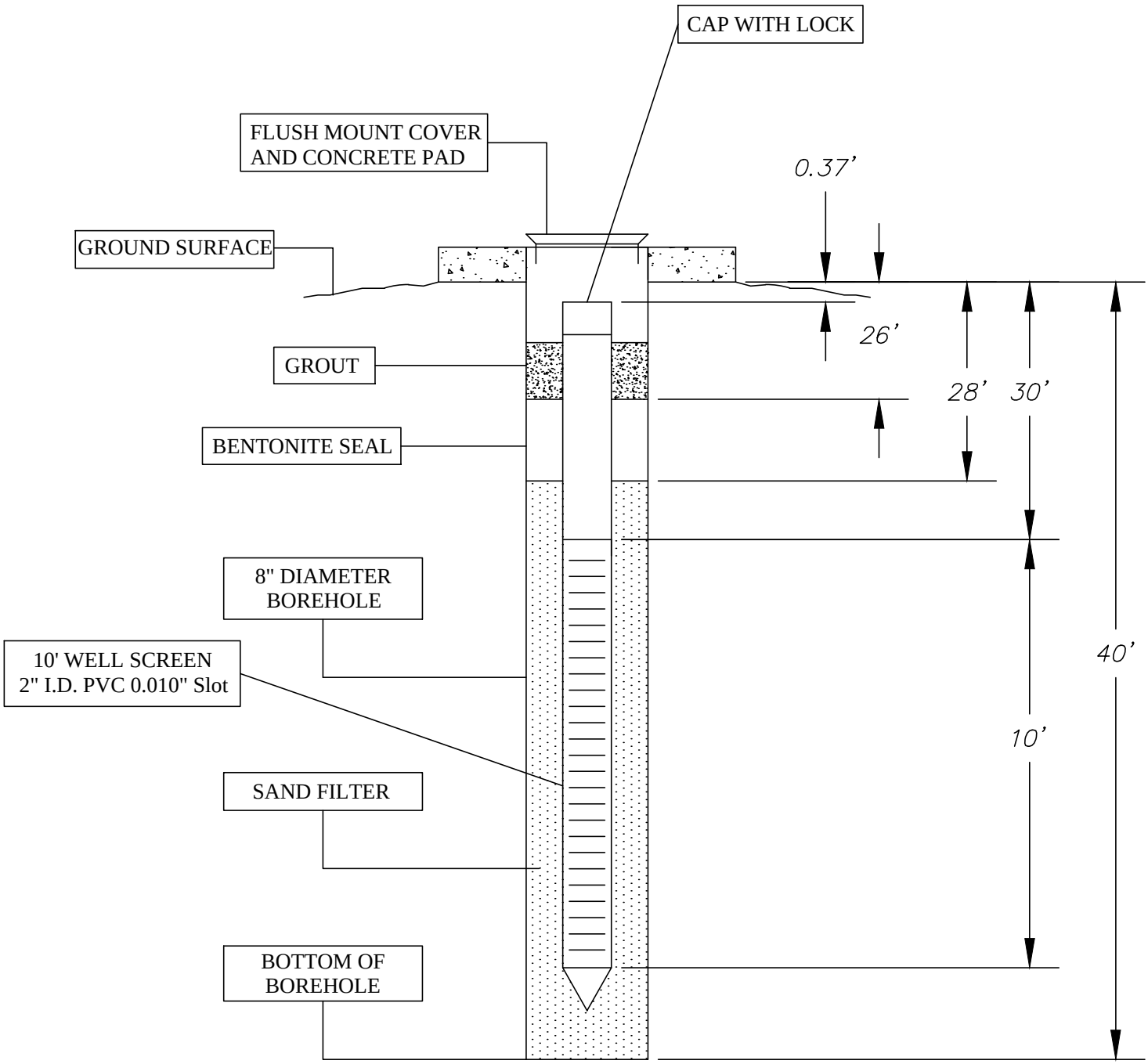
INSTALLED BY: GEOLOGIC EXPLORATION

ESP SITE PERSONNEL: EDDIE ROGERS

STATIC WATER DEPTH (FT) BELOW TOC: 28.70

TOC ELEVATION (FT MSL): 2270.55

GROUND SURFACE ELEVATION (FT MSL): 2270.92



PROJECT NO BN12.602.003	SHEET TITLE WELL # MW-A4 PERMANENT MONITORING WELL DIAGRAM	ESP Associates, P.A. P.O. Box 7030 Charlotte, NC 28241 3475 Lakemont Blvd. Fort Mill, SC 29708 704-583-4949 (NC) 803-802-2440 (SC) www.espassociates.com
SCALE NTS		
DATE 05/26/15		
DRAWN BY WB	PROJECT HENDERSON CO. LANDFILL HENDERSONVILLE, NORTH CAROLINA	
CHECKED BY NZ		

INSTALL DATE: 04/28/15

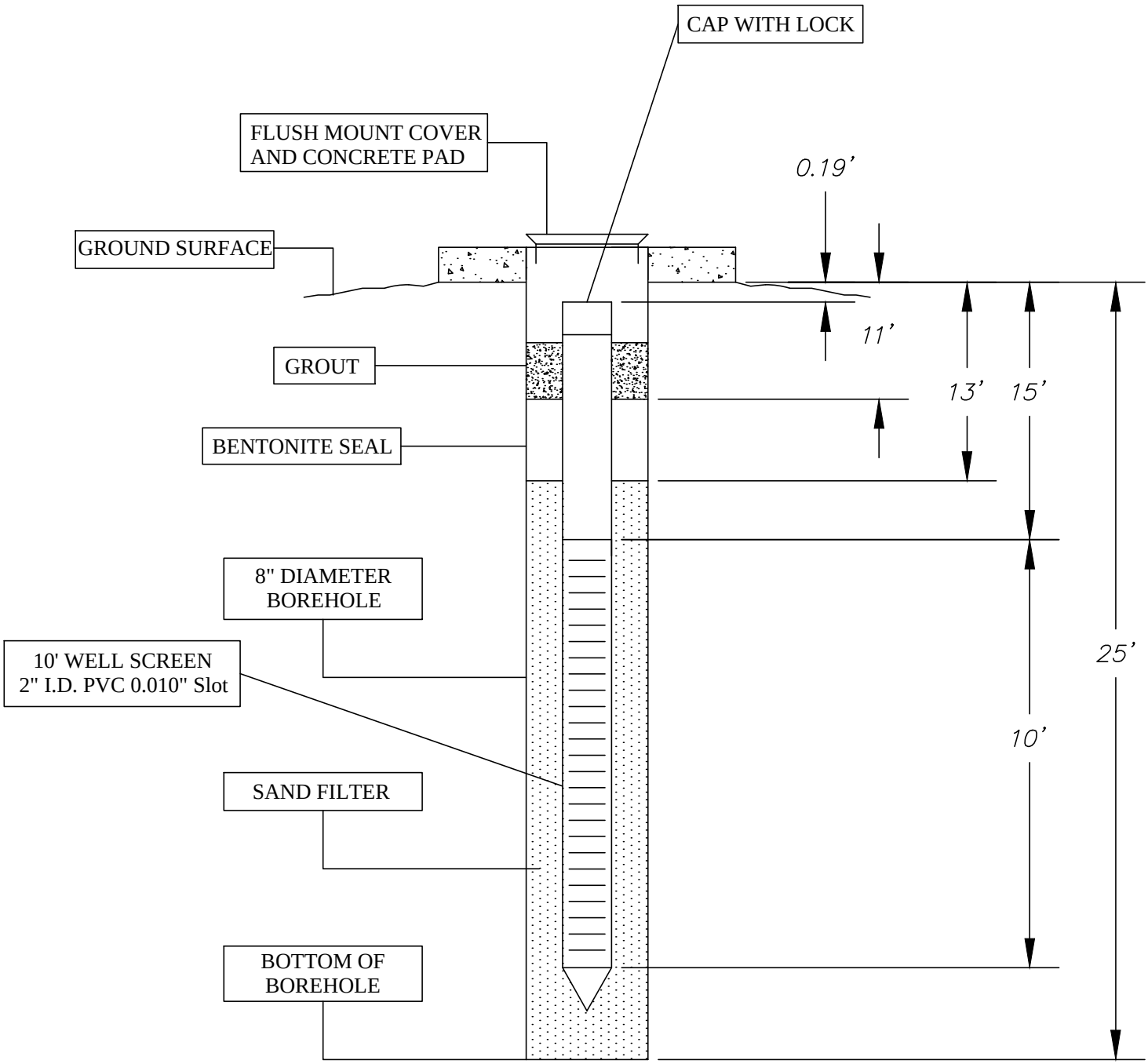
INSTALLED BY: GEOLOGIC EXPLORATION

ESP SITE PERSONNEL: EDDIE ROGERS

STATIC WATER DEPTH (FT) BELOW TOC: 20.92

TOC ELEVATION (FT MSL): 2242.60

GROUND SURFACE ELEVATION (FT MSL): 2242.79



PROJECT NO BN12.602.003	SHEET TITLE WELL # MW-A5 PERMANENT MONITORING WELL DIAGRAM
SCALE NTS	
DATE 05/26/15	
DRAWN BY WB	PROJECT HENDERSON CO. LANDFILL HENDERSONVILLE, NORTH CAROLINA
CHECKED BY NZ	

ESP Associates, P.A.
P.O. Box 7030
Charlotte, NC 28241
3475 Lakemont Blvd.
Fort Mill, SC 29708
704-583-4949 (NC)
803-802-2440 (SC)
www.espassociates.com

INSTALL DATE: 04/28/15

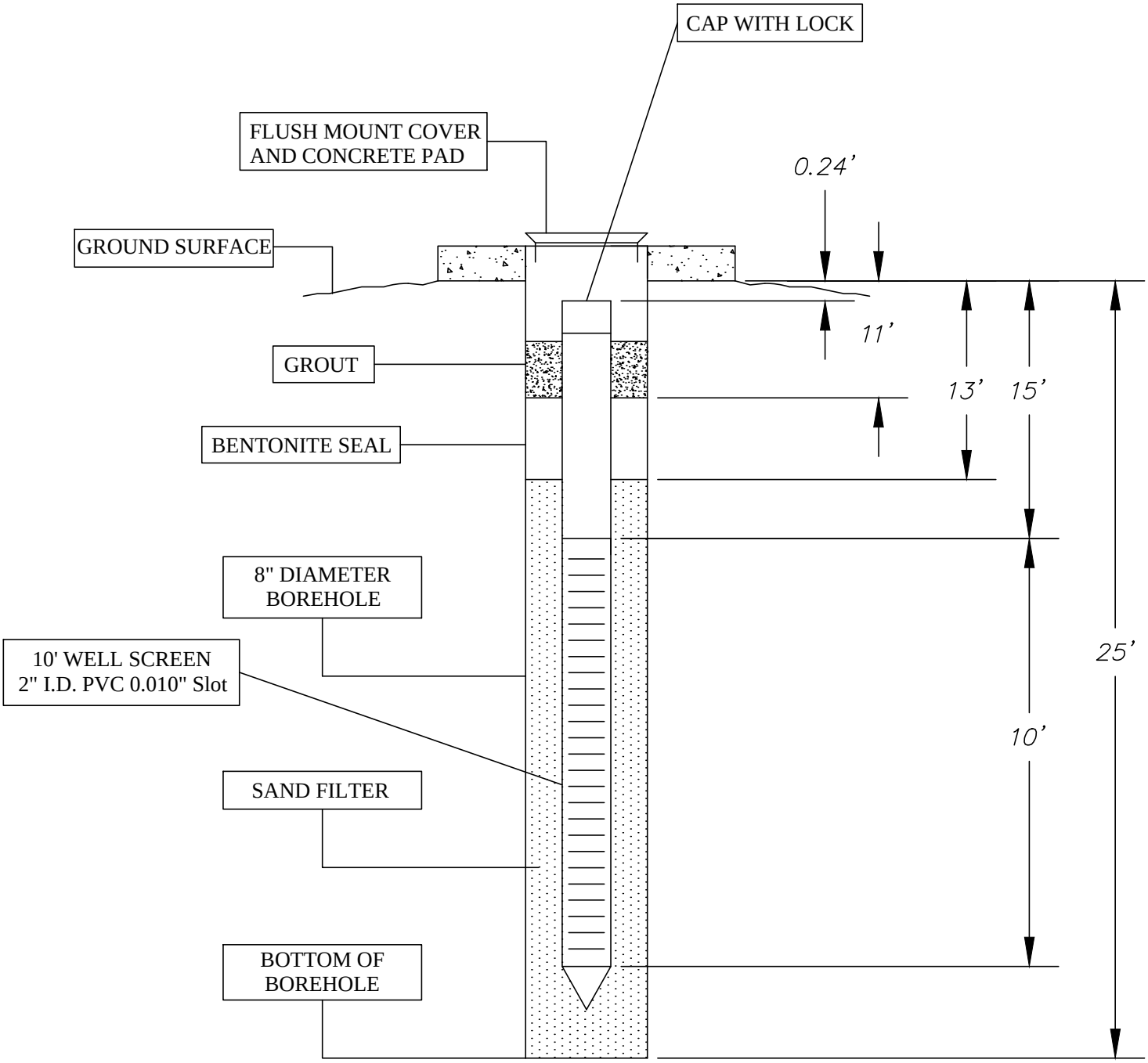
INSTALLED BY: GEOLOGIC EXPLORATION

ESP SITE PERSONNEL: EDDIE ROGERS

STATIC WATER DEPTH (FT) BELOW TOC: 12.9

TOC ELEVATION (FT MSL): 2216.46

GROUND SURFACE ELEVATION (FT MSL): 2216.70



PROJECT NO BN12.602.003	SHEET TITLE WELL # MW-A8 PERMANENT MONITORING WELL DIAGRAM	ESP Associates, P.A. P.O. Box 7030 Charlotte, NC 28241 3475 Lakemont Blvd. Fort Mill, SC 29708 704-583-4949 (NC) 803-802-2440 (SC) www.espassociates.com
SCALE NTS		
DATE 05/26/15		
DRAWN BY WB	PROJECT HENDERSON CO. LANDFILL HENDERSONVILLE, NORTH CAROLINA	
CHECKED BY NZ		

WELL CONSTRUCTION RECORD

This form can be used for single or multiple wells

1. Well Contractor Information:

VINCE FEDERLE

Well Contractor Name

A - 3552

NC Well Contractor Certification Number

GEOLOGIC EXPLORATION, INC

Company Name

2. Well Construction Permit #: _____

List all applicable well construction permits (i.e. County, State, Variance, etc.)

3. Well Use (check well use):

Water Supply Well:

- ☐Agricultural
- ☐Municipal/Public
- ☐Geothermal (Heating/Cooling Supply)
- ☐Residential Water Supply (single)
- ☐Industrial/Commercial
- ☐Residential Water Supply (shared)
- ☐Irrigation

Non-Water Supply Well:

- ☑Monitoring
- ☐Recovery

Injection Well:

- ☐Aquifer Recharge
- ☐Groundwater Remediation
- ☐Aquifer Storage and Recovery
- ☐Salinity Barrier
- ☐Aquifer Test
- ☐Stormwater Drainage
- ☐Experimental Technology
- ☐Subsidence Control
- ☐Geothermal (Closed Loop)
- ☐Tracer
- ☐Geothermal (Heating/Cooling Return)
- ☐Other (explain under #21 Remarks)

4. Date Well(s) Completed: 04/28/15 **Well ID#** MW-A2

5a. Well Location:

HENDERSON CO LANDFILL

Facility/Owner Name

Facility ID# (if applicable)

154 MOONSTONE LANE HENDERSONVILLE 28791

Physical Address, City, and Zip

HENDERSON

County

Parcel Identification No. (PIN)

5b. Latitude and Longitude in degrees/minutes/seconds or decimal degrees:
(if well field, one lat/long is sufficient)

35.35144635 N 82.49419138 W

6. Is (are) the well(s): ☑**Permanent** or ☐**Temporary**

7. Is this a repair to an existing well: ☐Yes or ☑No

If this is a repair, fill out known well construction information and explain the nature of the repair under #21 remarks section or on the back of this form.

8. Number of wells constructed: 1

For multiple injection or non-water supply wells ONLY with the same construction, you can submit one form.

9. Total well depth below land surface: 30.0 **(ft.)**

For multiple wells list all depths if different (example- 3@200' and 2@100')

10. Static water level below top of casing: 19.0 **(ft.)**

If water level is above casing, use "+"

11. Borehole diameter: 8.0 **(in.)**

12. Well construction method: AUGER

(i.e. auger, rotary, cable, direct push, etc.)

FOR WATER SUPPLY WELLS ONLY:

13a. Yield (gpm) _____ **Method of test:** _____

13b. Disinfection type: _____ **Amount:** _____

For Internal Use ONLY:

14. WATER ZONES

FROM	TO	DESCRIPTION
ft.	ft.	
ft.	ft.	

15. OUTER CASING (for multi-cased wells) OR LINER (if applicable)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
ft.	ft.	in.		

16. INNER CASING OR TUBING (geothermal closed-loop)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
0.0 ft.	20.0 ft.	2.0 in.	SCH 40	PVC
ft.	ft.	in.		

17. SCREEN

FROM	TO	DIAMETER	SLOT SIZE	THICKNESS	MATERIAL
20.0 ft.	30.0 ft.	2.0 in.	.010	SCH 40	PVC
ft.	ft.	in.			

18. GROUT

FROM	TO	MATERIAL	EMPLACEMENT METHOD & AMOUNT
0.0 ft.	16.0 ft.	PORTLAND BENTONITE	SLURRY
ft.	ft.		
ft.	ft.		

19. SAND/GRAVEL PACK (if applicable)

FROM	TO	MATERIAL	EMPLACEMENT METHOD
18.0 ft.	30.0 ft.	20-40	FINE SILICA SAND
ft.	ft.		

20. DRILLING LOG (attach additional sheets if necessary)

FROM	TO	DESCRIPTION (color, hardness, soil/rock type, grain size, etc.)
0.0 ft.	4.0 ft.	RED/BROWN/TAN SILT/FINE TO COARSE SAND
4.0 ft.	12.0 ft.	BLACK SILT, FINE TO COARSE SAND, ROCK
ft.	ft.	FRAGMENTS, WASTE DEBRIS
12.0 ft.	24.0 ft.	GRAY/BROWN/TAN FINE TO COARSE SAND
ft.	ft.	TRACE SILT, ROCK FRAGMENTS
24.0 ft.	30.0 ft.	RED/BROWN/GRAY FINE TO COARSE SAND
ft.	ft.	QUARTZ ROCK FRAGMENTS, TRACE SILT

21. REMARKS

BENTONITE SEAL FROM 16.0 TO 18.0 FEET

22. Certification:

Vincent R. Federle 05/05/15

Signature of Certified Well Contractor

Date

By signing this form, I hereby certify that the well(s) was (were) constructed in accordance with 15A NCAC 02C .0100 or 15A NCAC 02C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

23. Site diagram or additional well details:
You may use the back of this page to provide additional well site details or well construction details. You may also attach additional pages if necessary.

SUBMITTAL INSTUCTIONS

24a. For All Wells: Submit this form within 30 days of completion of well construction to the following:

Division of Water Quality, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

24b. For Injection Wells: In addition to sending the form to the address in 24a above, also submit a copy of this form within 30 days of completion of well construction to the following:

Division of Water Quality, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

24c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well construction to the county health department of the county where constructed.

WELL CONSTRUCTION RECORD

This form can be used for single or multiple wells

1. Well Contractor Information:

VINCE FEDERLE

Well Contractor Name

A - 3552

NC Well Contractor Certification Number

GEOLOGIC EXPLORATION, INC

Company Name

2. Well Construction Permit #: _____

List all applicable well construction permits (i.e. County, State, Variance, etc.)

3. Well Use (check well use):

Water Supply Well:

- ☐Agricultural
- ☐Municipal/Public
- ☐Geothermal (Heating/Cooling Supply)
- ☐Residential Water Supply (single)
- ☐Industrial/Commercial
- ☐Residential Water Supply (shared)
- ☐Irrigation

Non-Water Supply Well:

- ☑Monitoring
- ☐Recovery

Injection Well:

- ☐Aquifer Recharge
- ☐Groundwater Remediation
- ☐Aquifer Storage and Recovery
- ☐Salinity Barrier
- ☐Aquifer Test
- ☐Stormwater Drainage
- ☐Experimental Technology
- ☐Subsidence Control
- ☐Geothermal (Closed Loop)
- ☐Tracer
- ☐Geothermal (Heating/Cooling Return)
- ☐Other (explain under #21 Remarks)

4. Date Well(s) Completed: 04/27/15 **Well ID#** MW-A4

5a. Well Location:

HENDERSON CO LANDFILL

Facility/Owner Name

Facility ID# (if applicable)

154 MOONSTONE LANE HENDERSONVILLE 28791

Physical Address, City, and Zip

HENDERSON

County

Parcel Identification No. (PIN)

5b. Latitude and Longitude in degrees/minutes/seconds or decimal degrees:
(if well field, one lat/long is sufficient)

35.35158711 N 82.49282915 W

6. Is (are) the well(s): ☑**Permanent** or ☐**Temporary**

7. Is this a repair to an existing well: ☐Yes or ☑No

If this is a repair, fill out known well construction information and explain the nature of the repair under #21 remarks section or on the back of this form.

8. Number of wells constructed: 1

For multiple injection or non-water supply wells ONLY with the same construction, you can submit one form.

9. Total well depth below land surface: 40.0 **(ft.)**

For multiple wells list all depths if different (example- 3@200' and 2@100')

10. Static water level below top of casing: 28.0 **(ft.)**

If water level is above casing, use "+"

11. Borehole diameter: 8.0 **(in.)**

12. Well construction method: AUGER

(i.e. auger, rotary, cable, direct push, etc.)

FOR WATER SUPPLY WELLS ONLY:

13a. Yield (gpm) _____ **Method of test:** _____

13b. Disinfection type: _____ **Amount:** _____

For Internal Use ONLY:

14. WATER ZONES

FROM	TO	DESCRIPTION
ft.	ft.	
ft.	ft.	

15. OUTER CASING (for multi-cased wells) OR LINER (if applicable)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
ft.	ft.	in.		

16. INNER CASING OR TUBING (geothermal closed-loop)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
0.0 ft.	30.0 ft.	2.0 in.	SCH 40	PVC
ft.	ft.	in.		

17. SCREEN

FROM	TO	DIAMETER	SLOT SIZE	THICKNESS	MATERIAL
30.0 ft.	40.0 ft.	2.0 in.	.010	SCH 40	PVC
ft.	ft.	in.			

18. GROUT

FROM	TO	MATERIAL	EMPLACEMENT METHOD & AMOUNT
0.0 ft.	26.0 ft.	PORTLAND BENTONITE	SLURRY
ft.	ft.		
ft.	ft.		

19. SAND/GRAVEL PACK (if applicable)

FROM	TO	MATERIAL	EMPLACEMENT METHOD
28.0 ft.	40.0 ft.	20-40	FINE SILICA SAND
ft.	ft.		

20. DRILLING LOG (attach additional sheets if necessary)

FROM	TO	DESCRIPTION (color, hardness, soil/rock type, grain size, etc.)
0.0 ft.	1.0 ft.	RED/BROWN SILT/ROCK FRAGMENTS/TRACE FINE SAND
1.0 ft.	3.5 ft.	GRAY/BROWN SILT/TRACE CLAY, FINE SAND/ROCK FRAGMENTS
3.5 ft.	8.5 ft.	WASTE DEBRIS
8.5 ft.	17.0 ft.	TAN/BROWN FINE TO COARSE SAND/SILT/ROCK FRAGMENTS
17.0 ft.	27.0 ft.	RED/BROWN/TAN/BLACK FINE TO COARSE SAND/ROCK FRAGMENTS
27.0 ft.	45.0 ft.	TAN/BROWN/RED/WHITE FINE TO COARSE SAND
ft.	ft.	ROCK FRAGMENTS, TRACE SILT/RELIC STRUCTURING

21. REMARKS

BENTONITE SEAL FROM 26.0 TO 28.0 FEET

22. Certification:

Vincent R. Federle — 05/05/15

Signature of Certified Well Contractor — Date

By signing this form, I hereby certify that the well(s) was (were) constructed in accordance with 15A NCAC 02C .0100 or 15A NCAC 02C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

23. Site diagram or additional well details:

You may use the back of this page to provide additional well site details or well construction details. You may also attach additional pages if necessary.

SUBMITTAL INSTUCTIONS

24a. For All Wells: Submit this form within 30 days of completion of well construction to the following:

Division of Water Quality, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

24b. For Injection Wells: In addition to sending the form to the address in 24a above, also submit a copy of this form within 30 days of completion of well construction to the following:

Division of Water Quality, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

24c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well construction to the county health department of the county where constructed.

WELL CONSTRUCTION RECORD

This form can be used for single or multiple wells

1. Well Contractor Information:

VINCE FEDERLE

Well Contractor Name

A - 3552

NC Well Contractor Certification Number

GEOLOGIC EXPLORATION, INC

Company Name

2. Well Construction Permit #: _____

List all applicable well construction permits (i.e. County, State, Variance, etc.)

3. Well Use (check well use):

Water Supply Well:

- ☐Agricultural
- ☐Municipal/Public
- ☐Geothermal (Heating/Cooling Supply)
- ☐Residential Water Supply (single)
- ☐Industrial/Commercial
- ☐Residential Water Supply (shared)
- ☐Irrigation

Non-Water Supply Well:

- ☑Monitoring
- ☐Recovery

Injection Well:

- ☐Aquifer Recharge
- ☐Groundwater Remediation
- ☐Aquifer Storage and Recovery
- ☐Salinity Barrier
- ☐Aquifer Test
- ☐Stormwater Drainage
- ☐Experimental Technology
- ☐Subsidence Control
- ☐Geothermal (Closed Loop)
- ☐Tracer
- ☐Geothermal (Heating/Cooling Return)
- ☐Other (explain under #21 Remarks)

4. Date Well(s) Completed: 04/28/15 **Well ID#** MW-A5

5a. Well Location:

HENDERSON CO LANDFILL

Facility/Owner Name

Facility ID# (if applicable)

154 MOONSTONE LANE HENDERSONVILLE 28791

Physical Address, City, and Zip

HENDERSON

County

Parcel Identification No. (PIN)

5b. Latitude and Longitude in degrees/minutes/seconds or decimal degrees:
(if well field, one lat/long is sufficient)

35.35122573 N 82.49422021 W

6. Is (are) the well(s): ☑**Permanent** or ☐**Temporary**

7. Is this a repair to an existing well: ☐Yes or ☑No

If this is a repair, fill out known well construction information and explain the nature of the repair under #21 remarks section or on the back of this form.

8. Number of wells constructed: 1

For multiple injection or non-water supply wells ONLY with the same construction, you can submit one form.

9. Total well depth below land surface: 25.0 **(ft.)**

For multiple wells list all depths if different (example- 3@200' and 2@100')

10. Static water level below top of casing: 19.0 **(ft.)**

If water level is above casing, use "+"

11. Borehole diameter: 8.0 **(in.)**

12. Well construction method: AUGER

(i.e. auger, rotary, cable, direct push, etc.)

FOR WATER SUPPLY WELLS ONLY:

13a. Yield (gpm) _____ **Method of test:** _____

13b. Disinfection type: _____ **Amount:** _____

For Internal Use ONLY:

14. WATER ZONES

FROM	TO	DESCRIPTION
ft.	ft.	
ft.	ft.	

15. OUTER CASING (for multi-cased wells) OR LINER (if applicable)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
ft.	ft.	in.		

16. INNER CASING OR TUBING (geothermal closed-loop)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
0.0 ft.	15.0 ft.	2.0 in.	SCH 40	PVC
ft.	ft.	in.		

17. SCREEN

FROM	TO	DIAMETER	SLOT SIZE	THICKNESS	MATERIAL
15.0 ft.	25.0 ft.	2.0 in.	.010	SCH 40	PVC
ft.	ft.	in.			

18. GROUT

FROM	TO	MATERIAL	EMPLACEMENT METHOD & AMOUNT
0.0 ft.	11.0 ft.	PORTLAND BENTONITE	SLURRY
ft.	ft.		
ft.	ft.		

19. SAND/GRAVEL PACK (if applicable)

FROM	TO	MATERIAL	EMPLACEMENT METHOD
13.0 ft.	25.0 ft.	20-40	FINE SILICA SAND
ft.	ft.		

20. DRILLING LOG (attach additional sheets if necessary)

FROM	TO	DESCRIPTION (color, hardness, soil/rock type, grain size, etc.)
0.0 ft.	2.0 ft.	RED/BROWN/TAN SILT/FINE TO COARSE SAND
2.0 ft.	3.5 ft.	BROWN FINE TO COARSE SAND/TRACE SILT
3.5 ft.	12.5 ft.	WASTE DEBRIS
12.5 ft.	25.0 ft.	GRAY/BROWN FINE TO COARSE SAND, TRACE SILT
ft.	ft.	
ft.	ft.	
ft.	ft.	

21. REMARKS

BENTONITE SEAL FROM 11.0 TO 13.0 FEET

22. Certification:

Vincent R. Federle 05/05/15

Signature of Certified Well Contractor Date

By signing this form, I hereby certify that the well(s) was (were) constructed in accordance with 15A NCAC 02C .0100 or 15A NCAC 02C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

23. Site diagram or additional well details:

You may use the back of this page to provide additional well site details or well construction details. You may also attach additional pages if necessary.

SUBMITTAL INSTUCTIONS

24a. For All Wells: Submit this form within 30 days of completion of well construction to the following:

Division of Water Quality, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

24b. For Injection Wells: In addition to sending the form to the address in 24a above, also submit a copy of this form within 30 days of completion of well construction to the following:

Division of Water Quality, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

24c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well construction to the county health department of the county where constructed.

WELL CONSTRUCTION RECORD

This form can be used for single or multiple wells

1. Well Contractor Information:

VINCE FEDERLE

Well Contractor Name

A - 3552

NC Well Contractor Certification Number

GEOLOGIC EXPLORATION, INC

Company Name

2. Well Construction Permit #: _____

List all applicable well construction permits (i.e. County, State, Variance, etc.)

3. Well Use (check well use):

Water Supply Well:

- ☐Agricultural
- ☐Municipal/Public
- ☐Geothermal (Heating/Cooling Supply)
- ☐Residential Water Supply (single)
- ☐Industrial/Commercial
- ☐Residential Water Supply (shared)
- ☐Irrigation

Non-Water Supply Well:

- ☑Monitoring
- ☐Recovery

Injection Well:

- ☐Aquifer Recharge
- ☐Groundwater Remediation
- ☐Aquifer Storage and Recovery
- ☐Salinity Barrier
- ☐Aquifer Test
- ☐Stormwater Drainage
- ☐Experimental Technology
- ☐Subsidence Control
- ☐Geothermal (Closed Loop)
- ☐Tracer
- ☐Geothermal (Heating/Cooling Return)
- ☐Other (explain under #21 Remarks)

4. Date Well(s) Completed: 04/28/15 **Well ID#** MW-A8

5a. Well Location:

HENDERSON CO LANDFILL

Facility/Owner Name

Facility ID# (if applicable)

154 MOONSTONE LANE HENDERSONVILLE 28791

Physical Address, City, and Zip

HENDERSON

County

Parcel Identification No. (PIN)

5b. Latitude and Longitude in degrees/minutes/seconds or decimal degrees:
(if well field, one lat/long is sufficient)

35.35164414 N 82.49534542 W

6. Is (are) the well(s): ☑**Permanent** or ☐**Temporary**

7. Is this a repair to an existing well: ☐Yes or ☑No

If this is a repair, fill out known well construction information and explain the nature of the repair under #21 remarks section or on the back of this form.

8. Number of wells constructed: 1

For multiple injection or non-water supply wells ONLY with the same construction, you can submit one form.

9. Total well depth below land surface: 25.0 **(ft.)**

For multiple wells list all depths if different (example- 3@200' and 2@100')

10. Static water level below top of casing: 14.0 **(ft.)**

If water level is above casing, use "+"

11. Borehole diameter: 8.0 **(in.)**

12. Well construction method: AUGER

(i.e. auger, rotary, cable, direct push, etc.)

FOR WATER SUPPLY WELLS ONLY:

13a. Yield (gpm) _____ **Method of test:** _____

13b. Disinfection type: _____ **Amount:** _____

For Internal Use ONLY:

14. WATER ZONES

FROM	TO	DESCRIPTION
ft.	ft.	
ft.	ft.	

15. OUTER CASING (for multi-cased wells) OR LINER (if applicable)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
ft.	ft.	in.		

16. INNER CASING OR TUBING (geothermal closed-loop)

FROM	TO	DIAMETER	THICKNESS	MATERIAL
0.0 ft.	15.0 ft.	2.0 in.	SCH 40	PVC
ft.	ft.	in.		

17. SCREEN

FROM	TO	DIAMETER	SLOT SIZE	THICKNESS	MATERIAL
15.0 ft.	25.0 ft.	2.0 in.	.010	SCH 40	PVC
ft.	ft.	in.			

18. GROUT

FROM	TO	MATERIAL	EMPLACEMENT METHOD & AMOUNT
0.0 ft.	11.0 ft.	PORTLAND BENTONITE	SLURRY
ft.	ft.		
ft.	ft.		

19. SAND/GRAVEL PACK (if applicable)

FROM	TO	MATERIAL	EMPLACEMENT METHOD
13.0 ft.	25.0 ft.	20-40	FINE SILICA SAND
ft.	ft.		

20. DRILLING LOG (attach additional sheets if necessary)

FROM	TO	DESCRIPTION (color, hardness, soil/rock type, grain size, etc.)
0.0 ft.	5.0 ft.	RED/BROWN/TAN SILT/FINE TO COARSE
ft.	ft.	SAND, ROCK FRAGMENTS, TRACE ORGANICS
5.0 ft.	18.0 ft.	GRAY/BROWN/TAN FINE TO COARSE SAND
ft.	ft.	MODERATELY MICACEOUS/SILT, ROCK FRAGMENTS
18.0 ft.	25.0 ft.	RED/BROWN/GRAY FINE TO COARSE SAND
ft.	ft.	QUARTZ ROCK FRAGMENTS, TRACE SILT
ft.	ft.	RELIC STRUCTURING

21. REMARKS

BENTONITE SEAL FROM 11.0 TO 13.0 FEET

22. Certification:

Vincent R. Federle 05/05/15

Signature of Certified Well Contractor

Date

By signing this form, I hereby certify that the well(s) was (were) constructed in accordance with 15A NCAC 02C .0100 or 15A NCAC 02C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.

23. Site diagram or additional well details:

You may use the back of this page to provide additional well site details or well construction details. You may also attach additional pages if necessary.

SUBMITTAL INSTUCTIONS

24a. For All Wells: Submit this form within 30 days of completion of well construction to the following:

Division of Water Quality, Information Processing Unit,
1617 Mail Service Center, Raleigh, NC 27699-1617

24b. For Injection Wells: In addition to sending the form to the address in 24a above, also submit a copy of this form within 30 days of completion of well construction to the following:

Division of Water Quality, Underground Injection Control Program,
1636 Mail Service Center, Raleigh, NC 27699-1636

24c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well construction to the county health department of the county where constructed.

APPENDIX B
FIELD DOCUMENTATION

Rite in the Rain®
ALL-WEATHER WRITING PAPER

Name ESP Associates, PA

Address 3475 Lakemont Blvd
Ft. Mill, SC 29708

Phone 336.232.5213 Nora Zirps

Project Henderson Co Landfill
TO 796 DP-7
BN12.602.003 Task 02,03

Clear Vinyl Protective Slipcovers (Item No. 30) are available for this style of notebook.
Helps protect your notebook from wear & tear. Contact your dealer or the J. L. Darling Corporation

CONTENTS

DATE	REFERENCE	DATE
2-4	Task 03	4.23, 24, 25
4-23	Task 02	4.27 —
		5-6.15

4.23.15 Henderson Co. Landfill
TO 7961DP-7
E6-BN12.602.003 Task 3
Eddie Rogers
1500 To EnviroEquipment for PID, GEM 2000 Plus, supplies 35354
1520 Arrive EE 35358
1530 Depart EE
1545 Arrive home - unload supplies 35371

Eddie Rogers
4.23.15

4.24.15 Henderson Co. Landfill
TO 7961DP-7
BN12.602.003 Task 3
Eddie Rogers, William Broadner
0715 Load task supplies, depart to office, load additional task supplies 35371 - 35382
0800 Depart office to site 35382
1000 Arrive site ~~35384~~ ER 35442
Meet with landfill ops. manager for gas probes (county) combination for cap locks. (4505)
1030 HASP review
1040 Begin calibration of GEM and PID and set up of Trimble for GPS location of task 2 locations
1100 Obtain ambient air readings
1105 Begin installing gas screening caps
1130 Finish " " " "
1135 Begin GPS locating of proposed task 2 locations (permanent M-wells)

Note: See landfill gas screening form and calibration logs for specific Task 3 field activities.

[illegible]

1210 Finish GPS locating of Task 2 locations.
1220 Begin landfill gas screening (Task 3) of designated probes
1450 Obtain background reading
1535 Finish landfill gas screening task
1540 Calibrate screening equipment
1545 Load equipment
1550 Depart site 35492
1800 Arrive office 35602
1815 Finish unloading equipment

Eddie Rogers
4.27.15

4.27.15 Henderson Co. Landfill
TO 7961DP-7
BN12.602.003 Task 2
ESP Eddie Rogers
Geologic Exploration (GE) Vince Federle
Derril, Travis
0700 Departure to site 35670
0915 Arrive site 35777
0930 Spoke with Greg Wiggins, Landfill Operations manager - got card
1100 Drillers arrive, stage equipment at designated area
1105 Pressure wash augers (looked clean)
1115 HASP review
1120 Calibrate PID
1125 Unload GP and supplies and set up at MW-A4
1140 Begin Macro-core continous sampling
Note: See Field Boring, ~~and~~ CR calibration log and Permanent Well Diagrams for specific field data
1245 Terminate Macro-core sampling at 45' in Saprolite, switch to HSA for MW installation. soils moist at 34'.

1250 Notify PM, recommend setting MW-A4 at 40, above dense saprolite - agree recommendation
1255 Begin HSA drilling to 40' for MW installation of MW-A4
1425 Debris interval causing slow advancement of HSA.
1520 Begin installation, construction of MW-A4
1625 Finish partial construction of MW-A4 will grout all wells atomorrow. SWL 28.7
1630 Move transit vehicles to residence property, Landfill gate is secured at 1630 daily M-Sat
1650 Begin decon of downhole equipment
1710 Finish decon activities at previously designated location (equipment staging area adjacent to Convenience Dr.) Calibrate PID.
1720 Transit vehicle (supply truck) is stuck in soft area on residential portion of site, use GP to tow out of soft saturated area.

1730 Residential landowner Michael Crisp on site - spoke briefly regarding much precipitation has occurred past week and was briefed on task activities occuring in the next week on his property
1745 ESP and GE depart site 35777
1815 ESP arrives hotel 35787

11.25

Eddie Rogers
4-27-15

Rain in the Rain

4.28.15 Henderson Co. Landfill
TO 7961 DP-7
BN 12.602.003 Task 2
ESP Eddie Rogers
GE Vince Federle, Darrl, Travis
0715 Departure to site 35787
0730 Arrive site 35797, GE on site
0745 HASP review
0750 Load supplies onto ESP truck
GE supply truck does not have 4 wheel drive and portions of residence property soils are soft or saturated
0800 Move and set up rig at MW-A5
0810 Calibrate PID
0815 Begin Macro-core continous (MC) sampling, soils moist at 16'
0835 Terminate Macro-core sampling at 30' saprolite at 28.0'. Switch to HSA to 25'
0850 Begin HSA drilling to 25'
0930 Begin installation of MW-A5
1015 Finish installation of MW-A5
SWL 20.92

1020 Move rig to decon area, pressure wash down hole equipment
1035 Finish decon, move rig to MW-A2 location
1045 Begin Macro-core continous sampling, soils moist at 12.5
1105 Terminate MC sampling at 30'. saprolite at 24.0, switch to HSA to 30'
1115 Begin HSA drilling to 30'
1210 Begin installation of MW-A2
Finish installation of MW-A2
1255 Finish installation of MW-A2
SWL 19.0'
1300 Move rig to decon staging area
1305 Drillers to lunch
1400 Drillers back
1405 Decon down hole equipment
1415 Move rig to MW-A8
1425 Begin MC continous sampling
1450 Terminate MC sampling at 25' soils moist at 13.0', Saprolite at 18.0'. Switch to HSA to 25'
1455 Begin HSA drilling to 25'

1520 Begin installation of MW-A8
1555 Finish installation of MW-A8.
SWL 12.9
1610 Move rig to decon staging area
1620 Arrive staging area, hook up grout mixing trailer to supply truck (gate is secured at 1630)
1625 Stage grout trailer on county property where houses were.
1630 Begin decon of down hole equipment
1645 Move rig to MW-A4 to power deconed WHALE with booster pump. (flushed with distilled H_2O.)
1650 Begin purging MW-A4 ''''
1715 Finish purging MW-A4, approx. 25 gals. until clear, flush pump and line with distilled water.
1730 Begin purging MW-A8 ''''
1745 Finish purging MW-A8, approx 23 gals. until clear, flush pump and line with distilled water.
1755 Begin purging MW-A5
1758 Drillers leave site to Lowes for grass seed, straw. Did not start on grouting wells. Set up for AM

1800 Slow recharge, 2 gals at a time purging, 4 x dry
1820 Finish purging MW-A5 approx 8 gal semi-clear, flush pump and line with distilled water.
1830 Begin purging MW-A2, approx 10 gal until clear, flush pump and line after use. SR
1845 Finished at, Calibrate PID
1855 Depart site to hotel 35797
1920 Arrive hotel 35806

Eddie Rogers
4.28.15

Rite in the Rain

4.29.15 Henderson Co. Landfill
TO 7961 DP-7
BN12.602.003.Task 02
ESP Eddie Rogers, William Bendnick (WB)
GE Vince Federle, Darril, Travis
0215 Departure to site 35806
0740 Arrive site 35815, Drillers on site mixing grout for MW's. HASP sigs.
0930 WB on site with MW development equipment, supplies. HASP review sig.
1000 In preparation for rain event, set up canopy tent adjacent to MW-A2, unload equipment under tent and prepare for development of MW — however cannot start until grouting and total completion of MW is complete.
1110 Heavy rain begins
1200 Lunch (ESP)
1230 Prepare for development of MW-A2
1255 Begin development at a low flow, approx. 8 gals @ .5 gal/min
1315 Finish development of MW-A2
1320 Decon pump with distilled H_2O, Alconox with DI H_2O rinse

1325 Disconnect tubing, rain intermittent now
1330 ~~Decon~~ ER Begin moving equipment to MW-A5, Drillers to lunch
1345 Prepare for development of MW-A5
1400 Begin development at a low flow of .2 gal/min, total volume extracted 4 gals
1420 Finish development; Drillers back from lunch. Finish well cover installations
1430 Spoke with PM - notified her that no WQ screenings were performed - Indicated that I was going to perform WQ during sampling. - Will have to perform WQ's on previous A2, A5 tomorrow
1515 Drillers are loading equipment complete on vehicles in staging area, seed + straw
1550 ESP loading equipment
1610 Landfill ops. authorizes disposal of task waste material (trash) before departing site from GE task activities
1615 ESP unloads pump and generator for clean pump procedure of distilled H_2O Alconox mix

with DI H_2O rinse.
1620 Finish decon of sub-pump, load equipment.
1625 GE departs site
1630 ESP departs site to hotel 35815
4.29.15 1655 Arrive hotel 35824

Eddie Rogers
4.29.15

4.30.15 Henderson Co. Landfill
TO 7961 DP-7
BN12.602.003 Task 02
Eddie Rogers, William Bradner
0745 Departure to site 35824
0810 Arrive site 35835
0815 Unload equipment, set up for well development activities of MW-A8, HASP review sigs.
0830 Calibrate WQ Instruments
0905 Begin WQ screening of MW-A8
NOTE: See Well Development Form and Calibration Logs for specific field data of well developments
1020 Finish WQ screening of MW-A8 extract pump, flush with distilled water/alconox mix, rinse with DI H_2O, load equipment.
1035 Move to MW-A5 unload equipment
1040 Begin setting up for well development and WQ screening of MW-A5
1050 Begin WQ screening
1150 Turn pump off for recharge
1200 Lunch

Return on Pg

1300 Lunch back, start pump back on for WQ screening
1345 Finish WQ screening of MW-A5, extract pump, decon, disconnect tubing
1400 Move to MW-A2, set up for WQ screening and development
1425 Begin WQ screening of MW-A-2
1540 Finish development and WQ screening of MW-A2
1545 Extract pump, decon, disconnect tubing
1600 Calibrate WQ equipment
1610 Load equipment
1630 Depart site for hotel 35837
1650 Arrive hotel 35846
8.75

Eddie Rogers
4.30.15

5.1.15 Henderson Co. Landfill
TO 7961DP-7
BN12.602.003 Task 02
Eddie Rogers, William Bendrick (WB)
0745 Departure to site 35846
0810 Arrive site 35856
0815 Unload equipment, set up for well development, WQ screening of MW-A4. HASP review - SIGS
0820 Calibrate WQ equipment
0850 Begin WQ; development of MW-A4
1020 Finish development and WQ screening of MW-A4
1025 Extract pump, decon, disconnect tubing
1040 Calibrate WQ equipment
1045 Load equipment
1050 Depart site 35856
1245 Arrive EnviroEquip - return PID 35965
1250 Depart EE to office
1310 Arrive office 35969
5.25

Eddie Rogers
5.1.15

5.13.15 Henderson Co. Landfill
TO7961 DP-7
BN12.602.003 Task 02
Eddie Rogers
1030 Departure to office 35969
1050 Arrive office 35980, Load supplies coolers, project admin.
1130 Leave office

Eddie Rogers
5.13.15

5.14.15 Henderson Co. Landfill
TO 7961 DP-7
BN12.602.003 Task 02
Eddie Rogers William Broadhead (WB)
Surveyors Clint, John
0645 Departure to site 36013 Arrive
0905 Set up traffic safety cones, 36124
0920 Begin opening wells
0950 Finish opening wells, WB on site
1000 HASP review
1005 Clint on site; Calibrate WQ equipment
1030 Begin Water Level Survey
1105 Finish " " "
1110 Begin setting up for WQ/sampling of MW-9; steep incline causing set delays, have to move general equip down hill - power cable not long enough, tubing crimping
1135 Begin WQ, GW sampling activities
1235 Finish WQ screening
1240 Begin sampling
1250 Finish sampling - decon
1255 Move ~~starting~~ setting up at MW-12
1315 Begin WQ screening

1415 Finish WQ screening
1420 Begin sampling
1440 Finish sampling of MW-12 - decon
1445 Move equipment, set up at MW-13
1500 Begin WQ screening of MW-13
1550 Finish WQ screening
1555 Begin sampling MW-13
1605 Begin Duplicate 1
1615 ~~Begin RB-1~~ Extract pump - decon
1620 Obtain RB-1 sample, Calibrate WQ
1630 Add more ice, secure samples, COC
load equipment
1640 Depart site to Fed Ex 36124
1650 Arrive Fed Ex 36129
1700 Depart for hotel 36129
1715 Arrive hotel 36134

Note: See Groundwater Sampling Forms and Calibration Logs for specific field data for Task 2 activities performed on 5.4 and 5.5.2015

Eddie Rogers
5.4.15

5.5.15 Henderson Co. Landfill
TO7961 DP-7
BN12.60.003 Task 02
Eddie Rogers William Bradner (WB)
0745 Departure to site, get supplies 36134
0830 Arrive site 36143
0835 Unload equipment
0840 HASP review
0845 Begin setting up a MW-A4
Calibrate WQ
0910 Begin WQ screening
1000 Finish WQ screening
1010 Begin sampling MW-A4
1020 Sample Duplicate 2
1040 Load equipment, decon
1045 Depart to gas sta. for generator fuel 36143
1115 Arrive from getting fuel 36150
1120 Begin setting up for WQ of MW-A8
1140 Begin WQ screening
1235 Begin sampling
1240 Finish sampling, extract pumps, decon
1245 Load equipment, move to MW-A2
set up for WQ

1300 Begin WQ screening of MW-A2
1340 Finish WQ screening " "
1345 Begin sampling MW-A2
1350 Finish sampling, extract pump, decon
1355 Load equipment, move to MW-A5
set up for WQ screening
1405 Begin WQ screening of MW-A5
1425 Finish WQ screening of " "
1430 Begin sampling of MW-A5
1435 Finish sampling, add more ice, secure
samples in cooler, decon pump
calibrate WQ, COC
1450 Depart site for Fed Ex 36150
1500 Arrive Fed Ex 36155
1505 Depart Fed Ex for office 36155
1700 Arrive office 36262
9.75

Eddie Rogers
5.5.15

5.6.15 Henderson Co Landfill
TO7981DP-7
BN12602.003 Task 02
Eddie Rogers 36262
0715 Departure to Enviro Equip (EE)
0745 Arrive EE 36271
Unload task equipment
0755 Departure to office from EE

Eddie Rogers
5.6.15

Return on Run

FIELD BORING LOG

Project: Henderson Co. Landfill (T.O. 7961DP-7)	Boring No.: MW-A-2
Drilling Company: Geologic Exploration	Drilling Method: 4.25-inch ID Hollow Stem Augers
Driller: Vince Federle	Drill Rig: Geoprobe 7822 DT
Logged By: Eddie Rogers	Sampling Equipment: 5' 2" O.D. Macro-Core Sampler
Date/Time Boring Started: 4.28.15, 1045	Total Depth of Boring (ft bgs): 30'
Date/Time Boring Completed: 4.28.15 1255	Depth to Groundwater at Time of Drilling (ft bgs): 12.5
Weather: Sunny	Depth Interval of Encountered Waste (ft bgs): 4.0' - 12.0'
GPS Coordinates (NC State Plane NAD 83 in decimal degrees to the seventh order):	

Depth (ft)	Material Description	USCS Class.	PID Reading (ppm)
0 - 0.3'	topsoil, grassmat		0 - 5' 31.2
0.3' - 4.0'	Reddish to tannish brown SILT with f. to cse. sand and rock frags. trace organics	ML	5' - 10' 75.7
4.0' - 12.0'	Black (stained) SILT with f. to cse. sand, rock frags mixed with waste debris consisting of paper, wood, rubber, metal scraps, plastic sheeting cloth	ML	10' - 15' 19.2
	Soils moist at 12.5		15' - 20' 0.5
12.0' - 24.0	Grayish to tannish brown, f. to cse. SAND with trace of silt and rock frags, micaceous residual	SM	20' - 25' 0
24.0' - 30.0'	Red, brown, gray, f. to cse. SAND with quartz rock frags, trace silt, moderately micaceous. Saprolite relic structurins		25' - 30' 0
	Switch to HSA for MW installation at 30'		

FIELD BORING LOG

Project: Henderson Co. Landfill (T.O. 7961DP-7)	Boring No.: MW-A4
Drilling Company: Geologic Exploration	Drilling Method: 4.25-inch ID Hollow Stem Augers
Driller: Vince Federle	Drill Rig: Geoprobe 7822 DT
Logged By: Eddie Rogers	Sampling Equipment: 2" O.D. Macro-Core Sampler
Date/Time Boring Started: 4.27.15, 1140	Total Depth of Boring (ft bgs): 45' set MW at 40'
Date/Time Boring Completed: 4.27.15, 1625	Depth to Groundwater at Time of Drilling (ft bgs): 34.0'
Weather: Sunny	Depth Interval of Encountered Waste (ft bgs): 3.5'-8.5
GPS Coordinates (NC State Plane NAD 83 in decimal degrees to the seventh order):	

Depth (ft)	Material Description	USCS Class.	PID Reading (ppm)
0 - 0.3'	topsoil, grassmat		0-5' 12.5
0.3' - 1.0'	Reddish brown SILT with organics, rock frags., trace f. sand	ML	5'-10' 70.2
1.0' - 3.5'	Grayish brown SILT, trace of clay, f. sand and rock frags.	ML	10'-15' 15.8
3.5' - 8.5'	Waste debris consisting of metal scraps, wood, plastic sheeting, abundant tile, glass, paper, cloth, asphalt.		15'-20' 4.7
8.5' - 17.0'	Tannish brown, f. to cse. SAND with silt, rock frags., moderately micaceous possible residual.	SM	20'-25' 2.3
17.0 - 27.5	Reddish to tannish brown, black f. to cse. SAND, trace silt, rock frags, moderately micaceous, manganese staining. Residual.	SM	25'-30' 1.2
27.5 - 36.0'	Tannish brown, orange, white, f. to cse SAND, trace silt, rock frags., highly micaceous Soils moist at 34.0'	SM	30'-35' 0
36.0' - 45.0'	Tannish to reddish brown, white, f. to cse. SAND with rock frags, trace silt, highly micaceous, relic structures - Saprolite		35'-40' 0
	Switch to HSA for MW installation to 40.0'		40'-45' 0

FIELD BORING LOG

Project: Henderson Co. Landfill (T.O. 7961DP-7)	Boring No.: MW-A5
Drilling Company: Geologic Exploration	Drilling Method: 4.25-inch ID Hollow Stem Augers
Driller: Vince Federle	Drill Rig: Geoprobe 7822 DT
Logged By: Eddie Rogers	Sampling Equipment: 5'2" O.D. Macro-Core Sampler
Date/Time Boring Started: 4.28.15, 0815	Total Depth of Boring (ft bgs): 30, set ~ 25
Date/Time Boring Completed: 4.28.15 1015	Depth to Groundwater at Time of Drilling (ft bgs): 16.0'
Weather: sunny	Depth Interval of Encountered Waste (ft bgs): 3.5 - 12.5
GPS Coordinates (NC State Plane NAD 83 in decimal degrees to the seventh order):	

Depth (ft)	Material Description	USCS Class.	PID Reading (ppm)
0 - 0.3'	topsoil, grass mat		0' - 5' 12.6
0.3' - 2.0'	Reddish to tannish brown SILT with f. to cse. sand, rock frags, some organics	ML	5' - 10' 31.2
2.0' - 3.5'	Brown, f. to cse. SAND with rock frags., trace silt, moderately micaceous	SM	10' - 15' 7.6
3.5' - 12.5'	Waste debris consisting of paper, wood soil mix, plastic sheeting.		15' - 20' 5.2
12.5' - 28.0'	Grayish to lt. brown, f. to cse., SAND with rock frags, trace silt, moderately micaceous. Residual	SM	20' - 25' 2.8
	Soils moist at 16.0'		25' - 30' 0
28.0' - 30.0'	Red, brown, grayish white, f. to cse. SAND with quartz rock frags., highly micaceous, relic structures. Saprolite	SM	
	Switch to HSA for MW installation at 25'		

FIELD BORING LOG

Project: Henderson Co. Landfill (T.O. 7961DP-7)	Boring No.: MW - A8
Drilling Company: Geologic Exploration	Drilling Method: 4.25-inch ID Hollow Stem Augers
Driller: Vince Federle	Drill Rig: Geoprobe 7822 DT
Logged By: Eddie Rogers	Sampling Equipment: 5'2" O.D. Macro-Core Sampler
Date/Time Boring Started: 4.28.15, 1425	Total Depth of Boring (ft bgs): 25'
Date/Time Boring Completed: 4.28.15, 1555	Depth to Groundwater at Time of Drilling (ft bgs): 13.0
Weather: Sunny	Depth Interval of Encountered Waste (ft bgs): no waste debris
GPS Coordinates (NC State Plane NAD 83 in decimal degrees to the seventh order):	

Depth (ft)	Material Description	USCS Class.	PID Reading (ppm)
0 - 0.3'	topsoil, grassmat		0-5' 0
0.3'-5.5'	Reddish to tannish brown SILT with f. to cse. sand, rockfrags., trace organics	ML	5'-10' 0
5.5' - 18.0'	Gray to tannish brown, f. to cse., SAND with silt, rockfrags., moderately micaceous. Residual	SM	10'-15' 0.2
	Soils moist at 13.0		15'-20' 0.6
18.0'-25.0	Red, brown, gray, f. to cse. SAND, with quartz rock frags, trace silt, relic structuring Saprolite	SM	20'-25' 0
	Switch to HSA for MW installation at 25.0'		

INSTALL DATE: 4.28.15

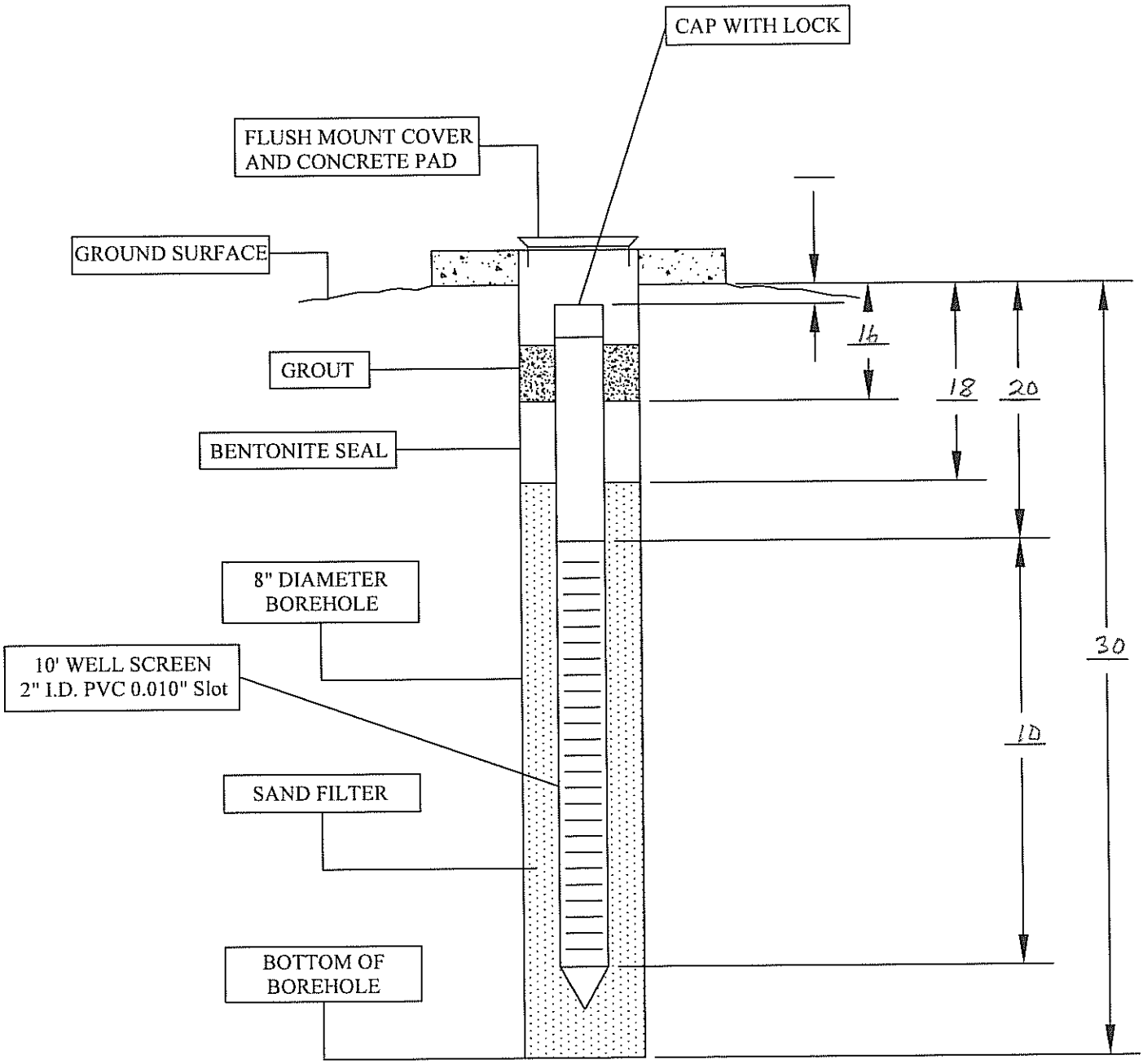
INSTALLED BY: GE

ESP SITE PERSONNEL: STR

STATIC WATER DEPTH (FT) BELOW TOC: 19.0

TOC ELEVATION (FT MSL):

GROUND SURFACE ELEVATION (FT MSL):



PROJECT NO BN12.602.003	SHEET TITLE	WELL # MW-A2 PERMANENT MONITORING WELL DIAGRAM
SCALE NTS		
DATE		
DRAWN BY WB	PROJECT	HENDERSON CO. LANDFILL HENDERSONVILLE, NORTH CAROLINA
CHECKED BY CW		

ESP Associates, P.A.
P.O. Box 7030
Charlotte, NC 28241
3475 Lakemont Blvd.
Fort Mill, SC 29708
704-583-4949 (NC)
803-802-2440 (SC)
www.espassociates.com

INSTALL DATE: 4.27.15

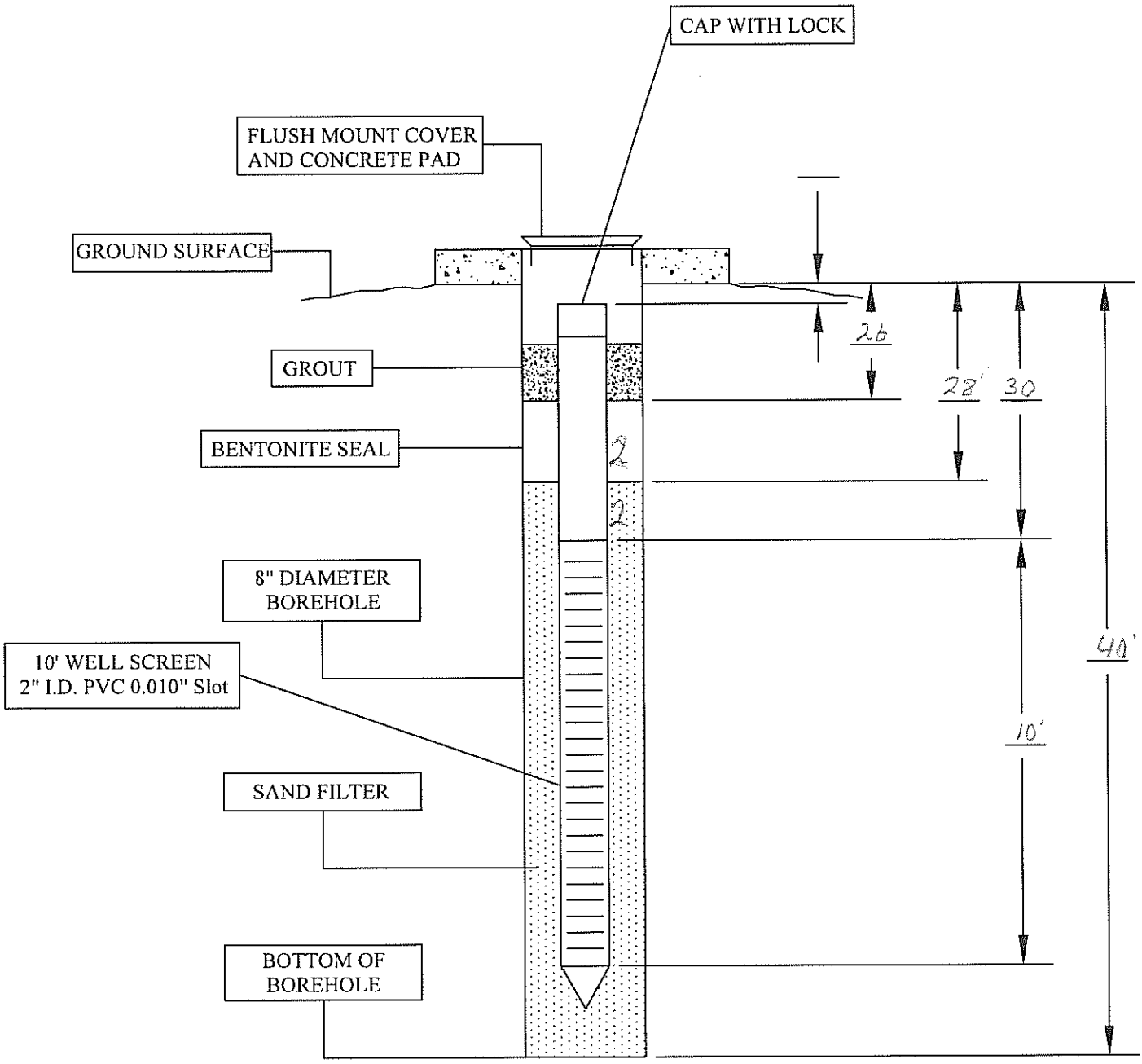
INSTALLED BY: GE

ESP SITE PERSONNEL: ER

STATIC WATER DEPTH (FT) BELOW TOC: 28.70

TOC ELEVATION (FT MSL): _____

GROUND SURFACE ELEVATION (FT MSL): _____



PROJECT NO BN12.602.003	SHEET TITLE WELL # MW-A-4 PERMANENT MONITORING WELL DIAGRAM	ESP Associates, P.A. P.O. Box 7030 Charlotte, NC 28241 3475 Lakemont Blvd. Fort Mill, SC 29708 704-583-4949 (NC) 803-802-2440 (SC) www.espassociates.com
SCALE NTS		
DATE		
DRAWN BY WB	PROJECT HENDERSON CO. LANDFILL HENDERSONVILLE, NORTH CAROLINA	
CHECKED BY CW		

INSTALL DATE: 4.28.15

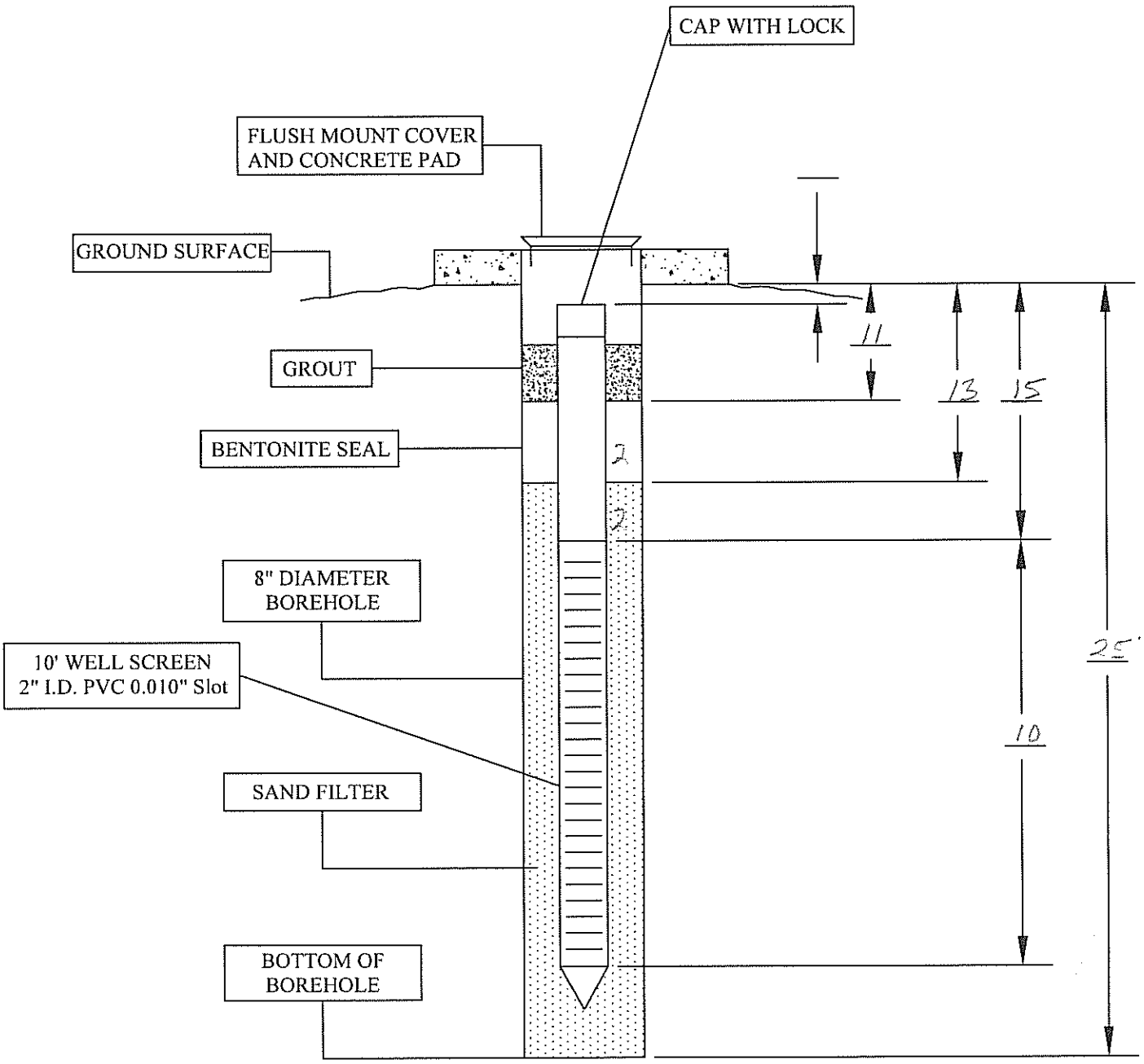
INSTALLED BY: GE

ESP SITE PERSONNEL: E. R

STATIC WATER DEPTH (FT) BELOW TOC: 20.92

TOC ELEVATION (FT MSL): _____

GROUND SURFACE ELEVATION (FT MSL): _____



PROJECT NO BN12.602.003	SHEET TITLE WELL # MW-A5 PERMANENT MONITORING WELL DIAGRAM	ESP Associates, P.A. P.O. Box 7030 Charlotte, NC 28241 3475 Lakemont Blvd. Fort Mill, SC 29708 704-583-4949 (NC) 803-802-2440 (SC) www.espassociates.com
SCALE NTS		
DATE		
DRAWN BY WB	PROJECT HENDERSON CO. LANDFILL HENDERSONVILLE, NORTH CAROLINA	
CHECKED BY CW		

INSTALL DATE: 4.28.15

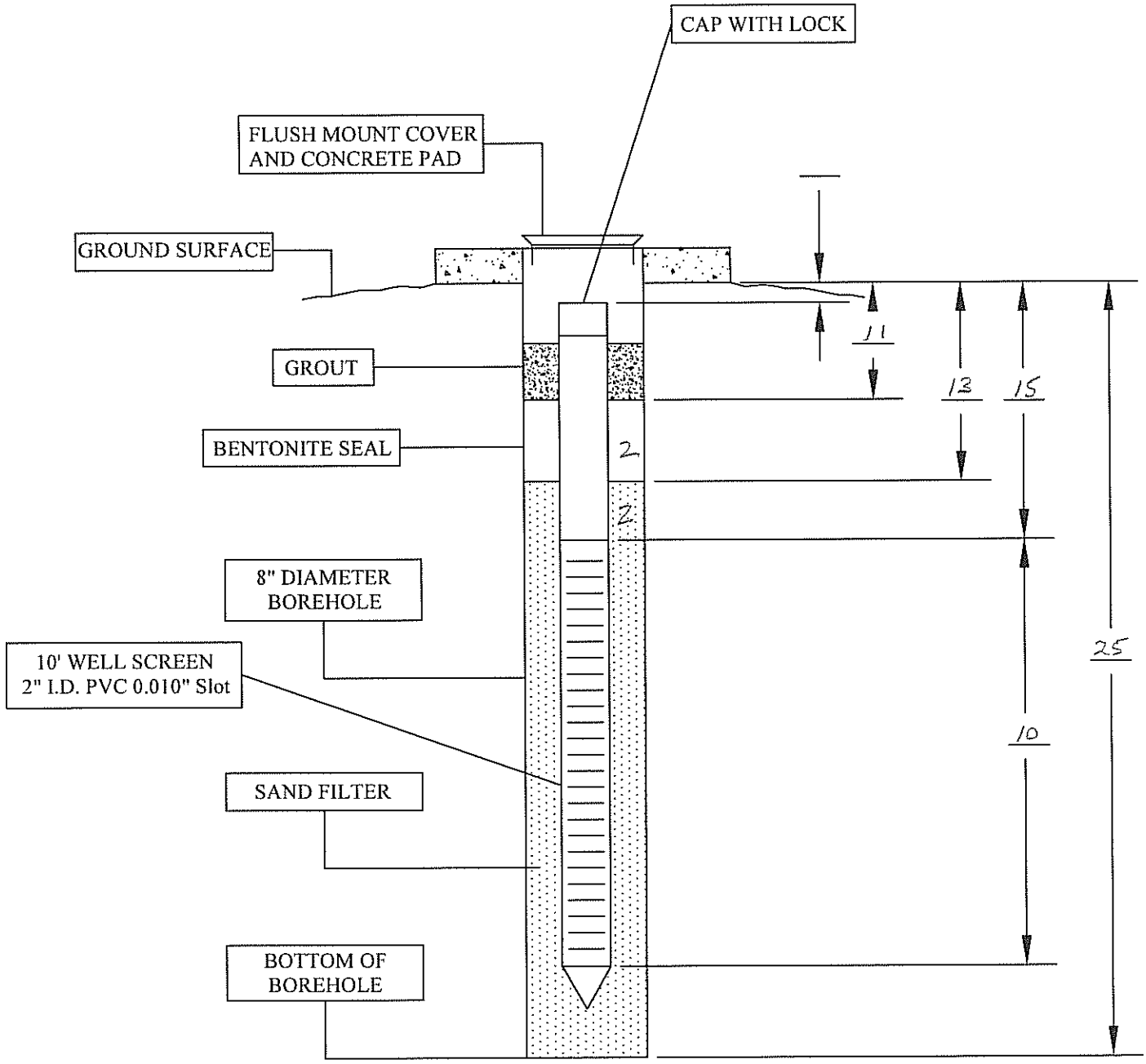
INSTALLED BY: GE

ESP SITE PERSONNEL: ER

STATIC WATER DEPTH (FT) BELOW TOC: 12.9

TOC ELEVATION (FT MSL):

GROUND SURFACE ELEVATION (FT MSL):



PROJECT NO BN12.602.003	SHEET TITLE WELL # MW-A8 PERMANENT MONITORING WELL DIAGRAM	ESP Associates, P.A. P.O. Box 7030 Charlotte, NC 28241 3475 Lakemont Blvd. Fort Mill, SC 29708 704-583-4949 (NC) 803-802-2440 (SC) www.espassociates.com
SCALE NTS		
DATE		
DRAWN BY WB	PROJECT HENDERSON CO. LANDFILL HENDERSONVILLE, NORTH CAROLINA	
CHECKED BY CW		

WELL DEVELOPMENT FORM

Project:	Henderson Co. Landfill (T.O. 7961DP-7)
Monitoring Well No.:	MW-A2
Date Development Started:	4.29.15
Date Development Completed:	4.29.15
Well Developers:	Eddie Rogers, William Broadnax
Weather Conditions:	intermittent rain

Well Diameter (inches):	2"
Total Well Depth (ft below TOC):	30.0'
Static Water Level Depth (ft below TOC):	14.7
Water Column Height (ft):	15.3
3-Volume Extraction Estimate (Gallons): *	7.49

* For 2-inch diameter well, 3-volumes = 0.48 x water column height (ft).

1631 2.49

Date/ Time (24 hrs)	Flow Rate (gal/min)	Cumulative Volume Extracted (gallons)	Water Level Depth (ft TOC)	pH	Temp (°C)	Conductivity (µS/cm)	Turbidity (NTU)
1255	.5	8					

WELL DEVELOPMENT FORM

Project:	Henderson Co. Landfill (T.O. 7961DP-7)
Monitoring Well No.:	MW-A2
Date Development Started:	4.30.15
Date Development Completed:	4.30.15
Well Developers:	ER, WB
Weather Conditions:	Sunny

Well Diameter (inches):	2
Total Well Depth (ft below TOC):	30
Static Water Level Depth (ft below TOC):	14.68
Water Column Height (ft):	15.32
3-Volume Extraction Estimate (Gallons): *	7.496

* For 2-inch diameter well, 3-volumes = 0.48 x water column height (ft).

0.1431 with pump set to 28

Date/ Time (24 hrs) 4.30.15	Flow Rate (gal/min)	Cumulative Volume Extracted (gallons)	Water Level Depth (ft TOC)	pH	Temp (°C)	Conductivity (µS/cm)	Turbidity (NTU)
1425	.1	1	14.20	4.90	20.4	118	37.38
1440	.1	2.5	16.63	4.87	18.2	100	19.96
1455	.1	4.0	16.82	4.98	19.6	99	4.60
1510	.1	5.5	16.88	5.00	19.4	101	3.55
1525	.1	7.0	16.92	5.01	19.5	100	4.32
1540	.1	8.5	16.89	5.00	19.4	99	4.01

WELL DEVELOPMENT FORM

Project:	Henderson Co. Landfill (T.O. 7961DP-7)
Monitoring Well No.:	MW-A4
Date Development Started:	5.1.15
Date Development Completed:	5.1.15
Well Developers:	SR, WB
Weather Conditions:	sunny, windy

Well Diameter (inches):	2
Total Well Depth (ft below TOC):	40
Static Water Level Depth (ft below TOC):	28.26
Water Column Height (ft):	11.74.
3-Volume Extraction Estimate (Gallons): *	5.74

* For 2-inch diameter well, 3-volumes = 0.48 x water column height (ft).

0.1631 with pump set at 28

Date/ Time (24 hrs) 5.1.15	Flow Rate (gal/min)	Cumulative Volume Extracted (gallons)	Water Level Depth (ft TOC)	pH	Temp (°C)	Conductivity (µS/cm)	Turbidity (NTU)
0850	.1	1	28.05	5.47	11.8	85	494.2
0905	.1	2.5	29.12	5.36	14.2	59	317.7
0920	.1	4.0	29.23	5.30	14.5	51	133.0
0935	.1	5.5	29.24	5.34	14.9	52	19.3
0950	.1	7.0	29.30	5.29	15.3	53	6.80
1005	.1	8.5	29.36	5.33	15.2	52	6.49
1020	.1	10.0	29.41	5.27	15.2	49	3.23

WELL DEVELOPMENT FORM

Project:	Henderson Co. Landfill (T.O. 7961DP-7)
Monitoring Well No.:	MW-A5
Date Development Started:	4.29.15
Date Development Completed:	4.29.15
Well Developers:	ER, WB
Weather Conditions:	intermittent rain

Well Diameter (inches):	2"
Total Well Depth (ft below TOC):	25.0'
Static Water Level Depth (ft below TOC):	17.7
Water Column Height (ft):	7.3
3-Volume Extraction Estimate (Gallons): *	3.57

* For 2-inch diameter well, 3-volumes = 0.48 x water column height (ft).

.1631 1.190

Date/ Time (24 hrs)	Flow Rate (gal/min)	Cumulative Volume Extracted (gallons)	Water Level Depth (ft TOC)	pH	Temp (°C)	Conductivity (µS/cm)	Turbidity (NTU)
1400	.2	4					

WELL DEVELOPMENT FORM

Project:	Henderson Co. Landfill (T.O. 7961DP-7)
Monitoring Well No.:	MW-A5
Date Development Started:	4.30.15
Date Development Completed:	4.30.15
Well Developers:	ER, WB
Weather Conditions:	Sunny

Well Diameter (inches):	2
Total Well Depth (ft below TOC):	25'
Static Water Level Depth (ft below TOC):	17.71
Water Column Height (ft):	7.29
3-Volume Extraction Estimate (Gallons): *	3.57

* For 2-inch diameter well, 3-volumes = 0.48 x water column height (ft).

4.30.15 DI 4321 with pump set at 24'

Date/ Time (24 hrs)	Flow Rate (gal/min)	Cumulative Volume Extracted (gallons)	Water Level Depth (ft TOC)	pH	Temp (°C)	Conductivity (µS/cm)	Turbidity (NTU)
1050	.10	1	17.36	5.30	16.8	269	121.8
1105	.10	2.5	19.13	5.45	16.5	308	112.3
1120	.10	4.0	19.92	5.48	16.7	333	38.82
1135	.10	5.5	19.80	5.61	17.9	397	85.54
1150	.10	7.0	20.67	5.55	18.1	393	76.16
1315	.10	8.5	19.75	5.49	18.2	395	67.27
1330	.10	10.0	20.78	5.48	18.3	391	11.93
1345	.10	11.5	20.82	5.50	18.2	388	9.80

WELL DEVELOPMENT FORM

Project:	Henderson Co. Landfill (T.O. 7961DP-7)
Monitoring Well No.:	MW-A8
Date Development Started:	4.30.15
Date Development Completed:	4.30.15
Well Developers:	ER, WB
Weather Conditions:	sunny

Well Diameter (inches):	2
Total Well Depth (ft below TOC):	25.
Static Water Level Depth (ft below TOC):	11.4'
Water Column Height (ft):	13.6
3-Volume Extraction Estimate (Gallons): *	6.65

* For 2-inch diameter well, 3-volumes = 0.48 x water column height (ft).
0.1631

with pump set at 24.

Date/ Time (24 hrs) 4.30.15	Flow Rate (gal/min)	Cumulative Volume Extracted (gallons)	Water Level Depth (ft TOC)	pH	Temp (°C)	Conductivity (µS/cm)	Turbidity (NTU)
0905	.10	1	12.30	6.04	13.2	935	1100
0920	.10	2.5	12.35	6.08	13.2	890	35.69
0935	.10	4.0	12.41	6.12	14.1	922	15.00
0950	.10	5.5	12.37	6.06	14.7	924	8.45
1005	.10	7.0	12.33	6.04	14.8	910	7.86
1020	.10	8.5	12.36	6.05	14.8	927	1.94

WATER LEVEL SURVEY FORM

Project: Henderson Co. Landfill (T.O. 7961DP-7)

Date: 5.4.15

Measured by: ER

Well No.	Time (24 hr)	Static Water Depth (ft below TOC)
MW-A2	1052	14.75
MW-A4	1105	28.35
MW-A5	1100	17.72
MW-A8	1056	11.40
MW-9	1030	14.39
MW-12	1037	49.83
MW-13	1045	44.36

GROUNDWATER SAMPLING FORM

Project:	Henderson Co. Landfill (T.O. 7961DP-7)
Monitoring Well No.:	MW-A2
Weather Conditions:	Sunny

Well Diameter (inches):	2
Total Well Depth (ft below TOC):	30
Static Water Level Depth (ft below TOC):	14.72
Depth Pump Set (ft below TOC):	27

Groundwater Sample ID:	MW-A2
Sample Collection Date:	5.5.15
Field Samplers:	IR, WB

Duplicate Sample Collected?	Yes ____ No ✓
Duplicate Sample ID	

Analysis	Container(s)	Preservation[1]
VOCs - 8260B	Three 40-ml glass vials	HCl
1,4-Dioxane - 8260SIM	Three 40-ml glass vials	HCl
SVOCs - 8270D_LL	Two 1-liter amber glass	None
Metals - 3030/6020A	250-ml plastic	HNO_3
Mercury - 7470A	Included with Other Metals	
Sulfate & Nitrate - 300.0	125-ml plastic	None
Ammonia - 350.1	250-ml plastic	H_2SO_4

1 - All samples kept cool, 4(+/-)2°C.

WELL PURGING INFORMATION

Time (24 hr)	Flow Rate ~~(Liters/Minute)~~ Gallons	Cumulative Volume Extracted ~~(Liters)~~ Gallons	Water Level Depth (ft below TOC)	pH	Temperature (°C)	Conductivity (µS/cm)	Turbidity (NTU)
1300	.1	1	17.69	4.22	19.7	83	100.1
1310	.1	2	18.37	4.42	18.6	83	59.98
1320	.1	3	18.64	4.43	18.6	82	38.31
1330	.1	4	18.74	4.41	18.5	81	9.69
1340	.1	5	18.91	4.42	18.4	80	8.79
1345	Sample						

GROUNDWATER SAMPLING FORM

Project:	Henderson Co. Landfill (T.O. 7961DP-7)
Monitoring Well No.:	MW-A4
Weather Conditions:	Sunny

Well Diameter (inches):	2
Total Well Depth (ft below TOC):	40
Static Water Level Depth (ft below TOC):	28.37
Depth Pump Set (ft below TOC):	35.0

Groundwater Sample ID:	MW-A4
Sample Collection Date:	5.5.15
Field Samplers:	SR, WB

Duplicate Sample Collected?	Yes ✓ No ___
Duplicate Sample ID	Duplicate 2

Analysis	Container(s)	Preservation[1]
VOCs - 8260B	Three 40-ml glass vials	HCl
1,4-Dioxane - 8260SIM	Three 40-ml glass vials	HCl
SVOCs - 8270D_LL	Two 1-liter amber glass	None
Metals - 3030/6020A	250-ml plastic	HNO_3
Mercury - 7470A	Included with Other Metals	
Sulfate & Nitrate - 300.0	125-ml plastic	None
Ammonia - 350.1	250-ml plastic	H_2SO_4

1 - All samples kept cool, 4(+/-)2°C.

WELL PURGING INFORMATION

Time (24 hr)	Flow Rate Gallons (Liters/Minute)	Cumulative Volume Extracted Gallons (Liters)	Water Level Depth (ft below TOC)	pH	Temperature (°C)	Conductivity (µS/cm)	Turbidity (NTU)
0910	.1	1	29.32	4.76	17.3	51	1036
0920	.1	2	29.59	4.77	16.9	50	89.26
0930	.1	3	29.78	4.81	16.7	48	47.53
0940	.1	4	29.97	4.83	16.7	49	39.78
0950	.1	5	30.18	4.79	16.6	47	20.71
1000	.1	6	30.27	4.84	16.7	46	9.70
1010	Sample						
1020	Duplicate 2						

GROUNDWATER SAMPLING FORM

Project:	Henderson Co. Landfill (T.O. 7961DP-7)
Monitoring Well No.:	MW-A5
Weather Conditions:	Sunny

Well Diameter (inches):	2
Total Well Depth (ft below TOC):	25.0
Static Water Level Depth (ft below TOC):	17.74
Depth Pump Set (ft below TOC):	24

Groundwater Sample ID:	MW-A5
Sample Collection Date:	5.5.15
Field Samplers:	JR, WB

Duplicate Sample Collected?	Yes ____ No ✓
Duplicate Sample ID	

Analysis	Container(s)	Preservation[1]
VOCs - 8260B	Three 40-ml glass vials	HCl
1,4-Dioxane - 8260SIM	Three 40-ml glass vials	HCl
SVOCs - 8270D_LL	Two 1-liter amber glass	None
Metals - 3030/6020A	250-ml plastic	HNO_3
Mercury - 7470A	Included with Other Metals	
Sulfate & Nitrate - 300.0	125-ml plastic	None
Ammonia - 350.1	250-ml plastic	H_2SO_4

1 - All samples kept cool, 4(+/-)2°C.

WELL PURGING INFORMATION

Time (24 hr)	Flow Rate Gallons (Liters/Minute)	Cumulative Volume Extracted Gallons (Liters)	Water Level Depth (ft below TOC)	pH	Temperature (°C)	Conductivity (µS/cm)	Turbidity (NTU)
1405	.1	1	18.72	4.99	17.1	291	163.1
1415	.1	2	19.95	5.02	17.0	294	8.34
1425	.1	3	21.13	5.04	17.0	292	7.32
1430	Sample						

GROUNDWATER SAMPLING FORM

Project:	Henderson Co. Landfill (T.O. 7961DP-7)
Monitoring Well No.:	MW-A8
Weather Conditions:	Sunny

Well Diameter (inches):	2
Total Well Depth (ft below TOC):	25
Static Water Level Depth (ft below TOC):	11.37
Depth Pump Set (ft below TOC):	23

Groundwater Sample ID:	MW-A8
Sample Collection Date:	5.5.15
Field Samplers:	ER. WD

Duplicate Sample Collected?	Yes ____ No ✓
Duplicate Sample ID	

Analysis	Container(s)	Preservation[1]
VOCs - 8260B	Three 40-ml glass vials	HCl
1,4-Dioxane - 8260SIM	Three 40-ml glass vials	HCl
SVOCs - 8270D_LL	Two 1-liter amber glass	None
Metals - 3030/6020A	250-ml plastic	HNO_3
Mercury - 7470A	Included with Other Metals	
Sulfate & Nitrate - 300.0	125-ml plastic	None
Ammonia - 350.1	250-ml plastic	H_2SO_4

1 - All samples kept cool, 4(+/-)2°C.

WELL PURGING INFORMATION

Time (24 hr)	Flow Rate Gallons ~~(Liters/Minute)~~	Cumulative Volume Extracted Gallons ~~(Liters)~~	Water Level Depth (ft below TOC)	pH	Temperature (°C)	Conductivity (µS/cm)	Turbidity (NTU)
1140	.1	1	12.33	4.84	19.9	740	1100
1150	.1	2	12.54	4.88	18.5	781	583.2
1200	.1	3	12.78	5.38	16.9	883	74.93
1210	.1	4	13.01	5.68	16.6	902	22.75
1220	.1	5	13.17	5.72	16.4	910	10.70
1230	.1	6	13.25	5.74	16.5	912	8.98
1235	Sample						

GROUNDWATER SAMPLING FORM

Project:	Henderson Co. Landfill (T.O. 7961DP-7)
Monitoring Well No.:	MW-9
Weather Conditions:	Sunny

Well Diameter (inches):	2
Total Well Depth (ft below TOC):	28.00
Static Water Level Depth (ft below TOC):	14.39
Depth Pump Set (ft below TOC):	26.00

Groundwater Sample ID:	MW-9
Sample Collection Date:	5-4-15
Field Samplers:	WB + ER

Duplicate Sample Collected?	Yes ____ No ✓
Duplicate Sample ID	

Analysis	Container(s)	Preservation[1]
VOCs - 8260B	Three 40-ml glass vials	HCl
1,4-Dioxane - 8260SIM	Three 40-ml glass vials	HCl
SVOCs - 8270D_LL	Two 1-liter amber glass	None
Metals - 3030/6020A	250-ml plastic	HNO_3
Mercury - 7470A	Included with Other Metals	
Sulfate & Nitrate - 300.0	125-ml plastic	None
Ammonia - 350.1	250-ml plastic	H_2SO_4

1 - All samples kept cool, 4(+/-)2°C.

WELL PURGING INFORMATION

Time (24 hr)	Flow Rate ~~(Liters/Minute)~~ Gallons	Cumulative Volume Extracted ~~(Liters)~~ Gal	Water Level Depth (ft below TOC)	pH	Temperature (°C)	Conductivity (µS/cm)	Turbidity (NTU)
1135	.1	1	14.62	3.49	20.6	161	4.62
1145	.1	2	15.48	3.53	20.4	157	5.12
1155	.1	3	15.54	3.70	19.8	149	6.03
1205	.1	4	15.59	3.75	19.7	148	5.04
1215	.1	5	15.61	3.76	19.2	149	4.92
1225	.1	6	15.63	3.76	19.2	149	1.80
1235	.1	7	15.64	3.79	19.2	150	0.81
1240	Sample						

GROUNDWATER SAMPLING FORM

Project:	Henderson Co. Landfill (T.O. 7961DP-7)
Monitoring Well No.:	MW-12
Weather Conditions:	p. cloudy

Well Diameter (inches):	2
Total Well Depth (ft below TOC):	62.58
Static Water Level Depth (ft below TOC):	49.83
Depth Pump Set (ft below TOC):	60.0

12.75 wc

Groundwater Sample ID:	MW-12
Sample Collection Date:	5-4-15
Field Samplers:	ER, WB

Duplicate Sample Collected?	Yes ____ No ✓
Duplicate Sample ID	

Analysis	Container(s)	Preservation[1]
VOCs - 8260B	Three 40-ml glass vials	HCl
1,4-Dioxane - 8260SIM	Three 40-ml glass vials	HCl
SVOCs - 8270D_LL	Two 1-liter amber glass	None
Metals - 3030/6020A	250-ml plastic	HNO_3
Mercury - 7470A	Included with Other Metals	
Sulfate & Nitrate - 300.0	125-ml plastic	None
Ammonia - 350.1	250-ml plastic	H_2SO_4

1 - All samples kept cool, 4(+/-)2°C.

after pump set

WELL PURGING INFORMATION

Time (24 hr)	Flow Rate Gals ~~(Liters~~/Minute)	Cumulative Volume Extracted Gals ~~(Liters)~~	Water Level Depth (ft below TOC)	pH	Temperature (°C)	Conductivity (µS/cm)	Turbidity (NTU)
1315	.1	1	50.10	4.78	19.8	307	46.00
1325	.1	2	51.03	4.87	19.5	299	6.20
1335	.1	3	51.05	4.99	19.4	309	3.46
1345	.1	4	51.09	5.01	19.6	333	1.60
1355	.1	5	51.20	5.09	19.9	341	1.19
1405	.1	6	51.23	5.08	20.0	346	0.63
1415	.1	7	51.33	5.07	20.1	347	0.59
1420	Sample						

GROUNDWATER SAMPLING FORM

Project:	Henderson Co. Landfill (T.O. 7961DP-7)
Monitoring Well No.:	MW-13
Weather Conditions:	cloudy

Well Diameter (inches):	2
Total Well Depth (ft below TOC):	87.15
Static Water Level Depth (ft below TOC):	44.36
Depth Pump Set (ft below TOC):	75.00

Groundwater Sample ID:	MW-13
Sample Collection Date:	5-4-15
Field Samplers:	WB + FR

Duplicate Sample Collected?	Yes ✓ No ____
Duplicate Sample ID	Duplicate 1

Analysis	Container(s)	Preservation[1]
VOCs - 8260B	Three 40-ml glass vials	HCl
1,4-Dioxane - 8260SIM	Three 40-ml glass vials	HCl
SVOCs - 8270D_LL	Two 1-liter amber glass	None
Metals - 3030/6020A	250-ml plastic	HNO_3
Mercury - 7470A	Included with Other Metals	
Sulfate & Nitrate - 300.0	125-ml plastic	None
Ammonia - 350.1	250-ml plastic	H_2SO_4

1 - All samples kept cool, 4(+/-)2°C.

WELL PURGING INFORMATION

Time (24 hr)	Flow Rate Gallons (Liters/Minute)	Cumulative Volume Extracted (Gallons (Liters))	Water Level Depth (ft below TOC)	pH	Temperature (°C)	Conductivity (µS/cm)	Turbidity (NTU)
1510	.1	1	43.55	4.68	18.4	281	1.74
1520	.1	2	53.77	4.80	17.6	282	1.80
1530	.1	3	54.69	4.82	17.8	280	1.17
1540	.1	4	55.31	4.86	17.9	279	1.16
1550	.1	5	56.95	4.85	18.0	278	1.15
1555	Sample						
1605	Duplicate 1						

Subsurface Landfill Gas Probe Screening Form

Project: Henderson Co. Landfill (Task Order 7961DP-7)

Monitoring Date: 4.24.15 Recorded by: ER, WB Signature: [illegible]

Background Location: 125' S of residence, 100' east of GP-6

Weather Conditions: sunny, mild

Wind Speed and Direction: calm Barometric Pressure (circle one): Falling Rising Steady

Instrument: Landtec GEM 2000+ Serial Number: GM2K4-E010-L Date Last Calibrated: 4.24.15

Instrument: RAE Systems MiniRAE 3000 Serial Number: PGM 7320 Date Last Calibrated: 4.24.15, 1540

Instrument: Ambient ~~Weather WS-1171A~~ ~~Serial Number:~~ ~~Date Last Calibrated:~~

NOAA station Hendersonville

Gas Probe ID	Time	Barometric Pressure (Hg)	Temperature (F)	Humidity (%)	Methane (% by volume)	Methane (% LEL)	Oxygen (O_2) (% by volume)	Carbon Dioxide (CO_2) (% by volume)	Hydrogen Sulfide (H_2S) (ppm)	VOCs (ppm)
GP-1	1220	30.07	61	26	17.0	>>>	0	22.7	4	0.6
GP-1	1510	30.04	66	21%	17.1	>>>	0	22.8	8	0.2
GP-2	1230	30.07	61	26%	22.8	>>>	0	25.9	9	4.2
GP-2	1520	30.04	66	21%	22.9	>>>	0	26.0	10	6.4
GP-4	1150	30.09	57	25%	19.6	>>>	0	29.5	2	0
GP-4	1420	30.06	67	20%	18.8	>>>	0	29.6	3	0
GP-5	1210	30.09	58	25%	0	0	18.4	1.5	0	1.2
GP-5	1500	30.04	66	21%	0	0	18.4	1.5	0	1.6
GP-6	1200	30.09	58	24%	0	0	8.9	11.4	0	1.8
GP-6	1440	30.04	66	21%	0	0	9.0	11.4	0	2.4
LFG-101	1140	30.09	57	25%	0	0	19.2	0.3	0	0.9
LFG-101	1430	30.08	67	20%	0	0	19.2	0.2	0	2.6
LFG-102	1120	30.09	57	25%	0	0	18.2	0.9	0	2.1
LFG-102	1410	30.08	67	20%	0	0	18.0	1.1	0	1.2
LFG-103	1130	30.09	57	25%	0	0	10.0	7.6	0	3.1
LFG-103	1400	30.06	67	20%	0	0	10.2	7.3	0	4.7
Background	1100	30.14	53°	28%	0	0	21.0	0	0	0
Background	1450	30.04	66	21%	0	0	21.0	0	0	0
GP-3	1240	30.07	61	26%	0	0	15.3	1.7	0	1.9
GP-3	1530	30.04	66	21%	0	0	15.4	1.7	0	2.3

Water Quality Field Instrument Calibration Form

Project: Henderson Co. Landfill (T.O. 7961DP-7)

Date:	4.30.15
Time:	0835
Calibrated by:	WB

Standard	Buffer Value	Instrument Reading
pH		
Instrument: HI 991300	Serial Number: 0822145	
pH = 4	4	4
pH = 7	7	7
pH = 10	10	10
Conductivity		
Instrument: HI 991300	Serial Number: 0822145	
Conductivity Standard #1	1413 µS/cm	1413 µS/cm
Conductivity Standard #2		
Turbidity		
Instrument: Micro TPW	Serial Number: 201106172	
Turbidity Standard #1	1000 NTU	1000 NTU
Turbidity Standard #2	10.0 NTU	10.0 NTU
Turbidity Standard #3	0.02 NTU	0.02 NTU

Water Quality Field Instrument Calibration Form

Project: Henderson Co. Landfill (T.O. 7961DP-7)

Date:	4-30-15
Time:	1600
Calibrated by:	WB

Standard	Buffer Value	Instrument Reading
pH		
Instrument: HI 991300	Serial Number: 0822145	
pH = 4	4	4
pH = 7	7	7
pH = 10	10	10
Conductivity		
Instrument: HI 991300	Serial Number: 0822145	
Conductivity Standard #1	1413 µS/cm	1413 µS/cm
Conductivity Standard #2		
Turbidity		
Instrument: Micro TPW	Serial Number: 201106172	
Turbidity Standard #1	1000 NTU	1000 NTU
Turbidity Standard #2	10.0 NTU	10.0 NTU
Turbidity Standard #3	0.02 NTU	0.02 NTU

Water Quality Field Instrument Calibration Form

Project: Henderson Co. Landfill (T.O. 7961DP-7)

Date:	5-1-15
Time:	0820
Calibrated by:	WB

Standard	Buffer Value	Instrument Reading
pH		
Instrument: HI 991300	Serial Number: 0822145	
pH = 4	4	4
pH = 7	7	7
pH = 10	10	10
Conductivity		
Instrument: HI 991300	Serial Number: 0822145	
Conductivity Standard #1	1413 µS/cm	1413 µS/cm
Conductivity Standard #2		
Turbidity		
Instrument: Micro TPW	Serial Number: 20110617 2	
Turbidity Standard #1	1000 NTU	1000 NTU
Turbidity Standard #2	10.0 NTU	10.0 NTU
Turbidity Standard #3	0.02 NTU	0.02 NTU

Water Quality Field Instrument Calibration Form

Project: Henderson Co. Landfill (T.O. 7961DP-7)

Date:	5-1-15
Time:	1040
Calibrated by:	WB

Standard	Buffer Value	Instrument Reading
pH		
Instrument: HI 991300	Serial Number: 0822145	
pH = 4	4	4
pH = 7	7	7
pH = 10	10	10
Conductivity		
Instrument: HI 991300	Serial Number: 0822145	
Conductivity Standard #1	1413 µS/cm	1413 µS/cm
Conductivity Standard #2		
Turbidity		
Instrument: Micro TPW	Serial Number: 201106172	
Turbidity Standard #1	1000 NTU	1000 NTU
Turbidity Standard #2	10.0 NTU	10.0 NTU
Turbidity Standard #3	0.02 NTU	0.02 NTU

Water Quality Field Instrument Calibration Form

Project: Henderson Co. Landfill (T.O. 7961DP-7)

Date:	5-4-15
Time:	1005
Calibrated by:	WP

Standard	Buffer Value	Instrument Reading
pH		
Instrument: HI 991300	Serial Number:	08522145
pH = 4	4	4
pH = 7	7	7
pH = 10	10	10
Conductivity		
Instrument: HI 991300	Serial Number:	08522145
Conductivity Standard #1	1413 µS/cm	1413 µS/cm
Conductivity Standard #2		
Turbidity		
Instrument: Micro TPW	Serial Number:	20110617a
Turbidity Standard #1	1000 NTU	1000 NTU
Turbidity Standard #2	10.0 NTU	10.0 NTU
Turbidity Standard #3	0.02 NTU	0.02 NTU

Water Quality Field Instrument Calibration Form

Project: Henderson Co. Landfill (T.O. 7961DP-7)

Date:	5-4-15
Time:	1620
Calibrated by:	WB

Standard	Buffer Value	Instrument Reading
pH		
Instrument: HI 991300	Serial Number:	08522145
pH = 4	4	4
pH = 7	7	7
pH = 10	10	10
Conductivity		
Instrument: HI 991300	Serial Number:	08522145
Conductivity Standard #1	1413 µS/cm	1413 µS/cm
Conductivity Standard #2		
Turbidity		
Instrument: Micro TPW	Serial Number:	201106172
Turbidity Standard #1	1000 NTU	1000 NTU
Turbidity Standard #2	10.0 NTU	10.0 NTU
Turbidity Standard #3	0.02 NTU	0.02 NTU

Water Quality Field Instrument Calibration Form

Project: Henderson Co. Landfill (T.O. 7961DP-7)

Date:	5-5-15
Time:	0845
Calibrated by:	WB

Standard	Buffer Value	Instrument Reading
pH		
Instrument: HI 991300	Serial Number: 08522145	
pH = 4	4	4
pH = 7	7	7
pH = 10	10	10
Conductivity		
Instrument: HI 991300	Serial Number: 08522145	
Conductivity Standard #1	1413 µS/cm	1413 µS/cm
Conductivity Standard #2		
Turbidity		
Instrument: Micro TPW	Serial Number: 201106172	
Turbidity Standard #1	1000 NTU	1000 NTU
Turbidity Standard #2	10.0 NTU	10.0 NTU
Turbidity Standard #3	0.02 NTU	0.02 NTU

Water Quality Field Instrument Calibration Form

Project: Henderson Co. Landfill (T.O. 7961DP-7)

Date:	5-5-15
Time:	1435
Calibrated by:	WB

Standard	Buffer Value	Instrument Reading
pH		
Instrument: HI 991300	Serial Number: 08522145	
pH = 4	4	4
pH = 7	7	7
pH = 10	10	10
Conductivity		
Instrument: HI 991300	Serial Number: 08522145	
Conductivity Standard #1	1413 µS/cm	1413 µS/cm
Conductivity Standard #2		
Turbidity		
Instrument: Micro TPW	Serial Number: 201106172	
Turbidity Standard #1	1000 NTU	1000 NTU
Turbidity Standard #2	10.0 NTU	10.0 NTU
Turbidity Standard #3	0.02 NTU	0.02 NTU

Landtec GEM 2000 Plus Calibration Form

Project: Henderson Co. Landfill (T.O. 7961DP-7)

Manufacturer/Instrument: Landtec GEM 2000 Plus	
Serial Number:	GM2K4-E010-L
Calibrated by:	WB
Signature:	WB

Date	Time	Barometric Pressure (Hg)	Temperature (F)	Humidity (%)	Battery Check OK?	Calibration Gas Standard Used (Name)	Calibration Gas Expiration Date	Calibration Standard Concentration (indicate units)	Meter Reading (indicate units)
4/24/15	1040	30.14 ↓	53	28	✓	H_2S	2/3/15	10 PPM	10 PPM
4/24/15		30.14 ↓	53	28	✓	CO	2/3/15	50 PPM	51 PPM
4/24/15		30.14 ↓	53	28	✓	CH_4	2/3/15	2.5%	2.5%
4/24/15		30.14 ↓	53	28	✓	O_2	2/3/15	18.0%	18.1%
4/24/15		30.14 ↓	53	28	✓	N_2	4/23/15	15.0%	15.1%
4/24/15		30.14 ↓	53	28	✓	CO_2	4/23/15	35.0%	35.1%
4/24/15		30.04	66	21	✓	H_2S	2/3/15	10 PPM	10 PPM
4/24/15		30.04	66	21	✓	CO	2/3/15	50 PPM	50 PPM
4/24/15		30.04	66	21	✓	CH_4	2/3/15	2.5%	2.5%
4/24/15		30.04	66	21	✓	O_2	2/3/15	18.0%	18.1%
4/24/15		30.04	66	21	✓	N_2	4/23/15	15.0%	15.1%
		30.04	66	21	✓	CO_2	4/23/15	35.0%	35.1%

CERTIFICATION OF CALIBRATION

ISSUED BY: Landtec North America Instrument Services Facility
Date Of Calibration: September 29, 2014
Certificate Number: GM13992_6/13883

PJLA Calibration Accreditation No. 66916

Approved By Signatory

Landtec North America Instrument Services Facility,
850 South Via Lata, Suite 112, Colton CA, 92324
www.landtecna.com

Andrew Arambula
Laboratory Inspection

Customer: *Enviro Equipment*

11180 Downs Road
Pineville, NC 28134
USA

Description: Gas Analyser

Model: GEM2000Plus
Serial Number: GM13992

Accredited Results:

Methane (CH4)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
50.0	49.6	1.05
15.0	15.2	0.65
5.0	5.0	0.41

Carbon Dioxide (CO2)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
50.0	50.1	1.20
15.0	14.7	0.71
5.0	4.7	0.43

Oxygen (O2)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
21.0	21.0	0.25

Gas cylinders are traceable and details can be provided if requested.

CH4, CO2 readings recorded at: 34.4 °C/94.0 °F
O2 readings recorded at: 24.7 °C/76.5 °F
Barometric Pressure: 28.80 "Hg

Method of Test: The analyzer is calibrated in a temperature controlled chamber using reference gases. All analyzers are calibrated in accordance with our procedure ISP-17 using high purity grade gas.

All calibrations are performed in accordance with ISO 17025 at LANDTEC, an ISO 17025:2005 – accredited service facility through PJLA.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with NIST requirements.

The calibration results published in this certificate were obtained using equipment capable of producing results that are traceable to NIST and through NIST to the International System of Units (SI). Certification only applies to results shown. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

CERTIFICATION OF CALIBRATION

PILA ACCREDITED CALIBRATION LABORATORY NO. 66916

Certificate Number
GM13992_6/13883

Non Accredited results:

Pressure Transducers (inches of water column)					
Transducer	Certified (Low)	Reading (Low)	Certified (High)	Reading (High)	Accuracy
Static	0"	0.0"	40"	39.9"	2.0"
Differential	0"	0.0"	4"	4.0"	0.7"

Barometer (mbar)	
Reference	Instrument Reading
0975 mbar / 28.80 "Hg	0975 mbar / 28.78 "Hg

Additional Gas Cells		
Gas	Certified Gas (ppm)	Instrument Reading (ppm)
H2	1003	LOW
CO	504	505
H2S	51.8	49.9

As received gas check readings:

Methane (CH4)	
Certified Gas (%)	Instrument Reading (%)
60.0	62.4
15.0	15.6
5.0	5.4

Carbon Dioxide (CO2)	
Certified Gas (%)	Instrument Reading (%)
40.0	39.5
15.0	15.1
5.0	5.2

Oxygen (O2)	
Certified Gas (%)	Instrument Reading (%)
21.0	20.4

As received Gas readings recorded at: 34.4 °C/94.0 °F
As received Barometric Pressure recorded at: 24.7 °C/76.5 °F

End of Certificate

LP015LNANIST-1.0

ENVIRO-EQUIPMENT, INC.

LANDTEC *GEM 2000 Plus* CALIBRATION DATA SHEET

Serial Number GM13992 Date 4-22-15 Inspector CSF

Time/Date ✓ Battery Level 100% Memory Cleared ✓

Gas Alarms: CH_4 = 100.0% ✓ CO_2 = 100.0% ✓ O_2 = 22.0% ✓

Zero Transducers ✓ Pump Flow Rate 740 cc/min Vacuum Tested To 100" H_2O ✓

Calibration Check (Performed at Room Temperature)

Calibration Gas	Calibration Gas Concentration	Lot Number	Expiration	Reading	Accuracy*
CH_4	50%	1782266	02/18	50.1%	± 3%
CO_2	35%	1782266	02/18	35.0%	± 3%
O_2	4%	1800334	02/18	4.0%	± 1%
CO	50 ppm	1765910	11/16	50 ppm	± 10%
H_2S	10 ppm	1765910	11/16	10 ppm	± 10%
Ambient O_2	20.9%	N/A	N/A	20.8%	

*Accuracy depends upon calibration range; 15%-FS range for CH_4 & CO_2, 0-5% volume for O_2, 0%-FS for H_2S, and 10% of reading for CO.

CH_4 Zero ✓ O_2 Zero ✓ H_2 Zero ✓ CO Zero ✓ H_2S Zero ✓

INSPECTOR'S MAINTENANCE NOTES

ANALYSIS CERTIFICATION

METHOD OF PREPARATION : GRAVIMETRIC / PRESSURE TRANSFILLING

METHOD OF ANALYSIS : GC(TCD)

ACCURACY : ± 2% RELATIVE

LOT NO. & QTY.	COMP. 1 N_2	COMP. 2 CO_2	COMP. 3 CH_4	COMP. 4	COMP. 5	COMP. 6	Exp Date
1782266(6)	15.00%	35.00%	BALANCE				02/01/18

Gas mixtures manufactured with balances calibrated by an ISO 17025 accredited Company using NIST traceable weights and meets or exceeds the requirements of NIST Handbook 44.
Calibration test CG/01/06/15/DW01, CG/01/06/15/DW02, CG/01/06/15/DW03, or CG/01/06/15/DW04 dated, 6th January 2015 applies.
WEIGHT SETS USED: Kit# 92231, Test# 1957031, Kit# 03610, Test# 14593, Test# 14566

No affecting environmental conditions during analysis.

REQUESTED BY : ENVIRO-EQUIPMENT INC

CUSTOMER PURCHASE ORDER NUMBER : 15-0018

PACKING LIST NUMBER : 58531292

CERTIFICATION DATE : January 21, 2015

ANALYSIS BY : _____
Quality Representative

"We certify that all the cylinders for the Lot numbers identified herein are manufactured and tested within the requirements of CFR 49 part 178.65 and that physical and chemical test reports are on file and copies will be furnished upon request."

CALGAZ, Div. of Air Liquide America Specialty Gases LLC
821 Chesapeake Drive, Cambridge, MD 21613-0149
Phone: (410)228-6400 Fax: (410)228-4251

ANALYSIS CERTIFICATION

METHOD OF PREPARATION : GRAVIMETRIC / PRESSURE TRANSFILLING

METHOD OF ANALYSIS : ELECTROCHEMICAL CELL, PARAMAGNETIC OXYGEN CELL, GC(FID)

ACCURACY : ± 10% RELATIVE (H_2S), ± 2% RELATIVE (CO, CH_4, O_2)

LOT NO. & QTY.	COMP. 1 H_2S	COMP. 2 CO	COMP. 3 CH_4	COMP. 4 O_2	COMP. 5 N_2	COMP. 6	Exp Date
1801059(10)	10PPM	50PPM	2.50%	18.00%	BALANCE		02/03/17

Gas mixtures manufactured with balances calibrated by an ISO 17025 accredited Company using NIST traceable weights and meets or exceeds the requirements of NIST Handbook 44.
Calibration test CG/01/06/15/DW01, CG/01/06/15/DW02, CG/01/06/15/DW03, or CG/01/06/15/DW04 dated, 6th January 2015 applies.
WEIGHT SETS USED: Kit# 92231, Test# 1957031, Kit# 03610, Test# 14593, Test# 14566

No affecting environmental conditions during analysis.

REQUESTED BY : ENVIRO-EQUIPMENT INC

CUSTOMER PURCHASE ORDER NUMBER : 15-0028

PACKING LIST NUMBER : 58669159

CERTIFICATION DATE : February 3, 2015

ANALYSIS BY : Vicki Johnson
Quality Representative

"We certify that all the cylinders for the Lot numbers identified herein are manufactured and tested within the requirements of CFR 49 part 178.65 and that physical and chemical test reports are on file and copies will be furnished upon request."

CALGAZ, Div. of Air Liquide America Specialty Gases LLC
821 Chesapeake Drive, Cambridge, MD 21613-0149
Phone: (410)228-6400 Fax: (410)228-4251

ANALYSIS CERTIFICATION

METHOD OF PREPARATION : GRAVIMETRIC / PRESSURE TRANSFILLING

METHOD OF ANALYSIS : PARAMAGNETIC OXYGEN CELL

ACCURACY : ± 2% RELATIVE

LOT NO. & QTY.	COMP. 1 O_2	COMP. 2 N_2	COMP. 3	COMP. 4	COMP. 5	COMP. 6	Exp Date
1800334(6)	4.00%	BALANCE					02/01/18

Gas mixtures manufactured with balances calibrated by an ISO 17025 accredited Company using NIST traceable weights and meets or exceeds the requirements of NIST Handbook 44.
Calibration test CG/01/06/15/DW01, CG/01/06/15/DW02, CG/01/06/15/DW03, or CG/01/06/15/DW04 dated, 6th January 2015 applies.
WEIGHT SETS USED: Kit# 92231, Test# 1957031, Kit# 03610, Test# 14593, Test# 14566

No affecting environmental conditions during analysis.

REQUESTED BY : ENVIRO-EQUIPMENT INC

CUSTOMER PURCHASE ORDER NUMBER : 15-0018

PACKING LIST NUMBER : 58531292

CERTIFICATION DATE : January 21, 2015

ANALYSIS BY : _____
Quality Representative

"We certify that all the cylinders for the Lot numbers identified herein are manufactured and tested within the requirements of CFR 49 part 178.65 and that physical and chemical test reports are on file and copies will be furnished upon request."

CALGAZ, Div. of Air Liquide America Specialty Gases LLC
821 Chesapeake Drive, Cambridge, MD 21613-0149
Phone: (410)228-6400 Fax: (410)228-4251

PHOTOIONIZATION DETECTOR CALIBRATION FORM

Project:	Henderson Co. Landfill (T.O. 7961DP-7)
Manufacturer / Instrument:	RAE Systems MiniRAE 3000
Serial Number:	PGM 7320
Calibrated by:	ER
Signature:	Estelle Rogers

Date 2015	Time	Battery Check OK?	Zero Check Reading (ppm)	Calibration Gas Standard (Name)	Calibration Gas Expiration Date	Cal Gas Standard Concentration (ppm)	Meter Reading (ppm)
4.24	1040	✓	0	Isobutylene	9.2017	100	100.2
4.24	1540	✓	0	Isobutylene	9.2017	100	100.2
4.27	1120	✓	0	Isobutylene	9.20.17	100	100.3
4.27	1710	✓	0	Isobutylene	9.20.17	100	100.2
4.28	0810	✓	0	Isobutylene	9.20.17	100	100.4
4.28	1845	✓	0	Isobutylene	9.20.17	100	100.2

Spec Air Specialty Gases

22 Albiston Way Auburn, ME 04210
800-292-6218
207-777-6218
Fax 207-777-6215
www.specair.com

ISO/IEC 17025:2005 ACCREDITED

Certificate of Analysis

ENVIRO EQUIPMENT INC

Date: September 19, 2014
Purchase Order Number: 14-0401
Order Number: 366474

Certified Standard *Lot Batch Analysis

Below are the results of the analysis you requested, as reported by our laboratory. Results are in mole percent, unless otherwise indicated. Mixtures are prepared by either partial pressure or gravimetric method. Gas mixtures are traceable to N.I.S.T. weights and/or N.I.S.T. gas mixture reference materials.

Cylinder Number: DISP. 34L *Lot Number:* 44262-61

Component	*Request*	*Actual*
ISOBUTYLENE	100 PPM	98.6 PPM
AIR	BALANCE	BALANCE

Comments:

Expiration Date	Fill Pressure	Technician
September / 2017	500psig@70F	Kyle Christianson KAC

This laboratory is not ISO 17025 accredited for the test or calibration marked with an asterisk.
The only liability of this company for gas which fails to comply with this analysis shall be replacement thereof by the company without extra cost.

Quality Assurance Check:

Initials: JBR

Date: 4-24-15

Serial #: 024214091

Redi-flo 2

ENVIRO-EQUIPMENT, INC.

Quality Assurance Check:

Initials: RWR

Date: 4/28/15

Serial #: 1919-T

Heron 150' WLM

ENVIRO-EQUIPMENT, INC

Quality Assurance Check:

Initials: JBR

Date: 4-24-15

Serial #: H031105 0022

RF2 VFD Controller

ENVIRO-EQUIPMENT, INC.

Quality Assurance Check:

Initials:

Date: 04/23/15

Serial #: PIDCAL 5

PID Calibration Kit

Isobutylene: 270

ENVIRO-EQUIPMENT, INC

APPENDIX C
SURVEYOR'S REPORT

ESP Associates, P.A.

May 11th, 2015

Mrs. Nora Zirps, PE
ESP Associates, P.A.
7204 W Friendly Av. Suite G
Greensboro, N.C. 27410

Dear Mrs. Zirps;

ESP Associates provided surveyed locations of 7 permanent groundwater monitoring wells, 3 old and 4 new at the Henderson Co. Landfill located at 154 Moonstone Lane, Hendersonville, N.C. as requested by NCDENR through you for an ongoing ESP project. The well locations and elevations were located on May 4th, 2015 and this report generated on May 11th, 2015. The wells were surveyed to the specifications provided of 0.1' horizontally and 0.01' vertically in the appropriate Datum Systems as explained below. Please see the table below as well as Datum Description provided for data concerning these wells.

Datum Description: The information in the following table was derived from GPS surveys utilizing Trimble R10 receivers with multiple observations under differing satellite geometry. Existing NCGS monuments "Studio" as well as the Hendersonville CORPS station was utilized to verify positioning obtained by use of the VRS system. Final coordinates were derived and reported on the NC Grid System and NAD 83 Latitude and Longitude as follows:

Metadata:

1) Class of Survey: A
2) Positional Accuracy: 0.07 Horizontal and 0.01 Vertical'
3) Type of GPS Field Procedure: VRS RTK Network w Multiple Observations
4) Dates of Survey: 5-4-2015
5) Datum/Epoch: NAD 83 (NSRS 2011);NAVD 88
6) Published Fixed Control Use: NCGS RTK Network and NGS monument "Studio"
7) Geoid Model: 12A
8) Combined Grid Factor: 0.99977588
9) Units: US Survey Feet

7204 West Friendly Ave. · Suite G · Greensboro, NC 27410
336.334.7724
www.espassociates.com

DATA TABLE

DATUM	NAD 83(2011)	NAD 83(2011)	NAVD88	NAD 83(2011)	NAD 83(2011)
			TOP INNER		
WELL NAME	CL TOP CAP NORTH	CL TOP CAP EAST	SLEVE ELEVATION	NORTH LATTITUDE	WEST LONGITUDE
MW-12	601684.66	958605.60	2300.43	35.35288649	-82.49331436
MW-9	601664.47	958473.04	2259.51	35.35281823	-82.49375629
MW-13	601511.96	958653.00	2296.88	35.35241686	-82.49313513
MW-A4	601206.95	958733.55	2270.55	35.35158711	-82.49282915
MW-A2	601170.05	958325.82	2242.23	35.35144635	-82.49419138
MW-A5	601090.10	958314.40	2242.60	35.35122573	-82.49422021
MW-A8	601254.10	957984.45	2216.46	35.35164414	-82.49534542

If you have any questions concerning this data, please contact me at 336-334-7724 or on mobile at 336-542-6149.

Sincerely,
ESP Associates, P.A.

NORTH CAROLINA PROFESSIONAL SEAL L-3343 LAND SURVEYOR JOHN P. SCOVILLE III

John P. Scoville III, PLS, CFS
Survey Manager

MONITORING WELL DATA SHEET
HENDERSON CO. LANDFILL
N.C. DEPT. OF ENVIRONMENT AND NATURAL RESOURCES

TASK ORDER: 7961DP-7

PROJECTION: LAMBERT (NAD83)
HORIZONTAL DATUM: NAD83 (NSRS2011)
VERTICAL DATUM: NAVD 88
STATE PLANE COORDINATE SYSTEM: NORTH CAROLINA (3200)
LATITUDE AND LONGITUDE IN NAD 83 DECIMAL DEGREES

MONITORING WELL NAME	DATE	TOWN OR COUNTY
MW-12	May 4th, 2015	Henderson County, N.C.
GRID NORTH(FT): 601684.66	LATITUDE DECIMAL DEGREES: N 35.3528864	SCALE FACTOR: 0.99987414
GRID EAST (FT): 958605.60	LONGITUDE DECIMAL DEGREES: W 82.49331436	COMB. FACTOR: 0.99977588
		METHOD: NC VRS & CONVENTIONAL

WELL ELEVATIONS	WELL DESCRIPTIVE DATA: ABOVE GROUND
ELEV: 2300.76	TOP CL WELL CAP
ELEV: 2300.43	TOP INNER 2” SLEVE
ELEV: N/A	TOP OF CONCRETE
ELEV:2299.52	GROUND AT FRONT

MONITORING WELL DATA SHEET
HENDERSON CO. LANDFILL
N.C. DEPT. OF ENVIRONMENT AND NATURAL RESOURCES

TASK ORDER: 7961DP-7

PROJECTION: LAMBERT (NAD83)
HORIZONTAL DATUM: NAD83 (NSRS2011)
VERTICAL DATUM: NAVD 88
STATE PLANE COORDINATE SYSTEM: NORTH CAROLINA (3200)
LATITUDE AND LONGITUDE IN NAD 83 DECIMAL DEGREES

MONITORING WELL NAME	DATE	TOWN OR COUNTY
MW-9	May 4th, 2015	Henderson County, N.C.
GRID NORTH(FT): 601664.47	LATITUDE DECIMAL DEGREES: N 35.35281823	SCALE FACTOR: 0.99987414
GRID EAST (FT): 958473.04	LONGITUDE DECIMAL DEGREES: W 82.49375629	COMB. FACTOR: 0.99977588
		METHOD: NC VRS & CONVENTIONAL

WELL ELEVATIONS	WELL DESCRIPTIVE DATA: ABOVE GROUND
ELEV: 2260.02	TOP CL WELL CAP
ELEV: 2259.51	TOP INNER 2” SLEVE
ELEV: 2257.05	TOP OF CONCRETE
ELEV: N/A	GROUND VARIES SLOPING

MONITORING WELL DATA SHEET
HENDERSON CO. LANDFILL
N.C. DEPT. OF ENVIRONMENT AND NATURAL RESOURCES

TASK ORDER: 7961DP-7

PROJECTION: LAMBERT (NAD83)
HORIZONTAL DATUM: NAD83 (NSRS2011)
VERTICAL DATUM: NAVD 88
STATE PLANE COORDINATE SYSTEM: NORTH CAROLINA (3200)
LATITUDE AND LONGITUDE IN NAD 83 DECIMAL DEGREES

MONITORING WELL NAME	DATE	TOWN OR COUNTY
MW-13	May 4th, 2015	Henderson County, N.C.
GRID NORTH(FT): 601511.96	LATITUDE DECIMAL DEGREES: N 35.35241686	SCALE FACTOR: 0.99987413
GRID EAST (FT): 958653.00	LONGITUDE DECIMAL DEGREES: W 82.49313513	COMB. FACTOR: 0.99977588
		METHOD: NC VRS & CONVENTIONAL

WELL ELEVATIONS	WELL DESCRIPTIVE DATA: ABOVE GROUND
ELEV: 2297.19	TOP CL WELL CAP
ELEV: 2296.88	TOP INNER 2” SLEVE
ELEV: 2294.83	TOP OF CONCRETE
ELEV: N/A	GROUND VARIES SLOPING

MONITORING WELL DATA SHEET
HENDERSON CO. LANDFILL
N.C. DEPT. OF ENVIRONMENT AND NATURAL RESOURCES

TASK ORDER: 7961DP-7

PROJECTION: LAMBERT (NAD83)
HORIZONTAL DATUM: NAD83 (NSRS2011)
VERTICAL DATUM: NAVD 88
STATE PLANE COORDINATE SYSTEM: NORTH CAROLINA (3200)
LATITUDE AND LONGITUDE IN NAD 83 DECIMAL DEGREES

MONITORING WELL NAME	DATE	TOWN OR COUNTY
MW-A4	May 4th, 2015	Henderson County, N.C.
GRID NORTH(FT): 601206.95	LATITUDE DECIMAL DEGREES: N 35.35158711	SCALE FACTOR: 0.99987410
GRID EAST (FT): 958733.55	LONGITUDE DECIMAL DEGREES: W 82.49282915	COMB. FACTOR: 0.99977588
		METHOD: NC VRS & CONVENTIONAL

WELL ELEVATIONS	WELL DESCRIPTIVE DATA: AT GROUND
ELEV: 2270.92	TOP CL WELL CAP
ELEV: 2270.55	TOP INNER 2” SLEVE
ELEV: N/A	TOP OF CONCRETE
ELEV: N/A	GROUND VARIES SLOPING

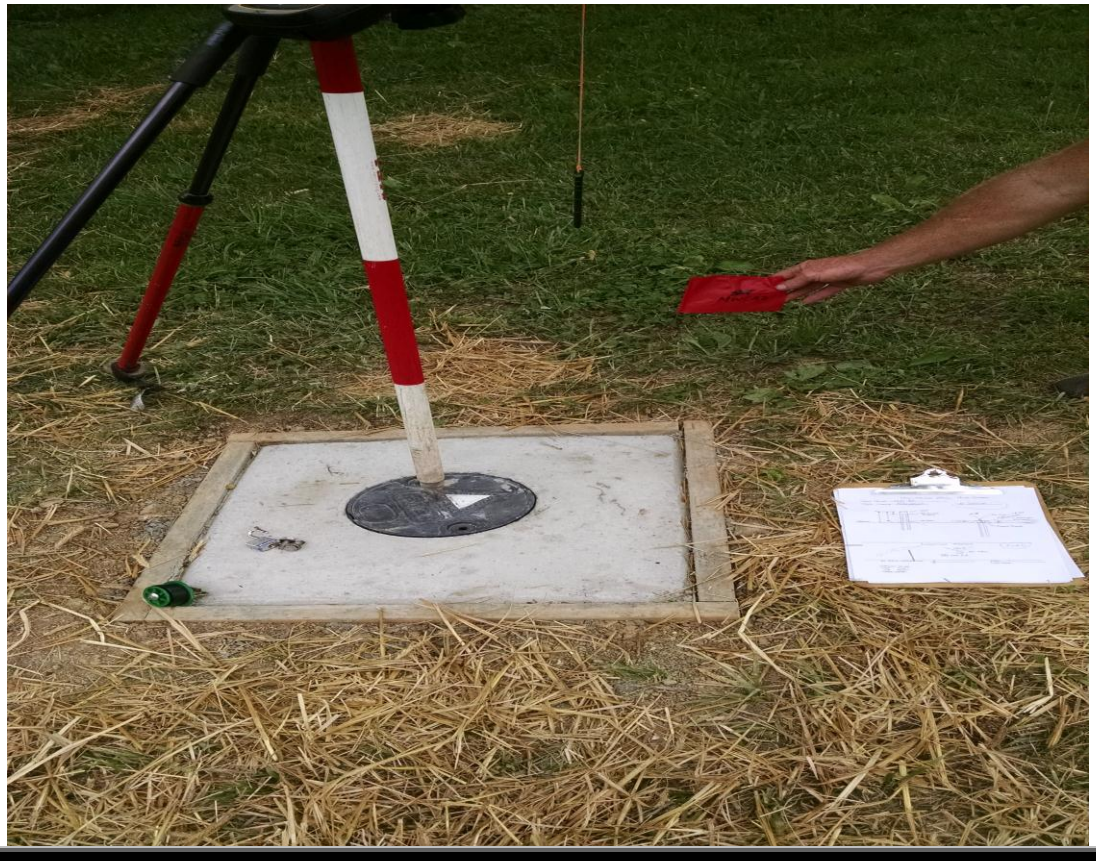
MONITORING WELL DATA SHEET
HENDERSON CO. LANDFILL
N.C. DEPT. OF ENVIRONMENT AND NATURAL RESOURCES

TASK ORDER: 7961DP-7

PROJECTION: LAMBERT (NAD83)
HORIZONTAL DATUM: NAD83 (NSRS2011)
VERTICAL DATUM: NAVD 88
STATE PLANE COORDINATE SYSTEM: NORTH CAROLINA (3200)
LATITUDE AND LONGITUDE IN NAD 83 DECIMAL DEGREES

MONITORING WELL NAME	DATE	TOWN OR COUNTY
MW-A2	May 4th, 2015	Henderson County, N.C.
GRID NORTH(FT): 601170.05	LATITUDE DECIMAL DEGREES: N 35.35144635	SCALE FACTOR: 0.99987410
GRID EAST (FT): 958325.82	LONGITUDE DECIMAL DEGREES: W 82.49419138	COMB. FACTOR: 0.99977588
		METHOD: NC VRS & CONVENTIONAL

WELL ELEVATIONS	WELL DESCRIPTIVE DATA: AT GROUND
ELEV: 2242.59	TOP CL WELL CAP
ELEV: 2242.23	TOP INNER 2” SLEVE
ELEV: N/A	TOP OF CONCRETE
ELEV: N/A	GROUND VARIES SLOPING



MONITORING WELL DATA SHEET
HENDERSON CO. LANDFILL
N.C. DEPT. OF ENVIRONMENT AND NATURAL RESOURCES

TASK ORDER: 7961DP-7

PROJECTION: LAMBERT (NAD83)
HORIZONTAL DATUM: NAD83 (NSRS2011)
VERTICAL DATUM: NAVD 88
STATE PLANE COORDINATE SYSTEM: NORTH CAROLINA (3200)
LATITUDE AND LONGITUDE IN NAD 83 DECIMAL DEGREES

MONITORING WELL NAME	DATE	TOWN OR COUNTY
MW-A5	May 4th, 2015	Henderson County, N.C.
GRID NORTH(FT): 601090.10	LATITUDE DECIMAL DEGREES: N 35.35122573	SCALE FACTOR: 0.99987409
GRID EAST (FT): 958314.40	LONGITUDE DECIMAL DEGREES: W 82.49422021	COMB. FACTOR: 0.99977588
		METHOD: NC VRS & CONVENTIONAL

WELL ELEVATIONS	WELL DESCRIPTIVE DATA: AT GROUND
ELEV: 2242.79	TOP CL WELL CAP
ELEV: 2242.60	TOP INNER 2” SLEVE
ELEV: N/A	TOP OF CONCRETE
ELEV: N/A	GROUND VARIES SLOPING

MONITORING WELL DATA SHEET
HENDERSON CO. LANDFILL
N.C. DEPT. OF ENVIRONMENT AND NATURAL RESOURCES

TASK ORDER: 7961DP-7

PROJECTION: LAMBERT (NAD83)
HORIZONTAL DATUM: NAD83 (NSRS2011)
VERTICAL DATUM: NAVD 88
STATE PLANE COORDINATE SYSTEM: NORTH CAROLINA (3200)
LATITUDE AND LONGITUDE IN NAD 83 DECIMAL DEGREES

MONITORING WELL NAME	DATE	TOWN OR COUNTY
MW-A8	May 4th, 2015	Henderson County, N.C.
GRID NORTH(FT): 601254.10	LATITUDE DECIMAL DEGREES: N 35.35164414	SCALE FACTOR: 0.99987411
GRID EAST (FT): 957984.45	LONGITUDE DECIMAL DEGREES: W 82.49534542	COMB. FACTOR: 0.99977588
		METHOD: NC VRS & CONVENTIONAL

WELL ELEVATIONS	WELL DESCRIPTIVE DATA: AT GROUND
ELEV: 2216.70	TOP CL WELL CAP
ELEV:2216.46	TOP INNER 2” SLEVE
ELEV: N/A	TOP OF CONCRETE
ELEV: N/A	GROUND VARIES SLOPING

APPENDIX D
LABORATORY ANALYTICAL REPORTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-112176-1
Client Project/Site: Henderson Co. Landfill
Revision: 1

For:
ESP Associates, P.A.
7204 West Friendley Ave
Suite G
Greensboro, North Carolina 27410

Attn: Nora Zirps

Kathryn Smith

Authorized for release by:
6/5/2015 12:19:09 PM

Kathryn Smith, Project Manager II
(912)354-7858
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LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Definitions/Glossary

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-112176-1	MW-13	Water	05/04/15 15:55	05/05/15 09:49
680-112176-2	Duplicate 1	Water	05/04/15 00:00	05/05/15 09:49
680-112176-3	RB-1	Water	05/04/15 16:20	05/05/15 09:49
680-112176-4	TB-1	Water	05/04/15 00:00	05/05/15 09:49
680-112176-5	MW-12	Water	05/04/15 14:20	05/05/15 09:49
680-112176-6	MW-9	Water	05/04/15 12:40	05/05/15 09:49
680-112176-7	TB-5	Water	05/04/15 00:00	05/05/15 09:49

Job ID: 680-112176-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE
Client: ESP Associates, P.A.
Project: Henderson Co. Landfill

Report Number: 680-112176-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT
The samples were received on 05/05/2015; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.4º C and 2.6º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples MW-13 (680-112176-1), Duplicate 1 (680-112176-2), RB-1 (680-112176-3), TB-1 (680-112176-4), MW-12 (680-112176-5), MW-9 (680-112176-6) and TB-5 (680-112176-7) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 05/08/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples MW-13 (680-112176-1), Duplicate 1 (680-112176-2), RB-1 (680-112176-3), TB-1 (680-112176-4), MW-12 (680-112176-5), MW-9 (680-112176-6) and TB-5 (680-112176-7) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 05/07/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) - LOW LEVEL
Samples MW-13 (680-112176-1), Duplicate 1 (680-112176-2), RB-1 (680-112176-3), MW-12 (680-112176-5) and MW-9 (680-112176-6) were analyzed for Semivolatile Organic Compounds (GC/MS) - Low level in accordance with EPA SW-846 Method 8270D. The samples were prepared on 05/06/2015 and analyzed on 05/13/2015.

Several analytes recoovverd low for the MS of sample MW-13MS (680-112176-1) in batch 680-382771. Caprolactam recovered high.

For the MSD of sample MW-13MSD (680-112176-1) in batch 680-382771, 2,4,5-Trichlorophenol, 3,3'-Dichlorobenzidine and Hexachlorobutadiene recovered low. Caprolactam failed therecovered high. Also, Several analytes exceeded the RPD limit.

The continuing calibration verification (CCV) analyzed in batch 382771 was outside the method criteria for the following analyte(s): Indeno(123-cd)pyrene and 2,6-Dinitrotoluene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Sample Duplicate 1 (680-112176-2)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

METALS (ICPMS)
Samples MW-13 (680-112176-1), Duplicate 1 (680-112176-2), RB-1 (680-112176-3), MW-12 (680-112176-5) and MW-9 (680-112176-6) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 05/06/2015 and analyzed on 05/08/2015.

Job ID: 680-112176-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

Lead was detected in method blank MB 680-381788/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY
Samples MW-13 (680-112176-1), Duplicate 1 (680-112176-2), RB-1 (680-112176-3), MW-12 (680-112176-5) and MW-9 (680-112176-6) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 05/06/2015 and analyzed on 05/07/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS BY ION CHROMATOGRAPHY (28 DAY)
Samples MW-13 (680-112176-1), Duplicate 1 (680-112176-2), RB-1 (680-112176-3), MW-12 (680-112176-5) and MW-9 (680-112176-6) were analyzed for Anions by Ion Chromatography (28 Day) in accordance with EPA Method 300.0. The samples were analyzed on 05/08/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS BY ION CHROMATOGRAPHY (48 HOUR)
Samples MW-13 (680-112176-1), Duplicate 1 (680-112176-2), RB-1 (680-112176-3), MW-12 (680-112176-5) and MW-9 (680-112176-6) were analyzed for Anions by Ion Chromatography (48 Hour) in accordance with EPA Method 300.0. The samples were analyzed on 05/05/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA
Samples MW-13 (680-112176-1), Duplicate 1 (680-112176-2), RB-1 (680-112176-3), MW-12 (680-112176-5) and MW-9 (680-112176-6) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 05/06/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TestAmerica Savannah QA Manager: Andrea Teal
TestAmerica Savannah Laboratory Director: Todd Baumgartner

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: MW-13

Date Collected: 05/04/15 15:55
Date Received: 05/05/15 09:49

Lab Sample ID: 680-112176-1

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.44**	**J**	1.0	0.22	ug/L			05/07/15 11:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 127*		*05/07/15 11:41*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.37	ug/L			05/08/15 11:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.62	ug/L			05/08/15 11:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.36	ug/L			05/08/15 11:41	1
1,1,2-Trichloroethane	ND		1.0	0.33	ug/L			05/08/15 11:41	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/08/15 11:41	1
1,1-Dichloroethene	ND		1.0	0.36	ug/L			05/08/15 11:41	1
1,2,3-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 11:41	1
1,2,4-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 11:41	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.1	ug/L			05/08/15 11:41	1
1,2-Dibromoethane	ND		1.0	0.44	ug/L			05/08/15 11:41	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/08/15 11:41	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/08/15 11:41	1
1,2-Dichloropropane	ND		1.0	0.67	ug/L			05/08/15 11:41	1
1,3-Dichlorobenzene	ND		1.0	0.43	ug/L			05/08/15 11:41	1
1,4-Dichlorobenzene	**0.52**	**J**	1.0	0.46	ug/L			05/08/15 11:41	1
2-Butanone (MEK)	ND		10	3.4	ug/L			05/08/15 11:41	1
2-Hexanone	ND		10	2.0	ug/L			05/08/15 11:41	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			05/08/15 11:41	1
Acetone	ND		10	7.0	ug/L			05/08/15 11:41	1
Benzene	ND		1.0	0.43	ug/L			05/08/15 11:41	1
Bromochloromethane	ND		1.0	0.45	ug/L			05/08/15 11:41	1
Bromoform	ND		1.0	0.43	ug/L			05/08/15 11:41	1
Bromomethane	ND		5.0	2.5	ug/L			05/08/15 11:41	1
Carbon disulfide	ND		2.0	1.0	ug/L			05/08/15 11:41	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			05/08/15 11:41	1
Chlorobenzene	ND		1.0	0.26	ug/L			05/08/15 11:41	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			05/08/15 11:41	1
Chloroethane	ND		5.0	2.5	ug/L			05/08/15 11:41	1
Chloroform	ND		1.0	0.50	ug/L			05/08/15 11:41	1
Chloromethane	ND		1.0	0.40	ug/L			05/08/15 11:41	1
cis-1,2-Dichloroethene	**2.6**		1.0	0.41	ug/L			05/08/15 11:41	1
cis-1,3-Dichloropropene	ND		1.0	0.40	ug/L			05/08/15 11:41	1
Cyclohexane	ND		1.0	0.39	ug/L			05/08/15 11:41	1
Dichlorobromomethane	ND		1.0	0.44	ug/L			05/08/15 11:41	1
Dichlorodifluoromethane	ND		1.0	0.60	ug/L			05/08/15 11:41	1
Ethylbenzene	ND		1.0	0.33	ug/L			05/08/15 11:41	1
Isopropylbenzene	ND		1.0	0.35	ug/L			05/08/15 11:41	1
Methyl acetate	ND		5.0	1.8	ug/L			05/08/15 11:41	1
Methyl tert-butyl ether	ND		10	0.30	ug/L			05/08/15 11:41	1
Methylcyclohexane	ND		1.0	0.43	ug/L			05/08/15 11:41	1
Methylene Chloride	ND		5.0	2.5	ug/L			05/08/15 11:41	1
m-Xylene & p-Xylene	ND		1.0	0.35	ug/L			05/08/15 11:41	1
o-Xylene	ND		1.0	0.23	ug/L			05/08/15 11:41	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: MW-13

Date Collected: 05/04/15 15:55
Date Received: 05/05/15 09:49

Lab Sample ID: 680-112176-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	0.27	ug/L			05/08/15 11:41	1
Tetrachloroethene	ND		1.0	0.74	ug/L			05/08/15 11:41	1
Toluene	ND		1.0	0.48	ug/L			05/08/15 11:41	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/08/15 11:41	1
trans-1,3-Dichloropropene	ND		1.0	0.42	ug/L			05/08/15 11:41	1
Trichloroethene	ND		1.0	0.48	ug/L			05/08/15 11:41	1
Trichlorofluoromethane	**1.6**		1.0	0.42	ug/L			05/08/15 11:41	1
Vinyl chloride	**2.2**		1.0	0.50	ug/L			05/08/15 11:41	1
Xylenes, Total	ND		1.0	0.23	ug/L			05/08/15 11:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*70 - 130*		*05/08/15 11:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*05/08/15 11:41*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*05/08/15 11:41*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*05/08/15 11:41*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND	F1 F2	0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
1,2,4,5-Tetrachlorobenzene	ND	F2	0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
2,2'-oxybis[1-chloropropane]	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
2,3,4,6-Tetrachlorophenol	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
2,4,5-Trichlorophenol	ND	F1	0.99	0.12	ug/L		05/06/15 17:19	05/13/15 16:29	1
2,4,6-Trichlorophenol	ND		0.99	0.17	ug/L		05/06/15 17:19	05/13/15 16:29	1
2,4-Dichlorophenol	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
2,4-Dimethylphenol	ND		2.0	0.68	ug/L		05/06/15 17:19	05/13/15 16:29	1
2,4-Dinitrophenol	ND		9.9	1.1	ug/L		05/06/15 17:19	05/13/15 16:29	1
2,4-Dinitrotoluene	ND		0.99	0.12	ug/L		05/06/15 17:19	05/13/15 16:29	1
2,6-Dinitrotoluene	ND		0.99	0.13	ug/L		05/06/15 17:19	05/13/15 16:29	1
2-Chloronaphthalene	ND	F1 F2	0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
2-Chlorophenol	ND		0.99	0.12	ug/L		05/06/15 17:19	05/13/15 16:29	1
2-Methylnaphthalene	ND	F1 F2	0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
2-Methylphenol	ND		2.0	0.73	ug/L		05/06/15 17:19	05/13/15 16:29	1
2-Nitroaniline	ND		0.99	0.16	ug/L		05/06/15 17:19	05/13/15 16:29	1
2-Nitrophenol	**0.14**	**J**	0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
3 & 4 Methylphenol	ND		2.0	0.65	ug/L		05/06/15 17:19	05/13/15 16:29	1
3,3'-Dichlorobenzidine	ND	F1	20	2.0	ug/L		05/06/15 17:19	05/13/15 16:29	1
3-Nitroaniline	ND		5.0	0.16	ug/L		05/06/15 17:19	05/13/15 16:29	1
4,6-Dinitro-2-methylphenol	ND		5.0	0.99	ug/L		05/06/15 17:19	05/13/15 16:29	1
4-Bromophenyl phenyl ether	ND	F1 F2	0.99	0.12	ug/L		05/06/15 17:19	05/13/15 16:29	1
4-Chloro-3-methylphenol	ND		0.99	0.12	ug/L		05/06/15 17:19	05/13/15 16:29	1
4-Chloroaniline	ND		4.0	2.0	ug/L		05/06/15 17:19	05/13/15 16:29	1
4-Chlorophenyl phenyl ether	ND	F1 F2	0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
4-Nitroaniline	ND		5.0	0.50	ug/L		05/06/15 17:19	05/13/15 16:29	1
4-Nitrophenol	ND		7.9	4.0	ug/L		05/06/15 17:19	05/13/15 16:29	1
Acenaphthene	ND	F1 F2	0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Acenaphthylene	ND	F1 F2	0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Acetophenone	ND		0.99	0.30	ug/L		05/06/15 17:19	05/13/15 16:29	1
Anthracene	ND	F1	0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Atrazine	ND		4.0	2.0	ug/L		05/06/15 17:19	05/13/15 16:29	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: MW-13

Date Collected: 05/04/15 15:55
Date Received: 05/05/15 09:49

Lab Sample ID: 680-112176-1

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzaldehyde	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Benzo[a]anthracene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Benzo[a]pyrene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Benzo[b]fluoranthene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Benzo[g,h,i]perylene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Bis(2-chloroethoxy)methane	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Bis(2-chloroethyl)ether	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.0	ug/L		05/06/15 17:19	05/13/15 16:29	1
Butyl benzyl phthalate	ND		0.99	0.12	ug/L		05/06/15 17:19	05/13/15 16:29	1
Caprolactam	**17**	**F1**	0.99	0.13	ug/L		05/06/15 17:19	05/13/15 16:29	1
Carbazole	ND		2.0	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Chrysene	ND		0.20	0.045	ug/L		05/06/15 17:19	05/13/15 16:29	1
Dibenz(a,h)anthracene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Dibenzofuran	ND	F1 F2	0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Diethyl phthalate	**0.22**	**J**	0.99	0.11	ug/L		05/06/15 17:19	05/13/15 16:29	1
Dimethyl phthalate	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Di-n-butyl phthalate	ND		0.99	0.39	ug/L		05/06/15 17:19	05/13/15 16:29	1
Di-n-octyl phthalate	ND		0.99	0.17	ug/L		05/06/15 17:19	05/13/15 16:29	1
Fluoranthene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Fluorene	ND	F1	0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Hexachlorobenzene	ND	F1	0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Hexachlorobutadiene	ND	F1	0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Hexachlorocyclopentadiene	ND	F1 F2	2.0	0.50	ug/L		05/06/15 17:19	05/13/15 16:29	1
Hexachloroethane	ND	F1	0.99	0.50	ug/L		05/06/15 17:19	05/13/15 16:29	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Isophorone	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Naphthalene	**0.58**	**F1 F2**	0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Nitrobenzene	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
N-Nitrosodi-n-propylamine	ND		0.99	0.13	ug/L		05/06/15 17:19	05/13/15 16:29	1
N-Nitrosodiphenylamine	ND		0.99	0.37	ug/L		05/06/15 17:19	05/13/15 16:29	1
Pentachlorophenol	ND		5.0	0.40	ug/L		05/06/15 17:19	05/13/15 16:29	1
Phenanthrene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1
Phenol	ND		0.99	0.13	ug/L		05/06/15 17:19	05/13/15 16:29	1
Pyrene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*64*		*30 - 130*	*05/06/15 17:19*	*05/13/15 16:29*	*1*
2-Fluorobiphenyl	*48*		*34 - 130*	*05/06/15 17:19*	*05/13/15 16:29*	*1*
2-Fluorophenol (Surr)	*56*		*25 - 130*	*05/06/15 17:19*	*05/13/15 16:29*	*1*
Nitrobenzene-d5 (Surr)	*58*		*32 - 130*	*05/06/15 17:19*	*05/13/15 16:29*	*1*
Phenol-d5 (Surr)	*60*		*27 - 130*	*05/06/15 17:19*	*05/13/15 16:29*	*1*
Terphenyl-d14 (Surr)	*63*		*36 - 130*	*05/06/15 17:19*	*05/13/15 16:29*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		50	23	ug/L			05/05/15 16:15	1
Sulfate	**18000**		1000	400	ug/L			05/08/15 21:12	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: MW-13

Lab Sample ID: 680-112176-1
Matrix: Water
Date Collected: 05/04/15 15:55
Date Received: 05/05/15 09:49

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.99	ug/L		05/06/15 15:28	05/08/15 06:16	1
Arsenic	ND		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 06:16	1
Beryllium	ND		0.20	0.070	ug/L		05/06/15 15:28	05/08/15 06:16	1
Cadmium	ND		0.50	0.20	ug/L		05/06/15 15:28	05/08/15 06:16	1
Chromium	**0.63**	**J**	1.0	0.16	ug/L		05/06/15 15:28	05/08/15 06:16	1
Copper	ND		1.0	0.21	ug/L		05/06/15 15:28	05/08/15 06:16	1
Iron	**66**		50	20	ug/L		05/06/15 15:28	05/08/15 06:16	1
Lead	ND		0.30	0.080	ug/L		05/06/15 15:28	05/08/15 06:16	1
Manganese	**67**		2.0	0.84	ug/L		05/06/15 15:28	05/08/15 06:16	1
Nickel	**0.86**	**J**	1.0	0.40	ug/L		05/06/15 15:28	05/08/15 06:16	1
Selenium	ND		0.50	0.21	ug/L		05/06/15 15:28	05/08/15 06:16	1
Silver	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 06:16	1
Thallium	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 06:16	1
Zinc	**4.2**	**J**	10	2.6	ug/L		05/06/15 15:28	05/08/15 06:16	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.080	ug/L		05/06/15 16:10	05/07/15 14:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		250	100	ug/L			05/06/15 14:19	1

Client Sample ID: Duplicate 1

Lab Sample ID: 680-112176-2
Matrix: Water
Date Collected: 05/04/15 00:00
Date Received: 05/05/15 09:49

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.46**	**J**	1.0	0.22	ug/L			05/07/15 12:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 127*		*05/07/15 12:00*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.37	ug/L			05/08/15 12:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.62	ug/L			05/08/15 12:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.36	ug/L			05/08/15 12:04	1
1,1,2-Trichloroethane	ND		1.0	0.33	ug/L			05/08/15 12:04	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/08/15 12:04	1
1,1-Dichloroethene	ND		1.0	0.36	ug/L			05/08/15 12:04	1
1,2,3-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 12:04	1
1,2,4-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 12:04	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.1	ug/L			05/08/15 12:04	1
1,2-Dibromoethane	ND		1.0	0.44	ug/L			05/08/15 12:04	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/08/15 12:04	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/08/15 12:04	1
1,2-Dichloropropane	ND		1.0	0.67	ug/L			05/08/15 12:04	1
1,3-Dichlorobenzene	ND		1.0	0.43	ug/L			05/08/15 12:04	1
1,4-Dichlorobenzene	**0.52**	**J**	1.0	0.46	ug/L			05/08/15 12:04	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: Duplicate 1

Date Collected: 05/04/15 00:00
Date Received: 05/05/15 09:49

Lab Sample ID: 680-112176-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		10	3.4	ug/L			05/08/15 12:04	1
2-Hexanone	ND		10	2.0	ug/L			05/08/15 12:04	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			05/08/15 12:04	1
Acetone	ND		10	7.0	ug/L			05/08/15 12:04	1
Benzene	ND		1.0	0.43	ug/L			05/08/15 12:04	1
Bromochloromethane	ND		1.0	0.45	ug/L			05/08/15 12:04	1
Bromoform	ND		1.0	0.43	ug/L			05/08/15 12:04	1
Bromomethane	ND		5.0	2.5	ug/L			05/08/15 12:04	1
Carbon disulfide	ND		2.0	1.0	ug/L			05/08/15 12:04	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			05/08/15 12:04	1
Chlorobenzene	ND		1.0	0.26	ug/L			05/08/15 12:04	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			05/08/15 12:04	1
Chloroethane	ND		5.0	2.5	ug/L			05/08/15 12:04	1
Chloroform	ND		1.0	0.50	ug/L			05/08/15 12:04	1
Chloromethane	ND		1.0	0.40	ug/L			05/08/15 12:04	1
cis-1,2-Dichloroethene	**2.5**		1.0	0.41	ug/L			05/08/15 12:04	1
cis-1,3-Dichloropropene	ND		1.0	0.40	ug/L			05/08/15 12:04	1
Cyclohexane	ND		1.0	0.39	ug/L			05/08/15 12:04	1
Dichlorobromomethane	ND		1.0	0.44	ug/L			05/08/15 12:04	1
Dichlorodifluoromethane	ND		1.0	0.60	ug/L			05/08/15 12:04	1
Ethylbenzene	ND		1.0	0.33	ug/L			05/08/15 12:04	1
Isopropylbenzene	ND		1.0	0.35	ug/L			05/08/15 12:04	1
Methyl acetate	ND		5.0	1.8	ug/L			05/08/15 12:04	1
Methyl tert-butyl ether	ND		10	0.30	ug/L			05/08/15 12:04	1
Methylcyclohexane	ND		1.0	0.43	ug/L			05/08/15 12:04	1
Methylene Chloride	ND		5.0	2.5	ug/L			05/08/15 12:04	1
m-Xylene & p-Xylene	ND		1.0	0.35	ug/L			05/08/15 12:04	1
o-Xylene	ND		1.0	0.23	ug/L			05/08/15 12:04	1
Styrene	ND		1.0	0.27	ug/L			05/08/15 12:04	1
Tetrachloroethene	ND		1.0	0.74	ug/L			05/08/15 12:04	1
Toluene	ND		1.0	0.48	ug/L			05/08/15 12:04	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/08/15 12:04	1
trans-1,3-Dichloropropene	ND		1.0	0.42	ug/L			05/08/15 12:04	1
Trichloroethene	ND		1.0	0.48	ug/L			05/08/15 12:04	1
Trichlorofluoromethane	**1.7**		1.0	0.42	ug/L			05/08/15 12:04	1
Vinyl chloride	**2.2**		1.0	0.50	ug/L			05/08/15 12:04	1
Xylenes, Total	ND		1.0	0.23	ug/L			05/08/15 12:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*70 - 130*		*05/08/15 12:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*05/08/15 12:04*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*05/08/15 12:04*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*05/08/15 12:04*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
1,2,4,5-Tetrachlorobenzene	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
2,2'-oxybis[1-chloropropane]	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
2,3,4,6-Tetrachlorophenol	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: Duplicate 1

Date Collected: 05/04/15 00:00
Date Received: 05/05/15 09:49

Lab Sample ID: 680-112176-2

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		0.99	0.12	ug/L		05/06/15 17:19	05/13/15 16:57	1
2,4,6-Trichlorophenol	ND		0.99	0.17	ug/L		05/06/15 17:19	05/13/15 16:57	1
2,4-Dichlorophenol	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
2,4-Dimethylphenol	ND		2.0	0.68	ug/L		05/06/15 17:19	05/13/15 16:57	1
2,4-Dinitrophenol	ND		9.9	1.1	ug/L		05/06/15 17:19	05/13/15 16:57	1
2,4-Dinitrotoluene	ND		0.99	0.12	ug/L		05/06/15 17:19	05/13/15 16:57	1
2,6-Dinitrotoluene	ND		0.99	0.13	ug/L		05/06/15 17:19	05/13/15 16:57	1
2-Chloronaphthalene	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
2-Chlorophenol	ND		0.99	0.12	ug/L		05/06/15 17:19	05/13/15 16:57	1
2-Methylnaphthalene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
2-Methylphenol	ND		2.0	0.73	ug/L		05/06/15 17:19	05/13/15 16:57	1
2-Nitroaniline	ND		0.99	0.16	ug/L		05/06/15 17:19	05/13/15 16:57	1
2-Nitrophenol	**0.16**	**J**	0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
3 & 4 Methylphenol	ND		2.0	0.65	ug/L		05/06/15 17:19	05/13/15 16:57	1
3,3'-Dichlorobenzidine	ND		20	2.0	ug/L		05/06/15 17:19	05/13/15 16:57	1
3-Nitroaniline	ND		4.9	0.16	ug/L		05/06/15 17:19	05/13/15 16:57	1
4,6-Dinitro-2-methylphenol	ND		4.9	0.99	ug/L		05/06/15 17:19	05/13/15 16:57	1
4-Bromophenyl phenyl ether	ND		0.99	0.12	ug/L		05/06/15 17:19	05/13/15 16:57	1
4-Chloro-3-methylphenol	ND		0.99	0.12	ug/L		05/06/15 17:19	05/13/15 16:57	1
4-Chloroaniline	ND		3.9	2.0	ug/L		05/06/15 17:19	05/13/15 16:57	1
4-Chlorophenyl phenyl ether	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
4-Nitroaniline	ND		4.9	0.49	ug/L		05/06/15 17:19	05/13/15 16:57	1
4-Nitrophenol	ND		7.9	3.9	ug/L		05/06/15 17:19	05/13/15 16:57	1
Acenaphthene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Acenaphthylene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Acetophenone	ND		0.99	0.30	ug/L		05/06/15 17:19	05/13/15 16:57	1
Anthracene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Atrazine	ND		3.9	2.0	ug/L		05/06/15 17:19	05/13/15 16:57	1
Benzaldehyde	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Benzo[a]anthracene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Benzo[a]pyrene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Benzo[b]fluoranthene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Benzo[g,h,i]perylene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Bis(2-chloroethoxy)methane	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Bis(2-chloroethyl)ether	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Bis(2-ethylhexyl) phthalate	ND		4.9	2.0	ug/L		05/06/15 17:19	05/13/15 16:57	1
Butyl benzyl phthalate	ND		0.99	0.12	ug/L		05/06/15 17:19	05/13/15 16:57	1
Carbazole	ND		2.0	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Chrysene	ND		0.20	0.044	ug/L		05/06/15 17:19	05/13/15 16:57	1
Dibenz(a,h)anthracene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Dibenzofuran	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Diethyl phthalate	**0.12**	**J**	0.99	0.11	ug/L		05/06/15 17:19	05/13/15 16:57	1
Dimethyl phthalate	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Di-n-butyl phthalate	ND		0.99	0.38	ug/L		05/06/15 17:19	05/13/15 16:57	1
Di-n-octyl phthalate	ND		0.99	0.17	ug/L		05/06/15 17:19	05/13/15 16:57	1
Fluoranthene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Fluorene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Hexachlorobenzene	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: Duplicate 1

Date Collected: 05/04/15 00:00
Date Received: 05/05/15 09:49

Lab Sample ID: 680-112176-2

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Hexachlorocyclopentadiene	ND		2.0	0.49	ug/L		05/06/15 17:19	05/13/15 16:57	1
Hexachloroethane	ND		0.99	0.49	ug/L		05/06/15 17:19	05/13/15 16:57	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Isophorone	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Naphthalene	**0.80**		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Nitrobenzene	ND		0.99	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
N-Nitrosodi-n-propylamine	ND		0.99	0.13	ug/L		05/06/15 17:19	05/13/15 16:57	1
N-Nitrosodiphenylamine	ND		0.99	0.37	ug/L		05/06/15 17:19	05/13/15 16:57	1
Pentachlorophenol	ND		4.9	0.39	ug/L		05/06/15 17:19	05/13/15 16:57	1
Phenanthrene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1
Phenol	ND		0.99	0.13	ug/L		05/06/15 17:19	05/13/15 16:57	1
Pyrene	ND		0.20	0.099	ug/L		05/06/15 17:19	05/13/15 16:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*70*		*30 - 130*	*05/06/15 17:19*	*05/13/15 16:57*	*1*
2-Fluorobiphenyl	*68*		*34 - 130*	*05/06/15 17:19*	*05/13/15 16:57*	*1*
2-Fluorophenol (Surr)	*68*		*25 - 130*	*05/06/15 17:19*	*05/13/15 16:57*	*1*
Nitrobenzene-d5 (Surr)	*73*		*32 - 130*	*05/06/15 17:19*	*05/13/15 16:57*	*1*
Phenol-d5 (Surr)	*70*		*27 - 130*	*05/06/15 17:19*	*05/13/15 16:57*	*1*
Terphenyl-d14 (Surr)	*68*		*36 - 130*	*05/06/15 17:19*	*05/13/15 16:57*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**40**		4.9	0.64	ug/L		05/06/15 17:19	05/13/15 20:11	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*62*		*30 - 130*	*05/06/15 17:19*	*05/13/15 20:11*	*5*
2-Fluorobiphenyl	*62*		*34 - 130*	*05/06/15 17:19*	*05/13/15 20:11*	*5*
2-Fluorophenol (Surr)	*62*		*25 - 130*	*05/06/15 17:19*	*05/13/15 20:11*	*5*
Nitrobenzene-d5 (Surr)	*66*		*32 - 130*	*05/06/15 17:19*	*05/13/15 20:11*	*5*
Phenol-d5 (Surr)	*64*		*27 - 130*	*05/06/15 17:19*	*05/13/15 20:11*	*5*
Terphenyl-d14 (Surr)	*63*		*36 - 130*	*05/06/15 17:19*	*05/13/15 20:11*	*5*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		50	23	ug/L			05/05/15 17:02	1
Sulfate	**17000**		1000	400	ug/L			05/08/15 22:25	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.99	ug/L		05/06/15 15:28	05/08/15 06:21	1
Arsenic	ND		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 06:21	1
Beryllium	**0.082**	**J**	0.20	0.070	ug/L		05/06/15 15:28	05/08/15 06:21	1
Cadmium	ND		0.50	0.20	ug/L		05/06/15 15:28	05/08/15 06:21	1
Chromium	**0.85**	**J**	1.0	0.16	ug/L		05/06/15 15:28	05/08/15 06:21	1
Copper	**0.28**	**J**	1.0	0.21	ug/L		05/06/15 15:28	05/08/15 06:21	1
Iron	**83**		50	20	ug/L		05/06/15 15:28	05/08/15 06:21	1
Lead	**0.098**	**J B**	0.30	0.080	ug/L		05/06/15 15:28	05/08/15 06:21	1
Manganese	**67**		2.0	0.84	ug/L		05/06/15 15:28	05/08/15 06:21	1
Nickel	**1.1**		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 06:21	1

Client Sample ID: Duplicate 1

Lab Sample ID: 680-112176-2
Date Collected: 05/04/15 00:00
Matrix: Water
Date Received: 05/05/15 09:49

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		0.50	0.21	ug/L		05/06/15 15:28	05/08/15 06:21	1
Silver	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 06:21	1
Thallium	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 06:21	1
Zinc	**5.4**	**J**	10	2.6	ug/L		05/06/15 15:28	05/08/15 06:21	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.080	ug/L		05/06/15 16:10	05/07/15 14:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		250	100	ug/L			05/06/15 14:19	1

Client Sample ID: RB-1

Lab Sample ID: 680-112176-3
Date Collected: 05/04/15 16:20
Matrix: Water
Date Received: 05/05/15 09:49

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1.0	0.22	ug/L			05/07/15 12:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 127*		*05/07/15 12:18*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.37	ug/L			05/08/15 12:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.62	ug/L			05/08/15 12:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.36	ug/L			05/08/15 12:27	1
1,1,2-Trichloroethane	ND		1.0	0.33	ug/L			05/08/15 12:27	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/08/15 12:27	1
1,1-Dichloroethene	ND		1.0	0.36	ug/L			05/08/15 12:27	1
1,2,3-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 12:27	1
1,2,4-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 12:27	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.1	ug/L			05/08/15 12:27	1
1,2-Dibromoethane	ND		1.0	0.44	ug/L			05/08/15 12:27	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/08/15 12:27	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/08/15 12:27	1
1,2-Dichloropropane	ND		1.0	0.67	ug/L			05/08/15 12:27	1
1,3-Dichlorobenzene	ND		1.0	0.43	ug/L			05/08/15 12:27	1
1,4-Dichlorobenzene	ND		1.0	0.46	ug/L			05/08/15 12:27	1
2-Butanone (MEK)	ND		10	3.4	ug/L			05/08/15 12:27	1
2-Hexanone	ND		10	2.0	ug/L			05/08/15 12:27	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			05/08/15 12:27	1
Acetone	**9.0**	**J**	10	7.0	ug/L			05/08/15 12:27	1
Benzene	ND		1.0	0.43	ug/L			05/08/15 12:27	1
Bromochloromethane	ND		1.0	0.45	ug/L			05/08/15 12:27	1
Bromoform	ND		1.0	0.43	ug/L			05/08/15 12:27	1
Bromomethane	ND		5.0	2.5	ug/L			05/08/15 12:27	1
Carbon disulfide	ND		2.0	1.0	ug/L			05/08/15 12:27	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			05/08/15 12:27	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: RB-1

Date Collected: 05/04/15 16:20
Date Received: 05/05/15 09:49

Lab Sample ID: 680-112176-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.26	ug/L			05/08/15 12:27	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			05/08/15 12:27	1
Chloroethane	ND		5.0	2.5	ug/L			05/08/15 12:27	1
Chloroform	ND		1.0	0.50	ug/L			05/08/15 12:27	1
Chloromethane	ND		1.0	0.40	ug/L			05/08/15 12:27	1
cis-1,2-Dichloroethene	ND		1.0	0.41	ug/L			05/08/15 12:27	1
cis-1,3-Dichloropropene	ND		1.0	0.40	ug/L			05/08/15 12:27	1
Cyclohexane	ND		1.0	0.39	ug/L			05/08/15 12:27	1
Dichlorobromomethane	ND		1.0	0.44	ug/L			05/08/15 12:27	1
Dichlorodifluoromethane	ND		1.0	0.60	ug/L			05/08/15 12:27	1
Ethylbenzene	ND		1.0	0.33	ug/L			05/08/15 12:27	1
Isopropylbenzene	ND		1.0	0.35	ug/L			05/08/15 12:27	1
Methyl acetate	ND		5.0	1.8	ug/L			05/08/15 12:27	1
Methyl tert-butyl ether	ND		10	0.30	ug/L			05/08/15 12:27	1
Methylcyclohexane	ND		1.0	0.43	ug/L			05/08/15 12:27	1
Methylene Chloride	ND		5.0	2.5	ug/L			05/08/15 12:27	1
m-Xylene & p-Xylene	ND		1.0	0.35	ug/L			05/08/15 12:27	1
o-Xylene	ND		1.0	0.23	ug/L			05/08/15 12:27	1
Styrene	ND		1.0	0.27	ug/L			05/08/15 12:27	1
Tetrachloroethene	ND		1.0	0.74	ug/L			05/08/15 12:27	1
Toluene	ND		1.0	0.48	ug/L			05/08/15 12:27	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/08/15 12:27	1
trans-1,3-Dichloropropene	ND		1.0	0.42	ug/L			05/08/15 12:27	1
Trichloroethene	ND		1.0	0.48	ug/L			05/08/15 12:27	1
Trichlorofluoromethane	ND		1.0	0.42	ug/L			05/08/15 12:27	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/08/15 12:27	1
Xylenes, Total	ND		1.0	0.23	ug/L			05/08/15 12:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*70 - 130*		*05/08/15 12:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*05/08/15 12:27*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*05/08/15 12:27*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*05/08/15 12:27*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		1.2	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
1,2,4,5-Tetrachlorobenzene	ND		1.2	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
2,2'-oxybis[1-chloropropane]	ND		1.2	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
2,3,4,6-Tetrachlorophenol	ND		1.2	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
2,4,5-Trichlorophenol	ND		1.2	0.14	ug/L		05/06/15 17:19	05/13/15 17:25	1
2,4,6-Trichlorophenol	ND		1.2	0.20	ug/L		05/06/15 17:19	05/13/15 17:25	1
2,4-Dichlorophenol	ND		1.2	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
2,4-Dimethylphenol	ND		2.3	0.81	ug/L		05/06/15 17:19	05/13/15 17:25	1
2,4-Dinitrophenol	ND		12	1.3	ug/L		05/06/15 17:19	05/13/15 17:25	1
2,4-Dinitrotoluene	ND		1.2	0.14	ug/L		05/06/15 17:19	05/13/15 17:25	1
2,6-Dinitrotoluene	ND		1.2	0.15	ug/L		05/06/15 17:19	05/13/15 17:25	1
2-Chloronaphthalene	ND		1.2	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
2-Chlorophenol	ND		1.2	0.14	ug/L		05/06/15 17:19	05/13/15 17:25	1
2-Methylnaphthalene	ND		0.23	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1

Client Sample ID: RB-1

Date Collected: 05/04/15 16:20
Date Received: 05/05/15 09:49

Lab Sample ID: 680-112176-3

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	ND		2.3	0.87	ug/L		05/06/15 17:19	05/13/15 17:25	1
2-Nitroaniline	ND		1.2	0.19	ug/L		05/06/15 17:19	05/13/15 17:25	1
2-Nitrophenol	**0.12**	**J**	1.2	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
3 & 4 Methylphenol	ND		2.3	0.78	ug/L		05/06/15 17:19	05/13/15 17:25	1
3,3'-Dichlorobenzidine	ND		23	2.3	ug/L		05/06/15 17:19	05/13/15 17:25	1
3-Nitroaniline	ND		5.9	0.19	ug/L		05/06/15 17:19	05/13/15 17:25	1
4,6-Dinitro-2-methylphenol	ND		5.9	1.2	ug/L		05/06/15 17:19	05/13/15 17:25	1
4-Bromophenyl phenyl ether	ND		1.2	0.14	ug/L		05/06/15 17:19	05/13/15 17:25	1
4-Chloro-3-methylphenol	ND		1.2	0.14	ug/L		05/06/15 17:19	05/13/15 17:25	1
4-Chloroaniline	ND		4.7	2.3	ug/L		05/06/15 17:19	05/13/15 17:25	1
4-Chlorophenyl phenyl ether	ND		1.2	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
4-Nitroaniline	ND		5.9	0.59	ug/L		05/06/15 17:19	05/13/15 17:25	1
4-Nitrophenol	ND		9.4	4.7	ug/L		05/06/15 17:19	05/13/15 17:25	1
Acenaphthene	ND		0.23	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Acenaphthylene	ND		0.23	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Acetophenone	**2.0**		1.2	0.35	ug/L		05/06/15 17:19	05/13/15 17:25	1
Anthracene	ND		0.23	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Atrazine	ND		4.7	2.3	ug/L		05/06/15 17:19	05/13/15 17:25	1
Benzaldehyde	ND		1.2	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Benzo[a]anthracene	ND		0.23	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Benzo[a]pyrene	ND		0.23	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Benzo[b]fluoranthene	ND		0.23	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Benzo[g,h,i]perylene	ND		0.23	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Benzo[k]fluoranthene	ND		0.23	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Bis(2-chloroethoxy)methane	ND		1.2	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Bis(2-chloroethyl)ether	ND		1.2	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Bis(2-ethylhexyl) phthalate	ND		5.9	2.3	ug/L		05/06/15 17:19	05/13/15 17:25	1
Butyl benzyl phthalate	ND		1.2	0.14	ug/L		05/06/15 17:19	05/13/15 17:25	1
Caprolactam	ND		1.2	0.15	ug/L		05/06/15 17:19	05/13/15 17:25	1
Carbazole	ND		2.3	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Chrysene	ND		0.23	0.053	ug/L		05/06/15 17:19	05/13/15 17:25	1
Dibenz(a,h)anthracene	ND		0.23	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Dibenzofuran	ND		1.2	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Diethyl phthalate	ND		1.2	0.13	ug/L		05/06/15 17:19	05/13/15 17:25	1
Dimethyl phthalate	ND		1.2	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Di-n-butyl phthalate	ND		1.2	0.46	ug/L		05/06/15 17:19	05/13/15 17:25	1
Di-n-octyl phthalate	ND		1.2	0.20	ug/L		05/06/15 17:19	05/13/15 17:25	1
Fluoranthene	ND		0.23	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Fluorene	ND		0.23	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Hexachlorobenzene	ND		1.2	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Hexachlorobutadiene	ND		1.2	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Hexachlorocyclopentadiene	ND		2.3	0.59	ug/L		05/06/15 17:19	05/13/15 17:25	1
Hexachloroethane	ND		1.2	0.59	ug/L		05/06/15 17:19	05/13/15 17:25	1
Indeno[1,2,3-cd]pyrene	ND		0.23	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Isophorone	ND		1.2	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Naphthalene	**0.36**		0.23	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Nitrobenzene	ND		1.2	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
N-Nitrosodi-n-propylamine	ND		1.2	0.15	ug/L		05/06/15 17:19	05/13/15 17:25	1
N-Nitrosodiphenylamine	ND		1.2	0.43	ug/L		05/06/15 17:19	05/13/15 17:25	1

Client Sample ID: RB-1

Lab Sample ID: 680-112176-3

Date Collected: 05/04/15 16:20
Matrix: Water
Date Received: 05/05/15 09:49

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		5.9	0.47	ug/L		05/06/15 17:19	05/13/15 17:25	1
Phenanthrene	ND		0.23	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1
Phenol	ND		1.2	0.15	ug/L		05/06/15 17:19	05/13/15 17:25	1
Pyrene	ND		0.23	0.12	ug/L		05/06/15 17:19	05/13/15 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*61*		*30 - 130*	*05/06/15 17:19*	*05/13/15 17:25*	*1*
2-Fluorobiphenyl	*61*		*34 - 130*	*05/06/15 17:19*	*05/13/15 17:25*	*1*
2-Fluorophenol (Surr)	*63*		*25 - 130*	*05/06/15 17:19*	*05/13/15 17:25*	*1*
Nitrobenzene-d5 (Surr)	*66*		*32 - 130*	*05/06/15 17:19*	*05/13/15 17:25*	*1*
Phenol-d5 (Surr)	*63*		*27 - 130*	*05/06/15 17:19*	*05/13/15 17:25*	*1*
Terphenyl-d14 (Surr)	*62*		*36 - 130*	*05/06/15 17:19*	*05/13/15 17:25*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		50	23	ug/L			05/05/15 17:17	1
Sulfate	ND		1000	400	ug/L			05/08/15 22:39	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.99	ug/L		05/06/15 15:28	05/08/15 06:26	1
Arsenic	ND		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 06:26	1
Beryllium	ND		0.20	0.070	ug/L		05/06/15 15:28	05/08/15 06:26	1
Cadmium	ND		0.50	0.20	ug/L		05/06/15 15:28	05/08/15 06:26	1
Chromium	ND		1.0	0.16	ug/L		05/06/15 15:28	05/08/15 06:26	1
Copper	ND		1.0	0.21	ug/L		05/06/15 15:28	05/08/15 06:26	1
Iron	ND		50	20	ug/L		05/06/15 15:28	05/08/15 06:26	1
Lead	ND		0.30	0.080	ug/L		05/06/15 15:28	05/08/15 06:26	1
Manganese	ND		2.0	0.84	ug/L		05/06/15 15:28	05/08/15 06:26	1
Nickel	ND		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 06:26	1
Selenium	ND		0.50	0.21	ug/L		05/06/15 15:28	05/08/15 06:26	1
Silver	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 06:26	1
Thallium	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 06:26	1
Zinc	ND		10	2.6	ug/L		05/06/15 15:28	05/08/15 06:26	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.080	ug/L		05/06/15 16:10	05/07/15 14:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		250	100	ug/L			05/06/15 14:01	1

Client Sample ID: TB-1

Lab Sample ID: 680-112176-4

Date Collected: 05/04/15 00:00
Matrix: Water
Date Received: 05/05/15 09:49

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1.0	0.22	ug/L			05/07/15 12:36	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: TB-1

Date Collected: 05/04/15 00:00
Date Received: 05/05/15 09:49

Lab Sample ID: 680-112176-4

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 127*		*05/07/15 12:36*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.37	ug/L			05/08/15 12:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.62	ug/L			05/08/15 12:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.36	ug/L			05/08/15 12:50	1
1,1,2-Trichloroethane	ND		1.0	0.33	ug/L			05/08/15 12:50	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/08/15 12:50	1
1,1-Dichloroethene	ND		1.0	0.36	ug/L			05/08/15 12:50	1
1,2,3-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 12:50	1
1,2,4-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 12:50	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.1	ug/L			05/08/15 12:50	1
1,2-Dibromoethane	ND		1.0	0.44	ug/L			05/08/15 12:50	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/08/15 12:50	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/08/15 12:50	1
1,2-Dichloropropane	ND		1.0	0.67	ug/L			05/08/15 12:50	1
1,3-Dichlorobenzene	ND		1.0	0.43	ug/L			05/08/15 12:50	1
1,4-Dichlorobenzene	ND		1.0	0.46	ug/L			05/08/15 12:50	1
2-Butanone (MEK)	ND		10	3.4	ug/L			05/08/15 12:50	1
2-Hexanone	ND		10	2.0	ug/L			05/08/15 12:50	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			05/08/15 12:50	1
Acetone	ND		10	7.0	ug/L			05/08/15 12:50	1
Benzene	ND		1.0	0.43	ug/L			05/08/15 12:50	1
Bromochloromethane	ND		1.0	0.45	ug/L			05/08/15 12:50	1
Bromoform	ND		1.0	0.43	ug/L			05/08/15 12:50	1
Bromomethane	ND		5.0	2.5	ug/L			05/08/15 12:50	1
Carbon disulfide	ND		2.0	1.0	ug/L			05/08/15 12:50	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			05/08/15 12:50	1
Chlorobenzene	ND		1.0	0.26	ug/L			05/08/15 12:50	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			05/08/15 12:50	1
Chloroethane	ND		5.0	2.5	ug/L			05/08/15 12:50	1
Chloroform	ND		1.0	0.50	ug/L			05/08/15 12:50	1
Chloromethane	ND		1.0	0.40	ug/L			05/08/15 12:50	1
cis-1,2-Dichloroethene	ND		1.0	0.41	ug/L			05/08/15 12:50	1
cis-1,3-Dichloropropene	ND		1.0	0.40	ug/L			05/08/15 12:50	1
Cyclohexane	ND		1.0	0.39	ug/L			05/08/15 12:50	1
Dichlorobromomethane	ND		1.0	0.44	ug/L			05/08/15 12:50	1
Dichlorodifluoromethane	ND		1.0	0.60	ug/L			05/08/15 12:50	1
Ethylbenzene	ND		1.0	0.33	ug/L			05/08/15 12:50	1
Isopropylbenzene	ND		1.0	0.35	ug/L			05/08/15 12:50	1
Methyl acetate	ND		5.0	1.8	ug/L			05/08/15 12:50	1
Methyl tert-butyl ether	ND		10	0.30	ug/L			05/08/15 12:50	1
Methylcyclohexane	ND		1.0	0.43	ug/L			05/08/15 12:50	1
Methylene Chloride	ND		5.0	2.5	ug/L			05/08/15 12:50	1
m-Xylene & p-Xylene	ND		1.0	0.35	ug/L			05/08/15 12:50	1
o-Xylene	ND		1.0	0.23	ug/L			05/08/15 12:50	1
Styrene	ND		1.0	0.27	ug/L			05/08/15 12:50	1
Tetrachloroethene	ND		1.0	0.74	ug/L			05/08/15 12:50	1
Toluene	ND		1.0	0.48	ug/L			05/08/15 12:50	1

Client Sample ID: TB-1

Lab Sample ID: 680-112176-4
Date Collected: 05/04/15 00:00
Matrix: Water
Date Received: 05/05/15 09:49

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/08/15 12:50	1
trans-1,3-Dichloropropene	ND		1.0	0.42	ug/L			05/08/15 12:50	1
Trichloroethene	ND		1.0	0.48	ug/L			05/08/15 12:50	1
Trichlorofluoromethane	ND		1.0	0.42	ug/L			05/08/15 12:50	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/08/15 12:50	1
Xylenes, Total	ND		1.0	0.23	ug/L			05/08/15 12:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*70 - 130*		*05/08/15 12:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*05/08/15 12:50*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*05/08/15 12:50*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*05/08/15 12:50*	*1*

Client Sample ID: MW-12

Lab Sample ID: 680-112176-5
Date Collected: 05/04/15 14:20
Matrix: Water
Date Received: 05/05/15 09:49

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.5**		1.0	0.22	ug/L			05/07/15 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 127*		*05/07/15 12:55*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.37	ug/L			05/08/15 13:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.62	ug/L			05/08/15 13:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.36	ug/L			05/08/15 13:13	1
1,1,2-Trichloroethane	ND		1.0	0.33	ug/L			05/08/15 13:13	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/08/15 13:13	1
1,1-Dichloroethene	ND		1.0	0.36	ug/L			05/08/15 13:13	1
1,2,3-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 13:13	1
1,2,4-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 13:13	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.1	ug/L			05/08/15 13:13	1
1,2-Dibromoethane	ND		1.0	0.44	ug/L			05/08/15 13:13	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/08/15 13:13	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/08/15 13:13	1
1,2-Dichloropropane	ND		1.0	0.67	ug/L			05/08/15 13:13	1
1,3-Dichlorobenzene	ND		1.0	0.43	ug/L			05/08/15 13:13	1
1,4-Dichlorobenzene	ND		1.0	0.46	ug/L			05/08/15 13:13	1
2-Butanone (MEK)	ND		10	3.4	ug/L			05/08/15 13:13	1
2-Hexanone	ND		10	2.0	ug/L			05/08/15 13:13	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			05/08/15 13:13	1
Acetone	ND		10	7.0	ug/L			05/08/15 13:13	1
Benzene	ND		1.0	0.43	ug/L			05/08/15 13:13	1
Bromochloromethane	ND		1.0	0.45	ug/L			05/08/15 13:13	1
Bromoform	ND		1.0	0.43	ug/L			05/08/15 13:13	1
Bromomethane	ND		5.0	2.5	ug/L			05/08/15 13:13	1
Carbon disulfide	ND		2.0	1.0	ug/L			05/08/15 13:13	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: MW-12

Date Collected: 05/04/15 14:20
Date Received: 05/05/15 09:49

Lab Sample ID: 680-112176-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		1.0	0.33	ug/L			05/08/15 13:13	1
Chlorobenzene	ND		1.0	0.26	ug/L			05/08/15 13:13	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			05/08/15 13:13	1
Chloroethane	ND		5.0	2.5	ug/L			05/08/15 13:13	1
Chloroform	ND		1.0	0.50	ug/L			05/08/15 13:13	1
Chloromethane	ND		1.0	0.40	ug/L			05/08/15 13:13	1
cis-1,2-Dichloroethene	**0.96**	**J**	1.0	0.41	ug/L			05/08/15 13:13	1
cis-1,3-Dichloropropene	ND		1.0	0.40	ug/L			05/08/15 13:13	1
Cyclohexane	ND		1.0	0.39	ug/L			05/08/15 13:13	1
Dichlorobromomethane	ND		1.0	0.44	ug/L			05/08/15 13:13	1
Dichlorodifluoromethane	ND		1.0	0.60	ug/L			05/08/15 13:13	1
Ethylbenzene	ND		1.0	0.33	ug/L			05/08/15 13:13	1
Isopropylbenzene	ND		1.0	0.35	ug/L			05/08/15 13:13	1
Methyl acetate	ND		5.0	1.8	ug/L			05/08/15 13:13	1
Methyl tert-butyl ether	ND		10	0.30	ug/L			05/08/15 13:13	1
Methylcyclohexane	ND		1.0	0.43	ug/L			05/08/15 13:13	1
Methylene Chloride	ND		5.0	2.5	ug/L			05/08/15 13:13	1
m-Xylene & p-Xylene	ND		1.0	0.35	ug/L			05/08/15 13:13	1
o-Xylene	ND		1.0	0.23	ug/L			05/08/15 13:13	1
Styrene	ND		1.0	0.27	ug/L			05/08/15 13:13	1
Tetrachloroethene	ND		1.0	0.74	ug/L			05/08/15 13:13	1
Toluene	ND		1.0	0.48	ug/L			05/08/15 13:13	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/08/15 13:13	1
trans-1,3-Dichloropropene	ND		1.0	0.42	ug/L			05/08/15 13:13	1
Trichloroethene	ND		1.0	0.48	ug/L			05/08/15 13:13	1
Trichlorofluoromethane	ND		1.0	0.42	ug/L			05/08/15 13:13	1
Vinyl chloride	**0.77**	**J**	1.0	0.50	ug/L			05/08/15 13:13	1
Xylenes, Total	ND		1.0	0.23	ug/L			05/08/15 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*70 - 130*		*05/08/15 13:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*05/08/15 13:13*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*05/08/15 13:13*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*05/08/15 13:13*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		0.96	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
1,2,4,5-Tetrachlorobenzene	ND		0.96	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
2,2'-oxybis[1-chloropropane]	ND		0.96	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
2,3,4,6-Tetrachlorophenol	ND		0.96	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
2,4,5-Trichlorophenol	ND		0.96	0.12	ug/L		05/06/15 17:19	05/13/15 17:53	1
2,4,6-Trichlorophenol	ND		0.96	0.16	ug/L		05/06/15 17:19	05/13/15 17:53	1
2,4-Dichlorophenol	ND		0.96	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
2,4-Dimethylphenol	ND		1.9	0.66	ug/L		05/06/15 17:19	05/13/15 17:53	1
2,4-Dinitrophenol	ND		9.6	1.1	ug/L		05/06/15 17:19	05/13/15 17:53	1
2,4-Dinitrotoluene	ND		0.96	0.12	ug/L		05/06/15 17:19	05/13/15 17:53	1
2,6-Dinitrotoluene	ND		0.96	0.13	ug/L		05/06/15 17:19	05/13/15 17:53	1
2-Chloronaphthalene	ND		0.96	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
2-Chlorophenol	ND		0.96	0.12	ug/L		05/06/15 17:19	05/13/15 17:53	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: MW-12

Date Collected: 05/04/15 14:20
Date Received: 05/05/15 09:49

Lab Sample ID: 680-112176-5

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		0.19	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
2-Methylphenol	ND		1.9	0.71	ug/L		05/06/15 17:19	05/13/15 17:53	1
2-Nitroaniline	ND		0.96	0.15	ug/L		05/06/15 17:19	05/13/15 17:53	1
2-Nitrophenol	ND		0.96	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
3 & 4 Methylphenol	ND		1.9	0.64	ug/L		05/06/15 17:19	05/13/15 17:53	1
3,3'-Dichlorobenzidine	ND		19	1.9	ug/L		05/06/15 17:19	05/13/15 17:53	1
3-Nitroaniline	ND		4.8	0.15	ug/L		05/06/15 17:19	05/13/15 17:53	1
4,6-Dinitro-2-methylphenol	ND		4.8	0.96	ug/L		05/06/15 17:19	05/13/15 17:53	1
4-Bromophenyl phenyl ether	ND		0.96	0.12	ug/L		05/06/15 17:19	05/13/15 17:53	1
4-Chloro-3-methylphenol	ND		0.96	0.12	ug/L		05/06/15 17:19	05/13/15 17:53	1
4-Chloroaniline	ND		3.8	1.9	ug/L		05/06/15 17:19	05/13/15 17:53	1
4-Chlorophenyl phenyl ether	ND		0.96	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
4-Nitroaniline	ND		4.8	0.48	ug/L		05/06/15 17:19	05/13/15 17:53	1
4-Nitrophenol	ND		7.7	3.8	ug/L		05/06/15 17:19	05/13/15 17:53	1
Acenaphthene	ND		0.19	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Acenaphthylene	ND		0.19	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Acetophenone	ND		0.96	0.29	ug/L		05/06/15 17:19	05/13/15 17:53	1
Anthracene	ND		0.19	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Atrazine	ND		3.8	1.9	ug/L		05/06/15 17:19	05/13/15 17:53	1
Benzaldehyde	ND		0.96	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Benzo[a]anthracene	ND		0.19	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Benzo[a]pyrene	ND		0.19	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Benzo[b]fluoranthene	ND		0.19	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Benzo[g,h,i]perylene	ND		0.19	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Bis(2-chloroethoxy)methane	ND		0.96	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Bis(2-chloroethyl)ether	ND		0.96	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Bis(2-ethylhexyl) phthalate	ND		4.8	1.9	ug/L		05/06/15 17:19	05/13/15 17:53	1
Butyl benzyl phthalate	ND		0.96	0.12	ug/L		05/06/15 17:19	05/13/15 17:53	1
Caprolactam	ND		0.96	0.13	ug/L		05/06/15 17:19	05/13/15 17:53	1
Carbazole	ND		1.9	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Chrysene	ND		0.19	0.043	ug/L		05/06/15 17:19	05/13/15 17:53	1
Dibenz(a,h)anthracene	ND		0.19	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Dibenzofuran	ND		0.96	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Diethyl phthalate	**0.35**	**J**	0.96	0.11	ug/L		05/06/15 17:19	05/13/15 17:53	1
Dimethyl phthalate	ND		0.96	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Di-n-butyl phthalate	ND		0.96	0.38	ug/L		05/06/15 17:19	05/13/15 17:53	1
Di-n-octyl phthalate	ND		0.96	0.16	ug/L		05/06/15 17:19	05/13/15 17:53	1
Fluoranthene	ND		0.19	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Fluorene	ND		0.19	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Hexachlorobenzene	ND		0.96	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Hexachlorobutadiene	ND		0.96	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Hexachlorocyclopentadiene	ND		1.9	0.48	ug/L		05/06/15 17:19	05/13/15 17:53	1
Hexachloroethane	ND		0.96	0.48	ug/L		05/06/15 17:19	05/13/15 17:53	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Isophorone	ND		0.96	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Naphthalene	**0.12**	**J**	0.19	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Nitrobenzene	ND		0.96	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
N-Nitrosodi-n-propylamine	ND		0.96	0.13	ug/L		05/06/15 17:19	05/13/15 17:53	1

Client Sample ID: MW-12

Lab Sample ID: 680-112176-5
Date Collected: 05/04/15 14:20
Matrix: Water
Date Received: 05/05/15 09:49

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		0.96	0.36	ug/L		05/06/15 17:19	05/13/15 17:53	1
Pentachlorophenol	ND		4.8	0.38	ug/L		05/06/15 17:19	05/13/15 17:53	1
Phenanthrene	ND		0.19	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1
Phenol	ND		0.96	0.13	ug/L		05/06/15 17:19	05/13/15 17:53	1
Pyrene	ND		0.19	0.096	ug/L		05/06/15 17:19	05/13/15 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*62*		*30 - 130*	*05/06/15 17:19*	*05/13/15 17:53*	*1*
2-Fluorobiphenyl	*60*		*34 - 130*	*05/06/15 17:19*	*05/13/15 17:53*	*1*
2-Fluorophenol (Surr)	*65*		*25 - 130*	*05/06/15 17:19*	*05/13/15 17:53*	*1*
Nitrobenzene-d5 (Surr)	*68*		*32 - 130*	*05/06/15 17:19*	*05/13/15 17:53*	*1*
Phenol-d5 (Surr)	*67*		*27 - 130*	*05/06/15 17:19*	*05/13/15 17:53*	*1*
Terphenyl-d14 (Surr)	*54*		*36 - 130*	*05/06/15 17:19*	*05/13/15 17:53*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**350**		50	23	ug/L			05/05/15 17:33	1
Sulfate	**23000**		1000	400	ug/L			05/08/15 22:54	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.99	ug/L		05/06/15 15:28	05/08/15 06:31	1
Arsenic	ND		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 06:31	1
Beryllium	**0.10**	**J**	0.20	0.070	ug/L		05/06/15 15:28	05/08/15 06:31	1
Cadmium	ND		0.50	0.20	ug/L		05/06/15 15:28	05/08/15 06:31	1
Chromium	**1.1**		1.0	0.16	ug/L		05/06/15 15:28	05/08/15 06:31	1
Copper	ND		1.0	0.21	ug/L		05/06/15 15:28	05/08/15 06:31	1
Iron	**57**		50	20	ug/L		05/06/15 15:28	05/08/15 06:31	1
Lead	ND		0.30	0.080	ug/L		05/06/15 15:28	05/08/15 06:31	1
Manganese	**110**		2.0	0.84	ug/L		05/06/15 15:28	05/08/15 06:31	1
Nickel	**1.3**		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 06:31	1
Selenium	**0.22**	**J**	0.50	0.21	ug/L		05/06/15 15:28	05/08/15 06:31	1
Silver	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 06:31	1
Thallium	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 06:31	1
Zinc	**5.2**	**J**	10	2.6	ug/L		05/06/15 15:28	05/08/15 06:31	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.080	ug/L		05/06/15 16:10	05/07/15 14:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		250	100	ug/L			05/06/15 14:19	1

Client Sample ID: MW-9

Lab Sample ID: 680-112176-6
Date Collected: 05/04/15 12:40
Matrix: Water
Date Received: 05/05/15 09:49

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1.0	0.22	ug/L			05/07/15 13:14	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: MW-9

Date Collected: 05/04/15 12:40
Date Received: 05/05/15 09:49

Lab Sample ID: 680-112176-6

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 127*		*05/07/15 13:14*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.37	ug/L			05/08/15 13:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.62	ug/L			05/08/15 13:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.36	ug/L			05/08/15 13:36	1
1,1,2-Trichloroethane	ND		1.0	0.33	ug/L			05/08/15 13:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/08/15 13:36	1
1,1-Dichloroethene	ND		1.0	0.36	ug/L			05/08/15 13:36	1
1,2,3-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 13:36	1
1,2,4-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 13:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.1	ug/L			05/08/15 13:36	1
1,2-Dibromoethane	ND		1.0	0.44	ug/L			05/08/15 13:36	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/08/15 13:36	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/08/15 13:36	1
1,2-Dichloropropane	ND		1.0	0.67	ug/L			05/08/15 13:36	1
1,3-Dichlorobenzene	ND		1.0	0.43	ug/L			05/08/15 13:36	1
1,4-Dichlorobenzene	ND		1.0	0.46	ug/L			05/08/15 13:36	1
2-Butanone (MEK)	ND		10	3.4	ug/L			05/08/15 13:36	1
2-Hexanone	ND		10	2.0	ug/L			05/08/15 13:36	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			05/08/15 13:36	1
Acetone	ND		10	7.0	ug/L			05/08/15 13:36	1
Benzene	ND		1.0	0.43	ug/L			05/08/15 13:36	1
Bromochloromethane	ND		1.0	0.45	ug/L			05/08/15 13:36	1
Bromoform	ND		1.0	0.43	ug/L			05/08/15 13:36	1
Bromomethane	ND		5.0	2.5	ug/L			05/08/15 13:36	1
Carbon disulfide	ND		2.0	1.0	ug/L			05/08/15 13:36	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			05/08/15 13:36	1
Chlorobenzene	ND		1.0	0.26	ug/L			05/08/15 13:36	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			05/08/15 13:36	1
Chloroethane	ND		5.0	2.5	ug/L			05/08/15 13:36	1
Chloroform	ND		1.0	0.50	ug/L			05/08/15 13:36	1
Chloromethane	ND		1.0	0.40	ug/L			05/08/15 13:36	1
cis-1,2-Dichloroethene	ND		1.0	0.41	ug/L			05/08/15 13:36	1
cis-1,3-Dichloropropene	ND		1.0	0.40	ug/L			05/08/15 13:36	1
Cyclohexane	ND		1.0	0.39	ug/L			05/08/15 13:36	1
Dichlorobromomethane	ND		1.0	0.44	ug/L			05/08/15 13:36	1
Dichlorodifluoromethane	ND		1.0	0.60	ug/L			05/08/15 13:36	1
Ethylbenzene	ND		1.0	0.33	ug/L			05/08/15 13:36	1
Isopropylbenzene	ND		1.0	0.35	ug/L			05/08/15 13:36	1
Methyl acetate	ND		5.0	1.8	ug/L			05/08/15 13:36	1
Methyl tert-butyl ether	ND		10	0.30	ug/L			05/08/15 13:36	1
Methylcyclohexane	ND		1.0	0.43	ug/L			05/08/15 13:36	1
Methylene Chloride	ND		5.0	2.5	ug/L			05/08/15 13:36	1
m-Xylene & p-Xylene	ND		1.0	0.35	ug/L			05/08/15 13:36	1
o-Xylene	ND		1.0	0.23	ug/L			05/08/15 13:36	1
Styrene	ND		1.0	0.27	ug/L			05/08/15 13:36	1
Tetrachloroethene	ND		1.0	0.74	ug/L			05/08/15 13:36	1
Toluene	ND		1.0	0.48	ug/L			05/08/15 13:36	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: MW-9

Date Collected: 05/04/15 12:40
Date Received: 05/05/15 09:49

Lab Sample ID: 680-112176-6

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/08/15 13:36	1
trans-1,3-Dichloropropene	ND		1.0	0.42	ug/L			05/08/15 13:36	1
Trichloroethene	ND		1.0	0.48	ug/L			05/08/15 13:36	1
Trichlorofluoromethane	ND		1.0	0.42	ug/L			05/08/15 13:36	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/08/15 13:36	1
Xylenes, Total	ND		1.0	0.23	ug/L			05/08/15 13:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*70 - 130*		*05/08/15 13:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*05/08/15 13:36*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*05/08/15 13:36*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*05/08/15 13:36*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		0.97	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
1,2,4,5-Tetrachlorobenzene	ND		0.97	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
2,2'-oxybis[1-chloropropane]	ND		0.97	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
2,3,4,6-Tetrachlorophenol	ND		0.97	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
2,4,5-Trichlorophenol	ND		0.97	0.12	ug/L		05/06/15 17:19	05/13/15 18:21	1
2,4,6-Trichlorophenol	ND		0.97	0.17	ug/L		05/06/15 17:19	05/13/15 18:21	1
2,4-Dichlorophenol	ND		0.97	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
2,4-Dimethylphenol	ND		1.9	0.67	ug/L		05/06/15 17:19	05/13/15 18:21	1
2,4-Dinitrophenol	ND		9.7	1.1	ug/L		05/06/15 17:19	05/13/15 18:21	1
2,4-Dinitrotoluene	ND		0.97	0.12	ug/L		05/06/15 17:19	05/13/15 18:21	1
2,6-Dinitrotoluene	ND		0.97	0.13	ug/L		05/06/15 17:19	05/13/15 18:21	1
2-Chloronaphthalene	ND		0.97	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
2-Chlorophenol	ND		0.97	0.12	ug/L		05/06/15 17:19	05/13/15 18:21	1
2-Methylnaphthalene	ND		0.19	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
2-Methylphenol	ND		1.9	0.72	ug/L		05/06/15 17:19	05/13/15 18:21	1
2-Nitroaniline	ND		0.97	0.16	ug/L		05/06/15 17:19	05/13/15 18:21	1
2-Nitrophenol	**0.16**	**J**	0.97	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
3 & 4 Methylphenol	ND		1.9	0.64	ug/L		05/06/15 17:19	05/13/15 18:21	1
3,3'-Dichlorobenzidine	ND		19	1.9	ug/L		05/06/15 17:19	05/13/15 18:21	1
3-Nitroaniline	ND		4.9	0.16	ug/L		05/06/15 17:19	05/13/15 18:21	1
4,6-Dinitro-2-methylphenol	ND		4.9	0.97	ug/L		05/06/15 17:19	05/13/15 18:21	1
4-Bromophenyl phenyl ether	ND		0.97	0.12	ug/L		05/06/15 17:19	05/13/15 18:21	1
4-Chloro-3-methylphenol	ND		0.97	0.12	ug/L		05/06/15 17:19	05/13/15 18:21	1
4-Chloroaniline	ND		3.9	1.9	ug/L		05/06/15 17:19	05/13/15 18:21	1
4-Chlorophenyl phenyl ether	ND		0.97	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
4-Nitroaniline	ND		4.9	0.49	ug/L		05/06/15 17:19	05/13/15 18:21	1
4-Nitrophenol	ND		7.8	3.9	ug/L		05/06/15 17:19	05/13/15 18:21	1
Acenaphthene	ND		0.19	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Acenaphthylene	ND		0.19	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Acetophenone	ND		0.97	0.29	ug/L		05/06/15 17:19	05/13/15 18:21	1
Anthracene	ND		0.19	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Atrazine	ND		3.9	1.9	ug/L		05/06/15 17:19	05/13/15 18:21	1
Benzaldehyde	ND		0.97	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Benzo[a]anthracene	ND		0.19	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Benzo[a]pyrene	ND		0.19	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: MW-9

Date Collected: 05/04/15 12:40
Date Received: 05/05/15 09:49

Lab Sample ID: 680-112176-6

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		0.19	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Benzo[g,h,i]perylene	ND		0.19	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Benzo[k]fluoranthene	ND		0.19	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Bis(2-chloroethoxy)methane	ND		0.97	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Bis(2-chloroethyl)ether	ND		0.97	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Bis(2-ethylhexyl) phthalate	ND		4.9	1.9	ug/L		05/06/15 17:19	05/13/15 18:21	1
Butyl benzyl phthalate	ND		0.97	0.12	ug/L		05/06/15 17:19	05/13/15 18:21	1
Caprolactam	ND		0.97	0.13	ug/L		05/06/15 17:19	05/13/15 18:21	1
Carbazole	ND		1.9	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Chrysene	ND		0.19	0.044	ug/L		05/06/15 17:19	05/13/15 18:21	1
Dibenz(a,h)anthracene	ND		0.19	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Dibenzofuran	ND		0.97	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Diethyl phthalate	ND		0.97	0.11	ug/L		05/06/15 17:19	05/13/15 18:21	1
Dimethyl phthalate	ND		0.97	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Di-n-butyl phthalate	ND		0.97	0.38	ug/L		05/06/15 17:19	05/13/15 18:21	1
Di-n-octyl phthalate	ND		0.97	0.17	ug/L		05/06/15 17:19	05/13/15 18:21	1
Fluoranthene	ND		0.19	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Fluorene	ND		0.19	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Hexachlorobenzene	ND		0.97	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Hexachlorobutadiene	ND		0.97	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Hexachlorocyclopentadiene	ND		1.9	0.49	ug/L		05/06/15 17:19	05/13/15 18:21	1
Hexachloroethane	ND		0.97	0.49	ug/L		05/06/15 17:19	05/13/15 18:21	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Isophorone	ND		0.97	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Naphthalene	ND		0.19	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Nitrobenzene	ND		0.97	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
N-Nitrosodi-n-propylamine	ND		0.97	0.13	ug/L		05/06/15 17:19	05/13/15 18:21	1
N-Nitrosodiphenylamine	ND		0.97	0.36	ug/L		05/06/15 17:19	05/13/15 18:21	1
Pentachlorophenol	ND		4.9	0.39	ug/L		05/06/15 17:19	05/13/15 18:21	1
Phenanthrene	ND		0.19	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1
Phenol	ND		0.97	0.13	ug/L		05/06/15 17:19	05/13/15 18:21	1
Pyrene	ND		0.19	0.097	ug/L		05/06/15 17:19	05/13/15 18:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*65*		*30 - 130*	*05/06/15 17:19*	*05/13/15 18:21*	*1*
2-Fluorobiphenyl	*66*		*34 - 130*	*05/06/15 17:19*	*05/13/15 18:21*	*1*
2-Fluorophenol (Surr)	*66*		*25 - 130*	*05/06/15 17:19*	*05/13/15 18:21*	*1*
Nitrobenzene-d5 (Surr)	*70*		*32 - 130*	*05/06/15 17:19*	*05/13/15 18:21*	*1*
Phenol-d5 (Surr)	*68*		*27 - 130*	*05/06/15 17:19*	*05/13/15 18:21*	*1*
Terphenyl-d14 (Surr)	*64*		*36 - 130*	*05/06/15 17:19*	*05/13/15 18:21*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**1300**		50	23	ug/L			05/05/15 17:48	1
Sulfate	**20000**		1000	400	ug/L			05/08/15 23:08	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.99	ug/L		05/06/15 15:28	05/08/15 06:36	1
Arsenic	ND		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 06:36	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: MW-9

Lab Sample ID: 680-112176-6
Date Collected: 05/04/15 12:40
Matrix: Water
Date Received: 05/05/15 09:49

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	1.2		0.20	0.070	ug/L		05/06/15 15:28	05/08/15 06:36	1
Cadmium	0.21	J	0.50	0.20	ug/L		05/06/15 15:28	05/08/15 06:36	1
Chromium	0.28	J	1.0	0.16	ug/L		05/06/15 15:28	05/08/15 06:36	1
Copper	ND		1.0	0.21	ug/L		05/06/15 15:28	05/08/15 06:36	1
Iron	ND		50	20	ug/L		05/06/15 15:28	05/08/15 06:36	1
Lead	ND		0.30	0.080	ug/L		05/06/15 15:28	05/08/15 06:36	1
Manganese	310		2.0	0.84	ug/L		05/06/15 15:28	05/08/15 06:36	1
Nickel	0.56	J	1.0	0.40	ug/L		05/06/15 15:28	05/08/15 06:36	1
Selenium	1.9		0.50	0.21	ug/L		05/06/15 15:28	05/08/15 06:36	1
Silver	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 06:36	1
Thallium	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 06:36	1
Zinc	2.6	J	10	2.6	ug/L		05/06/15 15:28	05/08/15 06:36	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.080	ug/L		05/06/15 16:10	05/07/15 14:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		250	100	ug/L			05/06/15 14:19	1

Client Sample ID: TB-5

Lab Sample ID: 680-112176-7
Date Collected: 05/04/15 00:00
Matrix: Water
Date Received: 05/05/15 09:49

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1.0	0.22	ug/L			05/07/15 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 127*		*05/07/15 13:32*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.37	ug/L			05/08/15 11:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.62	ug/L			05/08/15 11:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.36	ug/L			05/08/15 11:18	1
1,1,2-Trichloroethane	ND		1.0	0.33	ug/L			05/08/15 11:18	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/08/15 11:18	1
1,1-Dichloroethene	ND		1.0	0.36	ug/L			05/08/15 11:18	1
1,2,3-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 11:18	1
1,2,4-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 11:18	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.1	ug/L			05/08/15 11:18	1
1,2-Dibromoethane	ND		1.0	0.44	ug/L			05/08/15 11:18	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/08/15 11:18	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/08/15 11:18	1
1,2-Dichloropropane	ND		1.0	0.67	ug/L			05/08/15 11:18	1
1,3-Dichlorobenzene	ND		1.0	0.43	ug/L			05/08/15 11:18	1
1,4-Dichlorobenzene	ND		1.0	0.46	ug/L			05/08/15 11:18	1
2-Butanone (MEK)	ND		10	3.4	ug/L			05/08/15 11:18	1
2-Hexanone	ND		10	2.0	ug/L			05/08/15 11:18	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: TB-5

Date Collected: 05/04/15 00:00
Date Received: 05/05/15 09:49

Lab Sample ID: 680-112176-7

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			05/08/15 11:18	1
Acetone	ND		10	7.0	ug/L			05/08/15 11:18	1
Benzene	ND		1.0	0.43	ug/L			05/08/15 11:18	1
Bromochloromethane	ND		1.0	0.45	ug/L			05/08/15 11:18	1
Bromoform	ND		1.0	0.43	ug/L			05/08/15 11:18	1
Bromomethane	ND		5.0	2.5	ug/L			05/08/15 11:18	1
Carbon disulfide	ND		2.0	1.0	ug/L			05/08/15 11:18	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			05/08/15 11:18	1
Chlorobenzene	ND		1.0	0.26	ug/L			05/08/15 11:18	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			05/08/15 11:18	1
Chloroethane	ND		5.0	2.5	ug/L			05/08/15 11:18	1
Chloroform	ND		1.0	0.50	ug/L			05/08/15 11:18	1
Chloromethane	ND		1.0	0.40	ug/L			05/08/15 11:18	1
cis-1,2-Dichloroethene	ND		1.0	0.41	ug/L			05/08/15 11:18	1
cis-1,3-Dichloropropene	ND		1.0	0.40	ug/L			05/08/15 11:18	1
Cyclohexane	ND		1.0	0.39	ug/L			05/08/15 11:18	1
Dichlorobromomethane	ND		1.0	0.44	ug/L			05/08/15 11:18	1
Dichlorodifluoromethane	ND		1.0	0.60	ug/L			05/08/15 11:18	1
Ethylbenzene	ND		1.0	0.33	ug/L			05/08/15 11:18	1
Isopropylbenzene	ND		1.0	0.35	ug/L			05/08/15 11:18	1
Methyl acetate	ND		5.0	1.8	ug/L			05/08/15 11:18	1
Methyl tert-butyl ether	ND		10	0.30	ug/L			05/08/15 11:18	1
Methylcyclohexane	ND		1.0	0.43	ug/L			05/08/15 11:18	1
Methylene Chloride	ND		5.0	2.5	ug/L			05/08/15 11:18	1
m-Xylene & p-Xylene	ND		1.0	0.35	ug/L			05/08/15 11:18	1
o-Xylene	ND		1.0	0.23	ug/L			05/08/15 11:18	1
Styrene	ND		1.0	0.27	ug/L			05/08/15 11:18	1
Tetrachloroethene	ND		1.0	0.74	ug/L			05/08/15 11:18	1
Toluene	ND		1.0	0.48	ug/L			05/08/15 11:18	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/08/15 11:18	1
trans-1,3-Dichloropropene	ND		1.0	0.42	ug/L			05/08/15 11:18	1
Trichloroethene	ND		1.0	0.48	ug/L			05/08/15 11:18	1
Trichlorofluoromethane	ND		1.0	0.42	ug/L			05/08/15 11:18	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/08/15 11:18	1
Xylenes, Total	ND		1.0	0.23	ug/L			05/08/15 11:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*105*		*70 - 130*		*05/08/15 11:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*05/08/15 11:18*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*05/08/15 11:18*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*05/08/15 11:18*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-382040/8
Matrix: Water
Analysis Batch: 382040

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.37	ug/L			05/08/15 10:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.62	ug/L			05/08/15 10:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.36	ug/L			05/08/15 10:18	1
1,1,2-Trichloroethane	ND		1.0	0.33	ug/L			05/08/15 10:18	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/08/15 10:18	1
1,1-Dichloroethene	ND		1.0	0.36	ug/L			05/08/15 10:18	1
1,2,3-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 10:18	1
1,2,4-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 10:18	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.1	ug/L			05/08/15 10:18	1
1,2-Dibromoethane	ND		1.0	0.44	ug/L			05/08/15 10:18	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/08/15 10:18	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/08/15 10:18	1
1,2-Dichloropropane	ND		1.0	0.67	ug/L			05/08/15 10:18	1
1,3-Dichlorobenzene	ND		1.0	0.43	ug/L			05/08/15 10:18	1
1,4-Dichlorobenzene	ND		1.0	0.46	ug/L			05/08/15 10:18	1
2-Butanone (MEK)	ND		10	3.4	ug/L			05/08/15 10:18	1
2-Hexanone	ND		10	2.0	ug/L			05/08/15 10:18	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			05/08/15 10:18	1
Acetone	ND		10	7.0	ug/L			05/08/15 10:18	1
Benzene	ND		1.0	0.43	ug/L			05/08/15 10:18	1
Bromochloromethane	ND		1.0	0.45	ug/L			05/08/15 10:18	1
Bromoform	ND		1.0	0.43	ug/L			05/08/15 10:18	1
Bromomethane	ND		5.0	2.5	ug/L			05/08/15 10:18	1
Carbon disulfide	ND		2.0	1.0	ug/L			05/08/15 10:18	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			05/08/15 10:18	1
Chlorobenzene	ND		1.0	0.26	ug/L			05/08/15 10:18	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			05/08/15 10:18	1
Chloroethane	ND		5.0	2.5	ug/L			05/08/15 10:18	1
Chloroform	ND		1.0	0.50	ug/L			05/08/15 10:18	1
Chloromethane	ND		1.0	0.40	ug/L			05/08/15 10:18	1
cis-1,2-Dichloroethene	ND		1.0	0.41	ug/L			05/08/15 10:18	1
cis-1,3-Dichloropropene	ND		1.0	0.40	ug/L			05/08/15 10:18	1
Cyclohexane	ND		1.0	0.39	ug/L			05/08/15 10:18	1
Dichlorobromomethane	ND		1.0	0.44	ug/L			05/08/15 10:18	1
Dichlorodifluoromethane	ND		1.0	0.60	ug/L			05/08/15 10:18	1
Ethylbenzene	ND		1.0	0.33	ug/L			05/08/15 10:18	1
Isopropylbenzene	ND		1.0	0.35	ug/L			05/08/15 10:18	1
Methyl acetate	ND		5.0	1.8	ug/L			05/08/15 10:18	1
Methyl tert-butyl ether	ND		10	0.30	ug/L			05/08/15 10:18	1
Methylcyclohexane	ND		1.0	0.43	ug/L			05/08/15 10:18	1
Methylene Chloride	ND		5.0	2.5	ug/L			05/08/15 10:18	1
m-Xylene & p-Xylene	ND		1.0	0.35	ug/L			05/08/15 10:18	1
o-Xylene	ND		1.0	0.23	ug/L			05/08/15 10:18	1
Styrene	ND		1.0	0.27	ug/L			05/08/15 10:18	1
Tetrachloroethene	ND		1.0	0.74	ug/L			05/08/15 10:18	1
Toluene	ND		1.0	0.48	ug/L			05/08/15 10:18	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/08/15 10:18	1
trans-1,3-Dichloropropene	ND		1.0	0.42	ug/L			05/08/15 10:18	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-382040/8
Matrix: Water
Analysis Batch: 382040

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		1.0	0.48	ug/L			05/08/15 10:18	1
Trichlorofluoromethane	ND		1.0	0.42	ug/L			05/08/15 10:18	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/08/15 10:18	1
Xylenes, Total	ND		1.0	0.23	ug/L			05/08/15 10:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*70 - 130*		*05/08/15 10:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*		*05/08/15 10:18*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*05/08/15 10:18*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*05/08/15 10:18*	*1*

Lab Sample ID: LCS 680-382040/3
Matrix: Water
Analysis Batch: 382040

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	46.4		ug/L		93	74 - 128
1,1,2,2-Tetrachloroethane	50.0	51.5		ug/L		103	72 - 128
1,1,2-Trichloro-1,2,2-trifluoroetha ne	50.0	47.8		ug/L		96	65 - 131
1,1,2-Trichloroethane	50.0	48.5		ug/L		97	79 - 125
1,1-Dichloroethane	50.0	47.2		ug/L		94	80 - 120
1,1-Dichloroethene	50.0	48.5		ug/L		97	74 - 125
1,2,3-Trichlorobenzene	50.0	52.6		ug/L		105	61 - 151
1,2,4-Trichlorobenzene	50.0	51.7		ug/L		103	77 - 131
1,2-Dibromo-3-Chloropropane	50.0	53.5		ug/L		107	59 - 141
1,2-Dibromoethane	50.0	48.7		ug/L		97	77 - 131
1,2-Dichlorobenzene	50.0	51.3		ug/L		103	80 - 120
1,2-Dichloroethane	50.0	45.7		ug/L		91	75 - 130
1,2-Dichloropropane	50.0	48.0		ug/L		96	80 - 123
1,3-Dichlorobenzene	50.0	48.8		ug/L		98	80 - 120
1,4-Dichlorobenzene	50.0	49.1		ug/L		98	80 - 120
2-Butanone (MEK)	250	239		ug/L		96	75 - 133
2-Hexanone	250	237		ug/L		95	70 - 141
4-Methyl-2-pentanone (MIBK)	250	237		ug/L		95	75 - 135
Acetone	250	244		ug/L		98	60 - 154
Benzene	50.0	48.3		ug/L		97	73 - 131
Bromochloromethane	50.0	50.7		ug/L		101	77 - 122
Bromoform	50.0	54.5		ug/L		109	69 - 135
Bromomethane	50.0	42.7		ug/L		85	20 - 180
Carbon disulfide	50.0	43.1		ug/L		86	73 - 127
Carbon tetrachloride	50.0	49.0		ug/L		98	75 - 130
Chlorobenzene	50.0	49.9		ug/L		100	80 - 120
Chlorodibromomethane	50.0	51.3		ug/L		103	71 - 136
Chloroethane	50.0	44.9		ug/L		90	50 - 151
Chloroform	50.0	46.4		ug/L		93	79 - 122
Chloromethane	50.0	39.8		ug/L		80	63 - 126
cis-1,2-Dichloroethene	50.0	46.9		ug/L		94	80 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-382040/3
Matrix: Water
Analysis Batch: 382040

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	50.0	49.4		ug/L		99	80 - 133
Cyclohexane	50.0	45.9		ug/L		92	69 - 130
Dichlorobromomethane	50.0	48.7		ug/L		97	77 - 129
Dichlorodifluoromethane	50.0	37.0		ug/L		74	51 - 140
Ethylbenzene	50.0	50.0		ug/L		100	80 - 120
Isopropylbenzene	50.0	50.0		ug/L		100	80 - 120
Methyl acetate	250	243		ug/L		97	66 - 134
Methyl tert-butyl ether	50.0	48.1		ug/L		96	74 - 135
Methylcyclohexane	50.0	46.6		ug/L		93	75 - 127
Methylene Chloride	50.0	47.2		ug/L		94	76 - 129
m-Xylene & p-Xylene	50.0	49.7		ug/L		99	80 - 120
o-Xylene	50.0	50.5		ug/L		101	80 - 120
Styrene	50.0	51.1		ug/L		102	80 - 122
Tetrachloroethene	50.0	48.0		ug/L		96	77 - 123
Toluene	50.0	48.2		ug/L		96	80 - 122
trans-1,2-Dichloroethene	50.0	46.9		ug/L		94	78 - 123
trans-1,3-Dichloropropene	50.0	48.5		ug/L		97	74 - 140
Trichloroethene	50.0	47.9		ug/L		96	80 - 123
Trichlorofluoromethane	50.0	42.9		ug/L		86	58 - 145
Vinyl chloride	50.0	42.3		ug/L		85	68 - 132
Xylenes, Total	100	100		ug/L		100	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 680-382040/4
Matrix: Water
Analysis Batch: 382040

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	50.0	46.6		ug/L		93	74 - 128	0	20
1,1,2,2-Tetrachloroethane	50.0	50.5		ug/L		101	72 - 128	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	48.5		ug/L		97	65 - 131	1	30
1,1,2-Trichloroethane	50.0	48.3		ug/L		97	79 - 125	0	20
1,1-Dichloroethane	50.0	47.2		ug/L		94	80 - 120	0	20
1,1-Dichloroethene	50.0	48.8		ug/L		98	74 - 125	1	20
1,2,3-Trichlorobenzene	50.0	52.3		ug/L		105	61 - 151	0	40
1,2,4-Trichlorobenzene	50.0	51.6		ug/L		103	77 - 131	0	20
1,2-Dibromo-3-Chloropropane	50.0	52.0		ug/L		104	59 - 141	3	30
1,2-Dibromoethane	50.0	48.3		ug/L		97	77 - 131	1	30
1,2-Dichlorobenzene	50.0	49.8		ug/L		100	80 - 120	3	20
1,2-Dichloroethane	50.0	44.0		ug/L		88	75 - 130	4	20
1,2-Dichloropropane	50.0	47.8		ug/L		96	80 - 123	0	20
1,3-Dichlorobenzene	50.0	49.0		ug/L		98	80 - 120	0	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-382040/4
Matrix: Water
Analysis Batch: 382040

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene			50.0	49.0		ug/L		98	80 - 120	0	20
2-Butanone (MEK)			250	237		ug/L		95	75 - 133	1	30
2-Hexanone			250	234		ug/L		93	70 - 141	1	40
4-Methyl-2-pentanone (MIBK)			250	232		ug/L		93	75 - 135	2	30
Acetone			250	242		ug/L		97	60 - 154	1	40
Benzene			50.0	48.4		ug/L		97	73 - 131	0	30
Bromochloromethane			50.0	50.4		ug/L		101	77 - 122	1	20
Bromoform			50.0	54.6		ug/L		109	69 - 135	0	20
Bromomethane			50.0	45.9		ug/L		92	20 - 180	7	40
Carbon disulfide			50.0	44.6		ug/L		89	73 - 127	3	20
Carbon tetrachloride			50.0	49.5		ug/L		99	75 - 130	1	20
Chlorobenzene			50.0	50.4		ug/L		101	80 - 120	1	20
Chlorodibromomethane			50.0	50.0		ug/L		100	71 - 136	3	20
Chloroethane			50.0	44.9		ug/L		90	50 - 151	0	30
Chloroform			50.0	46.7		ug/L		93	79 - 122	1	20
Chloromethane			50.0	40.3		ug/L		81	63 - 126	1	30
cis-1,2-Dichloroethene			50.0	46.9		ug/L		94	80 - 122	0	20
cis-1,3-Dichloropropene			50.0	49.7		ug/L		99	80 - 133	1	20
Cyclohexane			50.0	47.2		ug/L		94	69 - 130	3	30
Dichlorobromomethane			50.0	47.7		ug/L		95	77 - 129	2	20
Dichlorodifluoromethane			50.0	37.1		ug/L		74	51 - 140	0	40
Ethylbenzene			50.0	50.1		ug/L		100	80 - 120	0	20
Isopropylbenzene			50.0	51.2		ug/L		102	80 - 120	2	20
Methyl acetate			250	237		ug/L		95	66 - 134	3	30
Methyl tert-butyl ether			50.0	47.6		ug/L		95	74 - 135	1	20
Methylcyclohexane			50.0	48.6		ug/L		97	75 - 127	4	30
Methylene Chloride			50.0	48.0		ug/L		96	76 - 129	2	20
m-Xylene & p-Xylene			50.0	51.0		ug/L		102	80 - 120	2	20
o-Xylene			50.0	50.3		ug/L		101	80 - 120	0	20
Styrene			50.0	51.0		ug/L		102	80 - 122	0	20
Tetrachloroethene			50.0	49.2		ug/L		98	77 - 123	3	20
Toluene			50.0	48.1		ug/L		96	80 - 122	0	20
trans-1,2-Dichloroethene			50.0	47.7		ug/L		95	78 - 123	2	20
trans-1,3-Dichloropropene			50.0	47.7		ug/L		95	74 - 140	2	20
Trichloroethene			50.0	49.7		ug/L		99	80 - 123	4	20
Trichlorofluoromethane			50.0	43.3		ug/L		87	58 - 145	1	30
Vinyl chloride			50.0	43.7		ug/L		87	68 - 132	3	30
Xylenes, Total			100	101		ug/L		101	80 - 120	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*

QC Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-276324/5
Matrix: Water
Analysis Batch: 276324

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1.0	0.22	ug/L			05/07/15 07:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 127*		*05/07/15 07:33*	*1*

Lab Sample ID: LCS 280-276324/3
Matrix: Water
Analysis Batch: 276324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	5.00	4.65		ug/L		93	25 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 127*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 680-381694/6-A
Matrix: Water
Analysis Batch: 382771

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 381694

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		1.0	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
1,2,4,5-Tetrachlorobenzene	ND		1.0	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
2,2'-oxybis[1-chloropropane]	ND		1.0	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
2,3,4,6-Tetrachlorophenol	ND		1.0	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
2,4,5-Trichlorophenol	ND		1.0	0.12	ug/L		05/06/15 17:19	05/13/15 14:39	1
2,4,6-Trichlorophenol	ND		1.0	0.17	ug/L		05/06/15 17:19	05/13/15 14:39	1
2,4-Dichlorophenol	ND		1.0	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
2,4-Dimethylphenol	ND		2.0	0.69	ug/L		05/06/15 17:19	05/13/15 14:39	1
2,4-Dinitrophenol	ND		10	1.1	ug/L		05/06/15 17:19	05/13/15 14:39	1
2,4-Dinitrotoluene	ND		1.0	0.12	ug/L		05/06/15 17:19	05/13/15 14:39	1
2,6-Dinitrotoluene	ND		1.0	0.13	ug/L		05/06/15 17:19	05/13/15 14:39	1
2-Chloronaphthalene	ND		1.0	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
2-Chlorophenol	ND		1.0	0.12	ug/L		05/06/15 17:19	05/13/15 14:39	1
2-Methylnaphthalene	ND		0.20	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
2-Methylphenol	ND		2.0	0.74	ug/L		05/06/15 17:19	05/13/15 14:39	1
2-Nitroaniline	ND		1.0	0.16	ug/L		05/06/15 17:19	05/13/15 14:39	1
2-Nitrophenol	ND		1.0	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
3 & 4 Methylphenol	ND		2.0	0.66	ug/L		05/06/15 17:19	05/13/15 14:39	1
3,3'-Dichlorobenzidine	ND		20	2.0	ug/L		05/06/15 17:19	05/13/15 14:39	1
3-Nitroaniline	ND		5.0	0.16	ug/L		05/06/15 17:19	05/13/15 14:39	1
4,6-Dinitro-2-methylphenol	ND		5.0	1.0	ug/L		05/06/15 17:19	05/13/15 14:39	1
4-Bromophenyl phenyl ether	ND		1.0	0.12	ug/L		05/06/15 17:19	05/13/15 14:39	1
4-Chloro-3-methylphenol	ND		1.0	0.12	ug/L		05/06/15 17:19	05/13/15 14:39	1
4-Chloroaniline	ND		4.0	2.0	ug/L		05/06/15 17:19	05/13/15 14:39	1
4-Chlorophenyl phenyl ether	ND		1.0	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-381694/6-A
Matrix: Water
Analysis Batch: 382771

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 381694

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitroaniline	ND		5.0	0.50	ug/L		05/06/15 17:19	05/13/15 14:39	1
4-Nitrophenol	ND		8.0	4.0	ug/L		05/06/15 17:19	05/13/15 14:39	1
Acenaphthene	ND		0.20	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Acenaphthylene	ND		0.20	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Acetophenone	ND		1.0	0.30	ug/L		05/06/15 17:19	05/13/15 14:39	1
Anthracene	ND		0.20	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Atrazine	ND		4.0	2.0	ug/L		05/06/15 17:19	05/13/15 14:39	1
Benzaldehyde	ND		1.0	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Benzo[a]anthracene	ND		0.20	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Benzo[a]pyrene	ND		0.20	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Benzo[b]fluoranthene	ND		0.20	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Benzo[g,h,i]perylene	ND		0.20	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Bis(2-chloroethoxy)methane	ND		1.0	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Bis(2-chloroethyl)ether	ND		1.0	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.0	ug/L		05/06/15 17:19	05/13/15 14:39	1
Butyl benzyl phthalate	ND		1.0	0.12	ug/L		05/06/15 17:19	05/13/15 14:39	1
Caprolactam	ND		1.0	0.13	ug/L		05/06/15 17:19	05/13/15 14:39	1
Carbazole	ND		2.0	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Chrysene	ND		0.20	0.045	ug/L		05/06/15 17:19	05/13/15 14:39	1
Dibenz(a,h)anthracene	ND		0.20	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Dibenzofuran	ND		1.0	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Diethyl phthalate	ND		1.0	0.11	ug/L		05/06/15 17:19	05/13/15 14:39	1
Dimethyl phthalate	ND		1.0	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Di-n-butyl phthalate	ND		1.0	0.39	ug/L		05/06/15 17:19	05/13/15 14:39	1
Di-n-octyl phthalate	ND		1.0	0.17	ug/L		05/06/15 17:19	05/13/15 14:39	1
Fluoranthene	ND		0.20	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Fluorene	ND		0.20	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Hexachlorobenzene	ND		1.0	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Hexachlorobutadiene	ND		1.0	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Hexachlorocyclopentadiene	ND		2.0	0.50	ug/L		05/06/15 17:19	05/13/15 14:39	1
Hexachloroethane	ND		1.0	0.50	ug/L		05/06/15 17:19	05/13/15 14:39	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Isophorone	ND		1.0	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Naphthalene	ND		0.20	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Nitrobenzene	ND		1.0	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
N-Nitrosodi-n-propylamine	ND		1.0	0.13	ug/L		05/06/15 17:19	05/13/15 14:39	1
N-Nitrosodiphenylamine	ND		1.0	0.37	ug/L		05/06/15 17:19	05/13/15 14:39	1
Pentachlorophenol	ND		5.0	0.40	ug/L		05/06/15 17:19	05/13/15 14:39	1
Phenanthrene	ND		0.20	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1
Phenol	ND		1.0	0.13	ug/L		05/06/15 17:19	05/13/15 14:39	1
Pyrene	ND		0.20	0.10	ug/L		05/06/15 17:19	05/13/15 14:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*66*		*30 - 130*	*05/06/15 17:19*	*05/13/15 14:39*	*1*
2-Fluorobiphenyl	*67*		*34 - 130*	*05/06/15 17:19*	*05/13/15 14:39*	*1*
2-Fluorophenol (Surr)	*71*		*25 - 130*	*05/06/15 17:19*	*05/13/15 14:39*	*1*
Nitrobenzene-d5 (Surr)	*76*		*32 - 130*	*05/06/15 17:19*	*05/13/15 14:39*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-381694/6-A
Matrix: Water
Analysis Batch: 382771

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 381694

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Phenol-d5 (Surr)	71		27 - 130	05/06/15 17:19	05/13/15 14:39	1
Terphenyl-d14 (Surr)	71		36 - 130	05/06/15 17:19	05/13/15 14:39	1

Lab Sample ID: LCS 680-381694/7-A
Matrix: Water
Analysis Batch: 382771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 381694

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	10.0	7.69		ug/L		77	50 - 130
1,2,4,5-Tetrachlorobenzene	10.0	6.81		ug/L		68	10 - 130
2,2'-oxybis[1-chloropropane]	10.0	9.54		ug/L		95	39 - 130
2,3,4,6-Tetrachlorophenol	10.0	8.61		ug/L		86	10 - 130
2,4,5-Trichlorophenol	10.0	8.99		ug/L		90	61 - 130
2,4,6-Trichlorophenol	10.0	9.06		ug/L		91	61 - 130
2,4-Dichlorophenol	10.0	8.64		ug/L		86	58 - 130
2,4-Dimethylphenol	10.0	7.64		ug/L		76	41 - 130
2,4-Dinitrophenol	20.0	16.9		ug/L		84	10 - 200
2,4-Dinitrotoluene	10.0	6.92		ug/L		69	57 - 130
2,6-Dinitrotoluene	10.0	12.2		ug/L		122	53 - 130
2-Chloronaphthalene	10.0	7.62		ug/L		76	48 - 130
2-Chlorophenol	10.0	8.35		ug/L		83	45 - 130
2-Methylnaphthalene	10.0	7.16		ug/L		72	51 - 130
2-Methylphenol	10.0	8.35		ug/L		84	49 - 130
2-Nitroaniline	10.0	9.80		ug/L		98	48 - 130
2-Nitrophenol	10.0	9.12		ug/L		91	49 - 130
3 & 4 Methylphenol	10.0	8.46		ug/L		85	55 - 130
3,3'-Dichlorobenzidine	10.0	6.98	J	ug/L		70	10 - 158
3-Nitroaniline	10.0	7.99		ug/L		80	18 - 147
4,6-Dinitro-2-methylphenol	20.0	16.6		ug/L		83	10 - 182
4-Bromophenyl phenyl ether	10.0	8.19		ug/L		82	44 - 130
4-Chloro-3-methylphenol	10.0	8.86		ug/L		89	54 - 130
4-Chloroaniline	10.0	7.10		ug/L		71	17 - 130
4-Chlorophenyl phenyl ether	10.0	8.02		ug/L		80	52 - 130
4-Nitroaniline	10.0	8.72		ug/L		87	31 - 147
4-Nitrophenol	20.0	18.4		ug/L		92	36 - 132
Acenaphthene	10.0	8.00		ug/L		80	42 - 130
Acenaphthylene	10.0	8.28		ug/L		83	45 - 130
Acetophenone	10.0	8.73		ug/L		87	45 - 130
Anthracene	10.0	8.60		ug/L		86	58 - 130
Atrazine	10.0	8.57		ug/L		86	45 - 143
Benzaldehyde	10.0	7.97		ug/L		80	21 - 147
Benzo[a]anthracene	10.0	8.60		ug/L		86	42 - 143
Benzo[a]pyrene	10.0	8.73		ug/L		87	45 - 151
Benzo[b]fluoranthene	10.0	9.65		ug/L		97	41 - 140
Benzo[g,h,i]perylene	10.0	9.58		ug/L		96	27 - 134
Benzo[k]fluoranthene	10.0	8.63		ug/L		86	45 - 140
Bis(2-chloroethoxy)methane	10.0	9.15		ug/L		91	47 - 130
Bis(2-chloroethyl)ether	10.0	8.96		ug/L		90	36 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 680-381694/7-A
Matrix: Water
Analysis Batch: 382771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 381694

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-ethylhexyl) phthalate	10.0	9.16		ug/L		92	10 - 158
Butyl benzyl phthalate	10.0	9.48		ug/L		95	60 - 130
Caprolactam	10.0	6.08		ug/L		61	31 - 130
Carbazole	10.0	9.10		ug/L		91	19 - 191
Chrysene	10.0	8.00		ug/L		80	40 - 142
Dibenz(a,h)anthracene	10.0	10.5		ug/L		105	38 - 130
Dibenzofuran	10.0	7.80		ug/L		78	56 - 130
Diethyl phthalate	10.0	7.40		ug/L		74	60 - 130
Dimethyl phthalate	10.0	8.75		ug/L		87	58 - 130
Di-n-butyl phthalate	10.0	9.63		ug/L		96	59 - 130
Di-n-octyl phthalate	10.0	9.26		ug/L		93	19 - 130
Fluoranthene	10.0	9.01		ug/L		90	46 - 136
Fluorene	10.0	8.02		ug/L		80	48 - 130
Hexachlorobenzene	10.0	7.68		ug/L		77	49 - 130
Hexachlorobutadiene	10.0	5.11		ug/L		51	36 - 130
Hexachlorocyclopentadiene	10.0	3.14		ug/L		31	16 - 130
Hexachloroethane	10.0	5.61		ug/L		56	32 - 130
Indeno[1,2,3-cd]pyrene	10.0	10.9		ug/L		109	12 - 130
Isophorone	10.0	9.34		ug/L		93	45 - 130
Naphthalene	10.0	7.28		ug/L		73	35 - 130
Nitrobenzene	10.0	8.68		ug/L		87	45 - 130
N-Nitrosodi-n-propylamine	10.0	9.06		ug/L		91	42 - 130
N-Nitrosodiphenylamine	20.0	17.3		ug/L		87	38 - 130
Pentachlorophenol	20.0	17.8		ug/L		89	12 - 156
Phenanthrene	10.0	8.45		ug/L		84	45 - 134
Phenol	10.0	8.04		ug/L		80	44 - 130
Pyrene	10.0	8.12		ug/L		81	47 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*68*		*30 - 130*
2-Fluorobiphenyl	*71*		*34 - 130*
2-Fluorophenol (Surr)	*69*		*25 - 130*
Nitrobenzene-d5 (Surr)	*76*		*32 - 130*
Phenol-d5 (Surr)	*70*		*27 - 130*
Terphenyl-d14 (Surr)	*68*		*36 - 130*

Lab Sample ID: 680-112176-1 MS
Matrix: Water
Analysis Batch: 382771

Client Sample ID: MW-13
Prep Type: Total/NA
Prep Batch: 381694

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	ND	F1 F2	9.96	3.32	F1	ug/L		33	50 - 130
1,2,4,5-Tetrachlorobenzene	ND	F2	9.96	2.61		ug/L		26	10 - 130
2,2'-oxybis[1-chloropropane]	ND		9.96	5.06		ug/L		51	39 - 130
2,3,4,6-Tetrachlorophenol	ND		9.96	7.75		ug/L		78	10 - 130
2,4,5-Trichlorophenol	ND	F1	9.96	5.31	F1	ug/L		53	61 - 130
2,4,6-Trichlorophenol	ND		9.96	7.52		ug/L		76	61 - 130
2,4-Dichlorophenol	ND		9.96	6.78		ug/L		68	58 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-112176-1 MS
Matrix: Water
Analysis Batch: 382771

Client Sample ID: MW-13
Prep Type: Total/NA
Prep Batch: 381694

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dimethylphenol	ND		9.96	7.06		ug/L		71	41 - 130
2,4-Dinitrophenol	ND		19.9	14.8		ug/L		74	10 - 200
2,4-Dinitrotoluene	ND		9.96	5.66		ug/L		57	57 - 130
2,6-Dinitrotoluene	ND		9.96	10.2		ug/L		102	53 - 130
2-Chloronaphthalene	ND	F1 F2	9.96	3.16	F1	ug/L		32	48 - 130
2-Chlorophenol	ND		9.96	5.91		ug/L		59	45 - 130
2-Methylnaphthalene	ND	F1 F2	9.96	2.98	F1	ug/L		30	51 - 130
2-Methylphenol	ND		9.96	6.74		ug/L		68	49 - 130
2-Nitroaniline	ND		9.96	7.76		ug/L		78	48 - 130
2-Nitrophenol	0.14	J	9.96	6.91		ug/L		68	49 - 130
3 & 4 Methylphenol	ND		9.96	7.08		ug/L		71	55 - 130
3,3'-Dichlorobenzidine	ND	F1	9.96	ND	F1	ug/L		0	10 - 158
3-Nitroaniline	ND		9.96	4.13	J	ug/L		41	18 - 147
4,6-Dinitro-2-methylphenol	ND		19.9	13.8		ug/L		69	10 - 182
4-Bromophenyl phenyl ether	ND	F1 F2	9.96	3.99	F1	ug/L		40	44 - 130
4-Chloro-3-methylphenol	ND		9.96	6.48		ug/L		65	54 - 130
4-Chloroaniline	ND		9.96	2.39	J	ug/L		24	17 - 130
4-Chlorophenyl phenyl ether	ND	F1 F2	9.96	3.68	F1	ug/L		37	52 - 130
4-Nitroaniline	ND		9.96	4.82	J	ug/L		48	31 - 147
4-Nitrophenol	ND		19.9	16.5		ug/L		83	36 - 132
Acenaphthene	ND	F1 F2	9.96	3.70	F1	ug/L		37	42 - 130
Acenaphthylene	ND	F1 F2	9.96	3.95	F1	ug/L		40	45 - 130
Acetophenone	ND		9.96	6.15		ug/L		62	45 - 130
Anthracene	ND	F1	9.96	5.27	F1	ug/L		53	58 - 130
Atrazine	ND		9.96	5.50		ug/L		55	45 - 143
Benzaldehyde	ND		9.96	4.25		ug/L		43	21 - 147
Benzo[a]anthracene	ND		9.96	5.88		ug/L		59	42 - 143
Benzo[a]pyrene	ND		9.96	5.76		ug/L		58	45 - 151
Benzo[b]fluoranthene	ND		9.96	6.34		ug/L		64	41 - 140
Benzo[g,h,i]perylene	ND		9.96	4.93		ug/L		50	27 - 134
Benzo[k]fluoranthene	ND		9.96	5.53		ug/L		56	45 - 140
Bis(2-chloroethoxy)methane	ND		9.96	7.09		ug/L		71	47 - 130
Bis(2-chloroethyl)ether	ND		9.96	5.76		ug/L		58	36 - 130
Bis(2-ethylhexyl) phthalate	ND		9.96	6.12		ug/L		61	10 - 158
Butyl benzyl phthalate	ND		9.96	7.53		ug/L		76	60 - 130
Caprolactam	17	F1	9.96	32.6	E F1	ug/L		157	31 - 130
Carbazole	ND		9.96	7.18		ug/L		72	19 - 191
Chrysene	ND		9.96	5.62		ug/L		56	40 - 142
Dibenz(a,h)anthracene	ND		9.96	5.70		ug/L		57	38 - 130
Dibenzofuran	ND	F1 F2	9.96	3.82	F1	ug/L		38	56 - 130
Diethyl phthalate	0.22	J	9.96	6.57		ug/L		64	60 - 130
Dimethyl phthalate	ND		9.96	7.30		ug/L		73	58 - 130
Di-n-butyl phthalate	ND		9.96	7.68		ug/L		77	59 - 130
Di-n-octyl phthalate	ND		9.96	6.03		ug/L		61	19 - 130
Fluoranthene	ND		9.96	6.23		ug/L		63	46 - 136
Fluorene	ND	F1	9.96	4.33	F1	ug/L		44	48 - 130
Hexachlorobenzene	ND	F1	9.96	3.33	F1	ug/L		33	49 - 130
Hexachlorobutadiene	ND	F1	9.96	2.17	F1	ug/L		22	36 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-112176-1 MS
Matrix: Water
Analysis Batch: 382771

Client Sample ID: MW-13
Prep Type: Total/NA
Prep Batch: 381694

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	ND	F1 F2	9.96	1.31	J F1	ug/L		13	16 - 130
Hexachloroethane	ND	F1	9.96	2.32	F1	ug/L		23	32 - 130
Indeno[1,2,3-cd]pyrene	ND		9.96	5.72		ug/L		57	12 - 130
Isophorone	ND		9.96	7.17		ug/L		72	45 - 130
Naphthalene	0.58	F1 F2	9.96	3.56	F1	ug/L		30	35 - 130
Nitrobenzene	ND		9.96	5.39		ug/L		54	45 - 130
N-Nitrosodi-n-propylamine	ND		9.96	6.82		ug/L		69	42 - 130
N-Nitrosodiphenylamine	ND		19.9	13.3		ug/L		67	38 - 130
Pentachlorophenol	ND		19.9	15.5		ug/L		78	12 - 156
Phenanthrene	ND		9.96	5.18		ug/L		52	45 - 134
Phenol	ND		9.96	6.43		ug/L		65	44 - 130
Pyrene	ND		9.96	5.70		ug/L		57	47 - 143

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*63*		*30 - 130*
2-Fluorobiphenyl	*51*		*34 - 130*
2-Fluorophenol (Surr)	*54*		*25 - 130*
Nitrobenzene-d5 (Surr)	*57*		*32 - 130*
Phenol-d5 (Surr)	*60*		*27 - 130*
Terphenyl-d14 (Surr)	*59*		*36 - 130*

Lab Sample ID: 680-112176-1 MSD
Matrix: Water
Analysis Batch: 382771

Client Sample ID: MW-13
Prep Type: Total/NA
Prep Batch: 381694

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl	ND	F1 F2	9.32	6.76	F2	ug/L		73	50 - 130	68	50
1,2,4,5-Tetrachlorobenzene	ND	F2	9.32	5.62	F2	ug/L		60	10 - 130	73	50
2,2'-oxybis[1-chloropropane]	ND		9.32	8.27		ug/L		89	39 - 130	48	50
2,3,4,6-Tetrachlorophenol	ND		9.32	8.12		ug/L		87	10 - 130	5	50
2,4,5-Trichlorophenol	ND	F1	9.32	4.89	F1	ug/L		53	61 - 130	8	50
2,4,6-Trichlorophenol	ND		9.32	7.81		ug/L		84	61 - 130	4	50
2,4-Dichlorophenol	ND		9.32	7.40		ug/L		79	58 - 130	9	50
2,4-Dimethylphenol	ND		9.32	7.53		ug/L		81	41 - 130	7	50
2,4-Dinitrophenol	ND		18.6	15.4		ug/L		83	10 - 200	4	50
2,4-Dinitrotoluene	ND		9.32	5.90		ug/L		63	57 - 130	4	50
2,6-Dinitrotoluene	ND		9.32	10.6		ug/L		114	53 - 130	4	50
2-Chloronaphthalene	ND	F1 F2	9.32	6.61	F2	ug/L		71	48 - 130	71	50
2-Chlorophenol	ND		9.32	7.11		ug/L		76	45 - 130	18	50
2-Methylnaphthalene	ND	F1 F2	9.32	6.34	F2	ug/L		68	51 - 130	72	50
2-Methylphenol	ND		9.32	7.28		ug/L		78	49 - 130	8	50
2-Nitroaniline	ND		9.32	8.23		ug/L		88	48 - 130	6	50
2-Nitrophenol	0.14	J	9.32	8.00		ug/L		84	49 - 130	15	50
3 & 4 Methylphenol	ND		9.32	7.48		ug/L		80	55 - 130	5	50
3,3'-Dichlorobenzidine	ND	F1	9.32	ND	F1	ug/L		0	10 - 158	NC	50
3-Nitroaniline	ND		9.32	5.40		ug/L		58	18 - 147	27	50
4,6-Dinitro-2-methylphenol	ND		18.6	14.7		ug/L		79	10 - 182	6	50
4-Bromophenyl phenyl ether	ND	F1 F2	9.32	6.85	F2	ug/L		74	44 - 130	53	50

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-112176-1 MSD
Matrix: Water
Analysis Batch: 382771

Client Sample ID: MW-13
Prep Type: Total/NA
Prep Batch: 381694

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Chloro-3-methylphenol	ND		9.32	6.71		ug/L		72	54 - 130	3	50
4-Chloroaniline	ND		9.32	2.99	J	ug/L		32	17 - 130	22	50
4-Chlorophenyl phenyl ether	ND	F1 F2	9.32	6.94	F2	ug/L		74	52 - 130	61	50
4-Nitroaniline	ND		9.32	6.42		ug/L		69	31 - 147	28	50
4-Nitrophenol	ND		18.6	16.9		ug/L		91	36 - 132	3	50
Acenaphthene	ND	F1 F2	9.32	7.11	F2	ug/L		76	42 - 130	63	50
Acenaphthylene	ND	F1 F2	9.32	7.19	F2	ug/L		77	45 - 130	58	50
Acetophenone	ND		9.32	7.36		ug/L		79	45 - 130	18	50
Anthracene	ND	F1	9.32	6.73		ug/L		72	58 - 130	24	50
Atrazine	ND		9.32	6.26		ug/L		67	45 - 143	13	50
Benzaldehyde	ND		9.32	5.32		ug/L		57	21 - 147	22	50
Benzo[a]anthracene	ND		9.32	6.29		ug/L		67	42 - 143	7	50
Benzo[a]pyrene	ND		9.32	6.21		ug/L		67	45 - 151	7	50
Benzo[b]fluoranthene	ND		9.32	6.49		ug/L		70	41 - 140	2	50
Benzo[g,h,i]perylene	ND		9.32	4.72		ug/L		51	27 - 134	4	50
Benzo[k]fluoranthene	ND		9.32	5.60		ug/L		60	45 - 140	1	50
Bis(2-chloroethoxy)methane	ND		9.32	7.74		ug/L		83	47 - 130	9	50
Bis(2-chloroethyl)ether	ND		9.32	7.36		ug/L		79	36 - 130	24	50
Bis(2-ethylhexyl) phthalate	ND		9.32	6.39		ug/L		69	10 - 158	4	50
Butyl benzyl phthalate	ND		9.32	8.24		ug/L		88	60 - 130	9	50
Caprolactam	17	F1	9.32	32.8	E F1	ug/L		169	31 - 130	1	50
Carbazole	ND		9.32	7.70		ug/L		83	19 - 191	7	50
Chrysene	ND		9.32	5.98		ug/L		64	40 - 142	6	50
Dibenz(a,h)anthracene	ND		9.32	5.48		ug/L		59	38 - 130	4	50
Dibenzofuran	ND	F1 F2	9.32	6.87	F2	ug/L		74	56 - 130	57	50
Diethyl phthalate	0.22	J	9.32	6.75		ug/L		70	60 - 130	3	50
Dimethyl phthalate	ND		9.32	7.58		ug/L		81	58 - 130	4	50
Di-n-butyl phthalate	ND		9.32	8.20		ug/L		88	59 - 130	7	50
Di-n-octyl phthalate	ND		9.32	6.29		ug/L		67	19 - 130	4	50
Fluoranthene	ND		9.32	7.38		ug/L		79	46 - 136	17	50
Fluorene	ND	F1	9.32	7.07		ug/L		76	48 - 130	48	50
Hexachlorobenzene	ND	F1	9.32	5.31		ug/L		57	49 - 130	46	50
Hexachlorobutadiene	ND	F1	9.32	2.91	F1	ug/L		31	36 - 130	29	50
Hexachlorocyclopentadiene	ND	F1 F2	9.32	2.83	F2	ug/L		30	16 - 130	74	50
Hexachloroethane	ND	F1	9.32	3.63		ug/L		39	32 - 130	44	50
Indeno[1,2,3-cd]pyrene	ND		9.32	7.61		ug/L		82	12 - 130	28	50
Isophorone	ND		9.32	7.81		ug/L		84	45 - 130	8	50
Naphthalene	0.58	F1 F2	9.32	7.08	F2	ug/L		70	35 - 130	66	50
Nitrobenzene	ND		9.32	7.37		ug/L		79	45 - 130	31	50
N-Nitrosodi-n-propylamine	ND		9.32	7.86		ug/L		84	42 - 130	14	50
N-Nitrosodiphenylamine	ND		18.6	14.9		ug/L		80	38 - 130	12	50
Pentachlorophenol	ND		18.6	16.3		ug/L		87	12 - 156	5	50
Phenanthrene	ND		9.32	7.20		ug/L		77	45 - 134	33	50
Phenol	ND		9.32	6.76		ug/L		73	44 - 130	5	50
Pyrene	ND		9.32	6.83		ug/L		73	47 - 143	18	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*67*		*30 - 130*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-112176-1 MSD — **Client Sample ID: MW-13**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382771 — **Prep Batch: 381694**

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*63*		*34 - 130*
2-Fluorophenol (Surr)	*60*		*25 - 130*
Nitrobenzene-d5 (Surr)	*67*		*32 - 130*
Phenol-d5 (Surr)	*64*		*27 - 130*
Terphenyl-d14 (Surr)	*65*		*36 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 680-381509/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381509

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		50	23	ug/L			05/05/15 09:40	1

Lab Sample ID: LCS 680-381509/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381509

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N			999	1070		ug/L		107	90 - 110		

Lab Sample ID: LCSD 680-381509/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381509

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N			999	1080		ug/L		108	90 - 110	1	30

Lab Sample ID: 680-112176-1 MS — **Client Sample ID: MW-13**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381509

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N	ND		999	1120		ug/L		112	80 - 120		

Lab Sample ID: 680-112176-1 MSD — **Client Sample ID: MW-13**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381509

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	ND		999	1130		ug/L		113	80 - 120	1	30

Lab Sample ID: MB 680-382322/35 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382322

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1000	400	ug/L			05/08/15 18:47	1

QC Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Lab Sample ID: LCS 680-382322/36 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382322

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			10000	9680		ug/L		97	90 - 110		

Lab Sample ID: LCSD 680-382322/37 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382322

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate			10000	9680		ug/L		97	90 - 110	0	30

Lab Sample ID: 680-112176-1 MS — **Client Sample ID: MW-13**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382322

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	18000		10000	27800		ug/L		95	80 - 120		

Lab Sample ID: 680-112176-1 MSD — **Client Sample ID: MW-13**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382322

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	18000		10000	27500		ug/L		91	80 - 120	1	30

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-381788/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382128 — **Prep Batch: 381788**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.99	ug/L		05/06/15 15:28	05/08/15 05:10	1
Arsenic	ND		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 05:10	1
Beryllium	ND		0.20	0.070	ug/L		05/06/15 15:28	05/08/15 05:10	1
Cadmium	ND		0.50	0.20	ug/L		05/06/15 15:28	05/08/15 05:10	1
Chromium	ND		1.0	0.16	ug/L		05/06/15 15:28	05/08/15 05:10	1
Copper	ND		1.0	0.21	ug/L		05/06/15 15:28	05/08/15 05:10	1
Iron	ND		50	20	ug/L		05/06/15 15:28	05/08/15 05:10	1
Lead	0.0990	J	0.30	0.080	ug/L		05/06/15 15:28	05/08/15 05:10	1
Manganese	ND		2.0	0.84	ug/L		05/06/15 15:28	05/08/15 05:10	1
Nickel	ND		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 05:10	1
Selenium	ND		0.50	0.21	ug/L		05/06/15 15:28	05/08/15 05:10	1
Silver	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 05:10	1
Thallium	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 05:10	1
Zinc	ND		10	2.6	ug/L		05/06/15 15:28	05/08/15 05:10	1

Lab Sample ID: LCS 680-381788/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382128 — **Prep Batch: 381788**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony			20.0	22.0		ug/L		110	75 - 125		

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-381788/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382128 — **Prep Batch: 381788**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	40.0	41.8		ug/L		105	75 - 125
Beryllium	20.0	21.1		ug/L		105	75 - 125
Cadmium	20.0	22.4		ug/L		112	75 - 125
Chromium	40.0	41.4		ug/L		103	75 - 125
Copper	40.0	43.1		ug/L		108	75 - 125
Iron	2000	2010		ug/L		101	75 - 125
Lead	200	214		ug/L		107	75 - 125
Manganese	200	201		ug/L		100	75 - 125
Nickel	40.0	42.4		ug/L		106	75 - 125
Selenium	40.0	41.6		ug/L		104	75 - 125
Silver	20.0	22.3		ug/L		112	75 - 125
Thallium	16.0	17.7		ug/L		110	75 - 125
Zinc	40.0	43.1		ug/L		108	75 - 125

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-381791/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381976 — **Prep Batch: 381791**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.080	ug/L		05/06/15 16:10	05/07/15 14:01	1

Lab Sample ID: LCS 680-381791/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381976 — **Prep Batch: 381791**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.60		ug/L		104	80 - 120

Lab Sample ID: 680-112176-1 MS — **Client Sample ID: MW-13**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381976 — **Prep Batch: 381791**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		1.00	1.10		ug/L		110	80 - 120

Lab Sample ID: 680-112176-1 MSD — **Client Sample ID: MW-13**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381976 — **Prep Batch: 381791**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		1.00	1.10		ug/L		110	80 - 120	0	20

QC Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-381856/12
Matrix: Water
Analysis Batch: 381856

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		250	100	ug/L			05/06/15 14:19	1

Lab Sample ID: LCS 680-381856/19
Matrix: Water
Analysis Batch: 381856

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia			1000	1020		ug/L		102	90 - 110		

Lab Sample ID: 680-112176-3 DU
Matrix: Water
Analysis Batch: 381856

Client Sample ID: RB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Ammonia	ND			ND		ug/L				NC	30

QC Association Summary

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

GC/MS VOA

Analysis Batch: 276324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112176-1	MW-13	Total/NA	Water	8260B SIM	
680-112176-2	Duplicate 1	Total/NA	Water	8260B SIM	
680-112176-3	RB-1	Total/NA	Water	8260B SIM	
680-112176-4	TB-1	Total/NA	Water	8260B SIM	
680-112176-5	MW-12	Total/NA	Water	8260B SIM	
680-112176-6	MW-9	Total/NA	Water	8260B SIM	
680-112176-7	TB-5	Total/NA	Water	8260B SIM	
LCS 280-276324/3	Lab Control Sample	Total/NA	Water	8260B SIM	
MB 280-276324/5	Method Blank	Total/NA	Water	8260B SIM	

Analysis Batch: 382040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112176-1	MW-13	Total/NA	Water	8260B	
680-112176-2	Duplicate 1	Total/NA	Water	8260B	
680-112176-3	RB-1	Total/NA	Water	8260B	
680-112176-4	TB-1	Total/NA	Water	8260B	
680-112176-5	MW-12	Total/NA	Water	8260B	
680-112176-6	MW-9	Total/NA	Water	8260B	
680-112176-7	TB-5	Total/NA	Water	8260B	
LCS 680-382040/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-382040/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-382040/8	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 381694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112176-1	MW-13	Total/NA	Water	3520C	
680-112176-1 MS	MW-13	Total/NA	Water	3520C	
680-112176-1 MSD	MW-13	Total/NA	Water	3520C	
680-112176-2 - DL	Duplicate 1	Total/NA	Water	3520C	
680-112176-2	Duplicate 1	Total/NA	Water	3520C	
680-112176-3	RB-1	Total/NA	Water	3520C	
680-112176-5	MW-12	Total/NA	Water	3520C	
680-112176-6	MW-9	Total/NA	Water	3520C	
LCS 680-381694/7-A	Lab Control Sample	Total/NA	Water	3520C	
MB 680-381694/6-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 382771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112176-1	MW-13	Total/NA	Water	8270D LL	381694
680-112176-1 MS	MW-13	Total/NA	Water	8270D LL	381694
680-112176-1 MSD	MW-13	Total/NA	Water	8270D LL	381694
680-112176-2	Duplicate 1	Total/NA	Water	8270D LL	381694
680-112176-2 - DL	Duplicate 1	Total/NA	Water	8270D LL	381694
680-112176-3	RB-1	Total/NA	Water	8270D LL	381694
680-112176-5	MW-12	Total/NA	Water	8270D LL	381694
680-112176-6	MW-9	Total/NA	Water	8270D LL	381694
LCS 680-381694/7-A	Lab Control Sample	Total/NA	Water	8270D LL	381694
MB 680-381694/6-A	Method Blank	Total/NA	Water	8270D LL	381694

QC Association Summary

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

HPLC/IC

Analysis Batch: 381509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112176-1	MW-13	Total/NA	Water	300.0	
680-112176-1 MS	MW-13	Total/NA	Water	300.0	
680-112176-1 MSD	MW-13	Total/NA	Water	300.0	
680-112176-2	Duplicate 1	Total/NA	Water	300.0	
680-112176-3	RB-1	Total/NA	Water	300.0	
680-112176-5	MW-12	Total/NA	Water	300.0	
680-112176-6	MW-9	Total/NA	Water	300.0	
LCS 680-381509/3	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-381509/4	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-381509/2	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 382322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112176-1	MW-13	Total/NA	Water	300.0	
680-112176-1 MS	MW-13	Total/NA	Water	300.0	
680-112176-1 MSD	MW-13	Total/NA	Water	300.0	
680-112176-2	Duplicate 1	Total/NA	Water	300.0	
680-112176-3	RB-1	Total/NA	Water	300.0	
680-112176-5	MW-12	Total/NA	Water	300.0	
680-112176-6	MW-9	Total/NA	Water	300.0	
LCS 680-382322/36	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-382322/37	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-382322/35	Method Blank	Total/NA	Water	300.0	

Metals

Prep Batch: 381788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112176-1	MW-13	Total/NA	Water	3030C	
680-112176-2	Duplicate 1	Total/NA	Water	3030C	
680-112176-3	RB-1	Total/NA	Water	3030C	
680-112176-5	MW-12	Total/NA	Water	3030C	
680-112176-6	MW-9	Total/NA	Water	3030C	
LCS 680-381788/2-A	Lab Control Sample	Total/NA	Water	3030C	
MB 680-381788/1-A	Method Blank	Total/NA	Water	3030C	

Prep Batch: 381791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112176-1	MW-13	Total/NA	Water	7470A	
680-112176-1 MS	MW-13	Total/NA	Water	7470A	
680-112176-1 MSD	MW-13	Total/NA	Water	7470A	
680-112176-2	Duplicate 1	Total/NA	Water	7470A	
680-112176-3	RB-1	Total/NA	Water	7470A	
680-112176-5	MW-12	Total/NA	Water	7470A	
680-112176-6	MW-9	Total/NA	Water	7470A	
LCS 680-381791/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 680-381791/1-A	Method Blank	Total/NA	Water	7470A	

Metals (Continued)

Analysis Batch: 381976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112176-1	MW-13	Total/NA	Water	7470A	381791
680-112176-1 MS	MW-13	Total/NA	Water	7470A	381791
680-112176-1 MSD	MW-13	Total/NA	Water	7470A	381791
680-112176-2	Duplicate 1	Total/NA	Water	7470A	381791
680-112176-3	RB-1	Total/NA	Water	7470A	381791
680-112176-5	MW-12	Total/NA	Water	7470A	381791
680-112176-6	MW-9	Total/NA	Water	7470A	381791
LCS 680-381791/2-A	Lab Control Sample	Total/NA	Water	7470A	381791
MB 680-381791/1-A	Method Blank	Total/NA	Water	7470A	381791

Analysis Batch: 382128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112176-1	MW-13	Total/NA	Water	6020A	381788
680-112176-2	Duplicate 1	Total/NA	Water	6020A	381788
680-112176-3	RB-1	Total/NA	Water	6020A	381788
680-112176-5	MW-12	Total/NA	Water	6020A	381788
680-112176-6	MW-9	Total/NA	Water	6020A	381788
LCS 680-381788/2-A	Lab Control Sample	Total/NA	Water	6020A	381788
MB 680-381788/1-A	Method Blank	Total/NA	Water	6020A	381788

General Chemistry

Analysis Batch: 381856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112176-1	MW-13	Total/NA	Water	350.1	
680-112176-2	Duplicate 1	Total/NA	Water	350.1	
680-112176-3	RB-1	Total/NA	Water	350.1	
680-112176-3 DU	RB-1	Total/NA	Water	350.1	
680-112176-5	MW-12	Total/NA	Water	350.1	
680-112176-6	MW-9	Total/NA	Water	350.1	
LCS 680-381856/19	Lab Control Sample	Total/NA	Water	350.1	
MB 680-381856/12	Method Blank	Total/NA	Water	350.1	

Lab Chronicle

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: MW-13

Lab Sample ID: 680-112176-1
Date Collected: 05/04/15 15:55
Matrix: Water
Date Received: 05/05/15 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	382040	05/08/15 11:41	JD1	TAL SAV
	Instrument ID: CMSS									
Total/NA	Analysis	8260B SIM		1	20 mL	20 mL	276324	05/07/15 11:41	MRM	TAL DEN
	Instrument ID: VMS_E									
Total/NA	Prep	3520C			504.5 mL	0.5 mL	381694	05/06/15 17:19	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	504.5 mL	0.5 mL	382771	05/13/15 16:29	NED	TAL SAV
	Instrument ID: CMSW									
Total/NA	Analysis	300.0		1	5 mL	5 mL	381509	05/05/15 16:15	DAS	TAL SAV
	Instrument ID: CICG									
Total/NA	Analysis	300.0		1	5 mL	5 mL	382322	05/08/15 21:12	DAS	TAL SAV
	Instrument ID: CICL									
Total/NA	Prep	3030C			50 mL	50 mL	381788	05/06/15 15:28	BJB	TAL SAV
Total/NA	Analysis	6020A		1	50 mL	50 mL	382128	05/08/15 06:16	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Prep	7470A			50 mL	50 mL	381791	05/06/15 16:10	JKL	TAL SAV
Total/NA	Analysis	7470A		1	50 mL	50 mL	381976	05/07/15 14:07	JKL	TAL SAV
	Instrument ID: LEEMAN2									
Total/NA	Analysis	350.1		1	2 mL	2 mL	381856	05/06/15 14:19	JME	TAL SAV
	Instrument ID: KONELAB1									

Client Sample ID: Duplicate 1

Lab Sample ID: 680-112176-2
Date Collected: 05/04/15 00:00
Matrix: Water
Date Received: 05/05/15 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	382040	05/08/15 12:04	JD1	TAL SAV
	Instrument ID: CMSS									
Total/NA	Analysis	8260B SIM		1	20 mL	20 mL	276324	05/07/15 12:00	MRM	TAL DEN
	Instrument ID: VMS_E									
Total/NA	Prep	3520C			1013.1 mL	1.0 mL	381694	05/06/15 17:19	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	1013.1 mL	1.0 mL	382771	05/13/15 16:57	NED	TAL SAV
	Instrument ID: CMSW									
Total/NA	Prep	3520C	DL		1013.1 mL	1.0 mL	381694	05/06/15 17:19	RBS	TAL SAV
Total/NA	Analysis	8270D LL	DL	5	1013.1 mL	1.0 mL	382771	05/13/15 20:11	NED	TAL SAV
	Instrument ID: CMSW									
Total/NA	Analysis	300.0		1	5 mL	5 mL	381509	05/05/15 17:02	DAS	TAL SAV
	Instrument ID: CICG									
Total/NA	Analysis	300.0		1	5 mL	5 mL	382322	05/08/15 22:25	DAS	TAL SAV
	Instrument ID: CICL									
Total/NA	Prep	3030C			50 mL	50 mL	381788	05/06/15 15:28	BJB	TAL SAV
Total/NA	Analysis	6020A		1	50 mL	50 mL	382128	05/08/15 06:21	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Prep	7470A			50 mL	50 mL	381791	05/06/15 16:10	JKL	TAL SAV

Lab Chronicle

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: Duplicate 1 — Lab Sample ID: 680-112176-2

Date Collected: 05/04/15 00:00 — **Matrix: Water**
Date Received: 05/05/15 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7470A		1	50 mL	50 mL	381976	05/07/15 14:16	JKL	TAL SAV
	Instrument ID: LEEMAN2									
Total/NA	Analysis	350.1		1	2 mL	2 mL	381856	05/06/15 14:19	JME	TAL SAV
	Instrument ID: KONELAB1									

Client Sample ID: RB-1 — Lab Sample ID: 680-112176-3

Date Collected: 05/04/15 16:20 — **Matrix: Water**
Date Received: 05/05/15 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	382040	05/08/15 12:27	JD1	TAL SAV
	Instrument ID: CMSS									
Total/NA	Analysis	8260B SIM		1	20 mL	20 mL	276324	05/07/15 12:18	MRM	TAL DEN
	Instrument ID: VMS_E									
Total/NA	Prep	3520C			851.2 mL	1.0 mL	381694	05/06/15 17:19	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	851.2 mL	1.0 mL	382771	05/13/15 17:25	NED	TAL SAV
	Instrument ID: CMSW									
Total/NA	Analysis	300.0		1	5 mL	5 mL	381509	05/05/15 17:17	DAS	TAL SAV
	Instrument ID: CICG									
Total/NA	Analysis	300.0		1	5 mL	5 mL	382322	05/08/15 22:39	DAS	TAL SAV
	Instrument ID: CICL									
Total/NA	Prep	3030C			50 mL	50 mL	381788	05/06/15 15:28	BJB	TAL SAV
Total/NA	Analysis	6020A		1	50 mL	50 mL	382128	05/08/15 06:26	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Prep	7470A			50 mL	50 mL	381791	05/06/15 16:10	JKL	TAL SAV
Total/NA	Analysis	7470A		1	50 mL	50 mL	381976	05/07/15 14:19	JKL	TAL SAV
	Instrument ID: LEEMAN2									
Total/NA	Analysis	350.1		1	2 mL	2 mL	381856	05/06/15 14:01	JME	TAL SAV
	Instrument ID: KONELAB1									

Client Sample ID: TB-1 — Lab Sample ID: 680-112176-4

Date Collected: 05/04/15 00:00 — **Matrix: Water**
Date Received: 05/05/15 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	382040	05/08/15 12:50	JD1	TAL SAV
	Instrument ID: CMSS									
Total/NA	Analysis	8260B SIM		1	20 mL	20 mL	276324	05/07/15 12:36	MRM	TAL DEN
	Instrument ID: VMS_E									

Lab Chronicle

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: MW-12

Lab Sample ID: 680-112176-5

Date Collected: 05/04/15 14:20
Date Received: 05/05/15 09:49

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	382040	05/08/15 13:13	JD1	TAL SAV
	Instrument ID: CMSS									
Total/NA	Analysis	8260B SIM		1	20 mL	20 mL	276324	05/07/15 12:55	MRM	TAL DEN
	Instrument ID: VMS_E									
Total/NA	Prep	3520C			1039.3 mL	1.0 mL	381694	05/06/15 17:19	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	1039.3 mL	1.0 mL	382771	05/13/15 17:53	NED	TAL SAV
	Instrument ID: CMSW									
Total/NA	Analysis	300.0		1	5 mL	5 mL	381509	05/05/15 17:33	DAS	TAL SAV
	Instrument ID: CICG									
Total/NA	Analysis	300.0		1	5 mL	5 mL	382322	05/08/15 22:54	DAS	TAL SAV
	Instrument ID: CICL									
Total/NA	Prep	3030C			50 mL	50 mL	381788	05/06/15 15:28	BJB	TAL SAV
Total/NA	Analysis	6020A		1	50 mL	50 mL	382128	05/08/15 06:31	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Prep	7470A			50 mL	50 mL	381791	05/06/15 16:10	JKL	TAL SAV
Total/NA	Analysis	7470A		1	50 mL	50 mL	381976	05/07/15 14:23	JKL	TAL SAV
	Instrument ID: LEEMAN2									
Total/NA	Analysis	350.1		1	2 mL	2 mL	381856	05/06/15 14:19	JME	TAL SAV
	Instrument ID: KONELAB1									

Client Sample ID: MW-9

Lab Sample ID: 680-112176-6

Date Collected: 05/04/15 12:40
Date Received: 05/05/15 09:49

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	382040	05/08/15 13:36	JD1	TAL SAV
	Instrument ID: CMSS									
Total/NA	Analysis	8260B SIM		1	20 mL	20 mL	276324	05/07/15 13:14	MRM	TAL DEN
	Instrument ID: VMS_E									
Total/NA	Prep	3520C			1030.1 mL	1.0 mL	381694	05/06/15 17:19	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	1030.1 mL	1.0 mL	382771	05/13/15 18:21	NED	TAL SAV
	Instrument ID: CMSW									
Total/NA	Analysis	300.0		1	5 mL	5 mL	381509	05/05/15 17:48	DAS	TAL SAV
	Instrument ID: CICG									
Total/NA	Analysis	300.0		1	5 mL	5 mL	382322	05/08/15 23:08	DAS	TAL SAV
	Instrument ID: CICL									
Total/NA	Prep	3030C			50 mL	50 mL	381788	05/06/15 15:28	BJB	TAL SAV
Total/NA	Analysis	6020A		1	50 mL	50 mL	382128	05/08/15 06:36	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Prep	7470A			50 mL	50 mL	381791	05/06/15 16:10	JKL	TAL SAV
Total/NA	Analysis	7470A		1	50 mL	50 mL	381976	05/07/15 14:26	JKL	TAL SAV
	Instrument ID: LEEMAN2									
Total/NA	Analysis	350.1		1	2 mL	2 mL	381856	05/06/15 14:19	JME	TAL SAV
	Instrument ID: KONELAB1									

Lab Chronicle

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Client Sample ID: TB-5

Date Collected: 05/04/15 00:00
Date Received: 05/05/15 09:49

Lab Sample ID: 680-112176-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	382040	05/08/15 11:18	JD1	TAL SAV
	Instrument ID: CMSS									
Total/NA	Analysis	8260B SIM		1	20 mL	20 mL	276324	05/07/15 13:32	MRM	TAL DEN
	Instrument ID: VMS_E									

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Certification Summary

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
North Carolina (WW/SW)	State Program	4	269	12-31-15

Laboratory: TestAmerica Denver

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-15
A2LA	ISO/IEC 17025		2907.01	10-31-15
Alabama	State Program	4	40730	09-30-12 *
Alaska (UST)	State Program	10	UST-30	04-05-16
Arizona	State Program	9	AZ0713	12-19-15
Arkansas DEQ	State Program	6	88-0687	06-01-16
California	State Program	9	2513	08-31-16
Connecticut	State Program	1	PH-0686	09-30-16
Florida	NELAP	4	E87667	06-30-15
Georgia	State Program	4	N/A	01-09-15 *
Illinois	NELAP	5	200017	04-30-16
Iowa	State Program	7	370	11-30-16
Kansas	NELAP	7	E-10166	07-31-15 *
Louisiana	NELAP	6	02096	06-30-15
Maine	State Program	1	CO0002	03-03-17
Minnesota	NELAP	5	8-999-405	12-31-15
Nevada	State Program	9	CO0026	07-31-15
New Hampshire	NELAP	1	205310	04-28-16
New Jersey	NELAP	2	CO004	06-30-15
New York	NELAP	2	11964	04-01-16
North Carolina (WW/SW)	State Program	4	358	12-31-15
North Dakota	State Program	8	R-034	01-09-16
Oklahoma	State Program	6	8614	08-31-15
Oregon	NELAP	10	4025	01-09-16
Pennsylvania	NELAP	3	68-00664	07-30-15
South Carolina	State Program	4	72002001	06-30-15
Texas	NELAP	6	T104704183-13-8	09-30-15
USDA	Federal		P330-13-00202	07-02-16
Utah	NELAP	8	CO00026	07-31-15
Virginia	NELAP	3	460232	06-14-15
Washington	State Program	10	C583	08-03-15
West Virginia DEP	State Program	3	354	11-30-15
Wisconsin	State Program	5	999615430	08-31-15
Wyoming (UST)	A2LA	8	2907.01	10-31-15

* Certification renewal pending - certification considered valid.

Method Summary

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112176-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL SAV
300.0	Anions, Ion Chromatography	MCAWW	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV
7470A	Mercury (CVAA)	SW846	TAL SAV
350.1	Nitrogen, Ammonia	MCAWW	TAL SAV

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Serial Number 71937

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

(✓) TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

( ) Alternate Laboratory Name/Location
Phone:
Fax:

PROJECT REFERENCE: Henderson Co. Landfill	PROJECT NO.: BN12.602.003	PROJECT LOCATION (STATE): NC	PAGE 1 OF 1
TAL (LAB) PROJECT MANAGER: Kathy Smith	P.O. NUMBER: 7961 DP-7	CONTRACT NO.	STANDARD REPORT DELIVERY (✓)
CLIENT (SITE) PM: Nora Zirps	CLIENT PHONE: 336.232.5213	CLIENT FAX	DATE DUE: 2 weeks
CLIENT NAME: ESP Associates, PA	CLIENT E-MAIL: nzirps@espassociates.com		EXPEDITED REPORT DELIVERY (SURCHARGE) ( )
CLIENT ADDRESS: 3475 Lakemont Blvd, Ft. Mill, SC 29708			DATE DUE:
COMPANY CONTRACTING THIS WORK (if applicable)			NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

REQUIRED ANALYSIS

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	TCL VOC's 8260B	1,4-Dioxane-8260SIM	TCL SVOC's 8270D LL	Metals (14) 3030/6020A	Mercury-7470A/7471B	Sulfate, Nitrate, Fluoride	Ammonia-350.1				REMARKS
5.4.15	1555	MW-13		✓				✓	✓	✓	✓	✓	✓	✓				
5.4.15		Duplicate 1		✓				✓	✓	✓	✓	✓	✓	✓				
5.4.15	1620	RB-1		✓				✓	✓	✓	✓	✓	✓	✓				
5.4.15		TB-1		✓				✓	✓									
5.4.15		TB-1		✓				✓	✓									
5.4.15		Temp Blank																

680-112176 Chain of Custody

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Eddie Rogers	5.4.15	1630						
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
C. Banda	050515	0940	YES ( ) NO ( )		680-112176	1.0/2.2(CF)1.4/26°C

TAL8240-680 (1008)

Serial Number 71936

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

(✓) TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

( ) Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE: Henderson Co. Landfill	PROJECT NO: BN602.003	PROJECT LOCATION (STATE): NC
TAL (LAB) PROJECT MANAGER: Kathy Smith	P.O. NUMBER: 7961DP-7	CONTRACT NO.
CLIENT (SITE) PM: Nora Zirps	CLIENT PHONE: 336.232.5213	CLIENT FAX
CLIENT NAME: ESP Associates, PA	CLIENT E-MAIL	
CLIENT ADDRESS: 3475 Lakemont Blvd. Ft Mill, SC 29708		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE 1 OF 1

STANDARD REPORT DELIVERY (✓)

DATE DUE 2 weeks

EXPEDITED REPORT DELIVERY (SURCHARGE) ( )

DATE DUE _____

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	TCL VOC's 8260B	1,4 Dioxane 8260SIM	TCL SVOC's 8270D LL	Metals (14) 3030/6020A	Mercury 7470A	Sulfate, Nitrate 300.0	Ammonia 350.1				REMARKS
~~MW-12~~				✓														
5.4.15	1420	MW-12		✓				✓	✓	✓	✓	✓	✓	✓				
5.4.15	1240	MW-9		✓				✓	✓	✓	✓	✓	✓	✓				
5.4.15		TB-5						✓	✓									
5.4.15		TB-5						✓	✓									
5.4.15		Temp Blank																

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY (SIGNATURE)	DATE	TIME
Edelic Rosas	5.4.15	1630						
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
C Banda	05/05/15	0949	YES ( ) NO ( )		680-112176	1.0/2.2(CF)1.4/2.6°C

TAL8240-680 (1008)

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Kathryn E	Carrier Tracking No(s):	COC No: 680-386196.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: kathy.smith@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.				Job #: 680-112176-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 5/15/2015			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: Henderson Co. Landfill	Project #: 68012467			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - ZnAcetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_SIM/8030B 1,4-Dioxane	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-13 (680-112176-1)	5/4/15	15:55 Eastern		Water			X	2	
Duplicate 1 (680-112176-2)	5/4/15	Eastern		Water			X	2	
RB-1 (680-112176-3)	5/4/15	16:20 Eastern		Water			X	2	
TB-1 (680-112176-4)	5/4/15	Eastern		Water			X	2	
MW-12 (680-112176-5)	5/4/15	14:20 Eastern		Water			X	2	
MW-9 (680-112176-6)	5/4/15	12:40 Eastern		Water			X	2	
TB-5 (680-112176-7)	5/4/15	Eastern		Water			X	2	

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by: [signature]	Date/Time: 5/5/15 17:00	Company: TA	Received by: Maya A Soto	Date/Time: 5/6/15 930	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: [illegible] 3.4 DAS to 2 5/6/15		

ORIGIN ID:SAVA (912) 354-7858
CHRISTY BANDA
TEST AMERICA
5102 LAROCHE AVE

SAVANNAH, GA 31404
UNITED STATES US

SHIP DATE: 05MAY15
ACTWGT: 9.4 LB MAN
CAD: 0622727/CAFE2807

BILL RECIPIENT

TO CUSTODY
TA ARVADA
4955 YARROW ST
COORS
ARVADA CO 80002
(303) 736-0100
INV:
PO:
REF:
DEPT:

FedEx Express

TRK# 0201 4598 9406 3551

WED - 06 MAY AA
STANDARD OVERNIGHT

XH WHHA

80002
CO-US DEN

Part # 156146-434 RIT2 03/12

FedEx Express **NEW Package US Airbill**

FedEx Tracking Number 8048 6686 6042

Form ID No. 0200

1 From

Date [redacted]

Sender's Name Phone

Company

Address

Dept/Floor/Suite/Room

City State ZIP

2 Your Internal Billing Reference

3 To

Recipient's Name Phone

Company

Address

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept/Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City State ZIP

☐ HOLD Weekday — FedEx location address REQUIRED. NOT available for FedEx First Overnight.

☐ HOLD Saturday — FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

8048 6686 6042

4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

For packages over 150 lbs, see FedEx Freight.

Next Business Day

☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

☐ FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.

☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☐ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required — Package may be left without obtaining a signature for delivery.

☐ Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*

☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods?

One box must be checked.

☐ No ☐ Yes — As per attached Shipper's Declaration. ☐ Yes — Shipper's Declaration not required. ☐ Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box. ☐ Cargo Aircraft Only

7 Payment *Bill to:*

*Enter FedEx Acct. No. or Credit Card No. below.

☐ Sender — Acct. No. in Section 1 will be billed. ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check ☐ Other FedEx Acct. No.

Total Packages Total Weight Credit Card Auth.

†Our liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

644

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FedEx TRK# 0200 8048 6686 6042

XX SAVA

FID 153041 04MAY15 SPAA 522C1/25E2/66DD

fedex.com 1.800.GoFedEx 1.800.463.3339

6/5/2015

FedEx Express **NEW Package US Airbill**

FedEx Tracking Number 8048 6686 6086

Form ID No. 0200

1 From

Date

Sender's Name Phone

Company

Address Dept./Floor/Suite/Room

City State ZIP

2 Your Internal Billing Reference

3 To

Recipient's Name Phone

Company

Address Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City State ZIP

☐ HOLD Weekday — FedEx location address REQUIRED. **NOT available for** FedEx First Overnight.

☐ HOLD Saturday — FedEx location address REQUIRED. **Available ONLY for** FedEx Priority Overnight and FedEx 2Day to select locations.

8048 6686 6086

4 Express Package Service • To most lo

NOTE: Service order has changed. Please select care

Next Business Day

☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

☐ F... Sec... will ... Delive...

☐ FedEx Third bus... Saturday ...

5 Packaging • Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ Fe... Tube

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery — **NOT available for** FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required — Package may be left without obtaining a signature for delivery.

☐ Direct Signature — Someone at recipient's address may sign for delivery. ***Fee applies.***

☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. ***Fee applies.***

Does this shipment contain dangerous goods?

One box must be checked.

☐ No ☐ Yes — As per attached Shipper's Declaration. ☐ Yes — Shipper's Declaration not required. ☐ Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

☐ Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below.

Obtain recip. Acct. No. ☐

☐ Sender — Acct. No. in Section 1 will be billed. ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

Total Packages Total Weight 50 lbs. Credit Card Auth.

Our liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

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fedex.com 1.800.GoFedEx 1.800.463.3339

1.800.GoFedEx 1.800.463.3339

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
434761

FedEx TRK# 0200 8048 6686 6086

TUE - 05 MAY 10:30A
PRIORITY OVERNIGHT

XX SAVA

31404
GA-US
SAV

/2015

State SC ZIP

Internal Billing Reference
characters will appear on invoice. OPTIONAL

ent's Phone ( )

any Test America

ss 5102 La Roche Ave.
not deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

HOLD Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

ss
line for the HOLD location address or for continuation of your shipping address.

Savannah State GA ZIP 31404

Easy new Peel-and-Stick airbill. No pouch needed.
Apply airbill directly to your package. See directions on back.

FedEx Express *NEW Package US Airbill* FedEx Tracking Number 8048 6686 6042

1 *Please print and press hard.*
5-4-15 Sender's FedEx Account Number SENDER'S FEDEX ACCOUNT NUMBER IS VALID

er's Nova Zirps Phone (336) 232-5213

any ESP Associates

ess 3475 Lakemont Blvd. Dept./Floor/Suite/Room

Fort Mill State SC ZIP 29715

Internal Billing Reference
characters will appear on invoice. OPTIONAL

ient's Phone ( )

any Test America

ess 5102 La Roche Ave.
not deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

HOLD Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

ess
s line for the HOLD location address or for continuation of your shipping address.

Savannah State GA ZIP 31404

Easy new Peel-and-Stick airbill. No pouch needed.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required
Package may be left without obtaining a signature for delivery.

☐ Direct Signature
Someone at recipient's address may sign for delivery. *Fee applies.*

☐ Indirect Signature
If no one is available at recipient's address, someone at a nearby address may sign for delivery. Not available for residential deliveries only.

Does this shipment contain dangerous goods?
One box must be checked.

☑ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 ____ x

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box. ☐ Cargo Aircraft Only

7 Payment *Bill to:*
Enter FedEx Acct. No. or Credit Card No. below.

☐ Sender Acct. No. in Section 1 will be billed. ☑ Recipient ☐ Third Party ☐ Credit Card ☐ Ca

FedEx Acct. No. Credit Card No. 142091895 Exp. Date

Total Packages Total Weight 50 lbs. Total Declared Value† $ ____ .00

†Our liability is limited to US$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

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Form ID No. 0200

4 Express Package Service * To most locations.
NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs. For packages over 150 lbs., use FedEx Express Freight.

Next Business Day	2nd Business Day
☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.	☐ FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
☑ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.	☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.	☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required
Package may be left without obtaining a signature for delivery.

☐ Direct Signature
Someone at recipient's address may sign for delivery. *Fee applies.*

☐ Indirect Signature
If no one is available at recipient's address, someone at a nearby address may sign for delivery. Not available for residential deliveries only.

Does this shipment contain dangerous goods?
One box must be checked.

☑ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 ____ x

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box. ☐ Cargo Aircraft Only

7 Payment *Bill to:*
Enter FedEx Acct. No. or Credit Card No. below.

☐ Sender Acct. No. in Section 1 will be billed. ☑ Recipient ☐ Third Party ☐ Credit Card ☐ C

FedEx Acct. No. Credit Card No. 142091895 Exp. Date

Total Packages Total Weight 44 lbs. Total Declared Value† $ ____ .00

Login Sample Receipt Checklist

Client: ESP Associates, P.A.

Job Number: 680-112176-1

Login Number: 112176
List Number: 1
Creator: Banda, Christy S

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ESP Associates, P.A.

Job Number: 680-112176-1

Login Number: 112176
List Number: 2
Creator: Soto, Mayra A

List Source: TestAmerica Denver
List Creation: 05/06/15 03:31 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-112219-1
Client Project/Site: Henderson Co. Landfill
Revision: 1

For:
ESP Associates, P.A.
7204 West Friendley Ave
Suite G
Greensboro, North Carolina 27410

Attn: Nora Zirps

Kathryn Smith

Authorized for release by:
6/5/2015 12:26:34 PM

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LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Definitions/Glossary

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-112219-1	MW-A2	Water	05/05/15 13:45	05/06/15 09:33
680-112219-2	MW-A5	Water	05/05/15 14:30	05/06/15 09:33
680-112219-3	TB-4	Water	05/05/15 00:00	05/06/15 09:33
680-112219-4	MW-A4	Water	05/05/15 10:10	05/06/15 09:33
680-112219-5	MW-A8	Water	05/05/15 12:35	05/06/15 09:33
680-112219-6	Duplicate 2	Water	05/05/15 00:00	05/06/15 09:33
680-112219-7	TB-3	Water	05/05/15 00:00	05/06/15 09:33

Job ID: 680-112219-1

Laboratory: TestAmerica Savannah

Narrative

Client: ESP Associates, P.A.

Project: Henderson Co. Landfill

Report Number: 680-112219-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT
The samples were received on 05/06/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.8 and 1.8 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples MW-A2 (680-112219-1), MW-A5 (680-112219-2), TB-4 (680-112219-3), MW-A4 (680-112219-4), MW-A8 (680-112219-5), Duplicate 2 (680-112219-6) and TB-3 (680-112219-7) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 05/08/2015.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with 382034.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples MW-A2 (680-112219-1), MW-A5 (680-112219-2), TB-4 (680-112219-3), MW-A4 (680-112219-4), MW-A8 (680-112219-5), Duplicate 2 (680-112219-6) and TB-3 (680-112219-7) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 05/13/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) - LOW LEVEL
Samples MW-A2 (680-112219-1), MW-A5 (680-112219-2), MW-A4 (680-112219-4), MW-A8 (680-112219-5) and Duplicate 2 (680-112219-6) were analyzed for Semivolatile Organic Compounds (GC/MS) - Low level in accordance with EPA SW-846 Method 8270D. The samples were prepared on 05/11/2015 and analyzed on 05/23/2015.

Bis(2-ethylhexyl) phthalate was detected in method blank MB 680-382481/17-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

2,4,6-Tribromophenol (Surr) recovered outside the surrogate recovery criteria high for MW-A2 (680-112219-1).

3,3'-Dichlorobenzidine and Atrazine recovered outside the recovery criteria low for LCS 680-382481/18-A.

Several analytes recovered outside the recovery criteria low for the MS/MSD of sample MW-A2MS (680-112219-1) in batch 680-384503.

The following analytes have been identified, in the reference method and/or via historical data, to be poor and/or erratic performers: Famphur, 1,4-Napthaquinone, Methane sulfonate, 1-naphthylamine, 2-naphthylamine, p-Dimethylamino azobenzene, p-phenylenediamine, a,a-dimethylphenethylamine, Methapyriline, 2-picoline (2-methylpyridine), 3,3'-dimethylbenzidine, 3,3'-dichlorobenzidine, Benzidine, Benzaldehyde, Benzoic acid, Dinoseb, Hexachlorophene, Hexachlorocyclopentadiene, o,o,o-triethylphosphorothioate. These analytes may have a %D >60% if the average %D of all the analytes in the continuing calibration verification (CCV) is 30%.

Job ID: 680-112219-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

The continuing calibration verification (CCV) analyzed in batch 680-384503 was outside the method criteria for the following analyte(s): Caprolactam, 4-Nitrophenol, 2,2'-oxybis[1-chloropropane] . A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

METALS (ICPMS)
Samples MW-A2 (680-112219-1), MW-A5 (680-112219-2), MW-A4 (680-112219-4), MW-A8 (680-112219-5) and Duplicate 2 (680-112219-6) were analyzed for Metals (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 05/06/2015 and analyzed on 05/08/2015 and 05/18/2015.

Lead was detected in method blank MB 680-381788/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Sample MW-A8 (680-112219-5)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY
Samples MW-A2 (680-112219-1), MW-A5 (680-112219-2), MW-A4 (680-112219-4), MW-A8 (680-112219-5) and Duplicate 2 (680-112219-6) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 05/06/2015 and analyzed on 05/07/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS BY ION CHROMATOGRAPHY (28 DAY)
Samples MW-A2 (680-112219-1), MW-A5 (680-112219-2), MW-A4 (680-112219-4), MW-A8 (680-112219-5) and Duplicate 2 (680-112219-6) were analyzed for Anions by Ion Chromatography (28 Day) in accordance with EPA Method 300.0. The samples were analyzed on 05/13/2015.

Sample MW-A8 (680-112219-5)[4X] required dilution prior to analysis due to color and appearance. Elevated reporting limits (RL) are provided.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS BY ION CHROMATOGRAPHY (48 HOUR)
Samples MW-A2 (680-112219-1), MW-A5 (680-112219-2), MW-A4 (680-112219-4), MW-A8 (680-112219-5) and Duplicate 2 (680-112219-6) were analyzed for Anions by Ion Chromatography (48 Hour) in accordance with EPA Method 300.0. The samples were analyzed on 05/06/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA
Samples MW-A2 (680-112219-1), MW-A5 (680-112219-2), MW-A4 (680-112219-4), MW-A8 (680-112219-5) and Duplicate 2 (680-112219-6) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 05/07/2015.

Samples MW-A5 (680-112219-2)[10X] and MW-A8 (680-112219-5)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 680-112219-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

TestAmerica Savannah QA Manager: Andrea Teal
TestAmerica Savannah Laboratory Director: Todd Baumgartner

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: MW-A2

Date Collected: 05/05/15 13:45
Date Received: 05/06/15 09:33

Lab Sample ID: 680-112219-1

Matrix: Water

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1.0	0.22	ug/L			05/13/15 11:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 127*		*05/13/15 11:03*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.37	ug/L			05/08/15 16:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.62	ug/L			05/08/15 16:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.36	ug/L			05/08/15 16:02	1
1,1,2-Trichloroethane	ND		1.0	0.33	ug/L			05/08/15 16:02	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/08/15 16:02	1
1,1-Dichloroethene	ND		1.0	0.36	ug/L			05/08/15 16:02	1
1,2,3-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 16:02	1
1,2,4-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 16:02	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.1	ug/L			05/08/15 16:02	1
1,2-Dibromoethane	ND		1.0	0.44	ug/L			05/08/15 16:02	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/08/15 16:02	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/08/15 16:02	1
1,2-Dichloropropane	ND		1.0	0.67	ug/L			05/08/15 16:02	1
1,3-Dichlorobenzene	ND		1.0	0.43	ug/L			05/08/15 16:02	1
1,4-Dichlorobenzene	ND		1.0	0.46	ug/L			05/08/15 16:02	1
2-Butanone (MEK)	ND		10	3.4	ug/L			05/08/15 16:02	1
2-Hexanone	ND		10	2.0	ug/L			05/08/15 16:02	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			05/08/15 16:02	1
Acetone	ND		10	7.0	ug/L			05/08/15 16:02	1
Benzene	ND		1.0	0.43	ug/L			05/08/15 16:02	1
Bromochloromethane	ND		1.0	0.45	ug/L			05/08/15 16:02	1
Bromoform	ND		1.0	0.43	ug/L			05/08/15 16:02	1
Bromomethane	ND		5.0	2.5	ug/L			05/08/15 16:02	1
Carbon disulfide	ND		2.0	1.0	ug/L			05/08/15 16:02	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			05/08/15 16:02	1
Chlorobenzene	**1.9**		1.0	0.26	ug/L			05/08/15 16:02	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			05/08/15 16:02	1
Chloroethane	ND		5.0	2.5	ug/L			05/08/15 16:02	1
Chloroform	ND		1.0	0.50	ug/L			05/08/15 16:02	1
Chloromethane	ND		1.0	0.40	ug/L			05/08/15 16:02	1
cis-1,2-Dichloroethene	ND		1.0	0.41	ug/L			05/08/15 16:02	1
cis-1,3-Dichloropropene	ND		1.0	0.40	ug/L			05/08/15 16:02	1
Cyclohexane	ND		1.0	0.39	ug/L			05/08/15 16:02	1
Dichlorobromomethane	ND		1.0	0.44	ug/L			05/08/15 16:02	1
Dichlorodifluoromethane	ND		1.0	0.60	ug/L			05/08/15 16:02	1
Ethylbenzene	ND		1.0	0.33	ug/L			05/08/15 16:02	1
Isopropylbenzene	**1.2**		1.0	0.35	ug/L			05/08/15 16:02	1
Methyl acetate	ND		5.0	1.8	ug/L			05/08/15 16:02	1
Methyl tert-butyl ether	ND		10	0.30	ug/L			05/08/15 16:02	1
Methylcyclohexane	ND		1.0	0.43	ug/L			05/08/15 16:02	1
Methylene Chloride	ND		5.0	2.5	ug/L			05/08/15 16:02	1
m-Xylene & p-Xylene	ND		1.0	0.35	ug/L			05/08/15 16:02	1
o-Xylene	ND		1.0	0.23	ug/L			05/08/15 16:02	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: MW-A2

Date Collected: 05/05/15 13:45
Date Received: 05/06/15 09:33

Lab Sample ID: 680-112219-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	0.27	ug/L			05/08/15 16:02	1
Tetrachloroethene	ND		1.0	0.74	ug/L			05/08/15 16:02	1
Toluene	ND		1.0	0.48	ug/L			05/08/15 16:02	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/08/15 16:02	1
trans-1,3-Dichloropropene	ND		1.0	0.42	ug/L			05/08/15 16:02	1
Trichloroethene	ND		1.0	0.48	ug/L			05/08/15 16:02	1
Trichlorofluoromethane	ND		1.0	0.42	ug/L			05/08/15 16:02	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/08/15 16:02	1
Xylenes, Total	ND		1.0	0.23	ug/L			05/08/15 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*70 - 130*		*05/08/15 16:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*05/08/15 16:02*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*05/08/15 16:02*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*05/08/15 16:02*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
1,2,4,5-Tetrachlorobenzene	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
2,2'-oxybis[1-chloropropane]	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
2,3,4,6-Tetrachlorophenol	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
2,4,5-Trichlorophenol	ND		1.0	0.12	ug/L		05/11/15 16:39	05/23/15 16:14	1
2,4,6-Trichlorophenol	ND		1.0	0.17	ug/L		05/11/15 16:39	05/23/15 16:14	1
2,4-Dichlorophenol	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
2,4-Dimethylphenol	ND		2.0	0.69	ug/L		05/11/15 16:39	05/23/15 16:14	1
2,4-Dinitrophenol	ND		10	1.1	ug/L		05/11/15 16:39	05/23/15 16:14	1
2,4-Dinitrotoluene	ND		1.0	0.12	ug/L		05/11/15 16:39	05/23/15 16:14	1
2,6-Dinitrotoluene	ND		1.0	0.13	ug/L		05/11/15 16:39	05/23/15 16:14	1
2-Chloronaphthalene	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
2-Chlorophenol	ND		1.0	0.12	ug/L		05/11/15 16:39	05/23/15 16:14	1
2-Methylnaphthalene	ND	F1	0.20	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
2-Methylphenol	ND		2.0	0.74	ug/L		05/11/15 16:39	05/23/15 16:14	1
2-Nitroaniline	ND		1.0	0.16	ug/L		05/11/15 16:39	05/23/15 16:14	1
2-Nitrophenol	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
3 & 4 Methylphenol	**0.94**	**J**	2.0	0.66	ug/L		05/11/15 16:39	05/23/15 16:14	1
3,3'-Dichlorobenzidine	ND	* F1	20	2.0	ug/L		05/11/15 16:39	05/23/15 16:14	1
3-Nitroaniline	ND		5.0	0.16	ug/L		05/11/15 16:39	05/23/15 16:14	1
4,6-Dinitro-2-methylphenol	ND		5.0	1.0	ug/L		05/11/15 16:39	05/23/15 16:14	1
4-Bromophenyl phenyl ether	ND		1.0	0.12	ug/L		05/11/15 16:39	05/23/15 16:14	1
4-Chloro-3-methylphenol	ND		1.0	0.12	ug/L		05/11/15 16:39	05/23/15 16:14	1
4-Chloroaniline	ND		4.0	2.0	ug/L		05/11/15 16:39	05/23/15 16:14	1
4-Chlorophenyl phenyl ether	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
4-Nitroaniline	ND		5.0	0.50	ug/L		05/11/15 16:39	05/23/15 16:14	1
4-Nitrophenol	ND		8.0	4.0	ug/L		05/11/15 16:39	05/23/15 16:14	1
Acenaphthene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Acenaphthylene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Acetophenone	ND		1.0	0.30	ug/L		05/11/15 16:39	05/23/15 16:14	1
Anthracene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Atrazine	ND	*	4.0	2.0	ug/L		05/11/15 16:39	05/23/15 16:14	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: MW-A2

Date Collected: 05/05/15 13:45
Date Received: 05/06/15 09:33

Lab Sample ID: 680-112219-1

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzaldehyde	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Benzo[a]anthracene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Benzo[a]pyrene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Benzo[b]fluoranthene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Benzo[g,h,i]perylene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Bis(2-chloroethoxy)methane	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Bis(2-chloroethyl)ether	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.0	ug/L		05/11/15 16:39	05/23/15 16:14	1
Butyl benzyl phthalate	**0.43**	**J F1**	1.0	0.12	ug/L		05/11/15 16:39	05/23/15 16:14	1
Caprolactam	ND		1.0	0.13	ug/L		05/11/15 16:39	05/23/15 16:14	1
Carbazole	ND		2.0	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Chrysene	ND		0.20	0.045	ug/L		05/11/15 16:39	05/23/15 16:14	1
Dibenz(a,h)anthracene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Dibenzofuran	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Diethyl phthalate	**0.28**	**J**	1.0	0.11	ug/L		05/11/15 16:39	05/23/15 16:14	1
Dimethyl phthalate	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Di-n-butyl phthalate	ND		1.0	0.39	ug/L		05/11/15 16:39	05/23/15 16:14	1
Di-n-octyl phthalate	ND		1.0	0.17	ug/L		05/11/15 16:39	05/23/15 16:14	1
Fluoranthene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Fluorene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Hexachlorobenzene	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Hexachlorobutadiene	ND	F1	1.0	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Hexachlorocyclopentadiene	ND		2.0	0.50	ug/L		05/11/15 16:39	05/23/15 16:14	1
Hexachloroethane	ND	F1	1.0	0.50	ug/L		05/11/15 16:39	05/23/15 16:14	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Isophorone	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Naphthalene	**0.14**	**J**	0.20	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Nitrobenzene	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
N-Nitrosodi-n-propylamine	ND		1.0	0.13	ug/L		05/11/15 16:39	05/23/15 16:14	1
N-Nitrosodiphenylamine	ND		1.0	0.37	ug/L		05/11/15 16:39	05/23/15 16:14	1
Pentachlorophenol	ND		5.0	0.40	ug/L		05/11/15 16:39	05/23/15 16:14	1
Phenanthrene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1
Phenol	**0.71**	**J**	1.0	0.13	ug/L		05/11/15 16:39	05/23/15 16:14	1
Pyrene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*140*	*X*	*30 - 130*	*05/11/15 16:39*	*05/23/15 16:14*	*1*
2-Fluorobiphenyl	*110*		*34 - 130*	*05/11/15 16:39*	*05/23/15 16:14*	*1*
2-Fluorophenol (Surr)	*99*		*25 - 130*	*05/11/15 16:39*	*05/23/15 16:14*	*1*
Nitrobenzene-d5 (Surr)	*103*		*32 - 130*	*05/11/15 16:39*	*05/23/15 16:14*	*1*
Phenol-d5 (Surr)	*105*		*27 - 130*	*05/11/15 16:39*	*05/23/15 16:14*	*1*
Terphenyl-d14 (Surr)	*128*		*36 - 130*	*05/11/15 16:39*	*05/23/15 16:14*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**160**		50	23	ug/L			05/06/15 18:27	1
Sulfate	**710**	**J**	1000	400	ug/L			05/13/15 10:06	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: MW-A2

Lab Sample ID: 680-112219-1
Matrix: Water

Date Collected: 05/05/15 13:45
Date Received: 05/06/15 09:33

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.99	ug/L		05/06/15 15:28	05/08/15 05:20	1
Arsenic	ND		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 05:20	1
Beryllium	**0.39**		0.20	0.070	ug/L		05/06/15 15:28	05/08/15 05:20	1
Cadmium	**0.22**	**J**	0.50	0.20	ug/L		05/06/15 15:28	05/08/15 05:20	1
Chromium	**0.79**	**J**	1.0	0.16	ug/L		05/06/15 15:28	05/08/15 05:20	1
Copper	**0.33**	**J**	1.0	0.21	ug/L		05/06/15 15:28	05/08/15 05:20	1
Iron	**1100**		50	20	ug/L		05/06/15 15:28	05/08/15 05:20	1
Lead	**0.27**	**J B**	0.30	0.080	ug/L		05/06/15 15:28	05/08/15 05:20	1
Manganese	**200**		2.0	0.84	ug/L		05/06/15 15:28	05/08/15 05:20	1
Nickel	**2.2**		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 05:20	1
Selenium	**0.35**	**J**	0.50	0.21	ug/L		05/06/15 15:28	05/08/15 05:20	1
Silver	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 05:20	1
Thallium	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 05:20	1
Zinc	**42**		10	2.6	ug/L		05/06/15 15:28	05/08/15 05:20	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.080	ug/L		05/06/15 16:10	05/07/15 14:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**400**		250	100	ug/L			05/07/15 14:59	1

Client Sample ID: MW-A5

Lab Sample ID: 680-112219-2
Matrix: Water

Date Collected: 05/05/15 14:30
Date Received: 05/06/15 09:33

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1.0	0.22	ug/L			05/13/15 11:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 127*		*05/13/15 11:21*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.37	ug/L			05/08/15 17:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.62	ug/L			05/08/15 17:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.36	ug/L			05/08/15 17:52	1
1,1,2-Trichloroethane	ND		1.0	0.33	ug/L			05/08/15 17:52	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/08/15 17:52	1
1,1-Dichloroethene	ND		1.0	0.36	ug/L			05/08/15 17:52	1
1,2,3-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 17:52	1
1,2,4-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 17:52	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.1	ug/L			05/08/15 17:52	1
1,2-Dibromoethane	ND		1.0	0.44	ug/L			05/08/15 17:52	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/08/15 17:52	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/08/15 17:52	1
1,2-Dichloropropane	ND		1.0	0.67	ug/L			05/08/15 17:52	1
1,3-Dichlorobenzene	ND		1.0	0.43	ug/L			05/08/15 17:52	1
1,4-Dichlorobenzene	ND		1.0	0.46	ug/L			05/08/15 17:52	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: MW-A5

Date Collected: 05/05/15 14:30
Date Received: 05/06/15 09:33

Lab Sample ID: 680-112219-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		10	3.4	ug/L			05/08/15 17:52	1
2-Hexanone	ND		10	2.0	ug/L			05/08/15 17:52	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			05/08/15 17:52	1
Acetone	ND		10	7.0	ug/L			05/08/15 17:52	1
Benzene	ND		1.0	0.43	ug/L			05/08/15 17:52	1
Bromochloromethane	ND		1.0	0.45	ug/L			05/08/15 17:52	1
Bromoform	ND		1.0	0.43	ug/L			05/08/15 17:52	1
Bromomethane	ND		5.0	2.5	ug/L			05/08/15 17:52	1
Carbon disulfide	ND		2.0	1.0	ug/L			05/08/15 17:52	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			05/08/15 17:52	1
Chlorobenzene	ND		1.0	0.26	ug/L			05/08/15 17:52	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			05/08/15 17:52	1
Chloroethane	ND		5.0	2.5	ug/L			05/08/15 17:52	1
Chloroform	ND		1.0	0.50	ug/L			05/08/15 17:52	1
Chloromethane	ND		1.0	0.40	ug/L			05/08/15 17:52	1
cis-1,2-Dichloroethene	ND		1.0	0.41	ug/L			05/08/15 17:52	1
cis-1,3-Dichloropropene	ND		1.0	0.40	ug/L			05/08/15 17:52	1
Cyclohexane	ND		1.0	0.39	ug/L			05/08/15 17:52	1
Dichlorobromomethane	ND		1.0	0.44	ug/L			05/08/15 17:52	1
Dichlorodifluoromethane	ND		1.0	0.60	ug/L			05/08/15 17:52	1
Ethylbenzene	ND		1.0	0.33	ug/L			05/08/15 17:52	1
Isopropylbenzene	ND		1.0	0.35	ug/L			05/08/15 17:52	1
Methyl acetate	ND		5.0	1.8	ug/L			05/08/15 17:52	1
Methyl tert-butyl ether	ND		10	0.30	ug/L			05/08/15 17:52	1
Methylcyclohexane	ND		1.0	0.43	ug/L			05/08/15 17:52	1
Methylene Chloride	ND		5.0	2.5	ug/L			05/08/15 17:52	1
m-Xylene & p-Xylene	ND		1.0	0.35	ug/L			05/08/15 17:52	1
o-Xylene	ND		1.0	0.23	ug/L			05/08/15 17:52	1
Styrene	ND		1.0	0.27	ug/L			05/08/15 17:52	1
Tetrachloroethene	ND		1.0	0.74	ug/L			05/08/15 17:52	1
Toluene	ND		1.0	0.48	ug/L			05/08/15 17:52	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/08/15 17:52	1
trans-1,3-Dichloropropene	ND		1.0	0.42	ug/L			05/08/15 17:52	1
Trichloroethene	ND		1.0	0.48	ug/L			05/08/15 17:52	1
Trichlorofluoromethane	ND		1.0	0.42	ug/L			05/08/15 17:52	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/08/15 17:52	1
Xylenes, Total	ND		1.0	0.23	ug/L			05/08/15 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*70 - 130*		*05/08/15 17:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*05/08/15 17:52*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*05/08/15 17:52*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*05/08/15 17:52*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		0.97	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
1,2,4,5-Tetrachlorobenzene	ND		0.97	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
2,2'-oxybis[1-chloropropane]	ND		0.97	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
2,3,4,6-Tetrachlorophenol	ND		0.97	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: MW-A5
Date Collected: 05/05/15 14:30
Date Received: 05/06/15 09:33

Lab Sample ID: 680-112219-2
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		0.97	0.12	ug/L		05/11/15 16:39	05/23/15 16:42	1
2,4,6-Trichlorophenol	ND		0.97	0.16	ug/L		05/11/15 16:39	05/23/15 16:42	1
2,4-Dichlorophenol	ND		0.97	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
2,4-Dimethylphenol	ND		1.9	0.67	ug/L		05/11/15 16:39	05/23/15 16:42	1
2,4-Dinitrophenol	ND		9.7	1.1	ug/L		05/11/15 16:39	05/23/15 16:42	1
2,4-Dinitrotoluene	ND		0.97	0.12	ug/L		05/11/15 16:39	05/23/15 16:42	1
2,6-Dinitrotoluene	ND		0.97	0.13	ug/L		05/11/15 16:39	05/23/15 16:42	1
2-Chloronaphthalene	ND		0.97	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
2-Chlorophenol	ND		0.97	0.12	ug/L		05/11/15 16:39	05/23/15 16:42	1
2-Methylnaphthalene	ND		0.19	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
2-Methylphenol	**0.87**	**J**	1.9	0.72	ug/L		05/11/15 16:39	05/23/15 16:42	1
2-Nitroaniline	ND		0.97	0.15	ug/L		05/11/15 16:39	05/23/15 16:42	1
2-Nitrophenol	ND		0.97	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
3 & 4 Methylphenol	**0.72**	**J**	1.9	0.64	ug/L		05/11/15 16:39	05/23/15 16:42	1
3,3'-Dichlorobenzidine	ND	*	19	1.9	ug/L		05/11/15 16:39	05/23/15 16:42	1
3-Nitroaniline	ND		4.8	0.15	ug/L		05/11/15 16:39	05/23/15 16:42	1
4,6-Dinitro-2-methylphenol	ND		4.8	0.97	ug/L		05/11/15 16:39	05/23/15 16:42	1
4-Bromophenyl phenyl ether	ND		0.97	0.12	ug/L		05/11/15 16:39	05/23/15 16:42	1
4-Chloro-3-methylphenol	ND		0.97	0.12	ug/L		05/11/15 16:39	05/23/15 16:42	1
4-Chloroaniline	ND		3.9	1.9	ug/L		05/11/15 16:39	05/23/15 16:42	1
4-Chlorophenyl phenyl ether	ND		0.97	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
4-Nitroaniline	ND		4.8	0.48	ug/L		05/11/15 16:39	05/23/15 16:42	1
4-Nitrophenol	ND		7.7	3.9	ug/L		05/11/15 16:39	05/23/15 16:42	1
Acenaphthene	**0.18**	**J**	0.19	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Acenaphthylene	ND		0.19	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Acetophenone	ND		0.97	0.29	ug/L		05/11/15 16:39	05/23/15 16:42	1
Anthracene	ND		0.19	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Atrazine	ND	*	3.9	1.9	ug/L		05/11/15 16:39	05/23/15 16:42	1
Benzaldehyde	ND		0.97	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Benzo[a]anthracene	ND		0.19	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Benzo[a]pyrene	ND		0.19	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Benzo[b]fluoranthene	ND		0.19	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Benzo[g,h,i]perylene	ND		0.19	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Benzo[k]fluoranthene	ND		0.19	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Bis(2-chloroethoxy)methane	ND		0.97	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Bis(2-chloroethyl)ether	ND		0.97	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Bis(2-ethylhexyl) phthalate	ND		4.8	1.9	ug/L		05/11/15 16:39	05/23/15 16:42	1
Butyl benzyl phthalate	**0.70**	**J**	0.97	0.12	ug/L		05/11/15 16:39	05/23/15 16:42	1
Caprolactam	ND		0.97	0.13	ug/L		05/11/15 16:39	05/23/15 16:42	1
Carbazole	ND		1.9	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Chrysene	ND		0.19	0.044	ug/L		05/11/15 16:39	05/23/15 16:42	1
Dibenz(a,h)anthracene	ND		0.19	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Dibenzofuran	ND		0.97	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Diethyl phthalate	ND		0.97	0.11	ug/L		05/11/15 16:39	05/23/15 16:42	1
Dimethyl phthalate	ND		0.97	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Di-n-butyl phthalate	ND		0.97	0.38	ug/L		05/11/15 16:39	05/23/15 16:42	1
Di-n-octyl phthalate	ND		0.97	0.16	ug/L		05/11/15 16:39	05/23/15 16:42	1
Fluoranthene	ND		0.19	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Fluorene	ND		0.19	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: MW-A5

Date Collected: 05/05/15 14:30
Date Received: 05/06/15 09:33

Lab Sample ID: 680-112219-2

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		0.97	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Hexachlorobutadiene	ND		0.97	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Hexachlorocyclopentadiene	ND		1.9	0.48	ug/L		05/11/15 16:39	05/23/15 16:42	1
Hexachloroethane	ND		0.97	0.48	ug/L		05/11/15 16:39	05/23/15 16:42	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Isophorone	**0.23**	**J**	0.97	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Naphthalene	ND		0.19	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Nitrobenzene	ND		0.97	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
N-Nitrosodi-n-propylamine	ND		0.97	0.13	ug/L		05/11/15 16:39	05/23/15 16:42	1
N-Nitrosodiphenylamine	ND		0.97	0.36	ug/L		05/11/15 16:39	05/23/15 16:42	1
Pentachlorophenol	ND		4.8	0.39	ug/L		05/11/15 16:39	05/23/15 16:42	1
Phenanthrene	ND		0.19	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1
Phenol	**0.39**	**J**	0.97	0.13	ug/L		05/11/15 16:39	05/23/15 16:42	1
Pyrene	ND		0.19	0.097	ug/L		05/11/15 16:39	05/23/15 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*80*		*30 - 130*	*05/11/15 16:39*	*05/23/15 16:42*	*1*
2-Fluorobiphenyl	*66*		*34 - 130*	*05/11/15 16:39*	*05/23/15 16:42*	*1*
2-Fluorophenol (Surr)	*60*		*25 - 130*	*05/11/15 16:39*	*05/23/15 16:42*	*1*
Nitrobenzene-d5 (Surr)	*62*		*32 - 130*	*05/11/15 16:39*	*05/23/15 16:42*	*1*
Phenol-d5 (Surr)	*59*		*27 - 130*	*05/11/15 16:39*	*05/23/15 16:42*	*1*
Terphenyl-d14 (Surr)	*79*		*36 - 130*	*05/11/15 16:39*	*05/23/15 16:42*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		50	23	ug/L			05/06/15 19:13	1
Sulfate	**1100**		1000	400	ug/L			05/13/15 10:20	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.99	ug/L		05/06/15 15:28	05/08/15 05:45	1
Arsenic	ND		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 05:45	1
Beryllium	ND		0.20	0.070	ug/L		05/06/15 15:28	05/08/15 05:45	1
Cadmium	**0.39**	**J**	0.50	0.20	ug/L		05/06/15 15:28	05/08/15 05:45	1
Chromium	**2.2**		1.0	0.16	ug/L		05/06/15 15:28	05/08/15 05:45	1
Copper	**0.81**	**J**	1.0	0.21	ug/L		05/06/15 15:28	05/08/15 05:45	1
Iron	**7200**		50	20	ug/L		05/06/15 15:28	05/08/15 05:45	1
Lead	**0.27**	**J B**	0.30	0.080	ug/L		05/06/15 15:28	05/08/15 05:45	1
Manganese	**2400**		2.0	0.84	ug/L		05/06/15 15:28	05/08/15 05:45	1
Nickel	**4.0**		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 05:45	1
Selenium	**0.42**	**J**	0.50	0.21	ug/L		05/06/15 15:28	05/08/15 05:45	1
Silver	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 05:45	1
Thallium	**0.35**		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 05:45	1
Zinc	**17**		10	2.6	ug/L		05/06/15 15:28	05/08/15 05:45	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.080	ug/L		05/06/15 16:10	05/07/15 14:56	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: MW-A5

Lab Sample ID: 680-112219-2
Date Collected: 05/05/15 14:30
Matrix: Water
Date Received: 05/06/15 09:33

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	12000		2500	1000	ug/L			05/07/15 15:38	10

Client Sample ID: TB-4

Lab Sample ID: 680-112219-3
Date Collected: 05/05/15 00:00
Matrix: Water
Date Received: 05/06/15 09:33

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1.0	0.22	ug/L			05/13/15 11:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*70 - 127*		*05/13/15 11:40*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.37	ug/L			05/08/15 15:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.62	ug/L			05/08/15 15:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.36	ug/L			05/08/15 15:21	1
1,1,2-Trichloroethane	ND		1.0	0.33	ug/L			05/08/15 15:21	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/08/15 15:21	1
1,1-Dichloroethene	ND		1.0	0.36	ug/L			05/08/15 15:21	1
1,2,3-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 15:21	1
1,2,4-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 15:21	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.1	ug/L			05/08/15 15:21	1
1,2-Dibromoethane	ND		1.0	0.44	ug/L			05/08/15 15:21	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/08/15 15:21	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/08/15 15:21	1
1,2-Dichloropropane	ND		1.0	0.67	ug/L			05/08/15 15:21	1
1,3-Dichlorobenzene	ND		1.0	0.43	ug/L			05/08/15 15:21	1
1,4-Dichlorobenzene	ND		1.0	0.46	ug/L			05/08/15 15:21	1
2-Butanone (MEK)	ND		10	3.4	ug/L			05/08/15 15:21	1
2-Hexanone	ND		10	2.0	ug/L			05/08/15 15:21	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			05/08/15 15:21	1
Acetone	ND		10	7.0	ug/L			05/08/15 15:21	1
Benzene	ND		1.0	0.43	ug/L			05/08/15 15:21	1
Bromochloromethane	ND		1.0	0.45	ug/L			05/08/15 15:21	1
Bromoform	ND		1.0	0.43	ug/L			05/08/15 15:21	1
Bromomethane	ND		5.0	2.5	ug/L			05/08/15 15:21	1
Carbon disulfide	ND		2.0	1.0	ug/L			05/08/15 15:21	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			05/08/15 15:21	1
Chlorobenzene	ND		1.0	0.26	ug/L			05/08/15 15:21	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			05/08/15 15:21	1
Chloroethane	ND		5.0	2.5	ug/L			05/08/15 15:21	1
Chloroform	ND		1.0	0.50	ug/L			05/08/15 15:21	1
Chloromethane	ND		1.0	0.40	ug/L			05/08/15 15:21	1
cis-1,2-Dichloroethene	ND		1.0	0.41	ug/L			05/08/15 15:21	1
cis-1,3-Dichloropropene	ND		1.0	0.40	ug/L			05/08/15 15:21	1
Cyclohexane	ND		1.0	0.39	ug/L			05/08/15 15:21	1
Dichlorobromomethane	ND		1.0	0.44	ug/L			05/08/15 15:21	1
Dichlorodifluoromethane	ND		1.0	0.60	ug/L			05/08/15 15:21	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: TB-4

Lab Sample ID: 680-112219-3
Date Collected: 05/05/15 00:00
Matrix: Water
Date Received: 05/06/15 09:33

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0	0.33	ug/L			05/08/15 15:21	1
Isopropylbenzene	ND		1.0	0.35	ug/L			05/08/15 15:21	1
Methyl acetate	ND		5.0	1.8	ug/L			05/08/15 15:21	1
Methyl tert-butyl ether	ND		10	0.30	ug/L			05/08/15 15:21	1
Methylcyclohexane	ND		1.0	0.43	ug/L			05/08/15 15:21	1
Methylene Chloride	ND		5.0	2.5	ug/L			05/08/15 15:21	1
m-Xylene & p-Xylene	ND		1.0	0.35	ug/L			05/08/15 15:21	1
o-Xylene	ND		1.0	0.23	ug/L			05/08/15 15:21	1
Styrene	ND		1.0	0.27	ug/L			05/08/15 15:21	1
Tetrachloroethene	ND		1.0	0.74	ug/L			05/08/15 15:21	1
Toluene	ND		1.0	0.48	ug/L			05/08/15 15:21	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/08/15 15:21	1
trans-1,3-Dichloropropene	ND		1.0	0.42	ug/L			05/08/15 15:21	1
Trichloroethene	ND		1.0	0.48	ug/L			05/08/15 15:21	1
Trichlorofluoromethane	ND		1.0	0.42	ug/L			05/08/15 15:21	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/08/15 15:21	1
Xylenes, Total	ND		1.0	0.23	ug/L			05/08/15 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*70 - 130*		*05/08/15 15:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*05/08/15 15:21*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*05/08/15 15:21*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*05/08/15 15:21*	*1*

Client Sample ID: MW-A4

Lab Sample ID: 680-112219-4
Date Collected: 05/05/15 10:10
Matrix: Water
Date Received: 05/06/15 09:33

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1.0	0.22	ug/L			05/13/15 11:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 127*		*05/13/15 11:58*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.37	ug/L			05/08/15 16:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.62	ug/L			05/08/15 16:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.36	ug/L			05/08/15 16:51	1
1,1,2-Trichloroethane	ND		1.0	0.33	ug/L			05/08/15 16:51	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/08/15 16:51	1
1,1-Dichloroethene	ND		1.0	0.36	ug/L			05/08/15 16:51	1
1,2,3-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 16:51	1
1,2,4-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 16:51	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.1	ug/L			05/08/15 16:51	1
1,2-Dibromoethane	ND		1.0	0.44	ug/L			05/08/15 16:51	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/08/15 16:51	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/08/15 16:51	1
1,2-Dichloropropane	ND		1.0	0.67	ug/L			05/08/15 16:51	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: MW-A4

Date Collected: 05/05/15 10:10
Date Received: 05/06/15 09:33

Lab Sample ID: 680-112219-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.43	ug/L			05/08/15 16:51	1
1,4-Dichlorobenzene	ND		1.0	0.46	ug/L			05/08/15 16:51	1
2-Butanone (MEK)	ND		10	3.4	ug/L			05/08/15 16:51	1
2-Hexanone	ND		10	2.0	ug/L			05/08/15 16:51	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			05/08/15 16:51	1
Acetone	ND		10	7.0	ug/L			05/08/15 16:51	1
Benzene	ND		1.0	0.43	ug/L			05/08/15 16:51	1
Bromochloromethane	ND		1.0	0.45	ug/L			05/08/15 16:51	1
Bromoform	ND		1.0	0.43	ug/L			05/08/15 16:51	1
Bromomethane	ND		5.0	2.5	ug/L			05/08/15 16:51	1
Carbon disulfide	ND		2.0	1.0	ug/L			05/08/15 16:51	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			05/08/15 16:51	1
Chlorobenzene	ND		1.0	0.26	ug/L			05/08/15 16:51	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			05/08/15 16:51	1
Chloroethane	ND		5.0	2.5	ug/L			05/08/15 16:51	1
Chloroform	ND		1.0	0.50	ug/L			05/08/15 16:51	1
Chloromethane	ND		1.0	0.40	ug/L			05/08/15 16:51	1
cis-1,2-Dichloroethene	ND		1.0	0.41	ug/L			05/08/15 16:51	1
cis-1,3-Dichloropropene	ND		1.0	0.40	ug/L			05/08/15 16:51	1
Cyclohexane	ND		1.0	0.39	ug/L			05/08/15 16:51	1
Dichlorobromomethane	ND		1.0	0.44	ug/L			05/08/15 16:51	1
Dichlorodifluoromethane	ND		1.0	0.60	ug/L			05/08/15 16:51	1
Ethylbenzene	ND		1.0	0.33	ug/L			05/08/15 16:51	1
Isopropylbenzene	ND		1.0	0.35	ug/L			05/08/15 16:51	1
Methyl acetate	ND		5.0	1.8	ug/L			05/08/15 16:51	1
Methyl tert-butyl ether	ND		10	0.30	ug/L			05/08/15 16:51	1
Methylcyclohexane	ND		1.0	0.43	ug/L			05/08/15 16:51	1
Methylene Chloride	ND		5.0	2.5	ug/L			05/08/15 16:51	1
m-Xylene & p-Xylene	ND		1.0	0.35	ug/L			05/08/15 16:51	1
o-Xylene	ND		1.0	0.23	ug/L			05/08/15 16:51	1
Styrene	ND		1.0	0.27	ug/L			05/08/15 16:51	1
Tetrachloroethene	ND		1.0	0.74	ug/L			05/08/15 16:51	1
Toluene	ND		1.0	0.48	ug/L			05/08/15 16:51	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/08/15 16:51	1
trans-1,3-Dichloropropene	ND		1.0	0.42	ug/L			05/08/15 16:51	1
Trichloroethene	ND		1.0	0.48	ug/L			05/08/15 16:51	1
Trichlorofluoromethane	ND		1.0	0.42	ug/L			05/08/15 16:51	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/08/15 16:51	1
Xylenes, Total	ND		1.0	0.23	ug/L			05/08/15 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*70 - 130*		*05/08/15 16:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*05/08/15 16:51*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*05/08/15 16:51*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*05/08/15 16:51*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
1,2,4,5-Tetrachlorobenzene	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: MW-A4

Date Collected: 05/05/15 10:10
Date Received: 05/06/15 09:33

Lab Sample ID: 680-112219-4

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2'-oxybis[1-chloropropane]	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
2,3,4,6-Tetrachlorophenol	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
2,4,5-Trichlorophenol	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:11	1
2,4,6-Trichlorophenol	ND		0.96	0.16	ug/L		05/11/15 16:39	05/23/15 17:11	1
2,4-Dichlorophenol	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
2,4-Dimethylphenol	ND		1.9	0.66	ug/L		05/11/15 16:39	05/23/15 17:11	1
2,4-Dinitrophenol	ND		9.6	1.1	ug/L		05/11/15 16:39	05/23/15 17:11	1
2,4-Dinitrotoluene	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:11	1
2,6-Dinitrotoluene	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:11	1
2-Chloronaphthalene	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
2-Chlorophenol	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:11	1
2-Methylnaphthalene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
2-Methylphenol	ND		1.9	0.71	ug/L		05/11/15 16:39	05/23/15 17:11	1
2-Nitroaniline	ND		0.96	0.15	ug/L		05/11/15 16:39	05/23/15 17:11	1
2-Nitrophenol	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
3 & 4 Methylphenol	ND		1.9	0.63	ug/L		05/11/15 16:39	05/23/15 17:11	1
3,3'-Dichlorobenzidine	ND	*	19	1.9	ug/L		05/11/15 16:39	05/23/15 17:11	1
3-Nitroaniline	ND		4.8	0.15	ug/L		05/11/15 16:39	05/23/15 17:11	1
4,6-Dinitro-2-methylphenol	ND		4.8	0.96	ug/L		05/11/15 16:39	05/23/15 17:11	1
4-Bromophenyl phenyl ether	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:11	1
4-Chloro-3-methylphenol	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:11	1
4-Chloroaniline	ND		3.8	1.9	ug/L		05/11/15 16:39	05/23/15 17:11	1
4-Chlorophenyl phenyl ether	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
4-Nitroaniline	ND		4.8	0.48	ug/L		05/11/15 16:39	05/23/15 17:11	1
4-Nitrophenol	ND		7.7	3.8	ug/L		05/11/15 16:39	05/23/15 17:11	1
Acenaphthene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Acenaphthylene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Acetophenone	ND		0.96	0.29	ug/L		05/11/15 16:39	05/23/15 17:11	1
Anthracene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Atrazine	ND	*	3.8	1.9	ug/L		05/11/15 16:39	05/23/15 17:11	1
Benzaldehyde	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Benzo[a]anthracene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Benzo[a]pyrene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Benzo[b]fluoranthene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Benzo[g,h,i]perylene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Bis(2-chloroethoxy)methane	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Bis(2-chloroethyl)ether	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Bis(2-ethylhexyl) phthalate	ND		4.8	1.9	ug/L		05/11/15 16:39	05/23/15 17:11	1
Butyl benzyl phthalate	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:11	1
Caprolactam	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:11	1
Carbazole	ND		1.9	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Chrysene	ND		0.19	0.043	ug/L		05/11/15 16:39	05/23/15 17:11	1
Dibenz(a,h)anthracene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Dibenzofuran	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Diethyl phthalate	ND		0.96	0.11	ug/L		05/11/15 16:39	05/23/15 17:11	1
Dimethyl phthalate	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Di-n-butyl phthalate	ND		0.96	0.37	ug/L		05/11/15 16:39	05/23/15 17:11	1
Di-n-octyl phthalate	ND		0.96	0.16	ug/L		05/11/15 16:39	05/23/15 17:11	1

Client Sample ID: MW-A4

Date Collected: 05/05/15 10:10
Date Received: 05/06/15 09:33

Lab Sample ID: 680-112219-4

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Fluorene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Hexachlorobenzene	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Hexachlorobutadiene	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Hexachlorocyclopentadiene	ND		1.9	0.48	ug/L		05/11/15 16:39	05/23/15 17:11	1
Hexachloroethane	ND		0.96	0.48	ug/L		05/11/15 16:39	05/23/15 17:11	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Isophorone	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Naphthalene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Nitrobenzene	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
N-Nitrosodi-n-propylamine	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:11	1
N-Nitrosodiphenylamine	ND		0.96	0.36	ug/L		05/11/15 16:39	05/23/15 17:11	1
Pentachlorophenol	ND		4.8	0.38	ug/L		05/11/15 16:39	05/23/15 17:11	1
Phenanthrene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1
Phenol	**0.23**	**J**	0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:11	1
Pyrene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*77*		*30 - 130*	*05/11/15 16:39*	*05/23/15 17:11*	*1*
2-Fluorobiphenyl	*64*		*34 - 130*	*05/11/15 16:39*	*05/23/15 17:11*	*1*
2-Fluorophenol (Surr)	*58*		*25 - 130*	*05/11/15 16:39*	*05/23/15 17:11*	*1*
Nitrobenzene-d5 (Surr)	*63*		*32 - 130*	*05/11/15 16:39*	*05/23/15 17:11*	*1*
Phenol-d5 (Surr)	*59*		*27 - 130*	*05/11/15 16:39*	*05/23/15 17:11*	*1*
Terphenyl-d14 (Surr)	*72*		*36 - 130*	*05/11/15 16:39*	*05/23/15 17:11*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**1000**		50	23	ug/L			05/06/15 19:28	1
Sulfate	ND		1000	400	ug/L			05/13/15 10:35	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.99	ug/L		05/06/15 15:28	05/08/15 05:50	1
Arsenic	ND		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 05:50	1
Beryllium	**0.17**	**J**	0.20	0.070	ug/L		05/06/15 15:28	05/08/15 05:50	1
Cadmium	ND		0.50	0.20	ug/L		05/06/15 15:28	05/08/15 05:50	1
Chromium	**2.9**		1.0	0.16	ug/L		05/06/15 15:28	05/08/15 05:50	1
Copper	**0.21**	**J**	1.0	0.21	ug/L		05/06/15 15:28	05/08/15 05:50	1
Iron	**86**		50	20	ug/L		05/06/15 15:28	05/08/15 05:50	1
Lead	**0.28**	**J B**	0.30	0.080	ug/L		05/06/15 15:28	05/08/15 05:50	1
Manganese	**200**		2.0	0.84	ug/L		05/06/15 15:28	05/08/15 05:50	1
Nickel	**3.7**		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 05:50	1
Selenium	**0.29**	**J**	0.50	0.21	ug/L		05/06/15 15:28	05/08/15 05:50	1
Silver	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 05:50	1
Thallium	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 05:50	1
Zinc	**4.6**	**J**	10	2.6	ug/L		05/06/15 15:28	05/08/15 05:50	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.080	ug/L		05/06/15 16:10	05/07/15 14:59	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: MW-A4

Lab Sample ID: 680-112219-4
Date Collected: 05/05/15 10:10
Matrix: Water
Date Received: 05/06/15 09:33

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		250	100	ug/L			05/07/15 14:59	1

Client Sample ID: MW-A8

Lab Sample ID: 680-112219-5
Date Collected: 05/05/15 12:35
Matrix: Water
Date Received: 05/06/15 09:33

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.9**		1.0	0.22	ug/L			05/13/15 12:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 127*		*05/13/15 12:17*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.37	ug/L			05/08/15 18:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.62	ug/L			05/08/15 18:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.36	ug/L			05/08/15 18:12	1
1,1,2-Trichloroethane	ND		1.0	0.33	ug/L			05/08/15 18:12	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/08/15 18:12	1
1,1-Dichloroethene	ND		1.0	0.36	ug/L			05/08/15 18:12	1
1,2,3-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 18:12	1
1,2,4-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 18:12	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.1	ug/L			05/08/15 18:12	1
1,2-Dibromoethane	ND		1.0	0.44	ug/L			05/08/15 18:12	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/08/15 18:12	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/08/15 18:12	1
1,2-Dichloropropane	ND		1.0	0.67	ug/L			05/08/15 18:12	1
1,3-Dichlorobenzene	ND		1.0	0.43	ug/L			05/08/15 18:12	1
1,4-Dichlorobenzene	ND		1.0	0.46	ug/L			05/08/15 18:12	1
2-Butanone (MEK)	ND		10	3.4	ug/L			05/08/15 18:12	1
2-Hexanone	ND		10	2.0	ug/L			05/08/15 18:12	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			05/08/15 18:12	1
Acetone	ND		10	7.0	ug/L			05/08/15 18:12	1
Benzene	**0.75**	**J**	1.0	0.43	ug/L			05/08/15 18:12	1
Bromochloromethane	ND		1.0	0.45	ug/L			05/08/15 18:12	1
Bromoform	ND		1.0	0.43	ug/L			05/08/15 18:12	1
Bromomethane	ND		5.0	2.5	ug/L			05/08/15 18:12	1
Carbon disulfide	ND		2.0	1.0	ug/L			05/08/15 18:12	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			05/08/15 18:12	1
Chlorobenzene	**2.1**		1.0	0.26	ug/L			05/08/15 18:12	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			05/08/15 18:12	1
Chloroethane	ND		5.0	2.5	ug/L			05/08/15 18:12	1
Chloroform	ND		1.0	0.50	ug/L			05/08/15 18:12	1
Chloromethane	ND		1.0	0.40	ug/L			05/08/15 18:12	1
cis-1,2-Dichloroethene	ND		1.0	0.41	ug/L			05/08/15 18:12	1
cis-1,3-Dichloropropene	ND		1.0	0.40	ug/L			05/08/15 18:12	1
Cyclohexane	ND		1.0	0.39	ug/L			05/08/15 18:12	1
Dichlorobromomethane	ND		1.0	0.44	ug/L			05/08/15 18:12	1
Dichlorodifluoromethane	ND		1.0	0.60	ug/L			05/08/15 18:12	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: MW-A8

Date Collected: 05/05/15 12:35
Date Received: 05/06/15 09:33

Lab Sample ID: 680-112219-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0	0.33	ug/L			05/08/15 18:12	1
Isopropylbenzene	**0.74**	**J**	1.0	0.35	ug/L			05/08/15 18:12	1
Methyl acetate	ND		5.0	1.8	ug/L			05/08/15 18:12	1
Methyl tert-butyl ether	ND		10	0.30	ug/L			05/08/15 18:12	1
Methylcyclohexane	ND		1.0	0.43	ug/L			05/08/15 18:12	1
Methylene Chloride	ND		5.0	2.5	ug/L			05/08/15 18:12	1
m-Xylene & p-Xylene	ND		1.0	0.35	ug/L			05/08/15 18:12	1
o-Xylene	ND		1.0	0.23	ug/L			05/08/15 18:12	1
Styrene	ND		1.0	0.27	ug/L			05/08/15 18:12	1
Tetrachloroethene	ND		1.0	0.74	ug/L			05/08/15 18:12	1
Toluene	ND		1.0	0.48	ug/L			05/08/15 18:12	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/08/15 18:12	1
trans-1,3-Dichloropropene	ND		1.0	0.42	ug/L			05/08/15 18:12	1
Trichloroethene	ND		1.0	0.48	ug/L			05/08/15 18:12	1
Trichlorofluoromethane	ND		1.0	0.42	ug/L			05/08/15 18:12	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/08/15 18:12	1
Xylenes, Total	ND		1.0	0.23	ug/L			05/08/15 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*70 - 130*		*05/08/15 18:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*05/08/15 18:12*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*05/08/15 18:12*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*05/08/15 18:12*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
1,2,4,5-Tetrachlorobenzene	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
2,2'-oxybis[1-chloropropane]	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
2,3,4,6-Tetrachlorophenol	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
2,4,5-Trichlorophenol	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:39	1
2,4,6-Trichlorophenol	ND		0.96	0.16	ug/L		05/11/15 16:39	05/23/15 17:39	1
2,4-Dichlorophenol	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
2,4-Dimethylphenol	ND		1.9	0.66	ug/L		05/11/15 16:39	05/23/15 17:39	1
2,4-Dinitrophenol	ND		9.6	1.1	ug/L		05/11/15 16:39	05/23/15 17:39	1
2,4-Dinitrotoluene	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:39	1
2,6-Dinitrotoluene	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:39	1
2-Chloronaphthalene	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
2-Chlorophenol	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:39	1
2-Methylnaphthalene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
2-Methylphenol	ND		1.9	0.71	ug/L		05/11/15 16:39	05/23/15 17:39	1
2-Nitroaniline	ND		0.96	0.15	ug/L		05/11/15 16:39	05/23/15 17:39	1
2-Nitrophenol	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
3 & 4 Methylphenol	ND		1.9	0.63	ug/L		05/11/15 16:39	05/23/15 17:39	1
3,3'-Dichlorobenzidine	ND	*	19	1.9	ug/L		05/11/15 16:39	05/23/15 17:39	1
3-Nitroaniline	ND		4.8	0.15	ug/L		05/11/15 16:39	05/23/15 17:39	1
4,6-Dinitro-2-methylphenol	ND		4.8	0.96	ug/L		05/11/15 16:39	05/23/15 17:39	1
4-Bromophenyl phenyl ether	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:39	1
4-Chloro-3-methylphenol	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:39	1
4-Chloroaniline	ND		3.8	1.9	ug/L		05/11/15 16:39	05/23/15 17:39	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: MW-A8

Date Collected: 05/05/15 12:35
Date Received: 05/06/15 09:33

Lab Sample ID: 680-112219-5

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
4-Nitroaniline	ND		4.8	0.48	ug/L		05/11/15 16:39	05/23/15 17:39	1
4-Nitrophenol	ND		7.7	3.8	ug/L		05/11/15 16:39	05/23/15 17:39	1
Acenaphthene	**0.43**		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Acenaphthylene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Acetophenone	ND		0.96	0.29	ug/L		05/11/15 16:39	05/23/15 17:39	1
Anthracene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Atrazine	ND	*	3.8	1.9	ug/L		05/11/15 16:39	05/23/15 17:39	1
Benzaldehyde	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Benzo[a]anthracene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Benzo[a]pyrene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Benzo[b]fluoranthene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Benzo[g,h,i]perylene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Bis(2-chloroethoxy)methane	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Bis(2-chloroethyl)ether	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Bis(2-ethylhexyl) phthalate	ND		4.8	1.9	ug/L		05/11/15 16:39	05/23/15 17:39	1
Butyl benzyl phthalate	**0.15**	**J**	0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:39	1
Caprolactam	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:39	1
Carbazole	**0.23**	**J**	1.9	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Chrysene	**0.049**	**J**	0.19	0.043	ug/L		05/11/15 16:39	05/23/15 17:39	1
Dibenz(a,h)anthracene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Dibenzofuran	**0.11**	**J**	0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Diethyl phthalate	ND		0.96	0.11	ug/L		05/11/15 16:39	05/23/15 17:39	1
Dimethyl phthalate	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Di-n-butyl phthalate	ND		0.96	0.37	ug/L		05/11/15 16:39	05/23/15 17:39	1
Di-n-octyl phthalate	ND		0.96	0.16	ug/L		05/11/15 16:39	05/23/15 17:39	1
Fluoranthene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Fluorene	**0.18**	**J**	0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Hexachlorobenzene	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Hexachlorobutadiene	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Hexachlorocyclopentadiene	ND		1.9	0.48	ug/L		05/11/15 16:39	05/23/15 17:39	1
Hexachloroethane	ND		0.96	0.48	ug/L		05/11/15 16:39	05/23/15 17:39	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Isophorone	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Naphthalene	**0.11**	**J**	0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Nitrobenzene	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
N-Nitrosodi-n-propylamine	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:39	1
N-Nitrosodiphenylamine	ND		0.96	0.36	ug/L		05/11/15 16:39	05/23/15 17:39	1
Pentachlorophenol	ND		4.8	0.38	ug/L		05/11/15 16:39	05/23/15 17:39	1
Phenanthrene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1
Phenol	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 17:39	1
Pyrene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 17:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*67*		*30 - 130*	*05/11/15 16:39*	*05/23/15 17:39*	*1*
2-Fluorobiphenyl	*54*		*34 - 130*	*05/11/15 16:39*	*05/23/15 17:39*	*1*
2-Fluorophenol (Surr)	*54*		*25 - 130*	*05/11/15 16:39*	*05/23/15 17:39*	*1*
Nitrobenzene-d5 (Surr)	*56*		*32 - 130*	*05/11/15 16:39*	*05/23/15 17:39*	*1*
Phenol-d5 (Surr)	*51*		*27 - 130*	*05/11/15 16:39*	*05/23/15 17:39*	*1*

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: MW-A8

Lab Sample ID: 680-112219-5
Date Collected: 05/05/15 12:35
Matrix: Water
Date Received: 05/06/15 09:33

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14 (Surr)	*56*		*36 - 130*	*05/11/15 16:39*	*05/23/15 17:39*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		50	23	ug/L			05/06/15 19:44	1
Sulfate	ND		4000	1600	ug/L			05/13/15 10:49	4

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.99	ug/L		05/06/15 15:28	05/08/15 05:55	1
Arsenic	ND		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 05:55	1
Beryllium	**0.077**	**J**	0.20	0.070	ug/L		05/06/15 15:28	05/08/15 05:55	1
Cadmium	ND		0.50	0.20	ug/L		05/06/15 15:28	05/08/15 05:55	1
Chromium	**0.41**	**J**	1.0	0.16	ug/L		05/06/15 15:28	05/08/15 05:55	1
Copper	**0.22**	**J**	1.0	0.21	ug/L		05/06/15 15:28	05/08/15 05:55	1
Iron	**170000**		1000	400	ug/L		05/06/15 15:28	05/18/15 16:14	20
Lead	**0.13**	**J B**	0.30	0.080	ug/L		05/06/15 15:28	05/08/15 05:55	1
Manganese	**3000**		2.0	0.84	ug/L		05/06/15 15:28	05/08/15 05:55	1
Nickel	**1.5**		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 05:55	1
Selenium	ND		0.50	0.21	ug/L		05/06/15 15:28	05/08/15 05:55	1
Silver	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 05:55	1
Thallium	**0.24**		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 05:55	1
Zinc	**6.0**	**J**	10	2.6	ug/L		05/06/15 15:28	05/08/15 05:55	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.080	ug/L		05/06/15 16:10	05/07/15 15:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**19000**		2500	1000	ug/L			05/07/15 15:08	10

Client Sample ID: Duplicate 2

Lab Sample ID: 680-112219-6
Date Collected: 05/05/15 00:00
Matrix: Water
Date Received: 05/06/15 09:33

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.39**	**J**	1.0	0.22	ug/L			05/13/15 12:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 127*		*05/13/15 12:36*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.37	ug/L			05/08/15 17:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.62	ug/L			05/08/15 17:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.36	ug/L			05/08/15 17:32	1
1,1,2-Trichloroethane	ND		1.0	0.33	ug/L			05/08/15 17:32	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/08/15 17:32	1
1,1-Dichloroethene	ND		1.0	0.36	ug/L			05/08/15 17:32	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: Duplicate 2

Date Collected: 05/05/15 00:00
Date Received: 05/06/15 09:33

Lab Sample ID: 680-112219-6

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 17:32	1
1,2,4-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 17:32	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.1	ug/L			05/08/15 17:32	1
1,2-Dibromoethane	ND		1.0	0.44	ug/L			05/08/15 17:32	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/08/15 17:32	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/08/15 17:32	1
1,2-Dichloropropane	ND		1.0	0.67	ug/L			05/08/15 17:32	1
1,3-Dichlorobenzene	ND		1.0	0.43	ug/L			05/08/15 17:32	1
1,4-Dichlorobenzene	ND		1.0	0.46	ug/L			05/08/15 17:32	1
2-Butanone (MEK)	ND		10	3.4	ug/L			05/08/15 17:32	1
2-Hexanone	ND		10	2.0	ug/L			05/08/15 17:32	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			05/08/15 17:32	1
Acetone	ND		10	7.0	ug/L			05/08/15 17:32	1
Benzene	ND		1.0	0.43	ug/L			05/08/15 17:32	1
Bromochloromethane	ND		1.0	0.45	ug/L			05/08/15 17:32	1
Bromoform	ND		1.0	0.43	ug/L			05/08/15 17:32	1
Bromomethane	ND		5.0	2.5	ug/L			05/08/15 17:32	1
Carbon disulfide	ND		2.0	1.0	ug/L			05/08/15 17:32	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			05/08/15 17:32	1
Chlorobenzene	ND		1.0	0.26	ug/L			05/08/15 17:32	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			05/08/15 17:32	1
Chloroethane	ND		5.0	2.5	ug/L			05/08/15 17:32	1
Chloroform	ND		1.0	0.50	ug/L			05/08/15 17:32	1
Chloromethane	ND		1.0	0.40	ug/L			05/08/15 17:32	1
cis-1,2-Dichloroethene	ND		1.0	0.41	ug/L			05/08/15 17:32	1
cis-1,3-Dichloropropene	ND		1.0	0.40	ug/L			05/08/15 17:32	1
Cyclohexane	ND		1.0	0.39	ug/L			05/08/15 17:32	1
Dichlorobromomethane	ND		1.0	0.44	ug/L			05/08/15 17:32	1
Dichlorodifluoromethane	ND		1.0	0.60	ug/L			05/08/15 17:32	1
Ethylbenzene	ND		1.0	0.33	ug/L			05/08/15 17:32	1
Isopropylbenzene	ND		1.0	0.35	ug/L			05/08/15 17:32	1
Methyl acetate	ND		5.0	1.8	ug/L			05/08/15 17:32	1
Methyl tert-butyl ether	ND		10	0.30	ug/L			05/08/15 17:32	1
Methylcyclohexane	ND		1.0	0.43	ug/L			05/08/15 17:32	1
Methylene Chloride	ND		5.0	2.5	ug/L			05/08/15 17:32	1
m-Xylene & p-Xylene	ND		1.0	0.35	ug/L			05/08/15 17:32	1
o-Xylene	ND		1.0	0.23	ug/L			05/08/15 17:32	1
Styrene	ND		1.0	0.27	ug/L			05/08/15 17:32	1
Tetrachloroethene	ND		1.0	0.74	ug/L			05/08/15 17:32	1
Toluene	ND		1.0	0.48	ug/L			05/08/15 17:32	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/08/15 17:32	1
trans-1,3-Dichloropropene	ND		1.0	0.42	ug/L			05/08/15 17:32	1
Trichloroethene	ND		1.0	0.48	ug/L			05/08/15 17:32	1
Trichlorofluoromethane	ND		1.0	0.42	ug/L			05/08/15 17:32	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/08/15 17:32	1
Xylenes, Total	ND		1.0	0.23	ug/L			05/08/15 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*70 - 130*		*05/08/15 17:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*05/08/15 17:32*	*1*

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: Duplicate 2

Date Collected: 05/05/15 00:00
Date Received: 05/06/15 09:33

Lab Sample ID: 680-112219-6

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*05/08/15 17:32*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*05/08/15 17:32*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
1,2,4,5-Tetrachlorobenzene	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
2,2'-oxybis[1-chloropropane]	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
2,3,4,6-Tetrachlorophenol	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
2,4,5-Trichlorophenol	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 18:07	1
2,4,6-Trichlorophenol	ND		0.96	0.16	ug/L		05/11/15 16:39	05/23/15 18:07	1
2,4-Dichlorophenol	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
2,4-Dimethylphenol	ND		1.9	0.66	ug/L		05/11/15 16:39	05/23/15 18:07	1
2,4-Dinitrophenol	ND		9.6	1.1	ug/L		05/11/15 16:39	05/23/15 18:07	1
2,4-Dinitrotoluene	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 18:07	1
2,6-Dinitrotoluene	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 18:07	1
2-Chloronaphthalene	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
2-Chlorophenol	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 18:07	1
2-Methylnaphthalene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
2-Methylphenol	ND		1.9	0.71	ug/L		05/11/15 16:39	05/23/15 18:07	1
2-Nitroaniline	ND		0.96	0.15	ug/L		05/11/15 16:39	05/23/15 18:07	1
2-Nitrophenol	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
3 & 4 Methylphenol	ND		1.9	0.63	ug/L		05/11/15 16:39	05/23/15 18:07	1
3,3'-Dichlorobenzidine	ND	*	19	1.9	ug/L		05/11/15 16:39	05/23/15 18:07	1
3-Nitroaniline	ND		4.8	0.15	ug/L		05/11/15 16:39	05/23/15 18:07	1
4,6-Dinitro-2-methylphenol	ND		4.8	0.96	ug/L		05/11/15 16:39	05/23/15 18:07	1
4-Bromophenyl phenyl ether	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 18:07	1
4-Chloro-3-methylphenol	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 18:07	1
4-Chloroaniline	ND		3.8	1.9	ug/L		05/11/15 16:39	05/23/15 18:07	1
4-Chlorophenyl phenyl ether	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
4-Nitroaniline	ND		4.8	0.48	ug/L		05/11/15 16:39	05/23/15 18:07	1
4-Nitrophenol	ND		7.7	3.8	ug/L		05/11/15 16:39	05/23/15 18:07	1
Acenaphthene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Acenaphthylene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Acetophenone	ND		0.96	0.29	ug/L		05/11/15 16:39	05/23/15 18:07	1
Anthracene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Atrazine	ND	*	3.8	1.9	ug/L		05/11/15 16:39	05/23/15 18:07	1
Benzaldehyde	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Benzo[a]anthracene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Benzo[a]pyrene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Benzo[b]fluoranthene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Benzo[g,h,i]perylene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Bis(2-chloroethoxy)methane	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Bis(2-chloroethyl)ether	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Bis(2-ethylhexyl) phthalate	ND		4.8	1.9	ug/L		05/11/15 16:39	05/23/15 18:07	1
Butyl benzyl phthalate	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 18:07	1
Caprolactam	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 18:07	1
Carbazole	ND		1.9	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: Duplicate 2

Date Collected: 05/05/15 00:00
Date Received: 05/06/15 09:33

Lab Sample ID: 680-112219-6

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		0.19	0.043	ug/L		05/11/15 16:39	05/23/15 18:07	1
Dibenz(a,h)anthracene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Dibenzofuran	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Diethyl phthalate	ND		0.96	0.11	ug/L		05/11/15 16:39	05/23/15 18:07	1
Dimethyl phthalate	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Di-n-butyl phthalate	ND		0.96	0.37	ug/L		05/11/15 16:39	05/23/15 18:07	1
Di-n-octyl phthalate	ND		0.96	0.16	ug/L		05/11/15 16:39	05/23/15 18:07	1
Fluoranthene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Fluorene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Hexachlorobenzene	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Hexachlorobutadiene	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Hexachlorocyclopentadiene	ND		1.9	0.48	ug/L		05/11/15 16:39	05/23/15 18:07	1
Hexachloroethane	ND		0.96	0.48	ug/L		05/11/15 16:39	05/23/15 18:07	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Isophorone	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Naphthalene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Nitrobenzene	ND		0.96	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
N-Nitrosodi-n-propylamine	ND		0.96	0.12	ug/L		05/11/15 16:39	05/23/15 18:07	1
N-Nitrosodiphenylamine	ND		0.96	0.36	ug/L		05/11/15 16:39	05/23/15 18:07	1
Pentachlorophenol	ND		4.8	0.38	ug/L		05/11/15 16:39	05/23/15 18:07	1
Phenanthrene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1
Phenol	**0.40**	**J**	0.96	0.12	ug/L		05/11/15 16:39	05/23/15 18:07	1
Pyrene	ND		0.19	0.096	ug/L		05/11/15 16:39	05/23/15 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*64*		*30 - 130*	*05/11/15 16:39*	*05/23/15 18:07*	*1*
2-Fluorobiphenyl	*57*		*34 - 130*	*05/11/15 16:39*	*05/23/15 18:07*	*1*
2-Fluorophenol (Surr)	*53*		*25 - 130*	*05/11/15 16:39*	*05/23/15 18:07*	*1*
Nitrobenzene-d5 (Surr)	*55*		*32 - 130*	*05/11/15 16:39*	*05/23/15 18:07*	*1*
Phenol-d5 (Surr)	*49*		*27 - 130*	*05/11/15 16:39*	*05/23/15 18:07*	*1*
Terphenyl-d14 (Surr)	*61*		*36 - 130*	*05/11/15 16:39*	*05/23/15 18:07*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**1100**		50	23	ug/L			05/06/15 19:59	1
Sulfate	ND		1000	400	ug/L			05/13/15 11:04	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.99	ug/L		05/06/15 15:28	05/08/15 06:10	1
Arsenic	ND		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 06:10	1
Beryllium	**0.12**	**J**	0.20	0.070	ug/L		05/06/15 15:28	05/08/15 06:10	1
Cadmium	ND		0.50	0.20	ug/L		05/06/15 15:28	05/08/15 06:10	1
Chromium	**1.3**		1.0	0.16	ug/L		05/06/15 15:28	05/08/15 06:10	1
Copper	ND		1.0	0.21	ug/L		05/06/15 15:28	05/08/15 06:10	1
Iron	**38**	**J**	50	20	ug/L		05/06/15 15:28	05/08/15 06:10	1
Lead	**0.098**	**J B**	0.30	0.080	ug/L		05/06/15 15:28	05/08/15 06:10	1
Manganese	**190**		2.0	0.84	ug/L		05/06/15 15:28	05/08/15 06:10	1
Nickel	**2.0**		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 06:10	1
Selenium	**0.27**	**J**	0.50	0.21	ug/L		05/06/15 15:28	05/08/15 06:10	1

Client Sample ID: Duplicate 2

Lab Sample ID: 680-112219-6
Date Collected: 05/05/15 00:00
Matrix: Water
Date Received: 05/06/15 09:33

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 06:10	1
Thallium	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 06:10	1
Zinc	**4.5**	**J**	10	2.6	ug/L		05/06/15 15:28	05/08/15 06:10	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.080	ug/L		05/06/15 16:10	05/07/15 15:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**140**	**J**	250	100	ug/L			05/07/15 14:33	1

Client Sample ID: TB-3

Lab Sample ID: 680-112219-7
Date Collected: 05/05/15 00:00
Matrix: Water
Date Received: 05/06/15 09:33

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1.0	0.22	ug/L			05/13/15 12:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 127*		*05/13/15 12:54*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.37	ug/L			05/08/15 15:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.62	ug/L			05/08/15 15:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.36	ug/L			05/08/15 15:41	1
1,1,2-Trichloroethane	ND		1.0	0.33	ug/L			05/08/15 15:41	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/08/15 15:41	1
1,1-Dichloroethene	ND		1.0	0.36	ug/L			05/08/15 15:41	1
1,2,3-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 15:41	1
1,2,4-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 15:41	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.1	ug/L			05/08/15 15:41	1
1,2-Dibromoethane	ND		1.0	0.44	ug/L			05/08/15 15:41	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/08/15 15:41	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/08/15 15:41	1
1,2-Dichloropropane	ND		1.0	0.67	ug/L			05/08/15 15:41	1
1,3-Dichlorobenzene	ND		1.0	0.43	ug/L			05/08/15 15:41	1
1,4-Dichlorobenzene	ND		1.0	0.46	ug/L			05/08/15 15:41	1
2-Butanone (MEK)	ND		10	3.4	ug/L			05/08/15 15:41	1
2-Hexanone	ND		10	2.0	ug/L			05/08/15 15:41	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			05/08/15 15:41	1
Acetone	ND		10	7.0	ug/L			05/08/15 15:41	1
Benzene	ND		1.0	0.43	ug/L			05/08/15 15:41	1
Bromochloromethane	ND		1.0	0.45	ug/L			05/08/15 15:41	1
Bromoform	ND		1.0	0.43	ug/L			05/08/15 15:41	1
Bromomethane	ND		5.0	2.5	ug/L			05/08/15 15:41	1
Carbon disulfide	ND		2.0	1.0	ug/L			05/08/15 15:41	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			05/08/15 15:41	1
Chlorobenzene	ND		1.0	0.26	ug/L			05/08/15 15:41	1

Client Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: TB-3

Date Collected: 05/05/15 00:00
Date Received: 05/06/15 09:33

Lab Sample ID: 680-112219-7

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	ND		1.0	0.32	ug/L			05/08/15 15:41	1
Chloroethane	ND		5.0	2.5	ug/L			05/08/15 15:41	1
Chloroform	ND		1.0	0.50	ug/L			05/08/15 15:41	1
Chloromethane	ND		1.0	0.40	ug/L			05/08/15 15:41	1
cis-1,2-Dichloroethene	ND		1.0	0.41	ug/L			05/08/15 15:41	1
cis-1,3-Dichloropropene	ND		1.0	0.40	ug/L			05/08/15 15:41	1
Cyclohexane	ND		1.0	0.39	ug/L			05/08/15 15:41	1
Dichlorobromomethane	ND		1.0	0.44	ug/L			05/08/15 15:41	1
Dichlorodifluoromethane	ND		1.0	0.60	ug/L			05/08/15 15:41	1
Ethylbenzene	ND		1.0	0.33	ug/L			05/08/15 15:41	1
Isopropylbenzene	ND		1.0	0.35	ug/L			05/08/15 15:41	1
Methyl acetate	ND		5.0	1.8	ug/L			05/08/15 15:41	1
Methyl tert-butyl ether	ND		10	0.30	ug/L			05/08/15 15:41	1
Methylcyclohexane	ND		1.0	0.43	ug/L			05/08/15 15:41	1
Methylene Chloride	ND		5.0	2.5	ug/L			05/08/15 15:41	1
m-Xylene & p-Xylene	ND		1.0	0.35	ug/L			05/08/15 15:41	1
o-Xylene	ND		1.0	0.23	ug/L			05/08/15 15:41	1
Styrene	ND		1.0	0.27	ug/L			05/08/15 15:41	1
Tetrachloroethene	ND		1.0	0.74	ug/L			05/08/15 15:41	1
Toluene	ND		1.0	0.48	ug/L			05/08/15 15:41	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/08/15 15:41	1
trans-1,3-Dichloropropene	ND		1.0	0.42	ug/L			05/08/15 15:41	1
Trichloroethene	ND		1.0	0.48	ug/L			05/08/15 15:41	1
Trichlorofluoromethane	ND		1.0	0.42	ug/L			05/08/15 15:41	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/08/15 15:41	1
Xylenes, Total	ND		1.0	0.23	ug/L			05/08/15 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*70 - 130*		*05/08/15 15:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*05/08/15 15:41*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*05/08/15 15:41*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*05/08/15 15:41*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-382034/8
Matrix: Water
Analysis Batch: 382034

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.37	ug/L			05/08/15 10:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.62	ug/L			05/08/15 10:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.36	ug/L			05/08/15 10:55	1
1,1,2-Trichloroethane	ND		1.0	0.33	ug/L			05/08/15 10:55	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/08/15 10:55	1
1,1-Dichloroethene	ND		1.0	0.36	ug/L			05/08/15 10:55	1
1,2,3-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 10:55	1
1,2,4-Trichlorobenzene	ND		5.0	2.5	ug/L			05/08/15 10:55	1
1,2-Dibromo-3-Chloropropane	ND		5.0	1.1	ug/L			05/08/15 10:55	1
1,2-Dibromoethane	ND		1.0	0.44	ug/L			05/08/15 10:55	1
1,2-Dichlorobenzene	ND		1.0	0.37	ug/L			05/08/15 10:55	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/08/15 10:55	1
1,2-Dichloropropane	ND		1.0	0.67	ug/L			05/08/15 10:55	1
1,3-Dichlorobenzene	ND		1.0	0.43	ug/L			05/08/15 10:55	1
1,4-Dichlorobenzene	ND		1.0	0.46	ug/L			05/08/15 10:55	1
2-Butanone (MEK)	ND		10	3.4	ug/L			05/08/15 10:55	1
2-Hexanone	ND		10	2.0	ug/L			05/08/15 10:55	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.1	ug/L			05/08/15 10:55	1
Acetone	ND		10	7.0	ug/L			05/08/15 10:55	1
Benzene	ND		1.0	0.43	ug/L			05/08/15 10:55	1
Bromochloromethane	ND		1.0	0.45	ug/L			05/08/15 10:55	1
Bromoform	ND		1.0	0.43	ug/L			05/08/15 10:55	1
Bromomethane	ND		5.0	2.5	ug/L			05/08/15 10:55	1
Carbon disulfide	ND		2.0	1.0	ug/L			05/08/15 10:55	1
Carbon tetrachloride	ND		1.0	0.33	ug/L			05/08/15 10:55	1
Chlorobenzene	ND		1.0	0.26	ug/L			05/08/15 10:55	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			05/08/15 10:55	1
Chloroethane	ND		5.0	2.5	ug/L			05/08/15 10:55	1
Chloroform	ND		1.0	0.50	ug/L			05/08/15 10:55	1
Chloromethane	ND		1.0	0.40	ug/L			05/08/15 10:55	1
cis-1,2-Dichloroethene	ND		1.0	0.41	ug/L			05/08/15 10:55	1
cis-1,3-Dichloropropene	ND		1.0	0.40	ug/L			05/08/15 10:55	1
Cyclohexane	ND		1.0	0.39	ug/L			05/08/15 10:55	1
Dichlorobromomethane	ND		1.0	0.44	ug/L			05/08/15 10:55	1
Dichlorodifluoromethane	ND		1.0	0.60	ug/L			05/08/15 10:55	1
Ethylbenzene	ND		1.0	0.33	ug/L			05/08/15 10:55	1
Isopropylbenzene	ND		1.0	0.35	ug/L			05/08/15 10:55	1
Methyl acetate	ND		5.0	1.8	ug/L			05/08/15 10:55	1
Methyl tert-butyl ether	ND		10	0.30	ug/L			05/08/15 10:55	1
Methylcyclohexane	ND		1.0	0.43	ug/L			05/08/15 10:55	1
Methylene Chloride	ND		5.0	2.5	ug/L			05/08/15 10:55	1
m-Xylene & p-Xylene	ND		1.0	0.35	ug/L			05/08/15 10:55	1
o-Xylene	ND		1.0	0.23	ug/L			05/08/15 10:55	1
Styrene	ND		1.0	0.27	ug/L			05/08/15 10:55	1
Tetrachloroethene	ND		1.0	0.74	ug/L			05/08/15 10:55	1
Toluene	ND		1.0	0.48	ug/L			05/08/15 10:55	1
trans-1,2-Dichloroethene	ND		1.0	0.37	ug/L			05/08/15 10:55	1
trans-1,3-Dichloropropene	ND		1.0	0.42	ug/L			05/08/15 10:55	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-382034/8
Matrix: Water
Analysis Batch: 382034

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		1.0	0.48	ug/L			05/08/15 10:55	1
Trichlorofluoromethane	ND		1.0	0.42	ug/L			05/08/15 10:55	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/08/15 10:55	1
Xylenes, Total	ND		1.0	0.23	ug/L			05/08/15 10:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*70 - 130*		*05/08/15 10:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*05/08/15 10:55*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*05/08/15 10:55*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*05/08/15 10:55*	*1*

Lab Sample ID: LCS 680-382034/3
Matrix: Water
Analysis Batch: 382034

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	47.5		ug/L		95	74 - 128
1,1,2,2-Tetrachloroethane	50.0	52.8		ug/L		106	72 - 128
1,1,2-Trichloro-1,2,2-trifluoroetha ne	50.0	41.1		ug/L		82	65 - 131
1,1,2-Trichloroethane	50.0	55.4		ug/L		111	79 - 125
1,1-Dichloroethane	50.0	48.6		ug/L		97	80 - 120
1,1-Dichloroethene	50.0	49.5		ug/L		99	74 - 125
1,2,3-Trichlorobenzene	50.0	43.6		ug/L		87	61 - 151
1,2,4-Trichlorobenzene	50.0	42.9		ug/L		86	77 - 131
1,2-Dibromo-3-Chloropropane	50.0	46.4		ug/L		93	59 - 141
1,2-Dibromoethane	50.0	55.4		ug/L		111	77 - 131
1,2-Dichlorobenzene	50.0	52.2		ug/L		104	80 - 120
1,2-Dichloroethane	50.0	50.4		ug/L		101	75 - 130
1,2-Dichloropropane	50.0	53.4		ug/L		107	80 - 123
1,3-Dichlorobenzene	50.0	50.0		ug/L		100	80 - 120
1,4-Dichlorobenzene	50.0	48.8		ug/L		98	80 - 120
2-Butanone (MEK)	250	269		ug/L		107	75 - 133
2-Hexanone	250	300		ug/L		120	70 - 141
4-Methyl-2-pentanone (MIBK)	250	294		ug/L		118	75 - 135
Acetone	250	271		ug/L		109	60 - 154
Benzene	50.0	48.5		ug/L		97	73 - 131
Bromochloromethane	50.0	51.7		ug/L		103	77 - 122
Bromoform	50.0	49.0		ug/L		98	69 - 135
Bromomethane	50.0	35.3		ug/L		71	20 - 180
Carbon disulfide	50.0	45.9		ug/L		92	73 - 127
Carbon tetrachloride	50.0	50.1		ug/L		100	75 - 130
Chlorobenzene	50.0	47.6		ug/L		95	80 - 120
Chlorodibromomethane	50.0	63.1		ug/L		126	71 - 136
Chloroethane	50.0	50.7		ug/L		101	50 - 151
Chloroform	50.0	49.6		ug/L		99	79 - 122
Chloromethane	50.0	46.9		ug/L		94	63 - 126
cis-1,2-Dichloroethene	50.0	50.2		ug/L		100	80 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-382034/3
Matrix: Water
Analysis Batch: 382034

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	50.0	56.8		ug/L		114	80 - 133
Cyclohexane	50.0	45.8		ug/L		92	69 - 130
Dichlorobromomethane	50.0	56.8		ug/L		114	77 - 129
Dichlorodifluoromethane	50.0	36.4		ug/L		73	51 - 140
Ethylbenzene	50.0	49.0		ug/L		98	80 - 120
Isopropylbenzene	50.0	50.8		ug/L		102	80 - 120
Methyl acetate	250	261		ug/L		104	66 - 134
Methyl tert-butyl ether	50.0	52.9		ug/L		106	74 - 135
Methylcyclohexane	50.0	46.7		ug/L		93	75 - 127
Methylene Chloride	50.0	52.1		ug/L		104	76 - 129
m-Xylene & p-Xylene	50.0	49.4		ug/L		99	80 - 120
o-Xylene	50.0	51.8		ug/L		104	80 - 120
Styrene	50.0	52.1		ug/L		104	80 - 122
Tetrachloroethene	50.0	45.5		ug/L		91	77 - 123
Toluene	50.0	51.3		ug/L		103	80 - 122
trans-1,2-Dichloroethene	50.0	44.5		ug/L		89	78 - 123
trans-1,3-Dichloropropene	50.0	58.0		ug/L		116	74 - 140
Trichloroethene	50.0	48.1		ug/L		96	80 - 123
Trichlorofluoromethane	50.0	39.8		ug/L		80	58 - 145
Vinyl chloride	50.0	40.6		ug/L		81	68 - 132
Xylenes, Total	100	101		ug/L		101	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 680-382034/4
Matrix: Water
Analysis Batch: 382034

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	50.0	48.8		ug/L		98	74 - 128	3	20
1,1,2,2-Tetrachloroethane	50.0	52.5		ug/L		105	72 - 128	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	43.0		ug/L		86	65 - 131	5	30
1,1,2-Trichloroethane	50.0	53.4		ug/L		107	79 - 125	4	20
1,1-Dichloroethane	50.0	48.6		ug/L		97	80 - 120	0	20
1,1-Dichloroethene	50.0	51.3		ug/L		103	74 - 125	4	20
1,2,3-Trichlorobenzene	50.0	44.7		ug/L		89	61 - 151	2	40
1,2,4-Trichlorobenzene	50.0	42.7		ug/L		85	77 - 131	1	20
1,2-Dibromo-3-Chloropropane	50.0	46.9		ug/L		94	59 - 141	1	30
1,2-Dibromoethane	50.0	53.3		ug/L		107	77 - 131	4	30
1,2-Dichlorobenzene	50.0	51.3		ug/L		103	80 - 120	2	20
1,2-Dichloroethane	50.0	50.3		ug/L		101	75 - 130	0	20
1,2-Dichloropropane	50.0	52.6		ug/L		105	80 - 123	1	20
1,3-Dichlorobenzene	50.0	49.7		ug/L		99	80 - 120	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-382034/4
Matrix: Water
Analysis Batch: 382034

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene			50.0	49.0		ug/L		98	80 - 120	0	20
2-Butanone (MEK)			250	268		ug/L		107	75 - 133	0	30
2-Hexanone			250	298		ug/L		119	70 - 141	1	40
4-Methyl-2-pentanone (MIBK)			250	288		ug/L		115	75 - 135	2	30
Acetone			250	259		ug/L		104	60 - 154	5	40
Benzene			50.0	49.1		ug/L		98	73 - 131	1	30
Bromochloromethane			50.0	49.1		ug/L		98	77 - 122	5	20
Bromoform			50.0	48.1		ug/L		96	69 - 135	2	20
Bromomethane			50.0	41.7		ug/L		83	20 - 180	17	40
Carbon disulfide			50.0	47.0		ug/L		94	73 - 127	2	20
Carbon tetrachloride			50.0	51.6		ug/L		103	75 - 130	3	20
Chlorobenzene			50.0	48.1		ug/L		96	80 - 120	1	20
Chlorodibromomethane			50.0	61.0		ug/L		122	71 - 136	3	20
Chloroethane			50.0	52.9		ug/L		106	50 - 151	4	30
Chloroform			50.0	49.1		ug/L		98	79 - 122	1	20
Chloromethane			50.0	51.1		ug/L		102	63 - 126	9	30
cis-1,2-Dichloroethene			50.0	49.2		ug/L		98	80 - 122	2	20
cis-1,3-Dichloropropene			50.0	55.4		ug/L		111	80 - 133	2	20
Cyclohexane			50.0	48.3		ug/L		97	69 - 130	5	30
Dichlorobromomethane			50.0	55.8		ug/L		112	77 - 129	2	20
Dichlorodifluoromethane			50.0	39.8		ug/L		80	51 - 140	9	40
Ethylbenzene			50.0	50.3		ug/L		101	80 - 120	3	20
Isopropylbenzene			50.0	52.2		ug/L		104	80 - 120	3	20
Methyl acetate			250	259		ug/L		104	66 - 134	1	30
Methyl tert-butyl ether			50.0	51.6		ug/L		103	74 - 135	2	20
Methylcyclohexane			50.0	49.3		ug/L		99	75 - 127	5	30
Methylene Chloride			50.0	51.1		ug/L		102	76 - 129	2	20
m-Xylene & p-Xylene			50.0	50.7		ug/L		101	80 - 120	3	20
o-Xylene			50.0	53.0		ug/L		106	80 - 120	2	20
Styrene			50.0	52.9		ug/L		106	80 - 122	2	20
Tetrachloroethene			50.0	47.4		ug/L		95	77 - 123	4	20
Toluene			50.0	51.7		ug/L		103	80 - 122	1	20
trans-1,2-Dichloroethene			50.0	45.2		ug/L		90	78 - 123	2	20
trans-1,3-Dichloropropene			50.0	55.8		ug/L		112	74 - 140	4	20
Trichloroethene			50.0	49.2		ug/L		98	80 - 123	2	20
Trichlorofluoromethane			50.0	42.3		ug/L		85	58 - 145	6	30
Vinyl chloride			50.0	36.4		ug/L		73	68 - 132	11	30
Xylenes, Total			100	104		ug/L		104	80 - 120	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*

QC Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Method: 8260B SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-277196/5
Matrix: Water
Analysis Batch: 277196

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1.0	0.22	ug/L			05/13/15 07:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 127*		*05/13/15 07:52*	*1*

Lab Sample ID: LCS 280-277196/3
Matrix: Water
Analysis Batch: 277196

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	5.00	4.89		ug/L		98	25 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 127*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 680-382481/17-A
Matrix: Water
Analysis Batch: 384503

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382481

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
1,2,4,5-Tetrachlorobenzene	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
2,2'-oxybis[1-chloropropane]	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
2,3,4,6-Tetrachlorophenol	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
2,4,5-Trichlorophenol	ND		1.0	0.12	ug/L		05/11/15 16:39	05/23/15 14:17	1
2,4,6-Trichlorophenol	ND		1.0	0.17	ug/L		05/11/15 16:39	05/23/15 14:17	1
2,4-Dichlorophenol	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
2,4-Dimethylphenol	ND		2.0	0.69	ug/L		05/11/15 16:39	05/23/15 14:17	1
2,4-Dinitrophenol	ND		10	1.1	ug/L		05/11/15 16:39	05/23/15 14:17	1
2,4-Dinitrotoluene	ND		1.0	0.12	ug/L		05/11/15 16:39	05/23/15 14:17	1
2,6-Dinitrotoluene	ND		1.0	0.13	ug/L		05/11/15 16:39	05/23/15 14:17	1
2-Chloronaphthalene	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
2-Chlorophenol	ND		1.0	0.12	ug/L		05/11/15 16:39	05/23/15 14:17	1
2-Methylnaphthalene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
2-Methylphenol	ND		2.0	0.74	ug/L		05/11/15 16:39	05/23/15 14:17	1
2-Nitroaniline	ND		1.0	0.16	ug/L		05/11/15 16:39	05/23/15 14:17	1
2-Nitrophenol	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
3 & 4 Methylphenol	ND		2.0	0.66	ug/L		05/11/15 16:39	05/23/15 14:17	1
3,3'-Dichlorobenzidine	ND		20	2.0	ug/L		05/11/15 16:39	05/23/15 14:17	1
3-Nitroaniline	ND		5.0	0.16	ug/L		05/11/15 16:39	05/23/15 14:17	1
4,6-Dinitro-2-methylphenol	ND		5.0	1.0	ug/L		05/11/15 16:39	05/23/15 14:17	1
4-Bromophenyl phenyl ether	ND		1.0	0.12	ug/L		05/11/15 16:39	05/23/15 14:17	1
4-Chloro-3-methylphenol	ND		1.0	0.12	ug/L		05/11/15 16:39	05/23/15 14:17	1
4-Chloroaniline	ND		4.0	2.0	ug/L		05/11/15 16:39	05/23/15 14:17	1
4-Chlorophenyl phenyl ether	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-382481/17-A
Matrix: Water
Analysis Batch: 384503

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382481

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitroaniline	ND		5.0	0.50	ug/L		05/11/15 16:39	05/23/15 14:17	1
4-Nitrophenol	ND		8.0	4.0	ug/L		05/11/15 16:39	05/23/15 14:17	1
Acenaphthene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Acenaphthylene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Acetophenone	ND		1.0	0.30	ug/L		05/11/15 16:39	05/23/15 14:17	1
Anthracene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Atrazine	ND		4.0	2.0	ug/L		05/11/15 16:39	05/23/15 14:17	1
Benzaldehyde	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Benzo[a]anthracene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Benzo[a]pyrene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Benzo[b]fluoranthene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Benzo[g,h,i]perylene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Bis(2-chloroethoxy)methane	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Bis(2-chloroethyl)ether	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Bis(2-ethylhexyl) phthalate	3.35	J	5.0	2.0	ug/L		05/11/15 16:39	05/23/15 14:17	1
Butyl benzyl phthalate	ND		1.0	0.12	ug/L		05/11/15 16:39	05/23/15 14:17	1
Caprolactam	ND		1.0	0.13	ug/L		05/11/15 16:39	05/23/15 14:17	1
Carbazole	ND		2.0	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Chrysene	ND		0.20	0.045	ug/L		05/11/15 16:39	05/23/15 14:17	1
Dibenz(a,h)anthracene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Dibenzofuran	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Diethyl phthalate	ND		1.0	0.11	ug/L		05/11/15 16:39	05/23/15 14:17	1
Dimethyl phthalate	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Di-n-butyl phthalate	ND		1.0	0.39	ug/L		05/11/15 16:39	05/23/15 14:17	1
Di-n-octyl phthalate	ND		1.0	0.17	ug/L		05/11/15 16:39	05/23/15 14:17	1
Fluoranthene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Fluorene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Hexachlorobenzene	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Hexachlorobutadiene	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Hexachlorocyclopentadiene	ND		2.0	0.50	ug/L		05/11/15 16:39	05/23/15 14:17	1
Hexachloroethane	ND		1.0	0.50	ug/L		05/11/15 16:39	05/23/15 14:17	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Isophorone	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Naphthalene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Nitrobenzene	ND		1.0	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
N-Nitrosodi-n-propylamine	ND		1.0	0.13	ug/L		05/11/15 16:39	05/23/15 14:17	1
N-Nitrosodiphenylamine	ND		1.0	0.37	ug/L		05/11/15 16:39	05/23/15 14:17	1
Pentachlorophenol	ND		5.0	0.40	ug/L		05/11/15 16:39	05/23/15 14:17	1
Phenanthrene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1
Phenol	ND		1.0	0.13	ug/L		05/11/15 16:39	05/23/15 14:17	1
Pyrene	ND		0.20	0.10	ug/L		05/11/15 16:39	05/23/15 14:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*62*		*30 - 130*	*05/11/15 16:39*	*05/23/15 14:17*	*1*
2-Fluorobiphenyl	*61*		*34 - 130*	*05/11/15 16:39*	*05/23/15 14:17*	*1*
2-Fluorophenol (Surr)	*56*		*25 - 130*	*05/11/15 16:39*	*05/23/15 14:17*	*1*
Nitrobenzene-d5 (Surr)	*61*		*32 - 130*	*05/11/15 16:39*	*05/23/15 14:17*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 680-382481/17-A
Matrix: Water
Analysis Batch: 384503

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382481

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Phenol-d5 (Surr)	58		27 - 130	05/11/15 16:39	05/23/15 14:17	1
Terphenyl-d14 (Surr)	70		36 - 130	05/11/15 16:39	05/23/15 14:17	1

Lab Sample ID: LCS 680-382481/18-A
Matrix: Water
Analysis Batch: 384503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 382481

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	10.0	5.71		ug/L		57	50 - 130
1,2,4,5-Tetrachlorobenzene	10.0	5.33		ug/L		53	10 - 130
2,2'-oxybis[1-chloropropane]	10.0	4.79		ug/L		48	39 - 130
2,3,4,6-Tetrachlorophenol	10.0	6.50		ug/L		65	10 - 130
2,4,5-Trichlorophenol	10.0	6.61		ug/L		66	61 - 130
2,4,6-Trichlorophenol	10.0	6.56		ug/L		66	61 - 130
2,4-Dichlorophenol	10.0	6.49		ug/L		65	58 - 130
2,4-Dimethylphenol	10.0	6.33		ug/L		63	41 - 130
2,4-Dinitrophenol	20.0	11.2		ug/L		56	10 - 200
2,4-Dinitrotoluene	10.0	6.61		ug/L		66	57 - 130
2,6-Dinitrotoluene	10.0	6.17		ug/L		62	53 - 130
2-Chloronaphthalene	10.0	5.61		ug/L		56	48 - 130
2-Chlorophenol	10.0	6.13		ug/L		61	45 - 130
2-Methylnaphthalene	10.0	5.70		ug/L		57	51 - 130
2-Methylphenol	10.0	5.91		ug/L		59	49 - 130
2-Nitroaniline	10.0	5.64		ug/L		56	48 - 130
2-Nitrophenol	10.0	6.64		ug/L		66	49 - 130
3 & 4 Methylphenol	10.0	5.55		ug/L		55	55 - 130
3,3'-Dichlorobenzidine	10.0	ND	*	ug/L		1	10 - 158
3-Nitroaniline	10.0	2.68	J	ug/L		27	18 - 147
4,6-Dinitro-2-methylphenol	20.0	11.3		ug/L		57	10 - 182
4-Bromophenyl phenyl ether	10.0	6.28		ug/L		63	44 - 130
4-Chloro-3-methylphenol	10.0	6.13		ug/L		61	54 - 130
4-Chloroaniline	10.0	ND		ug/L		18	17 - 130
4-Chlorophenyl phenyl ether	10.0	5.97		ug/L		60	52 - 130
4-Nitroaniline	10.0	4.98	J	ug/L		50	31 - 147
4-Nitrophenol	20.0	9.30		ug/L		46	36 - 132
Acenaphthene	10.0	5.84		ug/L		58	42 - 130
Acenaphthylene	10.0	5.94		ug/L		59	45 - 130
Acetophenone	10.0	6.28		ug/L		63	45 - 130
Anthracene	10.0	6.16		ug/L		62	58 - 130
Atrazine	10.0	3.52	J *	ug/L		35	45 - 143
Benzaldehyde	10.0	5.52		ug/L		55	21 - 147
Benzo[a]anthracene	10.0	6.04		ug/L		60	42 - 143
Benzo[a]pyrene	10.0	5.70		ug/L		57	45 - 151
Benzo[b]fluoranthene	10.0	6.49		ug/L		65	41 - 140
Benzo[g,h,i]perylene	10.0	6.60		ug/L		66	27 - 134
Benzo[k]fluoranthene	10.0	6.43		ug/L		64	45 - 140
Bis(2-chloroethoxy)methane	10.0	5.86		ug/L		59	47 - 130
Bis(2-chloroethyl)ether	10.0	4.23		ug/L		42	36 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 680-382481/18-A
Matrix: Water
Analysis Batch: 384503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 382481

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-ethylhexyl) phthalate	10.0	5.70		ug/L		57	10 - 158
Butyl benzyl phthalate	10.0	6.21		ug/L		62	60 - 130
Caprolactam	10.0	4.96		ug/L		50	31 - 130
Carbazole	10.0	6.33		ug/L		63	19 - 191
Chrysene	10.0	6.13		ug/L		61	40 - 142
Dibenz(a,h)anthracene	10.0	6.21		ug/L		62	38 - 130
Dibenzofuran	10.0	5.87		ug/L		59	56 - 130
Diethyl phthalate	10.0	6.18		ug/L		62	60 - 130
Dimethyl phthalate	10.0	6.17		ug/L		62	58 - 130
Di-n-butyl phthalate	10.0	6.06		ug/L		61	59 - 130
Di-n-octyl phthalate	10.0	6.13		ug/L		61	19 - 130
Fluoranthene	10.0	6.25		ug/L		63	46 - 136
Fluorene	10.0	5.97		ug/L		60	48 - 130
Hexachlorobenzene	10.0	6.31		ug/L		63	49 - 130
Hexachlorobutadiene	10.0	4.52		ug/L		45	36 - 130
Hexachlorocyclopentadiene	10.0	2.41		ug/L		24	16 - 130
Hexachloroethane	10.0	4.24		ug/L		42	32 - 130
Indeno[1,2,3-cd]pyrene	10.0	6.50		ug/L		65	12 - 130
Isophorone	10.0	5.88		ug/L		59	45 - 130
Naphthalene	10.0	5.73		ug/L		57	35 - 130
Nitrobenzene	10.0	5.83		ug/L		58	45 - 130
N-Nitrosodi-n-propylamine	10.0	5.81		ug/L		58	42 - 130
N-Nitrosodiphenylamine	20.0	12.1		ug/L		60	38 - 130
Pentachlorophenol	20.0	11.8		ug/L		59	12 - 156
Phenanthrene	10.0	6.24		ug/L		62	45 - 134
Phenol	10.0	5.10		ug/L		51	44 - 130
Pyrene	10.0	6.50		ug/L		65	47 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*69*		*30 - 130*
2-Fluorobiphenyl	*59*		*34 - 130*
2-Fluorophenol (Surr)	*54*		*25 - 130*
Nitrobenzene-d5 (Surr)	*59*		*32 - 130*
Phenol-d5 (Surr)	*54*		*27 - 130*
Terphenyl-d14 (Surr)	*66*		*36 - 130*

Lab Sample ID: 680-112219-1 MS
Matrix: Water
Analysis Batch: 384503

Client Sample ID: MW-A2
Prep Type: Total/NA
Prep Batch: 382481

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	ND		9.94	5.18		ug/L		52	50 - 130
1,2,4,5-Tetrachlorobenzene	ND		9.94	3.77		ug/L		38	10 - 130
2,2'-oxybis[1-chloropropane]	ND		9.94	4.71		ug/L		47	39 - 130
2,3,4,6-Tetrachlorophenol	ND		9.94	7.08		ug/L		71	10 - 130
2,4,5-Trichlorophenol	ND		9.94	7.27		ug/L		73	61 - 130
2,4,6-Trichlorophenol	ND		9.94	6.99		ug/L		70	61 - 130
2,4-Dichlorophenol	ND		9.94	6.85		ug/L		69	58 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-112219-1 MS
Matrix: Water
Analysis Batch: 384503

Client Sample ID: MW-A2
Prep Type: Total/NA
Prep Batch: 382481

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dimethylphenol	ND		9.94	7.00		ug/L		70	41 - 130
2,4-Dinitrophenol	ND		19.9	13.0		ug/L		66	10 - 200
2,4-Dinitrotoluene	ND		9.94	7.22		ug/L		73	57 - 130
2,6-Dinitrotoluene	ND		9.94	6.91		ug/L		70	53 - 130
2-Chloronaphthalene	ND		9.94	5.00		ug/L		50	48 - 130
2-Chlorophenol	ND		9.94	6.17		ug/L		62	45 - 130
2-Methylnaphthalene	ND	F1	9.94	4.81	F1	ug/L		48	51 - 130
2-Methylphenol	ND		9.94	6.33		ug/L		64	49 - 130
2-Nitroaniline	ND		9.94	6.25		ug/L		63	48 - 130
2-Nitrophenol	ND		9.94	6.76		ug/L		68	49 - 130
3 & 4 Methylphenol	0.94	J	9.94	6.98		ug/L		61	55 - 130
3,3'-Dichlorobenzidine	ND	* F1	9.94	ND	F1	ug/L		0	10 - 158
3-Nitroaniline	ND		9.94	5.79		ug/L		58	18 - 147
4,6-Dinitro-2-methylphenol	ND		19.9	13.1		ug/L		66	10 - 182
4-Bromophenyl phenyl ether	ND		9.94	5.82		ug/L		59	44 - 130
4-Chloro-3-methylphenol	ND		9.94	6.44		ug/L		65	54 - 130
4-Chloroaniline	ND		9.94	4.52		ug/L		46	17 - 130
4-Chlorophenyl phenyl ether	ND		9.94	5.40		ug/L		54	52 - 130
4-Nitroaniline	ND		9.94	5.97		ug/L		60	31 - 147
4-Nitrophenol	ND		19.9	10.7		ug/L		54	36 - 132
Acenaphthene	ND		9.94	5.51		ug/L		55	42 - 130
Acenaphthylene	ND		9.94	5.90		ug/L		59	45 - 130
Acetophenone	ND		9.94	6.26		ug/L		63	45 - 130
Anthracene	ND		9.94	5.88		ug/L		59	58 - 130
Atrazine	ND	*	9.94	6.24		ug/L		63	45 - 143
Benzaldehyde	ND		9.94	3.96		ug/L		40	21 - 147
Benzo[a]anthracene	ND		9.94	5.71		ug/L		57	42 - 143
Benzo[a]pyrene	ND		9.94	5.40		ug/L		54	45 - 151
Benzo[b]fluoranthene	ND		9.94	6.08		ug/L		61	41 - 140
Benzo[g,h,i]perylene	ND		9.94	5.93		ug/L		60	27 - 134
Benzo[k]fluoranthene	ND		9.94	6.24		ug/L		63	45 - 140
Bis(2-chloroethoxy)methane	ND		9.94	6.16		ug/L		62	47 - 130
Bis(2-chloroethyl)ether	ND		9.94	4.16		ug/L		42	36 - 130
Bis(2-ethylhexyl) phthalate	ND		9.94	5.42		ug/L		54	10 - 158
Butyl benzyl phthalate	0.43	J F1	9.94	6.01	F1	ug/L		56	60 - 130
Caprolactam	ND		9.94	4.60		ug/L		46	31 - 130
Carbazole	ND		9.94	6.99		ug/L		70	19 - 191
Chrysene	ND		9.94	5.66		ug/L		57	40 - 142
Dibenz(a,h)anthracene	ND		9.94	5.51		ug/L		55	38 - 130
Dibenzofuran	ND		9.94	5.74		ug/L		58	56 - 130
Diethyl phthalate	0.28	J	9.94	7.03		ug/L		68	60 - 130
Dimethyl phthalate	ND		9.94	6.84		ug/L		69	58 - 130
Di-n-butyl phthalate	ND		9.94	6.07		ug/L		61	59 - 130
Di-n-octyl phthalate	ND		9.94	5.79		ug/L		58	19 - 130
Fluoranthene	ND		9.94	6.11		ug/L		61	46 - 136
Fluorene	ND		9.94	5.83		ug/L		59	48 - 130
Hexachlorobenzene	ND		9.94	5.87		ug/L		59	49 - 130
Hexachlorobutadiene	ND	F1	9.94	2.93	F1	ug/L		29	36 - 130

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-112219-1 MS
Matrix: Water
Analysis Batch: 384503

Client Sample ID: MW-A2
Prep Type: Total/NA
Prep Batch: 382481

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorocyclopentadiene	ND		9.94	1.58	J	ug/L		16	16 - 130
Hexachloroethane	ND	F1	9.94	2.88	F1	ug/L		29	32 - 130
Indeno[1,2,3-cd]pyrene	ND		9.94	5.98		ug/L		60	12 - 130
Isophorone	ND		9.94	6.06		ug/L		61	45 - 130
Naphthalene	0.14	J	9.94	4.86		ug/L		48	35 - 130
Nitrobenzene	ND		9.94	5.66		ug/L		57	45 - 130
N-Nitrosodi-n-propylamine	ND		9.94	6.16		ug/L		62	42 - 130
N-Nitrosodiphenylamine	ND		19.9	13.2		ug/L		66	38 - 130
Pentachlorophenol	ND		19.9	13.0		ug/L		65	12 - 156
Phenanthrene	ND		9.94	6.12		ug/L		62	45 - 134
Phenol	0.71	J	9.94	5.67		ug/L		50	44 - 130
Pyrene	ND		9.94	6.00		ug/L		60	47 - 143

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*64*		*30 - 130*
2-Fluorobiphenyl	*53*		*34 - 130*
2-Fluorophenol (Surr)	*47*		*25 - 130*
Nitrobenzene-d5 (Surr)	*49*		*32 - 130*
Phenol-d5 (Surr)	*49*		*27 - 130*
Terphenyl-d14 (Surr)	*58*		*36 - 130*

Lab Sample ID: 680-112219-1 MSD
Matrix: Water
Analysis Batch: 384503

Client Sample ID: MW-A2
Prep Type: Total/NA
Prep Batch: 382481

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl	ND		9.32	6.25		ug/L		67	50 - 130	19	50
1,2,4,5-Tetrachlorobenzene	ND		9.32	5.23		ug/L		56	10 - 130	33	50
2,2'-oxybis[1-chloropropane]	ND		9.32	4.69		ug/L		50	39 - 130	0	50
2,3,4,6-Tetrachlorophenol	ND		9.32	7.23		ug/L		78	10 - 130	2	50
2,4,5-Trichlorophenol	ND		9.32	7.50		ug/L		81	61 - 130	3	50
2,4,6-Trichlorophenol	ND		9.32	7.12		ug/L		76	61 - 130	2	50
2,4-Dichlorophenol	ND		9.32	6.87		ug/L		74	58 - 130	0	50
2,4-Dimethylphenol	ND		9.32	6.87		ug/L		74	41 - 130	2	50
2,4-Dinitrophenol	ND		18.6	13.4		ug/L		72	10 - 200	3	50
2,4-Dinitrotoluene	ND		9.32	7.52		ug/L		81	57 - 130	4	50
2,6-Dinitrotoluene	ND		9.32	6.87		ug/L		74	53 - 130	1	50
2-Chloronaphthalene	ND		9.32	6.10		ug/L		65	48 - 130	20	50
2-Chlorophenol	ND		9.32	6.05		ug/L		65	45 - 130	2	50
2-Methylnaphthalene	ND	F1	9.32	5.83		ug/L		63	51 - 130	19	50
2-Methylphenol	ND		9.32	6.26		ug/L		67	49 - 130	1	50
2-Nitroaniline	ND		9.32	6.19		ug/L		66	48 - 130	1	50
2-Nitrophenol	ND		9.32	6.73		ug/L		72	49 - 130	0	50
3 & 4 Methylphenol	0.94	J	9.32	6.84		ug/L		63	55 - 130	2	50
3,3'-Dichlorobenzidine	ND	* F1	9.32	ND	F1	ug/L		0	10 - 158	NC	50
3-Nitroaniline	ND		9.32	5.79		ug/L		62	18 - 147	0	50
4,6-Dinitro-2-methylphenol	ND		18.6	13.1		ug/L		70	10 - 182	0	50
4-Bromophenyl phenyl ether	ND		9.32	6.94		ug/L		74	44 - 130	18	50

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-112219-1 MSD
Matrix: Water
Analysis Batch: 384503

Client Sample ID: MW-A2
Prep Type: Total/NA
Prep Batch: 382481

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Chloro-3-methylphenol	ND		9.32	6.45		ug/L		69	54 - 130	0	50
4-Chloroaniline	ND		9.32	4.35		ug/L		47	17 - 130	4	50
4-Chlorophenyl phenyl ether	ND		9.32	6.61		ug/L		71	52 - 130	20	50
4-Nitroaniline	ND		9.32	5.98		ug/L		64	31 - 147	0	50
4-Nitrophenol	ND		18.6	10.8		ug/L		58	36 - 132	0	50
Acenaphthene	ND		9.32	6.54		ug/L		70	42 - 130	17	50
Acenaphthylene	ND		9.32	6.65		ug/L		71	45 - 130	12	50
Acetophenone	ND		9.32	6.23		ug/L		67	45 - 130	0	50
Anthracene	ND		9.32	6.51		ug/L		70	58 - 130	10	50
Atrazine	ND	*	9.32	6.22		ug/L		67	45 - 143	0	50
Benzaldehyde	ND		9.32	4.28		ug/L		46	21 - 147	8	50
Benzo[a]anthracene	ND		9.32	6.30		ug/L		68	42 - 143	10	50
Benzo[a]pyrene	ND		9.32	5.92		ug/L		63	45 - 151	9	50
Benzo[b]fluoranthene	ND		9.32	7.06		ug/L		76	41 - 140	15	50
Benzo[g,h,i]perylene	ND		9.32	6.28		ug/L		67	27 - 134	6	50
Benzo[k]fluoranthene	ND		9.32	6.00		ug/L		64	45 - 140	4	50
Bis(2-chloroethoxy)methane	ND		9.32	6.14		ug/L		66	47 - 130	0	50
Bis(2-chloroethyl)ether	ND		9.32	4.08		ug/L		44	36 - 130	2	50
Bis(2-ethylhexyl) phthalate	ND		9.32	6.71		ug/L		72	10 - 158	21	50
Butyl benzyl phthalate	0.43	J F1	9.32	6.66		ug/L		67	60 - 130	10	50
Caprolactam	ND		9.32	4.80		ug/L		51	31 - 130	4	50
Carbazole	ND		9.32	7.28		ug/L		78	19 - 191	4	50
Chrysene	ND		9.32	6.40		ug/L		69	40 - 142	12	50
Dibenz(a,h)anthracene	ND		9.32	6.15		ug/L		66	38 - 130	11	50
Dibenzofuran	ND		9.32	6.69		ug/L		72	56 - 130	15	50
Diethyl phthalate	0.28	J	9.32	7.21		ug/L		74	60 - 130	2	50
Dimethyl phthalate	ND		9.32	6.90		ug/L		74	58 - 130	1	50
Di-n-butyl phthalate	ND		9.32	6.58		ug/L		71	59 - 130	8	50
Di-n-octyl phthalate	ND		9.32	6.07		ug/L		65	19 - 130	5	50
Fluoranthene	ND		9.32	6.93		ug/L		74	46 - 136	13	50
Fluorene	ND		9.32	6.69		ug/L		72	48 - 130	14	50
Hexachlorobenzene	ND		9.32	6.35		ug/L		68	49 - 130	8	50
Hexachlorobutadiene	ND	F1	9.32	2.86	F1	ug/L		31	36 - 130	2	50
Hexachlorocyclopentadiene	ND		9.32	2.04		ug/L		22	16 - 130	26	50
Hexachloroethane	ND	F1	9.32	3.11		ug/L		33	32 - 130	8	50
Indeno[1,2,3-cd]pyrene	ND		9.32	6.38		ug/L		68	12 - 130	6	50
Isophorone	ND		9.32	6.04		ug/L		65	45 - 130	0	50
Naphthalene	0.14	J	9.32	5.70		ug/L		60	35 - 130	16	50
Nitrobenzene	ND		9.32	5.70		ug/L		61	45 - 130	1	50
N-Nitrosodi-n-propylamine	ND		9.32	6.00		ug/L		64	42 - 130	3	50
N-Nitrosodiphenylamine	ND		18.6	13.4		ug/L		72	38 - 130	2	50
Pentachlorophenol	ND		18.6	13.4		ug/L		72	12 - 156	3	50
Phenanthrene	ND		9.32	7.01		ug/L		75	45 - 134	14	50
Phenol	0.71	J	9.32	5.44		ug/L		51	44 - 130	4	50
Pyrene	ND		9.32	6.80		ug/L		73	47 - 143	13	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*75*		*30 - 130*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 680-112219-1 MSD — **Client Sample ID: MW-A2**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 384503 — **Prep Batch: 382481**

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*34 - 130*
2-Fluorophenol (Surr)	*52*		*25 - 130*
Nitrobenzene-d5 (Surr)	*56*		*32 - 130*
Phenol-d5 (Surr)	*54*		*27 - 130*
Terphenyl-d14 (Surr)	*67*		*36 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 680-381861/29 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381861

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		50	23	ug/L			05/06/15 17:25	1

Lab Sample ID: LCS 680-381861/30 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381861

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	999	1060		ug/L		106	90 - 110

Lab Sample ID: LCSD 680-381861/31 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381861

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	999	1070		ug/L		107	90 - 110	1	30

Lab Sample ID: 680-112219-1 MS — **Client Sample ID: MW-A2**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381861

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	160		999	1290		ug/L		113	80 - 120

Lab Sample ID: 680-112219-1 MSD — **Client Sample ID: MW-A2**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381861

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	160		999	1310		ug/L		115	80 - 120	1	30

Lab Sample ID: MB 680-382828/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382828

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1000	400	ug/L			05/13/15 09:07	1

QC Sample Results

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Lab Sample ID: LCS 680-382828/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382828

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			10000	9840		ug/L		98	90 - 110		

Lab Sample ID: LCSD 680-382828/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382828

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate			10000	9850		ug/L		98	90 - 110	0	30

Lab Sample ID: 680-112219-6 MS — **Client Sample ID: Duplicate 2**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382828

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	ND		10000	10000		ug/L		100	80 - 120		

Lab Sample ID: 680-112219-6 MSD — **Client Sample ID: Duplicate 2**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382828

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	ND		10000	9630		ug/L		96	80 - 120	4	30

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 680-381788/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382128 — **Prep Batch: 381788**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.99	ug/L		05/06/15 15:28	05/08/15 05:10	1
Arsenic	ND		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 05:10	1
Beryllium	ND		0.20	0.070	ug/L		05/06/15 15:28	05/08/15 05:10	1
Cadmium	ND		0.50	0.20	ug/L		05/06/15 15:28	05/08/15 05:10	1
Chromium	ND		1.0	0.16	ug/L		05/06/15 15:28	05/08/15 05:10	1
Copper	ND		1.0	0.21	ug/L		05/06/15 15:28	05/08/15 05:10	1
Iron	ND		50	20	ug/L		05/06/15 15:28	05/08/15 05:10	1
Lead	0.0990	J	0.30	0.080	ug/L		05/06/15 15:28	05/08/15 05:10	1
Manganese	ND		2.0	0.84	ug/L		05/06/15 15:28	05/08/15 05:10	1
Nickel	ND		1.0	0.40	ug/L		05/06/15 15:28	05/08/15 05:10	1
Selenium	ND		0.50	0.21	ug/L		05/06/15 15:28	05/08/15 05:10	1
Silver	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 05:10	1
Thallium	ND		0.20	0.10	ug/L		05/06/15 15:28	05/08/15 05:10	1
Zinc	ND		10	2.6	ug/L		05/06/15 15:28	05/08/15 05:10	1

Lab Sample ID: LCS 680-381788/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382128 — **Prep Batch: 381788**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony			20.0	22.0		ug/L		110	75 - 125		

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 680-381788/2-A
Matrix: Water
Analysis Batch: 382128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 381788

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	40.0	41.8		ug/L		105	75 - 125
Beryllium	20.0	21.1		ug/L		105	75 - 125
Cadmium	20.0	22.4		ug/L		112	75 - 125
Chromium	40.0	41.4		ug/L		103	75 - 125
Copper	40.0	43.1		ug/L		108	75 - 125
Iron	2000	2010		ug/L		101	75 - 125
Lead	200	214		ug/L		107	75 - 125
Manganese	200	201		ug/L		100	75 - 125
Nickel	40.0	42.4		ug/L		106	75 - 125
Selenium	40.0	41.6		ug/L		104	75 - 125
Silver	20.0	22.3		ug/L		112	75 - 125
Thallium	16.0	17.7		ug/L		110	75 - 125
Zinc	40.0	43.1		ug/L		108	75 - 125

Lab Sample ID: 680-112219-1 MS
Matrix: Water
Analysis Batch: 382128

Client Sample ID: MW-A2
Prep Type: Total/NA
Prep Batch: 381788

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		20.0	21.0		ug/L		105	75 - 125
Arsenic	ND		40.0	41.1		ug/L		103	75 - 125
Beryllium	0.39		20.0	20.7		ug/L		101	75 - 125
Cadmium	0.22	J	20.0	21.3		ug/L		106	75 - 125
Chromium	0.79	J	40.0	40.1		ug/L		98	75 - 125
Copper	0.33	J	40.0	40.4		ug/L		100	75 - 125
Iron	1100		2000	2980		ug/L		93	75 - 125
Lead	0.27	J B	200	202		ug/L		101	75 - 125
Manganese	200		200	387		ug/L		92	75 - 125
Nickel	2.2		40.0	41.5		ug/L		98	75 - 125
Selenium	0.35	J	40.0	43.6		ug/L		108	75 - 125
Silver	ND		20.0	20.7		ug/L		103	75 - 125
Thallium	ND		16.0	16.6		ug/L		104	75 - 125
Zinc	42		40.0	79.4		ug/L		95	75 - 125

Lab Sample ID: 680-112219-1 MSD
Matrix: Water
Analysis Batch: 382128

Client Sample ID: MW-A2
Prep Type: Total/NA
Prep Batch: 381788

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		20.0	21.0		ug/L		105	75 - 125	0	20
Arsenic	ND		40.0	41.6		ug/L		104	75 - 125	1	20
Beryllium	0.39		20.0	20.8		ug/L		102	75 - 125	0	20
Cadmium	0.22	J	20.0	21.1		ug/L		105	75 - 125	1	20
Chromium	0.79	J	40.0	40.3		ug/L		99	75 - 125	1	20
Copper	0.33	J	40.0	40.8		ug/L		101	75 - 125	1	20
Iron	1100		2000	2990		ug/L		93	75 - 125	0	20
Lead	0.27	J B	200	203		ug/L		102	75 - 125	1	20
Manganese	200		200	388		ug/L		92	75 - 125	0	20
Nickel	2.2		40.0	41.8		ug/L		99	75 - 125	1	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 680-112219-1 MSD — **Client Sample ID: MW-A2**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382128 — **Prep Batch: 381788**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Selenium	0.35	J	40.0	43.5		ug/L		108	75 - 125	0	20
Silver	ND		20.0	20.6		ug/L		103	75 - 125	0	20
Thallium	ND		16.0	16.5		ug/L		103	75 - 125	1	20
Zinc	42		40.0	80.2		ug/L		96	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-381791/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381976 — **Prep Batch: 381791**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.080	ug/L		05/06/15 16:10	05/07/15 14:01	1

Lab Sample ID: LCS 680-381791/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381976 — **Prep Batch: 381791**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	2.50	2.60		ug/L		104	80 - 120

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-381993/40 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381993

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		250	100	ug/L			05/07/15 15:41	1

Lab Sample ID: LCS 680-381993/33 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381993

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	1000	1010		ug/L		101	90 - 110

Lab Sample ID: MB 680-381994/18 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381994

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		250	100	ug/L			05/07/15 14:44	1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 680-381994/1
Matrix: Water
Analysis Batch: 381994

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia			1000	1010		ug/L		101	90 - 110		

QC Association Summary

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

GC/MS VOA

Analysis Batch: 277196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112219-1	MW-A2	Total/NA	Water	8260B SIM	
680-112219-2	MW-A5	Total/NA	Water	8260B SIM	
680-112219-3	TB-4	Total/NA	Water	8260B SIM	
680-112219-4	MW-A4	Total/NA	Water	8260B SIM	
680-112219-5	MW-A8	Total/NA	Water	8260B SIM	
680-112219-6	Duplicate 2	Total/NA	Water	8260B SIM	
680-112219-7	TB-3	Total/NA	Water	8260B SIM	
LCS 280-277196/3	Lab Control Sample	Total/NA	Water	8260B SIM	
MB 280-277196/5	Method Blank	Total/NA	Water	8260B SIM	

Analysis Batch: 382034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112219-1	MW-A2	Total/NA	Water	8260B	
680-112219-2	MW-A5	Total/NA	Water	8260B	
680-112219-3	TB-4	Total/NA	Water	8260B	
680-112219-4	MW-A4	Total/NA	Water	8260B	
680-112219-5	MW-A8	Total/NA	Water	8260B	
680-112219-6	Duplicate 2	Total/NA	Water	8260B	
680-112219-7	TB-3	Total/NA	Water	8260B	
LCS 680-382034/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-382034/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-382034/8	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 382481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112219-1	MW-A2	Total/NA	Water	3520C	
680-112219-1 MS	MW-A2	Total/NA	Water	3520C	
680-112219-1 MSD	MW-A2	Total/NA	Water	3520C	
680-112219-2	MW-A5	Total/NA	Water	3520C	
680-112219-4	MW-A4	Total/NA	Water	3520C	
680-112219-5	MW-A8	Total/NA	Water	3520C	
680-112219-6	Duplicate 2	Total/NA	Water	3520C	
LCS 680-382481/18-A	Lab Control Sample	Total/NA	Water	3520C	
MB 680-382481/17-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 384503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112219-1	MW-A2	Total/NA	Water	8270D LL	382481
680-112219-1 MS	MW-A2	Total/NA	Water	8270D LL	382481
680-112219-1 MSD	MW-A2	Total/NA	Water	8270D LL	382481
680-112219-2	MW-A5	Total/NA	Water	8270D LL	382481
680-112219-4	MW-A4	Total/NA	Water	8270D LL	382481
680-112219-5	MW-A8	Total/NA	Water	8270D LL	382481
680-112219-6	Duplicate 2	Total/NA	Water	8270D LL	382481
LCS 680-382481/18-A	Lab Control Sample	Total/NA	Water	8270D LL	382481
MB 680-382481/17-A	Method Blank	Total/NA	Water	8270D LL	382481

QC Association Summary

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

HPLC/IC

Analysis Batch: 381861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112219-1	MW-A2	Total/NA	Water	300.0	
680-112219-1 MS	MW-A2	Total/NA	Water	300.0	
680-112219-1 MSD	MW-A2	Total/NA	Water	300.0	
680-112219-2	MW-A5	Total/NA	Water	300.0	
680-112219-4	MW-A4	Total/NA	Water	300.0	
680-112219-5	MW-A8	Total/NA	Water	300.0	
680-112219-6	Duplicate 2	Total/NA	Water	300.0	
LCS 680-381861/30	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-381861/31	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-381861/29	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 382828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112219-1	MW-A2	Total/NA	Water	300.0	
680-112219-2	MW-A5	Total/NA	Water	300.0	
680-112219-4	MW-A4	Total/NA	Water	300.0	
680-112219-5	MW-A8	Total/NA	Water	300.0	
680-112219-6	Duplicate 2	Total/NA	Water	300.0	
680-112219-6 MS	Duplicate 2	Total/NA	Water	300.0	
680-112219-6 MSD	Duplicate 2	Total/NA	Water	300.0	
LCS 680-382828/3	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-382828/4	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-382828/2	Method Blank	Total/NA	Water	300.0	

Metals

Prep Batch: 381788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112219-1	MW-A2	Total/NA	Water	3030C	
680-112219-1 MS	MW-A2	Total/NA	Water	3030C	
680-112219-1 MSD	MW-A2	Total/NA	Water	3030C	
680-112219-2	MW-A5	Total/NA	Water	3030C	
680-112219-4	MW-A4	Total/NA	Water	3030C	
680-112219-5	MW-A8	Total/NA	Water	3030C	
680-112219-6	Duplicate 2	Total/NA	Water	3030C	
LCS 680-381788/2-A	Lab Control Sample	Total/NA	Water	3030C	
MB 680-381788/1-A	Method Blank	Total/NA	Water	3030C	

Prep Batch: 381791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112219-1	MW-A2	Total/NA	Water	7470A	
680-112219-2	MW-A5	Total/NA	Water	7470A	
680-112219-4	MW-A4	Total/NA	Water	7470A	
680-112219-5	MW-A8	Total/NA	Water	7470A	
680-112219-6	Duplicate 2	Total/NA	Water	7470A	
LCS 680-381791/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 680-381791/1-A	Method Blank	Total/NA	Water	7470A	

Metals (Continued)

Analysis Batch: 381976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112219-1	MW-A2	Total/NA	Water	7470A	381791
680-112219-2	MW-A5	Total/NA	Water	7470A	381791
680-112219-4	MW-A4	Total/NA	Water	7470A	381791
680-112219-5	MW-A8	Total/NA	Water	7470A	381791
680-112219-6	Duplicate 2	Total/NA	Water	7470A	381791
LCS 680-381791/2-A	Lab Control Sample	Total/NA	Water	7470A	381791
MB 680-381791/1-A	Method Blank	Total/NA	Water	7470A	381791

Analysis Batch: 382128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112219-1	MW-A2	Total/NA	Water	6020A	381788
680-112219-1 MS	MW-A2	Total/NA	Water	6020A	381788
680-112219-1 MSD	MW-A2	Total/NA	Water	6020A	381788
680-112219-2	MW-A5	Total/NA	Water	6020A	381788
680-112219-4	MW-A4	Total/NA	Water	6020A	381788
680-112219-5	MW-A8	Total/NA	Water	6020A	381788
680-112219-6	Duplicate 2	Total/NA	Water	6020A	381788
LCS 680-381788/2-A	Lab Control Sample	Total/NA	Water	6020A	381788
MB 680-381788/1-A	Method Blank	Total/NA	Water	6020A	381788

Analysis Batch: 383691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112219-5	MW-A8	Total/NA	Water	6020A	381788

General Chemistry

Analysis Batch: 381993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112219-1	MW-A2	Total/NA	Water	350.1	
680-112219-2	MW-A5	Total/NA	Water	350.1	
680-112219-4	MW-A4	Total/NA	Water	350.1	
680-112219-5	MW-A8	Total/NA	Water	350.1	
LCS 680-381993/33	Lab Control Sample	Total/NA	Water	350.1	
MB 680-381993/40	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 381994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-112219-6	Duplicate 2	Total/NA	Water	350.1	
LCS 680-381994/1	Lab Control Sample	Total/NA	Water	350.1	
MB 680-381994/18	Method Blank	Total/NA	Water	350.1	

Lab Chronicle

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: MW-A2

Date Collected: 05/05/15 13:45
Date Received: 05/06/15 09:33

Lab Sample ID: 680-112219-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	382034	05/08/15 16:02	JD1	TAL SAV
	Instrument ID: CMSA2									
Total/NA	Analysis	8260B SIM		1	20 mL	20 mL	277196	05/13/15 11:03	MRM	TAL DEN
	Instrument ID: VMS_E									
Total/NA	Prep	3520C			501.2 mL	0.5 mL	382481	05/11/15 16:39	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	501.2 mL	0.5 mL	384503	05/23/15 16:14	JLW	TAL SAV
	Instrument ID: CMSY									
Total/NA	Analysis	300.0		1	5 mL	5 mL	381861	05/06/15 18:27	DAS	TAL SAV
	Instrument ID: CICG									
Total/NA	Analysis	300.0		1	5 mL	5 mL	382828	05/13/15 10:06	DAS	TAL SAV
	Instrument ID: CICL									
Total/NA	Prep	3030C			50 mL	50 mL	381788	05/06/15 15:28	BJB	TAL SAV
Total/NA	Analysis	6020A		1	50 mL	50 mL	382128	05/08/15 05:20	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Prep	7470A			50 mL	50 mL	381791	05/06/15 16:10	JKL	TAL SAV
Total/NA	Analysis	7470A		1	50 mL	50 mL	381976	05/07/15 14:53	JKL	TAL SAV
	Instrument ID: LEEMAN2									
Total/NA	Analysis	350.1		1	2 mL	2 mL	381993	05/07/15 14:59	JME	TAL SAV
	Instrument ID: KONELAB1									

Client Sample ID: MW-A5

Date Collected: 05/05/15 14:30
Date Received: 05/06/15 09:33

Lab Sample ID: 680-112219-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	382034	05/08/15 17:52	JD1	TAL SAV
	Instrument ID: CMSA2									
Total/NA	Analysis	8260B SIM		1	20 mL	20 mL	277196	05/13/15 11:21	MRM	TAL DEN
	Instrument ID: VMS_E									
Total/NA	Prep	3520C			1033.8 mL	1.0 mL	382481	05/11/15 16:39	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	1033.8 mL	1.0 mL	384503	05/23/15 16:42	JLW	TAL SAV
	Instrument ID: CMSY									
Total/NA	Analysis	300.0		1	5 mL	5 mL	381861	05/06/15 19:13	DAS	TAL SAV
	Instrument ID: CICG									
Total/NA	Analysis	300.0		1	5 mL	5 mL	382828	05/13/15 10:20	DAS	TAL SAV
	Instrument ID: CICL									
Total/NA	Prep	3030C			50 mL	50 mL	381788	05/06/15 15:28	BJB	TAL SAV
Total/NA	Analysis	6020A		1	50 mL	50 mL	382128	05/08/15 05:45	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Prep	7470A			50 mL	50 mL	381791	05/06/15 16:10	JKL	TAL SAV
Total/NA	Analysis	7470A		1	50 mL	50 mL	381976	05/07/15 14:56	JKL	TAL SAV
	Instrument ID: LEEMAN2									

Lab Chronicle

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: MW-A5

Lab Sample ID: 680-112219-2
Date Collected: 05/05/15 14:30
Matrix: Water
Date Received: 05/06/15 09:33

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		10	2 mL	2 mL	381993	05/07/15 15:38	JME	TAL SAV
	Instrument ID: KONELAB1									

Client Sample ID: TB-4

Lab Sample ID: 680-112219-3
Date Collected: 05/05/15 00:00
Matrix: Water
Date Received: 05/06/15 09:33

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	382034	05/08/15 15:21	JD1	TAL SAV
	Instrument ID: CMSA2									
Total/NA	Analysis	8260B SIM		1	20 mL	20 mL	277196	05/13/15 11:40	MRM	TAL DEN
	Instrument ID: VMS_E									

Client Sample ID: MW-A4

Lab Sample ID: 680-112219-4
Date Collected: 05/05/15 10:10
Matrix: Water
Date Received: 05/06/15 09:33

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	382034	05/08/15 16:51	JD1	TAL SAV
	Instrument ID: CMSA2									
Total/NA	Analysis	8260B SIM		1	20 mL	20 mL	277196	05/13/15 11:58	MRM	TAL DEN
	Instrument ID: VMS_E									
Total/NA	Prep	3520C			1041.8 mL	1.0 mL	382481	05/11/15 16:39	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	1041.8 mL	1.0 mL	384503	05/23/15 17:11	JLW	TAL SAV
	Instrument ID: CMSY									
Total/NA	Analysis	300.0		1	5 mL	5 mL	381861	05/06/15 19:28	DAS	TAL SAV
	Instrument ID: CICG									
Total/NA	Analysis	300.0		1	5 mL	5 mL	382828	05/13/15 10:35	DAS	TAL SAV
	Instrument ID: CICL									
Total/NA	Prep	3030C			50 mL	50 mL	381788	05/06/15 15:28	BJB	TAL SAV
Total/NA	Analysis	6020A		1	50 mL	50 mL	382128	05/08/15 05:50	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Prep	7470A			50 mL	50 mL	381791	05/06/15 16:10	JKL	TAL SAV
Total/NA	Analysis	7470A		1	50 mL	50 mL	381976	05/07/15 14:59	JKL	TAL SAV
	Instrument ID: LEEMAN2									
Total/NA	Analysis	350.1		1	2 mL	2 mL	381993	05/07/15 14:59	JME	TAL SAV
	Instrument ID: KONELAB1									

Lab Chronicle

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: MW-A8

Lab Sample ID: 680-112219-5
Date Collected: 05/05/15 12:35
Matrix: Water
Date Received: 05/06/15 09:33

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	382034	05/08/15 18:12	JD1	TAL SAV
	Instrument ID: CMSA2									
Total/NA	Analysis	8260B SIM		1	20 mL	20 mL	277196	05/13/15 12:17	MRM	TAL DEN
	Instrument ID: VMS_E									
Total/NA	Prep	3520C			1041.7 mL	1.0 mL	382481	05/11/15 16:39	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	1041.7 mL	1.0 mL	384503	05/23/15 17:39	JLW	TAL SAV
	Instrument ID: CMSY									
Total/NA	Analysis	300.0		1	5 mL	5 mL	381861	05/06/15 19:44	DAS	TAL SAV
	Instrument ID: CICG									
Total/NA	Analysis	300.0		4	5 mL	5 mL	382828	05/13/15 10:49	DAS	TAL SAV
	Instrument ID: CICL									
Total/NA	Prep	3030C			50 mL	50 mL	381788	05/06/15 15:28	BJB	TAL SAV
Total/NA	Analysis	6020A		1	50 mL	50 mL	382128	05/08/15 05:55	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Prep	3030C			50 mL	50 mL	381788	05/06/15 15:28	BJB	TAL SAV
Total/NA	Analysis	6020A		20	50 mL	50 mL	383691	05/18/15 16:14	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Prep	7470A			50 mL	50 mL	381791	05/06/15 16:10	JKL	TAL SAV
Total/NA	Analysis	7470A		1	50 mL	50 mL	381976	05/07/15 15:02	JKL	TAL SAV
	Instrument ID: LEEMAN2									
Total/NA	Analysis	350.1		10	2 mL	2 mL	381993	05/07/15 15:08	JME	TAL SAV
	Instrument ID: KONELAB1									

Client Sample ID: Duplicate 2

Lab Sample ID: 680-112219-6
Date Collected: 05/05/15 00:00
Matrix: Water
Date Received: 05/06/15 09:33

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	382034	05/08/15 17:32	JD1	TAL SAV
	Instrument ID: CMSA2									
Total/NA	Analysis	8260B SIM		1	20 mL	20 mL	277196	05/13/15 12:36	MRM	TAL DEN
	Instrument ID: VMS_E									
Total/NA	Prep	3520C			1041.9 mL	1.0 mL	382481	05/11/15 16:39	RBS	TAL SAV
Total/NA	Analysis	8270D LL		1	1041.9 mL	1.0 mL	384503	05/23/15 18:07	JLW	TAL SAV
	Instrument ID: CMSY									
Total/NA	Analysis	300.0		1	5 mL	5 mL	381861	05/06/15 19:59	DAS	TAL SAV
	Instrument ID: CICG									
Total/NA	Analysis	300.0		1	5 mL	5 mL	382828	05/13/15 11:04	DAS	TAL SAV
	Instrument ID: CICL									
Total/NA	Prep	3030C			50 mL	50 mL	381788	05/06/15 15:28	BJB	TAL SAV
Total/NA	Analysis	6020A		1	50 mL	50 mL	382128	05/08/15 06:10	BWR	TAL SAV
	Instrument ID: ICPMSC									
Total/NA	Prep	7470A			50 mL	50 mL	381791	05/06/15 16:10	JKL	TAL SAV

Lab Chronicle

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Client Sample ID: Duplicate 2

Lab Sample ID: 680-112219-6

Date Collected: 05/05/15 00:00
Matrix: Water
Date Received: 05/06/15 09:33

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7470A		1	50 mL	50 mL	381976	05/07/15 15:05	JKL	TAL SAV
	Instrument ID:	LEEMAN2								
Total/NA	Analysis	350.1		1	2 mL	2 mL	381994	05/07/15 14:33	JME	TAL SAV
	Instrument ID:	KONELAB1								

Client Sample ID: TB-3

Lab Sample ID: 680-112219-7

Date Collected: 05/05/15 00:00
Matrix: Water
Date Received: 05/06/15 09:33

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	382034	05/08/15 15:41	JD1	TAL SAV
	Instrument ID:	CMSA2								
Total/NA	Analysis	8260B SIM		1	20 mL	20 mL	277196	05/13/15 12:54	MRM	TAL DEN
	Instrument ID:	VMS_E								

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100
TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Certification Summary

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
North Carolina (WW/SW)	State Program	4	269	12-31-15

Laboratory: TestAmerica Denver

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-15
A2LA	ISO/IEC 17025		2907.01	10-31-15
Alabama	State Program	4	40730	09-30-12 *
Alaska (UST)	State Program	10	UST-30	04-05-16
Arizona	State Program	9	AZ0713	12-19-15
Arkansas DEQ	State Program	6	88-0687	06-01-16
California	State Program	9	2513	08-31-16
Connecticut	State Program	1	PH-0686	09-30-16
Florida	NELAP	4	E87667	06-30-15
Georgia	State Program	4	N/A	01-09-15 *
Illinois	NELAP	5	200017	04-30-16
Iowa	State Program	7	370	11-30-16
Kansas	NELAP	7	E-10166	07-31-15 *
Louisiana	NELAP	6	02096	06-30-15
Maine	State Program	1	CO0002	03-03-17
Minnesota	NELAP	5	8-999-405	12-31-15
Nevada	State Program	9	CO0026	07-31-15
New Hampshire	NELAP	1	205310	04-28-16
New Jersey	NELAP	2	CO004	06-30-15
New York	NELAP	2	11964	04-01-16
North Carolina (WW/SW)	State Program	4	358	12-31-15
North Dakota	State Program	8	R-034	01-09-16
Oklahoma	State Program	6	8614	08-31-15
Oregon	NELAP	10	4025	01-09-16
Pennsylvania	NELAP	3	68-00664	07-30-15
South Carolina	State Program	4	72002001	06-30-15
Texas	NELAP	6	T104704183-13-8	09-30-15
USDA	Federal		P330-13-00202	07-02-16
Utah	NELAP	8	CO00026	07-31-15
Virginia	NELAP	3	460232	06-14-15
Washington	State Program	10	C583	08-03-15
West Virginia DEP	State Program	3	354	11-30-15
Wisconsin	State Program	5	999615430	08-31-15
Wyoming (UST)	A2LA	8	2907.01	10-31-15

* Certification renewal pending - certification considered valid.

Method Summary

Client: ESP Associates, P.A.
Project/Site: Henderson Co. Landfill

TestAmerica Job ID: 680-112219-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL SAV
300.0	Anions, Ion Chromatography	MCAWW	TAL SAV
6020A	Metals (ICP/MS)	SW846	TAL SAV
7470A	Mercury (CVAA)	SW846	TAL SAV
350.1	Nitrogen, Ammonia	MCAWW	TAL SAV

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

FedEx TRK# 0200 8025 4861 2702

WED - 06 MAY 10:30A
PRIORITY OVERNIGHT

XX SAVA

31404
GA-US
SAV

FID 153041 05MAY15 SPAA 522C1/25E2/65DD

FedEx Express NEW Package US Airbill

FedEx Tracking Number 8025 48

1 From

Date 5.5.15

Sender's Name Nora Zipps Phone 336 232 5213

Company ESP Associates PA

Address 3475 Lakemont Blvd. Dept./Floor/Suite/Room

City Fort Mill State SC ZIP 29715

2 Your Internal Billing Reference

3 To

Recipient's Name Phone

Company Test America

Address 5102 LaRoche Ave. Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City Savannah State GA ZIP 31404

HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Next Business Day

- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [x] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- [ ] FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

Packages up to 150 lbs.* Over 150 lbs., use the new Express Freight US Airbill.

5 Packaging * Declared value limit $500.

- [ ] FedEx Envelope*
- [ ] FedEx Pak*
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

6 Special Handling and Delivery Signature Options

- [ ] SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Someone at recipient's address may sign for delivery. Fee applies.
- [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below.

Obtain recip. Acct. No. [ ]

- [ ] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

Total Packages 1 Total Weight 42.25 lbs. Credit Card Auth.

†Our liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

644

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fedex.com 1.800.GoFedEx 1.800.463.3339

FedEx Express **NEW** Package US Airbill

FedEx Tracking Number 8025 4861 2698

Form ID No. 0200 — Recipient's Copy

1 From

Date: 5.5.15

Sender's Name: Nora Zipp — Phone: 305 882 5218

Company: SSP Associates, PA

Address: 3475 Lakemont Blvd. — Dept./Floor/Suite/Room

City: Fort Mill — State: SC — ZIP: 29715

2 Your Internal Billing Reference

3 To

Recipient's Name — Phone

Company: Test America

Address: 5102 La Roche Ave. — Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address: Use this line for the HOLD location address or for continuation of your shipping address.

City: Savannah — State: GA — ZIP: 31404

☐ HOLD Weekday — FedEx location address REQUIRED. **NOT available for** FedEx First Overnight.

☐ HOLD Saturday — FedEx location address REQUIRED. **Available ONLY for** FedEx Priority Overnight and FedEx 2Day to select locations.

4 Express Package Service *To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs. *For packages over 150 lbs., use the new FedEx Express Freight US Airbill.*

Next Business Day

☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☑ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

☐ FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.

☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging *Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☑ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery — **NOT available for** FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required — Package may be left without obtaining a signature for delivery.

☐ Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*

☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods? One box must be checked.

☑ No ☐ Yes — As per attached Shipper's Declaration. ☐ Yes — Shipper's Declaration not required. ☐ Dry Ice — Dry ice, 9, UN 1845 ____ x ____ kg ☐ Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. ☐

☐ Sender — Acct. No. in Section 1 will be billed. ☑ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

Total Packages: 1 — Total Weight: 500 lbs. — Credit Card Auth.

*Our liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

644

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8025 4861 2698

ON RAIL TRANSPORT ONLY

Serial Number 71935

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

(✓) TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

( ) Alternate Laboratory Name/Location
Phone:
Fax:

PROJECT REFERENCE: Henderson Co. Landfill	PROJECT NO.: BN12.602.003	PROJECT LOCATION (STATE): NC	PAGE 1 OF 1
TAL (LAB) PROJECT MANAGER: Kathy Smith	P.O. NUMBER: 7961DP-7	CONTRACT NO.	STANDARD REPORT DELIVERY (✓)
CLIENT (SITE) PM: Nora Zirps	CLIENT PHONE: 336.232.5213	CLIENT FAX	DATE DUE: 7 weeks
CLIENT NAME: ESP Associates, PA	CLIENT E-MAIL: nzirps@espassociates.com		EXPEDITED REPORT DELIVERY (SURCHARGE) ( )
CLIENT ADDRESS: 3475 Lakemont Blvd, Ft. Mill, SC 29708			DATE DUE:
COMPANY CONTRACTING THIS WORK (if applicable)			NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

REQUIRED ANALYSIS

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX TYPE: AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	TCL VOCs 8260B	1,4-Dioxane 8260 SIM	TCL SVOCs 8270D LL	Metals (14) 3050B/6020A	Mercury 7470A	Sulfate, Nitrate 300.0	Ammonia 350.1				REMARKS
~~5.15.15~~	1345	MW-A2		✓				✓	✓	✓	✓	✓	✓	✓				
~~5.15.15~~	1430	MW-A5		✓				✓	✓	✓	✓	✓	✓	✓				
		TB-4		✓				✓	✓									
		TB-4		✓				✓	✓									

PRESERVATIVE

NUMBER OF CONTAINERS SUBMITTED

680-112219 Chain of Custody

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Eddie Rogers	5.5.15	1435						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
Brenda	05/06/15	0935	YES ( ) NO ( )		680-112219	D.4(CF) 0.8°C

TAL8240-680 (1008)

Serial Number 71928

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

(✓) TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

( ) Alternate Laboratory Name/Location
Phone:
Fax:

PROJECT REFERENCE: Henderson Co. Landfill	PROJECT NO.: BNI2.602.003	PROJECT LOCATION (STATE): NC	PAGE 1 OF 1
TAL (LAB) PROJECT MANAGER: Kathy Smith	P.O. NUMBER: 7961DP-7	CONTRACT NO.	STANDARD REPORT DELIVERY (✓)
CLIENT (SITE) PM: Nora Zirps	CLIENT PHONE: 336.232.5213	CLIENT FAX	DATE DUE: 2 weeks
CLIENT NAME: ESP Associates, PA	CLIENT E-MAIL: nzirps@espassociates.com		EXPEDITED REPORT DELIVERY (SURCHARGE) ( )
CLIENT ADDRESS: 3475 Lakemont Blvd. Ft. Mill, SC 29708			DATE DUE:
COMPANY CONTRACTING THIS WORK (if applicable)			NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

MATRIX TYPE — COMPOSITE (C) OR GRAB (G) INDICATE

REQUIRED ANALYSIS / NUMBER OF CONTAINERS SUBMITTED

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	TCL VOCs 8260B	1,4-Dioxane 8260SIM	TCL SVOCs 8270D LL	Metals (14) 3005/6020	Mercury 7470A	Sulfate, Nitrate 300.0	Ammonia 350.1			REMARKS
							PRESERVATIVE									
5.5.15	1010	MW-A4	✓				✓	✓	✓	✓	✓	✓	✓	✓		
5.5.15	1235	MW-A8	✓				✓	✓	✓	✓	✓	✓	✓	✓		
5.5.15		Duplicate 2	✓				✓	✓	✓	✓	✓	✓	✓			
5.5.15		TB-3	✓				✓	✓								
5.5.15		TB-3	✓				✓	✓								
5.5.15		Temp. Blank														

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Eddie Rogers	5.5.15	1435						
RECEIVED BY: (SIGNATURE)	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**	**RECEIVED BY: (SIGNATURE)**	**DATE**	**TIME**

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
NS	05/06/15	0933	YES ( ) NO ( )		680-112219	1.4 c / 1.0 c cf

TAL8240-680 (1008)

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Smith, Kathryn E	Carrier Tracking No(s):	COC No: 680-386372.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: kathy.smith@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.				Job #: 680-112219-1
Address: 4955 Yarrow Street, ,	Due Date Requested: 5/18/2015			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: Henderson Co. Landfill	Project #: 68012467			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_SIM/5030B 1,4-Dioxane	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-A2 (680-112219-1)	5/5/15	13:45 Eastern		Water			X	3	
MW-A5 (680-112219-2)	5/5/15	14:30 Eastern		Water			X	3	
TB-4 (680-112219-3)	5/5/15	Eastern		Water			X	2	
MW-A4 (680-112219-4)	5/5/15	10:10 Eastern		Water			X	3	
MW-A8 (680-112219-5)	5/5/15	12:35 Eastern		Water			X	3	
Duplicate 2 (680-112219-6)	5/5/15	Eastern		Water			X	3	
TB-3 (680-112219-7)	5/5/15	Eastern		Water			X	2	

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:		Method of Shipment:	
Relinquished by: [signature]	Date/Time: 5/6/15 17:00	Company: TA	Received by: [signature]	Date/Time: 5/7/15 910	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: Transfer by ms 41 IR5 T0.2 5/7/15

Login Sample Receipt Checklist

Client: ESP Associates, P.A.

Job Number: 680-112219-1

Login Number: 112219
List Number: 1
Creator: Banda, Christy S

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ESP Associates, P.A.

Job Number: 680-112219-1

Login Number: 112219
List Number: 2
Creator: Soto, Mayra A

List Source: TestAmerica Denver
List Creation: 05/07/15 04:53 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	